



Department of History and Civilization

**The Races of Europe:
Anthropological Race
Classification of Europeans
1839-1939**

Richard McMahon

Thesis submitted for assessment with a view to obtaining
the degree of Doctor in History and Civilisation
from the European University Institute

Florence, June 2007

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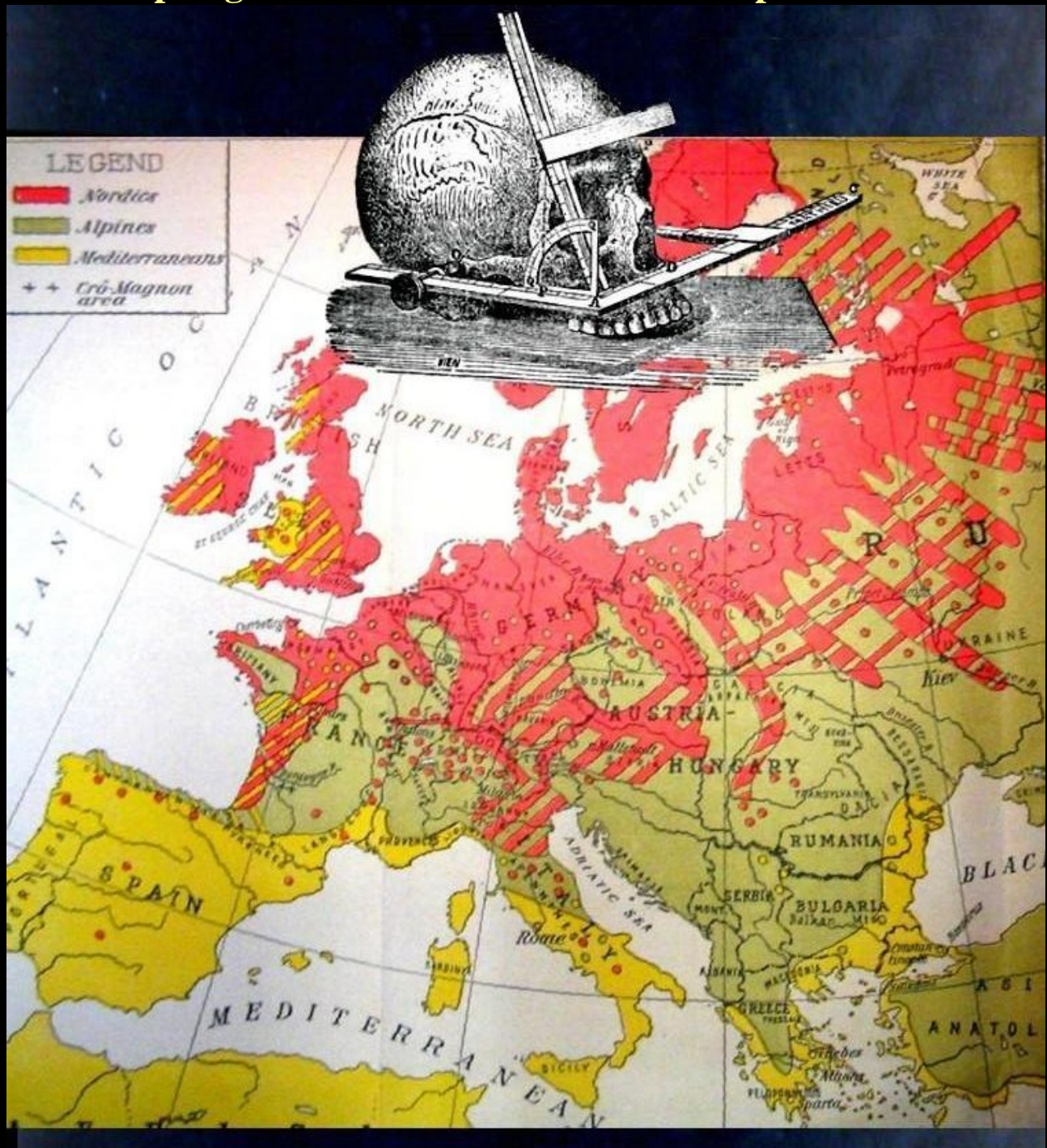
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THE RACES OF EUROPE

Anthropological Race Classification of Europeans 1839-1939



Richard McMahon

2006

**European University Institute doctoral thesis
under the supervision of Professor Peter Becker**

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Acknowledgements

This thesis would have been impossible without the always relevant and incisive advice of my supervisor, Professor Peter Becker. When he initially suggested this topic, which was very new to me, I was unsure whether it would be to my taste, but I have found it endlessly fascinating and rewarding. Several other academics also generously offered me useful advice or agreed to read sections of my work. They include Professor Bo Stråth of the IUE, Professor Claudio Pogliano of the University of Pisa and the Museum of the History of Science in Florence, Professor Maria Bucur-Deckard of the University of Indiana, Professor Lucian Boia and Professor Gheorghiuță Geană of the University of Bucharest, Dr. Claire O'Halloran, Dr. Barra Ó Dhonnabháin and Dr. Caitríona Ó Dochartaigh of University College Cork, Dr. Hillary Tovey of Trinity College Dublin, Dr. Robin Boast of the Cambridge University Museum of Archaeology and Anthropology University, Professor Wolfgang Schmale and Professor Michael Mitterauer of the University of Vienna and Dr. Joanna Tokarska-Bakir of the University of Warsaw.

I carried out research in the universities libraries of the IUE and the *Università degli Studi* in Florence, the Central European University in Budapest, University College Cork, Trinity College Dublin, the Universities of Bucharest and Warsaw and several libraries of the University of Vienna, and also at the Italian (Florence), Austrian (Vienna) and Romanian (Bucharest) national libraries and the libraries of the Museum of the History of Science in Florence and the Acadamia Națională in Bucharest. At the universities of Florence, Bucharest and Warsaw, I made use of the libraries of the anthropological or archaeological institutes as well as the central collections, and at the Austrian national library, I was given very generous access to the schoolbooks collection. I wish to thank the staff of all these libraries and particularly Ruth Nirere-Gbikpi and the other inter-library loan staff at the IUE and the team at the library of the anthropology institute of the Università degli Studi di Firenze, for all their patience and friendly helpfulness.

The IUE staff were a great help during these studies, especially in guiding my visiting Romanian relatives through the labyrinthine bureaucracy of the Italian state, whose stability they apparently threatened. I am also especially grateful for the hospitality of Dr. Margareth Lanzinger of the University of Vienna and Dr. Maike Sach of the Deutsche Historische Institut in Warsaw, and for the fruitful discussions and great support and suggestions provided by numerous fellow doctoral students, friends and family. I owe particular debts of gratitude to my brother Mark, who gave me

invaluable technical aid with the quantitative analysis section of my research, and my sister Naoimh, who started her doctorate at the same time as me but whom I have pipped at the post.

This thesis is dedicated to my son Iván Grammaticus, who came along after I had started it and competed with it for my attention.

Introduction

‘World history is a part of the history of organic development’

Opening quotation from the Darwinist Ernst Haeckel in Politische Anthropologie, by the Nordic supremacist Ludwig Woltmann (Woltmann 1903: 1).

This is a history of the serious scientific attempt, most intently in the period 1830s-1945, to define the biological races making up Europe’s population. The first three chapters examine the scientific community engaged in this task, their methods and the classifications they produced. The last three chapters are case studies of the relationship between political identities and race classifications in Ireland, Poland and Romania. Enlightenment anatomists established physical anthropology as the dominant, though not unchallenged authority on race (MacMaster 2001: 17). Classification piped observations of the human form, and especially skull proportions, through theories of race definition, formation, migration, inheritance, interaction and mixture. While each ethnic group was at first expected to have a typical physical ‘type’, around which individuals varied, anthropologists increasingly used statistical mass studies to decipher the originally pure elements of modern mixed populations. Data on cultural phenomena usually supplemented physical observation, as races were widely seen as bodies of both biological and cultural inheritance. The precise relationship between these was one of the most controversial issues in race anthropology, but the connection was vital for linking scientific race to politics.

Historians differ, sometimes rancorously, when interpreting crucial junctures in the history of scientific racism. Scientists writing history often stress scientific factors like new evidence, methodologies and theoretical advances, while historians of science and especially of racism criticise these ‘[p]alace histories’, and claim ‘scientific principles were to a large degree subordinate to’ the socio-political context (Stocking 1992: 343 & 349-51; 1988: 5; Malik 1996: 82-89 & 121; Blanckaert 1988: 20 & 49-50; Proctor 1988: 175; Bernasconi & Lott 2000: vii). The anthropologist Andrzej Wiercinski blamed Mendelian genetics for extreme racist interwar German raciology, while Benoit Massin associates it firmly with the general rightward drift of German society and academia (Wiercinski 1962: 11-12; Massin 1996: 101-2). From this viewpoint, science was taken very seriously due to ‘belief in progress’, but ‘was to a large extent simply the legitimator’ of ‘prior conclusions’, as scientific racism distorted and selectively adopted techniques, theories and

evidence to reflect or express the ‘tensions or problems’ of European industrialisation, urbanisation and colonialism (Malik 1996: 121; MacMaster 2001: 5-7; Nash 1962; Gould 1981: 85; Ballantyne 2002: 4). I largely agree, especially as the political useful core of race classification models and methods survived successive paradigm shifts in anthropology, while crises of confidence in political race models profoundly damaged race anthropology. This is the key conclusion of my second chapter. Almost all classifiers were nationalists and many were intensely political. Leading nineteenth-century French, German and Polish anthropologists became parliamentarians, government ministers and revolutionary leaders and the Polish prehistorian Kozłowski even served as Prime Minister (Lech 1997/98: 42; Massin 1996: 89; Harvey 1984: 400 & 402; Hammond 1980: 121 & 126; Godycki 1956: 12-13; Stołyhwo 1957: 6-7, 12 & 16). One British anthropologist meanwhile declared that legislation ‘must respect racial distinctions and characteristics, or it will be a disastrous and mischievous failure’ (Avery 1869: ccxxiv). However, like Claude Blanckaert and other historians of science, I see classification as a complex product of politics and science, shaped by raw evidence, international scientific norms, nationalist narratives, domestic national politics and interdisciplinary rivalries*. Race anthropology ‘became popular in the mid nineteenth century’, riding a wave of confidence in natural science and imparting its legitimacy to political narratives of ethnic groups and classes as biological bodies of descent (Barkan 1992: 4). When rulers, middle class and all social sciences but economics rediscovered the importance of irrational motivations after the 1870s, the biologically inclined saw race as the essential nature of a person or a people, determining their behaviour and tying them to the most ancient possible tradition (Hobsbawm 2005: 268-69). It was therefore expected to determine political allegiances. As chapter II argues, the term ‘race’ was systematically used throughout Europe for all kinds of physically, linguistically, culturally or even politically distinct groups†, with the understanding that they were all bodies of descent. A person’s ethnicity or nationality was therefore, in this usage, their race. Outside of identity politics, European race classification had little practical use. The argument that physical and psychological race features were inherited together was often used to ascribe superior biological traits to the classifier’s ‘own’ race, and research concentrated on histories of ethno-racial groups, giving modern nations and social classes deep prehistoric roots.

Politicised anthropology could win official backing for institutional development, which in turn could bring the international prestige and influence to make one’s preferred theories the

* The Actor-Network theory in the sociology of science strongly stresses this diversity of relevant factors (or even actors) in scientific processes and outcomes. An ANT study of the development of an electric car for example considered the participating electricity and car companies, ‘consumers, social movements and ministries’, visions of ‘post-industrial society’, lead accumulators, fuel cells and electrolytes as all equally important to the project (Callon 1986: 22-23).

† In Italian, the word even broadened to the general meaning of ‘type’ or ‘sort’.

international norm. However it sinned against the apolitical universalism of international science. Squaring the circle of conflicting nationalist and self-consciously scientific universalist identities was a major challenge for classifiers. Producing ‘patriotic’ findings through scientific fraud was probably too risky and shameful for the majority who took their identity as objective scientists seriously. Among the innumerable critics of race science, I found just one accusation of outright cheating. Wijworra says the German Nordic supremacist Ludwig Wilser, assisting Ammon’s anthropometric survey, wrote in higher values for stature and head-length ‘to confirm the Germanic stereotype’ (Wijworra 1996: 170). The flexibility of social science in any case made such deception unnecessary. Typically, scientists ‘seldom expressed their patriotic intentions’ and stressed their objectivity, but let ‘ideology and politics’ influence their interpretations and ‘choice of research problems’ (Rączkowski 1996: 189-90). Race classifiers were genuinely constrained by empirical evidence, but circumvented it with elaborate arguments that ‘laundered’ their politically and socially relevant conclusions. A Romanian archaeologist argued for example that while the intensely Romanised but ethnically mixed Pannonians fled to Italy after Rome fell, the ancestors of Romanians held their ground by rallying around their ‘powerful indigenous nation’ (Pârvan 1937: 169). Selective blindness also helped ensure nationalist results. Chapman says Scottish nationalist historiographers ‘are locked into a historical discourse within which only certain kinds of event happen,’ but ‘genuinely cannot *see*’ contradictory evidence (Chapman 1992: 104). Gould agrees that leading nineteenth century craniologists (skull measurers) like Paul Broca manipulated their empirical data ‘unconsciously’ (Gould 1981: 85).

The bio-cultural-historical amalgam of race required anatomical physical anthropology to collaborate with emerging social sciences like linguistics, archaeology and sociology, in tight disciplinary coalitions centred around the study of race, which I examine in chapter I. Anthropological disciplinary complexes succeeded ethnological ones in the nineteenth century, but split into several competing alliance systems in the twentieth. The inherent instability behind this turbulent history had many causes. Allied disciplines produced contradictory sets of evidence and competed for state support. Sciences wanted to concentrate on issues raised by their own research while simultaneously harnessing other disciplines to this agenda, and so competed to press their own specialist evidence as the ideal racial taxonomic criterion. The natural scientific positivism of biology, though prestigious, proved particularly problematic to apply to the study of cultural phenomena like languages and political groups. As a result, cultural and biological determinism edged apart by fits and starts, though it was the mid-twentieth century before race narrowed down to a purely physical meaning. The theoretical positions of each discipline reflected its scientific methodologies and practices, but very often also its political orientation, as political factions fought

to control national academic establishments, discipline by discipline. Left and right found different uses for the race concept, so that when discipline complexes disintegrated, new ones might be constructed around a different political agenda. The form of discipline complexes in a country also depended on how successfully each discipline contrived successful identity narratives and on the relative importance and relationship between disciplines there. The Catholic Church for example actively discouraged biological anthropology, but created such a backlash in some Catholic countries that it thrived there. Chapter I examines the creation and destruction of discipline complexes and chapter II, interaction between their methods.

I pay particular attention to the geographical dynamic of core and periphery, choosing peripheral regions for my case studies to illustrate how structural roles in the classification community influenced constructions of identity. The Polish case meanwhile dramatically illustrates how state investment could promote a periphery to core status. Chapter I looks at how peripherality affected institutional development and interaction, while chapters II and III examine how far the peripheries adopted and interpreted core methodologies and race narratives respectively. Peripheral scientists depended heavily on the core for standard classification techniques and narratives. However these narratives usually served core purposes like Teutonic-Nordic superiority over Irish Celts and Polish Slavs, and were therefore often imaginatively reinterpreted to suit local nationalist purposes. Each case study examines a separate reinterpretation strategy. I use the degree of acceptance of disadvantageous international norms as opposed to local reinterpretation as an important index of peripheral status. Chapter III pays particular attention to the different meanings of reformulating diagnostic method, race psychologies, race histories, race definitions or races schemes themselves. For example a weak national anthropology establishment might reinterpret race psychology stereotypes, which had little scientific underpinning, but only a much stronger one could credibly challenge international consensus on European taxonomy. My case studies identify the main neo-romantic responses to the internationally dominant narrative of Teutonic-Nordic superiority, each of which twisted the supposed weaknesses of 'inferior' races into strengths. Disadvantaged nations contrasted Nordic rational modernity with their own superior spirituality, its conquering aristocratic migrations with their peasant industriousness and connectedness with national territory and its Western prestige with defiant Asiatic or nativist Eastern European origins. Peripheries also exploited narrative strategies used within the core, such as the wild warrior identity patented by the Germans and Latin claims of superior civilisation.

I came to this subject from studying European integration. I wanted to discover how certain apparently persistent and repeating spatial patterns in integration worked, their emergence,

structure, durability and interactions. I do not claim that geography has an inherent, essential structure which determines the course of history, but history does appear to show geographical patterns of some *longue durée*, as historians and geographers like William McNeill, Stein Rokkan and D.W. Meinig have explored. Rokkan for example argued that the regions to the east, west and within the Netherlands-north Italy urban corridor experienced very different patterns of early modern state-building (Rokkan 1980: 179). Writers who do not problematise such patterns can end up assuming by default that nations or even fairly meaningless abstractions like ‘Asia’ are the only relevant geographical units. In this thesis, my approach to cultural geography stresses connectedness through communication. In chapter one in particular, I use statistical analysis of bibliographical citation to geographically trace the network of interconnections of the widely scattered debating community of race classifiers. I support this by examining the institutions they established to facilitate their debate. Race classification is an ideal starting point for understanding the networks which may affect European integration. It is a quite recent, largely acephalous, Europe-centred and very complex network of interacting thinkers and institutions, with a weak collective identity and organised over the course of a century in shifting disciplinary coalitions. The history, political science and sociology of science traditions of McNeill, Karl Deutsch, Actor-Network Theory and to an extent, the Annales and International Relations English schools, have seen patterns of cultural communication as decisive in defining regional cultures and political geography (Deutsch 1975: 36-39 & 76; McNeill 2003: 3-4; Braudel 1995a: 278-82). ANT describes a spatially complex world, where position in a bounded region intersects with the ‘*links or relations*’ which define position in a network, so that nation states, for example ‘are made by telephone systems, paperwork and geographical triangulation points’ (Law 1999: 6-7). This approach draws on a strand of cultural, historical and regional geography which dates from the 1960s. Torsten Hägerstrand in Sweden pioneered the study of geographical diffusion patterns, by making time series of the spatial diffusion of specific ‘technical and social innovations’ like postal checking and telephones (Hägerstrand 1967: 6 & 12-13). Donald Meinig meanwhile showed how trade, migration, communication and cultural influence in the American West often used the same routes, even after changes in ethnicity and technologies (Meinig 1971: 491). Certain areas saw little change in ‘route patterns’ from ‘the fur trade era’ until transcontinental railways or in ‘enduring spatial structure’ since seventeenth-century Spanish rule, he said (Meinig 1971: 491). Although documented communication is ideally suited to historical research however, connectivity is the Cinderella of cultural geography scholarship. By contrast, identity is highly fashionable and a huge literature from archaeology and Max Weber to Hofsteder and Fukuyama examines Europe’s social, mental and material commonalities.

Since its 1960s-1970s heyday in the Annales and World Systems schools, this kind of materialist social history has been harshly criticised. A key critique is that it misses the main point in the study of culture, which is how it affects the way people think. The anthropologist Clifford Geertz, whose hermeneutic method has had enormous influence in historiography, dismissed analyses of ‘underlying’ patterns, geographical or otherwise, which are largely unperceived by the actors, as turning culture ‘into structures and toying with it’, insisting that cultural study must focus on the meaning of ‘social actions... for the actors’ (Geertz 2000 [1973]: 27-29). The field of cultural studies strongly stresses ephemeral and politically manipulated aspects of identity, characterising suggestions that culture is ‘real’ as dubious political constructions. However communities of intellectuals invest careers and build solid and tenacious institutions to construct and defend identity narratives, and gain political backing and social authority for them. While Said’s critique of Orientalism deconstructs narratives of a homogeneous Orient, he and Samir Amin attribute Orientalism and Eurocentrism to pan-Western ‘communities of interpretation’ with ‘structures of attitudes’ maintained by ‘institutions, traditions, conventions’ and codes, going back to the Renaissance or even classical Greece (Said 1995: 7, 14, 22, 342 & 338; Amin 1989: 77). They are very ‘active’ in ‘the moral construction’ of a corporate ‘Europe’ and ‘the West’, as ‘important metaphors of blame or of self-castigation’ (McDonald 1997: 222). In Chapter one, I examine accusations that using externally imposed narratives like core and periphery can dehumanise the subject of study and reinforce derogatory stereotypes. As culture-focussed New Left academics displaced economics-centred Marxists, they criticised quantifying social history for focussing on ‘anonymous structures and development processes’, which turned individuals into ‘puppets of anonymous’ structural forces and dissolved them in a statistical mass (Reinhard 2006: 25). The determination to understand from the subject’s point of view is politically laudable, but surely a big advantage of an academic outsider studying a culture is that they can combine this with wider patterns which they spot through comparison and analysis, but may be invisible to the protagonists. In their frequent bitter standoffs for example, race anthropologists from rival nationalities believed themselves utterly different from one another, but argued this difference in a common forum, with common rules, using the same discursive strategies. Adversarial engagement forces adversaries to be similar in order to compete, but their own perspective does not see this similarity.

An important hermeneutic critique of macro-scale ideas such as European culture, is that these imagined abstractions cannot be grasped in any meaningful way. Politically-motivated writers like Samuel Huntington, who treated cultural ‘civilisations’ as proto-nations*, help to bring cultural

*He gave them a fairly homogeneous set of typical values and social institutions, at least the potential for common political identity and geopolitical unity, and often a defined territory.

macro-theories into disrepute. Geertz ultimately aimed to understand macro-concepts like cultures, processes and epochs, but his method of ethnographic description could only approach them through ‘*very intensive knowledge of the very smallest matters*’, making ‘*great narratives of any type*’ impossible (Reinhard 2006: 18-19 & 26). Reinhard therefore calls the methodology of historical cultural study ‘incomplete’, as micro-observations cannot be subjugated to general rules, but just connected with one another (Reinhard 2006: 19). My approach is precisely an experiment in combining Geertzian close examination of the narratives and praxis of a community, a methodology well established in history of science, with statistical pursuit of macro-scale geographical patterns. These patterns are not universal laws but rather relatively intensive communication and common cultural features, sometimes including common narratives of identity, which bind together regions for a longer or shorter period of time. I suspect that the criticism that diversity and contradictions *entirely* outweigh any wider cultural patterns, is no more valid than claims that the opposite is true. Apart from examining the geography of international organisation and, through bibliographical analysis, communication in the race classification community, I also seek wider patterns in the identity narratives themselves. European races like the Aryan, Celto-Slav or Nordic were transnational *regional* identity narratives, exploited in the identity narratives of several nationalisms at once*. They forced classifiers to negotiate between the narratives of national identity and international science. Ignoring the transnational geography of identity often means assuming by default that nations are hermetic units of cultural geography. For example many historians of race egregiously see interwar Germany’s hyper-politicised race science, which came closest to becoming a state ideology, as specifically and uniquely German, even though it combined a Germanicism and Nordicism shared with Scandinavia, Britain and the US with an ethnic nationalism typical throughout Central and Eastern Europe, and among Western subject peoples like the Irish and Basques. I examine the question of German exceptionalism in chapters I and III.

My aim is to understand better how European cultural geography works, by investigating a European-scale phenomenon, but without sacrificing the precision of Geertzian thick description. The combination of general and case study chapters is one strategy for doing this, but more important is my choice of a study population which, though much more scattered spatially, is numerically and thematically as focussed as Geertz’s Balinese cockfighters. This thesis is therefore an experiment in anchoring the study of broad features of European cultural geography in concrete observation. This problem is illustrated by the dichotomy between romantic Eastern European ethno-nationalism and Western civic nationalism, which students of nationalism like Anthony

*Understandably but unfortunately, national identity construction tends to be examined within a purely national context. Studies like Str ath and ap Malmborg’s *The Meaning of Europe* are exceptional in examining the influence of a

Smith and historians of nations throughout the continent recognise, and my research clearly shows is crucial to narratives of national identity. Though very useful, how do we tell whether a grand narrative like this is a political manipulation or if it really stands out from the normal historical contradictions and complexities? To bypass this everpresent social science dilemma of choosing between the ‘equally powerful *disatisfactions*’ of concrete ‘micro level’ and conceptual ‘macro scale’, Bruno Latour’s Actor-Network Theory advocates ‘following circulations’ of the countless ‘very local, very practical’ interactions, which make up the social network (Latour 1999: 16-20). In addition, the historical, geographical and social patterns of the putative elements of this grand narrative, from anti-Semitism and raciology to the reception of Herder, can be examined separately. How these patterns superimpose on one another suggests what broader narratives are worth retaining.

European race classification suffers academic neglect. Mine is the first full-length* history of classification for Europe and the only study for Ireland, Poland or Romania, at least since histories written by interwar practitioners themselves. Most anthropologically-trained historians of anthropology seek the origins of recent research preoccupations, and see the ‘naturalist heritage’ of craniology and anatomy as ‘a “stain” or a deviation’ from ‘the philosophical side’ of the history of anthropology (Dias 1991: 38). They ignore both my core topics: races, whose very existence was discredited in the mid-twentieth century; and also Europe, which largely colonial twentieth-century Western social anthropology abandoned until the late 1970s to sociology and folklore studies, ignoring European ‘big’ issues’ like nationalism (Macdonald 1997: 5-6). This implicitly denies the central role and absolute scientific respectability of European race study in much nineteenth and early twentieth-century ethnology and anthropology, as well as the role of race anthropology-centred discipline complexes in the emergence of other social sciences. In more than a thousand pages, Frank Spencer’s 1997 encyclopaedia of the history of physical anthropology has no separate entries for the main racial divisions of Europe proposed by physical anthropologists, nor for craniology, its main technique, nor for key classifiers like Lapouge, Deniker, Ripley and Günther. Histories of ethno-racial archaeology by contrast, which survived much better than race anthropology, are much more plentiful. In the 1960s-70s, anthropologists studying Europe and historians influenced by anthropological methods established fields like historical anthropology, microhistory, *Alltagsgeschichte* and European ethnology to extend the focus from supposedly unchanging rural communities to the urban mainstream and the historical construction of its identities (Reinhard 2006: 22-25; Macdonald 1997: 11-15). However these left-leaning fields never

transnational regional narrative like the Europe concept.

showed much interest in elite culture (Reinhard 2006: 22-25). While historians of anthropology dismiss race anthropology as pseudo-science, to be dealt with by political historians, the latter are generally much more familiar with political or humanities sources than with biological science[†]. Since around 1970, a growing literature has examined the instrumentalisation of ancestor groups in construction of national identity. Léon Poliakov addressed the Aryan myth, L.P. Curtis pioneered the study of anti-Irish racism, Nancy Stepan reconstructed English Teutonism from ‘implicit assumptions, incidental references, occasional asides and ephemeral sources’ from Carlyle on, while 1990s deconstructions caused turmoil in fields like Romanian history and Celtic studies[‡] (Leerssen 1996: 95-96). However these scholars concentrate on the more popular, higher-profile race discourses of historians like the Thierrys, Fichte, Renan, Carlyle and Taine, politicians like Disraeli, Bismark or Hitler, novelists like Walter Scott and unscientific or applied race theorists like Gobineau, Chamberlain and the eugenicists rather than dry esoteric craniological classification. Historians of racism like Poliakov, George Mosse and Neil MacMaster meanwhile concentrate on the role of race science in justifying the awesome or still pressing horrors of the Holocaust and colour racism rather than on the use of European classification to construct national identities and justify conservative social policies and nationalist geopolitics (MacMaster 2002: 5). Kenan Malik criticises ‘an almost axiomatic belief among historians, anthropologists and sociologists’ that the race concept ‘arose out of [European overseas] colonialism’, arguing that it emerged from ‘perceived differences within European society’ and was ‘only later’ systematically applied to skin colour differences (Malik 1996: 81-82).

The crucial political role of identity narratives has long been recognised. Catherine the Great imprisoned a German scholar in 1749 for trying to prove the ‘Finnish-Tartar origin of the Russians’ (presumably undermining Russia’s claim to enlightened civilisation), and ordered a hundred lashes for the Russian academic sponsoring him (Herz 1925: 6). National ancestors became still more

* Claude Blanckaert wrote a chapter on the subject (Blanckaert 1995). Bernasconi and Lott even claimed in 2000 that there was ‘as yet no reliable study’ of the history of the race concept (Bernasconi & Lott 2000: vii).

† An important exception is the branch of Nazi studies focussing on Nordic supremacism, which Lutzhöft founded in 1971 (Field 1977: 523). Claude Blanckaert, Stephen J. Gould, Elizabeth Fee, Gilles Boetsch, Jean-Noël Ferrie, Andrea Orsucci and Pauline Mazumdar are other students of the mechanics of classification and to an extent, the taxonomies produced.

‡ Just like nineteenth-century race classification disputes, recent debate in Celtic studies, an amalgam of archaeology, linguistics, study of literature in Celtic languages and the use of ‘Celtic’ ideas in non-Celtic languages, threatens the basis of an established academic discipline complex. In 1996 Hildegard Tristram said ‘[c]ritical discourse has only just begun in Celtic Studies’, which was as one of the ‘few marginalized’ linguistic disciplines where ‘dated’, ‘monolithic, self-assertive and positivistic’ philology ‘lingers on’ (Tristram 1996: 39-40). The debate similarly has important spatial characteristics. While French and German researchers continued to accept ‘monolithic’, intra-disciplinary Celts, British colleagues began questioning them from about 1980 on, claiming the Celtic identity narrative artificially combined archaeological, historical and linguistic evidence, to serve political needs (Zapatero 1993: 49-50; Chapman 1992: 3). Celtic scholars however describe these critics as part of an old ‘peculiarly Anglocentric’ or even English nationalist campaign of denying Celtic identity, liable ‘to degenerate into an attack on the concept’ and ‘very existence, of Celts’ (Evans 1999: 8; Megaw & Megaw 1999: 54-57).

important as spreading popular participation in politics and liberal modernity's erosion of traditional social structures made the people or folk a repository for communal politics (Megaw & Megaw 1999: 24; Lutzhöft 1971: 138). Though race anthropology was less populist than the ethnic race discourses of historians, philologists and propagandists, it gave political identity a vital connection with the ultimate contemporary truth-producing discourse of natural science, validated by professional and university institutionalisation. MacMaster suggests how dry scientific debate might influence popular and political racism. He says racism can long remain latent in popular culture 'without ever translating into overt... verbal or physical violence or... organized racism', but judicial, police, academic and media elites are vital in 'initiating action or forming' the 'dominant discourses' of 'wider public opinion' (MacMaster 2001: 8-9). Popular racism then often takes 'on its own volition and autonomy' as those bourgeoisie or educated working class in 'positions of power as minor civil servants, police officers, trade union leaders and politicians' give 'the crucial drive for 'upping the stakes' (2001: 9). Elite politicians and ostensibly objective scientists thus avoid the stain of vulgar racism, cynically justifying the racist policies they 'formulate and implement' 'as a necessary response to popular pressure' (MacMaster 2001: 8-9 & 90). Scientific race ideas, often in garbled form, had a continuous diffuse political impact through the many leading anthropologists with political posts or who exploited their scientific credentials to influence public debate and through their influence on other intellectuals, like eugenicists and popularisers (Barkan 1992: 39). Conscious of their power as purveyors of indisputable scientific fact, anthropologists like Gustaf Retzius cautioned against drawing 'conclusions of great importance from... dubious data' and presenting them 'as certain in books written for the general public' and schoolchildren, 'who accept them as confirmed facts' (Retzius, G 1909: 312). The popularising mission of politicised interwar German scientists assumed the social persuasiveness of science, while even in the 1980s, Italian popular atlases featured race maps (Mazumdar 1990: 202). Gould and Ackermann argue that race classification directly affected American immigration law and several SS policies, while Teti says that nineteenth-century Italian state officials used scientific racial terminology to label "'deviants" from the official norms' (Teti 1993: 189). Barford claims that the 'pan-Slavist ideals' of Stalin's advisers, based partly on prehistoric research, 'guided' delineation of the post-1945 Soviet sphere of influence and western Polish borders (Barford 2001: 276).

This work investigates the political subtexts of scientific narratives, so I should clarify my own. As a much-travelled, liberal, middle-class rationalist who sees nationalism as pathological, I have far greater sympathy for the cosmopolitan positivists than parochial romantic nationalism. These leanings and my Europeanism probably incline me to see the evils of racism and the holocaust as

our common European heritage rather than a solely German problem. My race classifiers included some hateful damaged people, who delighted in abusing whole categories of fellow humans. However as a strong believer in the power of culture, I accept that most of these scientists who, let it be remembered, studied biology rather than society at university, merely reproduced current prejudices without especial malice. This does not endear me to those prejudices, but having absorbed the post-modern zeitgeist of my time through exposure to advertising and cartoons as much as from Benedict Anderson, I cannot say that I would swim against the stream if I had grown up in the 1910s. My reservations about purely deconstructionist and critical theory approaches, and my special fondness for the films, music and rather materialist social history of circa 1973, should however be clear from this thesis. Finding Crang's 1999 cultural geography textbook contained not a single map was a disturbing experience for me. While many scientific assumptions and procedures of the race classifiers seem ridiculous to our eyes, they make perfect sense in the light of what was, and more importantly was not known at the time. The fundamental concept of distinct ethno-biological races was particularly rational. However I hope I would have found some proposals, like Hercules being an Irish name or the origin of racial diversity in chewing, as silly then as I do now. I hope that this thesis will not seem equally naïve in a century's time (should it be read), but I rule nothing out.

Chapter I

Race classifiers and anthropologists

On Tuesday night I shall be found
At 4, St. Martin's Place, sirs,
Where we discuss, on neutral ground,
The problems of our race, sirs,
O do not ask me if I can throw
A light on the impiety
The Fellows utter at the Anthro-
pological Society

British Anthropologist Edward Bradbrook (cited in Keith 1917: 30).

...without funds, Anthropological enterprise is impossible

Sir Arthur Keith, President of Britain's Royal Anthropological Institute (Keith 1917: 24)

This chapter discusses the modern community of scientists who classified European races and their relationship with the discipline of anthropology. Much of it is based on a series of statistical analyses, the most important using a database of 6059 bibliographical references, cited in 126 source texts. Most source texts were anthropological race classifications of Europe, but I also included some regional and global classification schemes which were historically important in European classification and some histories of race classification, especially by leading biologists or anthropologists. The vast majority of my source texts were from 1850-1941, with a few stretching back to 1749, and others as recent as 2002. Like all historiography, this is more art than science. I continuously made judgements in choosing source texts, selecting data to collect, mathematically preparing citations statistics and analysing and interpreting data. Different judgements may deliver different results in detail, but statistical analysis is ideal for reliably identifying the broad patterns of the classification community.

I argue that race classifiers formed a community of professional communication, with many common conceptions and techniques. My bibliographical analysis identifies two important institutions of this community, the common sets of peer authorities and of predecessors that classifiers consistently recognised as important and influential. Citation of a common set of peer authorities implied a recognised canon of key works and authors, plus agreement on methodologies and the field of discussion. Common predecessors meanwhile served as an ancestor totem, around which to build community identity, leading professionalising late nineteenth-century natural-science anthropologists to begin a historiography of their discipline (Dias 1991: 245). Many of these scientific purists, like medieval chroniclers, simply recopied standard potted histories, listing hallowed enlightenment and romantic period disciplinary ancestors, with their achievements and a few anecdotes, while sharply rejecting their often religiously-orientated approach (Schwidetzky 1974: 7). In my canon of the 89 most cited race classification schemes, defined as works cited as such by at least two of my source texts, the most commonly cited were those listed in potted histories as ‘fathers of the discipline’ (Făcaoăru 1938: 207; Brace 1997: 863; Eickstedt 1934: 135-36; Coon 1939: VIII: 1). Enlightenment writers like Swedish botanist Carl von Linné (or Linnaeus) (1707-78), Georges-Louis de Buffon (1707-88), Johann Friedrich Blumenbach (1752-1840), and Georges Cuvier (1769-1832) plus Bory de Saint-Vincent (1788-1846), Anders Retzius (1796-1860) and James Cowles Prichard (1786-1848) occupy seven of the top eleven places on the list. All but Retzius published their main race scheme by the 1830s. The other top-scoring classifiers fall into two categories. The classifications of Thomas Huxley and Ernst Haeckel were famous due to their much better-known work on evolution. Arguably the only top cited canonical classifiers who also acted as peer authorities were Joseph Deniker (1852-1918) and William Ripley (1867-1941) in the 1890s-1900s, who influenced almost all subsequent European classifications.

The race classification project and disciplines like anthropology and ethnology created different but closely intertwined kinds of communities. Race classifiers were strongly united by two of the three analytical aspects of culture* proposed by sociologists Rogers Brubaker and Frederick Cooper. These were ‘commonality’, or ‘the sharing of some common attribute’ and ‘connectedness’, ‘the relational ties which link people’ (Brubaker & Cooper 2000: 20). I defined my classifiers by their reading and citation of one another, a form of communication or connectedness. They also shared important commonalities, like the classification project, their bibliography, instruments, methods and concepts, which in turn required communication to standardise. Key commonalities were the medical training of most classifiers and their belief that race was biologically inherited, and usually legible from the physical form. However few classifiers defined themselves professionally as such.

Despite the standard history, they had a weak sense of Brubaker and Cooper's category of groupness, 'the emotionally laden sense of belonging to a distinctive, bounded group,' feeling 'solidarity... with fellow group members and... difference from or even antipathy to specified outsiders' (Brubaker & Cooper 2000: 19). Most saw themselves more as members of larger anthropological, scientific, or national communities.

Scientific disciplines were concerned with organisation, allocation of resources and professional identity. Anthropology was bricks and mortar, staff and equipment budgets, recognised academic qualifications and scientific expertise. It competed with other emerging sciences for state support, academic institutions and posts, and a readership. Anthropology was hardware, with race classification software running on it. The value of a work or author depended on the convinced savants themselves rather than outsiders. However race classification was such an important piece of software that the hardware was often configured to support it. Classifiers could therefore comfortably identify themselves as anthropologists, rather than developing a separate discipline of classification. The assumption that biological race influenced psychology, culture, society and politics repeatedly led anthropology to subsume studies of these topics. While most social sciences split from broader parent disciplines therefore, anthropology was a laborious fusion of 'separate research traditions', creating somewhat different discipline complexes in each country (Stocking 1984: 428; Dias 1991: 39).

Physical anthropologists always also studied non-racial issues like anthropogenesis, evolution, growth and inheritance (Read 1906: 56-57). Leading theorists like Lamarck, Beddoe, Hooton, Rudolf Martin and Eugen Fischer are therefore missing or poorly represented in my classification canon, compared to European race classifiers like Deniker. However race classification was the core issue for about a century. In the 1820s, 'linguistic-geographers, travellers, naturalists, and historians' began turning scholarly attention from 'great men' to populations, their 'very rivalries' strengthening the belief that race determined culture (Blanckaert 1988: 18). The 1830s-1840s ethnologists, positivist anthropologists and interwar raciologists created complexes variously combining physical anthropology with philology, archaeology, folklore, sociology, geography, psychology and history. The ethnology discipline complex of William-Frédéric Edwards (1776/77-1842) created a powerful consensus among some practitioners of these new social sciences, organising them around the pivot of studying 'the principle elements' distinguishing races (Blanckaert 1988: 18; Dias 1991: 20). Following Edwards, French ethnology 'became a synonym of raciology' and before 1850, 'few authors risked breaking out of this raciological circle' (Mucchielli

* or 'identity' in their terminology.

1997: 2; Blanckaert 1988: 19). The president of Britain's Anthropological Institute in 1917 called the Ethnological Society's founding aim, to collect and systematise 'all observations' on human races, studying their 'past, present and future' 'breeding, acclimatization and building-up' a 'really... up-to-date programme' and Grattan in Ireland defined ethnology in 1858 as 'the Science of Races' (Keith 1917: 15; Grattan 1858: 28). The ethnological disciplinary complex ultimately disintegrated but was replaced from 1859 by the more robust institutions of anthropology, led by Paul Broca (1824-80) in France and Rudolf Virchow (1821-1902) in Germany, and favouring physical anthropology and archaeology over linguistics. Perpetuating 'the Edwardian program', Race was the 'master principle of explanation', and ethnology the 'research programme' at least until Broca's death (Blanckaert 1988: 46 & 49). Article I of the original statutes of Broca's *Société d'Anthropologie de Paris*, seconded by its British equivalent, declared its purpose as 'scientific study of the human races' and leading members described the anthropology of France as simply the 'study of the French human races', listing four pages of physical features to be measured or described (Vallois 1959: 78; Perier, Bertillon & Lagneau 1861: 327-31; Stocking 1991: 248; Blanckaert 1988: 46). The positivist anthropological disciplinary complex collapsed, but that of *Rassenkunde*, or raciology emerged by 'the 1920s,' when race 'became *the* single most important concept' and 'object' of German and Central European anthropology (Proctor 1988: 148; Czekanowski 1967: 20). This linked physical anthropology with genetics, evolutionary biology and eugenics. For the Romanian interwar anthropogeographer Rădulescu, raciology 'should normally be the final result, which should crown... Anthropology' (Rădulescu 1941: 246).

The first part of this chapter outlines my main concepts, methods and sources, the second identifies major features of the classification community, and the third traces its development from before 1800 to the Second World War.

Concepts, methods and sources

Geography and the web

Brubaker and Cooper's concept of connectedness ties together the 'web of interaction', that William McNeill considers a fundamental element of culture (McNeill 2003: 3-4). A wide range of historians, political scientists and geographers have examined such aspects of these webs as communities of interpretation, diplomatic and geopolitical systems, and networks of economic exchange and social interaction. I analyse the community of classifiers as a web of individuals who lived, worked, published, and participated in political and intellectual debate from specific geographical sites, and within geographically rooted institutions. I treat this phenomenon as a

geographer might study the spatial diffusion of an innovation or the geographical structure of a transport system. I ask where the key practitioners and theorists of racial physical anthropology lived, studied, worked, published and travelled. From their bibliographical citation I assess the professional and geographical range of their sources and the languages they read. I also examine the geographical organisation of academic and professional anthropology, including professional associations, international conferences and organisational structures. I trace the geographical diffusion of ideas and the patterns of alliance and conflict in intellectual and organisational disputes, including national camps and international alliances. This chapter is therefore an empirical contribution to historical and cultural geography, to our understanding of how space has affected cultural development in Europe, and so to our knowledge of its cultural-geographical structure.

A geographical approach throws light on the relationship between nationalism and science, core-periphery relations within science, and the flux of relative influence between broader and more local levels of organisation. Certain sites and lines of communication or barriers to interaction were more central and influential than others, often depending as much on cultural compatibility and geopolitical alliance as on spatial proximity. The most frequently cited works and authors in my database were tightly concentrated in certain geographical areas, which strongly corresponded to contemporary centres of industrialisation, providing evidence for a core-periphery hypothesis. Very distinct national and regional schools operated in the very international classification community, with local hegemonic discourses and particularly dense internal webs of communication. Nationalism was the key politicising factor, but others included larger scale sub-communities of interpretation like the Germanophone area and competing schools within some countries. Analyses of the geographical diffusion of ideas and the spatial patterns of alliance and conflict in intellectual disputes, contribute to understanding movements like Nordic supremacism. The reception of ideas in the web of interaction depended on their inherent scientific value, but also on institutional and political influence, political implications, and cultural links and commonalities.

My statistical analyses

My statistical analysis is based on a canon of the most *authoritative* race classification schemes. These were works that historians and anthropologists most often cited as historically important schemes, the state of the art in contemporary race classification, or intellectual antecedents. Schemes were the highest geographical level of synthesis in race classification, reducing local studies to components of an overarching global or European perspective. If local studies by minor writers were taken seriously, 'high level' synthetic conclusions were largely the preserve of the most important classifiers, often with senior posts in prestigious anthropological institutions. I

choose my source texts with a ‘spiralling’ method, judging canonical status by how frequently other classifiers cited a work. I created an initial database of citations from a batch of texts suggested by historiographical sources, and then twice added batches of new texts that were cited particularly frequently in the previous sets. This process suggested classifiers formed a real web of interaction defined by continuous internal cross-referencing within a recognised group of authorities. The canon changed little despite adding new source texts, as the older and newer batches recognised similar canons of authoritative schemes. Of the global or European classification schemes cited in my final set of source texts, 80% were for the authors of my source texts.

In collecting source texts and data from them, I tried to record only the citations dealing with biological race classification of Europeans, generally found in historical accounts of classification and discussions of European race geography. I also tried to tease biological race classification apart from other classification traditions, such as philology, with which disciplinary complexes temporarily united it. Relatively autonomous communities of discussion like the enormous Aryan studies industry, with its own canon of authoritative works and political and geographical dynamics, could comfortably be separated from the mainstream of European race classification. Boundaries were often fuzzy however. Discussion of so-called fossil races like the Neanderthal was initially integral to European biological race classification for example, but later largely excluded. In some cases, such as when a canonically important text contained few suitable citations, or did not distinguish clearly between types of citation, I had to be less selective.

Each entry in my database refers to one reference in a source text to work by another writer, but as I carried out several mathematical operations on the simple count of citations, my statistical results always refer to a somewhat abstract ‘degree’ of citation of a particular language, country of publication or author. Within source texts, I weighted cited texts and authors by how often they were mentioned, how much space was used discussing them and sometimes the source text author’s estimation of their significance. I then gave a quota to each source text to reflect its relative weight in the canon, based on how much other source texts cited it, and calculated each citation in that source text as a proportion of its quota. Source texts making very few citations got reduced quotas to avoid statistical distortion from over-weighted individual citations. As source text references could be as limited as a vague mention of a surname, I filled in information from other sources where possible, sometimes using inference. I assumed for example that French, English or German native speakers, publishing in their home country, almost certainly used their own language, and that the main British, French, German and Italian journals almost always ran articles in the national language. Exceptions are outweighed by the vast majority of cases for which this method provides

correct data. I only accepted the least risky inferences. I created the database and carried out the simpler data analysis on Microsoft Excel, but my brother Mark, a computer engineer, wrote programs to carry out all the more complex mathematical operations. Mark also worked closely with me in planning the entire programme of analyses. Rather than using complex statistical formulae, he tackled the problem as an engineer, breaking it into a series of small steps, through which the computer could shepherd the masses of data.

I systematically collected data categories from source texts that localised cited works in place and time (place & date of publishing, language, author nationality, geographic focus of subject matter). Geographical subject matter includes places or peoples that the source text specifically discussed, or just referred to in passing. My city data is for publication, and not where classifiers lived. When a work is clearly cited in translation, I count it in with the target language as this reflects both the source text author's language abilities and the international distribution of the cited work. In a period of intense nationalism, the perceived national identity of theorists crucially impacted their classification work. I generally attributed to *émigré* classifiers the nationality of the community where they worked, while noting alternative identities likely to influence their sympathies. As my source texts rarely supply nationality data, I usually had to find it in historical accounts or by inference. My periodisation of the citations database is not based on the simple but arbitrary grid of calendar decades but on patterns of more or less concentrated citation that I perceived in a graph of citations per year*. This created periods of roughly twenty years in the main body of citations, after about 1833, and longer ones beforehand. The scantier pre-1833 data is less reliable, as it can be skewed by the weight of individual massively cited 'standard history' figures like Blumenbach. I used three main methods to analyse the citation database. The first was simply to count the overall degree of citation for each category of data that I recorded. I also cross-referenced between categories, to find how many German language texts were cited in 1815-32 for example, or the proportion of citations in source texts from France that were published in Belgium. Country statistics helped examine the power balance between national classification establishments, but analyses by region or city were better for the spatial distribution of activity. My second analysis method measured the degree of similarity between the lists of authors cited by each source text, allowing me to isolate groups of source texts which recognised common sets of peer authorities. I left out citations of classification schemes to exclude the standard history. I examined whether other features, such as common language or period, united groups of source texts defined by this method. My third method, creating a canon of 94 classification schemes mentioned as such by at least two

* As was the classification of Stolyhwo in Poland; see pp.174-76

source texts, addressed the standard history. The relatively manageable size of this list allowed me to enrich it with extra prosopic detail about canonical authors.

Other data sources

I systematically collected information for the period up until 1945 about the professional and academic institutions of the disciplines within which race classification was conducted. I included all institutions in Europe and the U.S. whose titles contain the words anthropology, ethnology, *Völkerkunde* (usually translated as ethnology) and *Rassenkunde* (raciology). Institutionalisation mostly began in the 1860s. My very diverse sources provide contradictory, incomplete and confusing information, so that for this as other statistics, my numerical conclusions are indicative rather than precise. I encountered at least twenty different terms for grades of professor, for example, variously translated between six languages. The German *Extraordinarius*, and its apparent synonym *ausserordentliche Professor*, were rendered variously as associate professor, assistant professor and visiting professor.

I supplement my own citations database by collecting similar information from bibliographies by the leading race classifiers William Ripley (1899) and Egon Freiherr von Eickstedt (1937), and the Italian writer Giulio Cogni (1938). Ripley, an American sociologist, compiled ‘a comprehensive representation of the literature’ on the races of Europe; the same focus as my database (Ripley 1899: vii). I extrapolated from about half the almost 2,000 titles in his list. The Breslau anthropology professor Eickstedt (1892-1965), a leading interwar German race scientist, reviewed over seventy different race classification schemes from more than two centuries (1937b: 37-89). Cogni’s bibliography meanwhile purported to represent the 162 ‘most important’, though ‘not necessarily the best’ current works ‘on the race problem’ (Cogni 1938: 37). He massively inflated the Italian contribution to race anthropology, hugely underestimated French and English literature, and ignored works not in French, German, English or Italian. Eickstedt’s list also boosted the proportion of German authors and was clearly designed to present his own work as the logical culmination of scientific progress to date. These bibliographies are nevertheless of value, Eickstedt offering a remarkably complete catalogue of classification schemes. Ripley and Cogni focus on contemporary authorities, so their coverage radically telescopes into their immediate pasts. Ripley’s list contains very little before 1840 and increases rapidly from 1870 on, while almost 40% of Cogni’s works were post-1933, less than half pre-1930, and well under half the rest before 1920. In contrast, Eickstedt and I overview the entire history of modern race classification. While he concentrates on schemes only however, I compile numerous accounts of peer authorities, like those of Ripley and Cogni, from a two-century period.

I also analyse data on the sites of international anthropological conferences in the period 1865-1938, and the lists of countries sending delegations to 26 of these, provided by the Mexican anthropologist Juan Comas (Comas 1956). He lists participating countries for 14 conferences before World War One, including 11 of the 14 *Congrès International d'Anthropologie et d'Archaeologie Préhistorique* (CIAAP) congresses (1866-1912) and three out-of-series meetings in 1878, 1879 and 1900. For the post-war period, he lists the national delegations attending 12 conferences: the four *Congrès International des Sciences Anthropologique et Ethnologique* (CISAE) and *Congrès International des Préhistorique et Paleolithique* (CISPP) (1932-38), plus the delegates to the 1933 preliminary session of the CISAE, and the seven *Institut International d'Anthropologie* (IIA) congresses (1921-37). In total, Comas lists 43 countries sending 224 national delegations to pre-1914 conferences, and 66 countries sending roughly 270 delegations to Interwar meetings. Though he gives no indication of the size of national delegation, the regularity of participation by countries in a series of conferences offers a rough measure of their level of participation. This in turn was determined by the degree of development and institutionalisation of anthropology in the country, distance of travel (especially for extra-Europeans) and geopolitical factors. There are only about fifteen citations in my citations database specifically identified as international conference papers, but I suspect there are several more.

Geographical structure of the race classification community

Despite important linguistic and national sub-communities of discourse on race classification, the leading scientists were generally extremely cosmopolitan. One British classifier said that of all tasks in anthropology, race classification depended 'most of all' on 'co-operation of many workers over a considerable period' (Tildesley 1928: 351). Classifiers travelled, studied and often even moved abroad. Retzius in Sweden, Beddoe in England and a pioneering Norwegian physical anthropologist studied on or made scientific tours of the continent (Gray 1911: 151; Blanckaert 1989: 167; Holck 1997a: 754). The serologist Hirsfeld worked in Warsaw, Berlin, Heidelberg, Zurich and, working for Serbs, in Salonika (Pogliano 2005: 85-92). Georg Forster, William Edwards, Louis Agassiz, Karl Ernst von Baer, Karl Vogt, Franz Pruner-Bey, Deniker, Franz Boas and Montandon were all *émigrés* meanwhile. Leading Jewish serologists fled to America from interwar Vienna, Heidelberg and Italy (Pogliano 2005: 85-92 & 98). Migration passed anthropological expertise from established centres to expanding frontier states like the U.S. and Russia and Schippers says pre-1914 European anthropology 'still had close relations with emigrant colleagues in the USA' (Schippers 1995: 234). Two thirds of Eickstedt's American schemes were by Agassiz, a Swiss, and Boas, a German Jew.

Migrants also concentrated provincial talent in metropolises like Paris and London. Most French anthropologists were provincial middling and petit bourgeois (Dias 1991: 238). Even among natives, surprising numbers of classifiers were from outside the social mainstream. Leading French anthropologists like Cuvier, Edwards, Quatrefages, Broca and Montandon had Protestant backgrounds, while Topinard spent part of his childhood in America and English ethnology emerged from a Quaker milieu (Ferembach 1986: 24). Eugen Fischer complained that most Italian anthropologists, including Sergi, were Jews, as were many of the early serologists (Proctor 1988: 164). Classifiers were frequently polyglot, citing the foreign journals that anthropological libraries generally subscribed to. They met foreign counterparts at international conferences and corresponded copiously. In a 1934 work Eickstedt cited works in eight Western European languages, plus Russian, Polish, Estonian and Hungarian. Anthropological institutions, especially societies and museums, actively promoted international contacts. So, paradoxically, did nationalist disputes, forcing each side to engage with its rival's scientific methods and evidence.

Intermediate areas like Switzerland acted as channels between language zones (Rupp-Eisenreich 1984: 98). Chavannes in Lausanne helped introduce German Enlightenment discipline names into French for example (Rupp-Eisenreich 1984: 98). Karl Vogt, an 1848 revolutionary who moved to Francophone Geneva, transmitted German scientific materialism to late nineteenth-century French anthropology (Harvey 1984: 390). Eickstedt meanwhile says the German anthropological centre of Göttingen in Hanover influenced Enlightenment Britain through the unification of the British and Hanoverian crowns (1937b: 87-88). Migrants to America were important in spreading European ideas to the broader Anglophone world, while leading mid-nineteenth century American classifiers like Morton, Nott and Wyman studied in Europe (Lurie 1954: 228; Hrdlička 1914: 513 & 528). There are hints of an end of century 'special relationship' between Italian and Anglophone anthropology. Huxley, Haddon and other Anglophone writers drew heavily on Giuffrida-Ruggeri and Sergi, who published an English translation of one book in 1901, and named a Philadelphia anatomist as a key inspiration (Huxley & Haddon 1935: 153 & 172-79; Haddon 1898: 583; 1924: 23 ; Sergi 1900: 36 & 41-44; Coon 1939: VIII: 2; Ripley 1900: 129; Orsucci 1998: 6). My database suggests that while others turned to German as preferred international publication language, Italians from the 1890s opted decisively for English.

Core and periphery

The core-periphery concept is a useful model for systems of communication like the race classification community, linking busy, powerful, established centres with less influential frontier areas. Communication, and power over it, have a geography. I found that in the classification

community, certain locations share ‘peripheral’ features like research restricted to local themes and executed by foreigners, exclusive links with a particular section of the core, and later and less frequent international contacts, stable institutions and inclusion in international canons. Spatial correspondence between these weaknesses in power relations suggest they are structural. The concept of geographic core and periphery has been severely criticised. However the sociologist Edward Shils only apparently says the ‘centre’ of society has ‘little’ to do with geography because he is more interested in core and periphery in ‘the realm of values and beliefs’, arguing that ‘merely spatial location’ really only affects society when it is consciously and emotionally felt (Shils 1975: 3, 6 & 26). While current interest in identity encourages this approach, I prefer the broader Brubaker-Cooper model of society, in which emotional identification and conscious meaning are just one factor of cultural community, alongside communication systems and common traits. By identifying patterns of spatial power relations in cultural activity, I may be accused of making people into helpless puppets of unseen inhuman geographical abstractions. Statistical studies are particularly dehumanising, treating their subjects as objects and refusing to see the world as they did. However the powerful and often racist scientific elite I study needs little protection from historians, and generally was quite comfortable with objectifying world-views. Writers like Larry Woolf and Maria Todorova applying the critique of ‘Orientalism’ to Eastern Europe, arguing that academics perpetuate and reinforce relations of dependency by representing them. I agree that Eastern Europeans transformed international ideas to suit their own political and cultural environment. But this was an unequal relationship. While 1930s Romanian race scientists transformed French and German race ideas with great imagination, Western scientists largely ignored equally original or valuable Romanian ideas.

My statistical analyses measure international interest in work rather than its absolute quantity or quality. The point of geographical core-periphery relations in an intellectual network, is that location unjustly prejudices the value placed on work. Numerous writers complain that Slavic archaeologists, anthropologists and biologists were ‘beyond the pale’ of the ‘Western’ “‘mainstream” intellectual community’ stretching from Germany to America, which ‘did not read Slavic languages’, translated ‘many important Slavic works’ decades late or never, ‘often ignored’ their intellectuals and only slowly recognised their capitals ‘as important centres of learning’ (Wolpoff and Caspari 1996: 111; Sklenář 1983: 125; Ripley 1899: viii; Czekanowski 1967: 42 & 62-63). My database confirms that ignorance of their languages led many Dutch, Finns and Czechs to write in ‘international’ languages instead. Czekanowski spoke of one positivist European classifier ignored in his native Poland for thirty years, suggesting that even Polish anthropologists were more receptive to international than local works (Czekanowski 1967: 42 & 44). Nationalist

narratives from the periphery needed the backing of foreign specialists for whom they were of solely academic interest. Intellectuals in Tsarist Russian are accused of having ‘often embraced’ the latest Western trends ‘rather uncritically’, while one Polish anthropologist apparently ended his influence at home and abroad by switching from his own terminology to a more standard international system (Graham 1977: 1145; Schwidetzky 1935: 80). Even innovative peripheral work was usually grounded in ‘international’ core interests, assumptions and techniques. Interwar Balkan scientists for instance couched even criticisms of German and Austrian racial assessments of the Balkans in terms of the German scientific framework they were trained in (see pp.411-14; Promitzer 2004: 2). Rather than Romania’s local majority, Pittard of Geneva initially focussed on ‘more or less exotic’ groups like Kurds, Greeks, Roma and Skoptzy, an Orthodox sect which severely genitally mutilated both sexes, relying on conversion to propogate itself (Landra 1942: 29; Milcu 1954: 23). Meanwhile, almost 72% of Spanish citations in my database and all Portuguese citations not about Portugal itself, dealt with Basques, whom many nineteenth century theorists saw as a unique and fascinating racial vestige. This partly reflects the importance of a Basque, Telesforo de Aranzadi, in Spanish anthropology, but also selective international interest in Iberian work.

Arguably, the race classification process had geographic parallels with industry, though its goods were unusually significant for both the consumer’s and producer’s identity. The core typically processes and adds value to raw material from peripheries and re-exports the dearer processed goods to peripheries, concentrating wealth at the core. Many peripheral economic actors are headquartered in the core or dependent on its capital, so power of decision is also concentrated there. Raw race anthropology data, including from peripheries, was used to theorise regional typologies which were then synthesised into European or global taxonomies. Even if local researchers did much basic measurement in peripheries, their data, and even their conclusions, were often brought into international discussion by visitors from the core, such as the Balkan specialists Lebzelter of Vienna and Eugène Pittard of Geneva, who published the very first Balkan synthesis in 1920 (Milcu 1954: 24; Rădulescu 1941: 262). Pittard worked closely with Romanian colleagues, but the Western European armchair specialists who devised almost all internationally authoritative race classifications were more likely to cite his ‘regional’ expertise than articles in Cluj medical journals (see pp.411-14). Syntheses by Romanian theorists were unknown abroad.

Dependency in one sphere of modernity does not mechanically imply permanent or general inferiority. Other classification communities with different geographies existed before, during and after race anthropology. An autonomous grid-like network of Slavicists linked Russian, Polish, Czech and some Western centres for example, but even this apparently peripheralised Balkan Slavs,

at least initially. Though rooted in the work of English scholars like William Jones, the extremely demanding and complex discipline of ‘comparative philology gained particular momentum’ in the new research universities of ‘post-Napoleonic Germany’ (Tristram 1996: 36-37). It spread slowly to France and Britain, and later still to more peripheral areas. Copenhagen and German-trained linguists introduced it into England by the 1830s (Horsman 1976: 393). Of eleven key works in 1788-1858 on the Indo-European language family, seven were in German, and all were published in Germany except for three texts by English Sanskrit experts and Rask, a Dane (Tristram 1990: 14). For Anglo and Francophone writers in 1829-37, linguistics was a ‘Continental’ and specifically German science, ‘still new, little known by the public’ or by British ethnologists other than Prichard (Edwards 1841: 82-83; Pictet 1836: 264; Leerssen 1996: 90-91). Conversely, the ‘‘great world’ of romantic period archaeology was peopled’, by British, Danes, French, Swedes, and only ‘to some extent’ Germans, Swiss, ‘and later the Italians’ (Sklenář 1983: 86). Though the French, German and English languages always dominated the race classification community, its geography was not immutable. Initially peripheral Polish, Italian and Russian anthropologists were eventually integrally involved in international discussion of European races, their voices heard as loudly as any other, while leadership rotated within the core. The community generally corresponded geographically with industrialisation and political power in Europe, but this was not necessarily automatic. Some early important core countries (France, Sweden, the Netherlands) declined in influence, not because they became scientific backwaters, but because their anthropologists pioneered the ultimate abandonment of race classification in science.

The best argument against the core-periphery model is that interaction took place between different parts of the periphery, transforming hierarchical hub and spoke connections into a more equitable grid pattern. Both geographical patterns can occur. My research suggests that centres like Göttingen, London, Brussels, Munich or Florence in the race classification community’s core, communicated on a fairly equal footing with one another – a grid network pattern. However my language of publication data suggests that peripheral zones often interacted almost exclusively with just one part of the core. Classifiers in Bosnia, Latvia, Hungary, Romania, Ukraine and overseas colonies were largely cited in just one foreign language, while in the Netherlands, Finland, the Czech lands and Greece, there was a balance between two or three international languages, suggesting communication with the entire international community rather than just one locally dominant power (see Fig. 1.1a-c). All but Romania in the first group made tiny contributions to my citations database, under 0.1% of the total, while all the second batch are above this threshold

except Greece^{*}. A list of 26 foreign association memberships and correspondents of Kopernicki in late nineteenth-century Poland meanwhile gave just six in Central and Eastern Europe, compared to seven Germans and eleven from further west in Europe (Godycki 1958: 32).

Core and periphery geography

All my statistical analyses of the race classification community confirmed certain geographical constants. A core composed of the Francophone, Germanophone and Anglophone language communities, each dominated by one country (France, Germany and Britain), plus smaller neighbouring peoples like the Dutch and Czechs, was surrounded by weaker anthropological 'powers' like Sweden, Italy, Russia and Poland and a periphery made up of the rest of Europe, plus certain overseas colonies and states. Schippers says the 'geographic centre' of the small pre-1914 'European anthropological community' was 'a triangle between Berlin, London and Paris' with 'close' links to the USA (1995: 234). France, Germany and Britain together account for most citations in my database in every period. In 1774-1905 they never fall below 60% of citations and are at about 79% in 1853-88. The next biggest database contributors are Sweden, Italy and the US. Pre-1814 Switzerland, Austria and Russia in 1872-1918 and Poland in 1919-39 temporarily matched Sweden's level of citation. My data on both cities and countries of publication suggest the big three countries were embedded in a north-west European core area of race classification, which expanded into Scandinavia, Italy and the main Atlantic seaboard cities of the United States, but just barely east of Germany (see Fig. 1.2a-d). The big three countries published 69% of works in Ripley's 1899 bibliography, followed by Russia (7%), Italy, Austria and the United States (4-5%), and Switzerland, Belgium and the Netherlands (1.5-2.5%). Most texts in my canon of schemes and at least 69% of those in my database, rising above 86% in six out of ten periods, were in the big three languages, as were over 85% of Ripley's titles, with a further 4-6% each for Russian and Italian, and about 80% of Eickstedt's canonical authors (see Fig. 1.3). Before 1795, two of my top canonical classifiers, Blumenbach and Linnaeus, published Latin works, making it the most common language for a time. The only other languages in my database with over 2% in any period were Italian, Swedish, Russian and Polish. The three big languages plus Italian and Latin also appear earliest in the database, followed by Dutch in 1802, Swedish and Norwegian in 1838, and Russian in 1846.

Ripley's data and my citations database give very similar spatial patterns of peripheral features like habitual use of foreign 'international' languages, less publishing and authoritative anthropological description by foreigners (see Fig. 1.4, Fig. 1.5). Promitzer says just a 'handful' of Balkan

^{*}Greece may represent a local equilibrium between external influences rather than true autonomy.

intellectuals ‘became interested in physical anthropology and “racial science”’ at the start of the twentieth century (Promitzer 2004: 2). In Ripley’s data, a fringe area of the extra-European colonies, Iberia, southern Italy, the Balkans, Hungary, Ukraine, Poland, the east-Baltic, Germany east of the Oder and Scandinavia together accounts for only 6% of total publication. My city of publication data largely agrees. Beyond Budapest, Naples, Paris and Lyon, Mediterranean basin cities just briefly appear as very minor publishing centres. Only Portugal was more significant. The greater Baltic region, including Denmark, Scandinavia, Poland and nearby areas of Russia also fell into this category initially, but by the interwar period had some fairly big centres. The continuous trickle of Russian works in my database were almost all published in the extreme north-west, in Moscow and on the Baltic. Scotland consistently contributed to race classification publication, but Ireland only on a very small scale. Over 95% of Ripley’s publications were from Europe, and most of Europe contributed, with the main exceptions being the Balkans (a few publications only), Portugal, the Czech lands and Finland. Most of the rest came from the United States, plus a few from British India. Occasional works in my database were published in the southern states of the US, in Canada and the Dutch East Indies, but none from Morocco or Tunisia, nor east of Bucharest, Athens and Cairo. Interwar Russian, Polish, Yugoslav and Romanian source texts cite just as much from the big three countries as other texts from the period. Though Polish and Russian source texts cite works in their own languages and by their own nationals, citation of other Central and Eastern European languages and Balkan writers is negligible.

Other data corroborate this geography. Most of Eickstedt’s classifiers are from continental north-western Europe, with slightly fewer in Britain, followed by Italy, the U.S., Austria and Slovenia. He has just a few classifiers in Poland, Russia, Scandinavia and Canada. The top attenders at pre-1914 anthropology congresses were imperial powers and smaller, technically advanced Western European countries. France, Belgium, Britain, Germany and Italy sent delegations to at least 13 of Comas’s 14 congresses. Russian, Swiss, Danish, Swedish, American and Austro-Hungarian delegates attended 10-12, Portugal and Spain, 8-9, the Netherlands, Romania and Argentina, Japan, Mexico, Norway and Hungary, four, and other Balkan and Latin American delegations attended just one or two. Of the most referenced foreign authors in E.-T. Hamy’s library catalogue meanwhile, five were English, three German and two each were American, Swedish and Swiss (Dias 1991: 240). In my database, native researchers described most Western European countries from the outset, including Scandinavia, Poland and Austria, but not Finland and Spain, while information cited about Eastern ones was generally by foreigners at least at the start. A Pole and a German made the first studies on Bulgarians in 1873-75, and foreigners initially dominated research after home-rule in 1878 (Godycki 1958: 26; Făcaoăru 1938: 217). Albania was the extreme case. Even amateur

anthropology ‘was essentially unknown’ there before 1912 and foreigners made most interwar studies (Fistani 1997: 47-48). Natives began describing Russia in the 1840s, Hungary in the 1870s, and with Finland and Bulgaria, these were the only Eastern countries to achieve full auto-representation. In countries starting this process later, like the Balkans from the 1880s and then the Czech lands, Spain, and Croatia, foreigners remained responsible for about half the descriptions cited. Nationals of the imperial power or local ethnic elites represented the Irish, Slovenes, Belarussians, East Galicians, Baltic Peoples, North Africans, Macedonians and Maltese in the database. A more mixed group of foreigners described Ukrainians, Albanians, Bosnians, Turks and other continents.

Language blocs

Languages had such a potent effect on the structure of the classification debate that it often makes more sense to examine it in terms of language blocs rather than countries. German or French speaking theorists in Switzerland and Belgium like Kollmann, Pittard and Houzé often followed linguistic affiliation in a number of controversial nationalist issues. This emotional identification, drawing on the key role of language in defining ethnicity, both resulted from and promoted enhanced interaction within language areas, as measured by institutional and social connections and choice of reading and citation. In Eickstedt’s canon, language zones were integrated publishing areas. Several of his authors published in both Vienna and German cities; in both Paris and Brussels, and in North America and London. The newly created *Ecole libre d’anthropologie* at Liège in Belgium had so close a relationship with its Paris equivalent, on which it was modelled, that in 1919 it agreed to merge its journal with the Parisian *Revue anthropologique*, threatened with closure due to war shortages (Myres 1930: 27). This may have reflected the special circumstances of wartime alliance however. Important mid-nineteenth-century American classifiers like Morton studied medicine in Britain meanwhile (Lurie 1954: 228).

German nationalism particularly stressed linguistic ethnicity, and the Germanophone area had a long tradition of particularly intense intellectual interaction and personal movement, influencing anthropology since its Enlightenment beginnings (Stagl 1995: 234-44). Germanophone anthropology functioned as a single intellectual community until the 1960s (Dostal and Gingrich 1996: 263). Eugen Fischer included Zurich and Vienna in a list of anthropology chairs in ‘Germany’ (Fischer 1923: 9). Around 1900, ‘[s]tudents, academicians, and scientific meetings circulated continuously between’ Germany, Austria-Hungary ‘and German-speaking Switzerland, forming in effect one “scientific nation.”’ (Massin 1996: 83). A ‘great number’ of German, Swiss and Austrian anthropologists studied or taught at some point in one another’s countries, including

leading figures like Kollmann, Vogt, Reche, Mollison, Schlaginhaufen, Rudolf Pöch and Rudolf Martin (Bay 1986: 300-2; Massin 1996: 83; Eickstedt 1940: 138; Oberhummer 1921: 96). Nearly half the trained German anthropologists up to 1945 studied under Martin, who was Swiss, or his students (Schwidetzki 1982: 88). German anthropology included diaspora Germans, like von Baer in St. Petersburg and Stieda at ‘the Baltic-German university city Dorpat’ (now Tartu in Estonia), both early nineteenth-century anatomists (Eickstedt 1940: 174). Almost all Dorpat-published citations in my database are in German, written by Stieda’s ethnic German or Swedish students, and focus less on the local area than usual in small, peripheral countries. The Vienna and German anthropological societies ‘worked in the closest harmony’, holding some joint annual meetings (Eickstedt 1940: 136; Poech 1921: 88-89). Swiss and German anthropologists meanwhile maintained ‘close and permanent’ intellectual ties from eighteenth-century Göttingen University, to the key role of Swiss craniologists in the early German anthropological society, and strong German influence in late nineteenth-century Switzerland (Rupp-Eisenreich 1984: 98; Eickstedt 1937b: 89; 1940: 138). Of ten anthropologists who tried to set up a German society in 1865, four were Swiss-based and one worked in Russia, while Geneva-based Carl Vogt convened the meeting that finally founded the society in Austria (Zangl-Kampf 1997: 547; Fischer 1926: 100).

French, German and English works were published in 13, 15 and 8 countries respectively where those languages were not native. While minor language speakers wanted a wider audience, all classifiers demanded foreign material they could understand. The Polish anthropological society planned in 1935 to publish articles in ‘world languages’ in its journal to give foreigners ‘an overview’ of Polish research (Schwidetzky 1935: 82). Taylor said that its ‘minority’ language isolated Italy within international anthropology (Taylor 1988: 48). An 1875 British journal meanwhile hoped description ‘in some more “international” language than Swedish’ would make a reviewed book ‘more generally accessible’ (Howorth 1875: 354). French was the main foreign language in Latin-speaking countries, the Netherlands, North Africa, Russia and Romania; and German in Scandinavia, the Baltic and Central Europe, though more among Czechs than Poles. English was the main foreign language of Greek works, followed by French, and challenged German’s dominance in Scandinavia. Czech and Dutch anthropologists occasionally wrote in English, Swedes in French and Greeks in German. Sklenář calls language a ‘serious’ problem for scholars of ‘smaller nations – Danes, Poles and Czechs’, who always followed major language work, translating it from 1850 on, but even though they at first published in ‘major languages’, did not ‘reach a wide public’ (Sklenář 1983: 86). Stagl includes the Dutch, Swiss, Hungarians and Czechs in Enlightenment and romantic Germany’s sphere of cultural influence (Stagl 1995: 234-44). Croat and other Slav intellectuals complained of being dependent for scientific recognition on,

but ignored by, ‘the German-speaking central European community’ (Wolpoff and Caspari 1996: 111). In Hungary, Bohemia, most of the Balkans, which first appeared very late in my database, plus overseas colonies, Ukraine, the Baltic lands and Ireland, where peasant and ruling classes spoke different languages, publishing was in international and ruling languages. This is an ambiguous peripherality index however as the Dutch also wrote almost entirely in foreign language, perhaps indicating the sophistication of local anthropological publishing. This may have been a factor in Bohemia also. Larger peripheral language communities like the Iberians, Russians and Poles were meanwhile mostly cited in their own languages. In Ripley’s data, Russia was the most significant foreign ‘market’ for both French and German, with almost as many French language works published there as in Switzerland.

If Slavic and Magyar Central Europe were peripheries of a wider Germanophone area, the geographically separate mid-Baltic and southern Scandinavian cluster of publication centres looks like part of its core, in some senses in the German orbit, but in others revolving around Stockholm (Holck 1997a: 754-55). Norwegians were full members of the Swedish anthropological society, and 40% of works in my database from Finland, where a large and socially prominent Swedish minority lived, were in Swedish (Holck 1997b: 1006). Eickstedt identified strong Scandinavian contributions to anthropology since Linnaeus (1937b: 88-89). Sweden had a quite consistent place in my database, with percentages of 5-13% in three periods, roughly proportional (for its size) with the leading countries, and Stockholm always published about as many cited works as the top two to four German centres. Dias calls Scandinavian ethnographical museums from Copenhagen (1807) on, a ‘point of reference’ and pilgrimage for late nineteenth-century European scholars (Dias 1991: 144). The three-age chronology of Thomsen in Copenhagen spread rapidly among Scandinavians, Poles and Czechs, but many German archaeologists long resisted it, in part due to Danish-Prussian territorial disputes (Sklenář 1983: 88-89).

Provinciality

Dependency relations also existed within the core and inside countries. In Ripley’s data, publication is extremely metropolitan. Of 110 cities where he reports publication, almost 65% was from Paris, London, Moscow, Brunswick, Vienna, Berlin and Leipzig, while over half the citation in my database of 175 cities was from Paris, London, Berlin and Vienna. Both data sets attribute at least 29% of publications to Paris alone, and report still more centralised publication of periodicals. Ripley’s top six cities account for three quarters of all of his journal articles, but just over half the monographs.

Large countries, even those like Russia with low education levels, could provide a critical mass for anthropological specialisation, particularly if concentrated in few centres. They therefore dominated international anthropology, while smaller countries often underperformed. Făcaoăru said ‘anthropology and adjacent sciences are partially introduced’ in interwar Sweden, Norway, Yugoslavia, Greece, Belgium, Java and India, and ‘poorly’ or nominally represented in Romania, Denmark, Bulgaria and the Baltic states (Făcaoăru 1938: 216). In Ripley’s bibliography, France was the most dominant publishing centre within its linguistic zone, with 85% of Francophone publications, followed by Britain (77%) and Germany (72%). While my database shows all three published some works in foreign languages, other countries speaking the big three languages (Belgium, Switzerland, Austria, Scotland, Ireland, Canada, the US) were purely monolingual, suggesting a certain provincialism. Smaller and more peripheral countries were both, in my database, at the bottom of the classification food chain, focussing on local research, and occasionally general topics, like global or European schemes, or non-geographical themes. They avoid specific studies of distant regions, suggesting that their writers were armchair anthropologists rather than explorers. The mix of countries involved suggests that size and development of an anthropological community, rather than degree of nationalism, dictated how cosmopolitan its interests were, as cited in my database. Germany, the Netherlands, Austria and Scotland devote 9-13% of their citations to their own people or subject people, France and England, 16-17%, Italy, 30%, and Sweden, Poland and Russia, 45-53%. At the opposite extreme, all or almost all citations from works published in Greece, Bulgaria, Hungary and Bosnia refer to those countries alone. Ukraine, Spain and Portugal, the Czech Lands, Denmark, Norway, Finland and Romania join them if research on immediate neighbours is considered local subject matter. Either limited resources required prioritisation of local research, or the international classification community dismissed small and peripheral country establishments as mere harvesters of anthropometric data.

Countries differ radically in how centralised their scientific publication and institutions were. While ‘all scientific matters of national’ French or British ‘concern centred on institutions of academic rank in Paris or London,’ Italy, where scientific and regional diversity went hand in hand, had ‘venerable and distinguished institutions’ in Rome, Milan, Florence and Naples and Germany had ‘numerous regional centres of anthropology’, academies in each of its constituent states, and networks of local societies and ethnological museums (Myres 1930: 23; Bunzl & Penny 2003: 15; Dias 1991: 31). In 1878, the German anthropological society had 26 member societies or branches including even in little towns like Memmingen and Gunzenhausen (Schwidetzky 1982). Ripley’s and my data show London and Paris always among the most productive cities, with British, Austrian and especially French race classification publishing overwhelmingly concentrated in

capitol cities, with. In Ripley’s data, around 70% of Belgian and Russian titles were from capitals, while my database made Stockholm the dominant Swedish centre. In contrast, Ripley, Cogni, Eickstedt and I report fluctuating constellations of smaller publishing centres in Germany (13 centres), Italy (6), Poland, Switzerland, the United States and the Netherlands, rarely exceeding a quarter of the national total. Cambridge and Edinburgh are important secondary British publishing centres in Eickstedt’s canon, and in my data, the 1830s-1840s were important for Scotland, which with Ireland, then contributed half the British figure. Edinburgh medical faculty, where Knox lectured and Prichard, Morton, Darwin and Beddoe were alumni, was an ‘important’ race study centre (Lurie 1854: 228; Allen 1971: xiv; Hrdlička 1914: 513). Unsurprisingly, Scottish works were also important in the late Enlightenment period (1774-1814), but otherwise, British race anthropology was largely published in England. England’s anthropology institutions and publication were seemingly as concentrated in London, and later in the nineteenth century, Oxford and Cambridge also, as France’s were in Paris. While German anthropologists apparently cooperated smoothly even across frontiers, united Italy, Poland and Romania seemed wracked with regional rivalries, perhaps due to the weak coherence of newly assembled countries (Schwidetzky 1935: 83). However multiple schools, each controlling different institutions represented the range of views within national anthropological establishments. While in decentralised countries, schools captured the institutions of particular cities, French and British anthropological factions battled to control institutions in Paris and London.

History of the Classification community

	1555- 1712	1713- 1773	1774- 1814	1815- 1832	1833- 1852	1853- 1871	1872- 1888	1889- 1905	1906- 1918	1919- 1939
France	40	31	10	85	21	27	41	34	7.5	12
Germany	0	5.5	54	3.5	14	22	31	13	28	38
Britain	16	28	21	5	25	29.5	7	19	16	18
Total	56	60	92	93.5	60	78.5	79	66	51.5	68

Works in my citations database published in the big three countries (percentage of total works)

France was usually the leading race classification country up to about 1900, with a ‘normal’ range of 25-40% of publications in my database. It was particularly dominant in the 1810s-1830s and 1870s-1890s, when Broca established an exceptional set of anthropological institutions in Paris. Anthropological booms in late Enlightenment Germany and much more modestly in mid-nineteenth century Britain and the US, interrupted French dominance. The Dutch and Swedes also contributed

important earlier classification works. France and Britain dominated the early nineteenth-century ethnological disciplinary coalition while France led late nineteenth-century, cosmopolitan, positivist anthropology. The latter was the heart of my database, which has twice as many citations for the 1850s-1860s as for the entire preceding period from 1655 on. Levels of citation are fairly steady from the 1850s on, with an important peak in 1889-1905, followed by a slightly lower plateau, with a gap for World War I. My canon of classifiers has a slightly earlier centre of gravity, due to the standard history effect. Of 89 classifiers, 11 were from before 1800, almost two thirds from the nineteenth century, half of these after 1860, and 24 after 1900. The classification community expanded from north-west Europe to Austria, Russia, the U.S. and Italy in the mid-nineteenth century, Central Europe in the century's later decades and then to the Balkans and some European colonies. Russia peaked in the nineteenth century and Italy at the start of the twentieth, while Americans and Poles became major twentieth century classifiers. The positivist international anthropology programme and disciplinary coalition disintegrated from around 1900. Western countries separated cultural from biological anthropology and faded as important race classifiers, while Germany, even before 1933, became increasingly race-obsessed. By the interwar period, its new, right-wing disciplinary coalition towered within international race classification. Eickstedt's canon confirms the turn of the twentieth century trends of increased diversity, German dominance and a strong American position. An overall majority of his schemes from 1903-36 are in the German language, followed by English, Italian, French and Russian.

Anthropologists often dated modern race classification from a 1684 article by François Bernier, a French physician and traveller. However my citations database first expanded powerfully from the 1770s, with Germans suddenly very prominent, accounting for over half the citations from 1777-1814. Eickstedt called this the flowering of German anthropology, recording only German schemes in 1773-96 (1937b: 88). In my race classification canon, around half of eighteenth-century citations were German, with the craniologist Blumenbach particularly prominent, followed by Immanuel Kant. After naturalists, the next most important eighteenth-century race classifiers in my canon were philosophers, geographers and historians, including Kant and Leibnitz. Humanities scholars were subsequently less well represented, as classification turned decisively towards biology. Several of the professional naturalists or physicians, including Bernier, and Bory in the nineteenth century, were travellers, publishing scientific accounts of exploration voyages, and introducing both naturalists and the public to non-European races. The explorer Richard Burton chaired the first London Anthropological Society meeting (Keith 1917: 19). Research missions continued, but the emergence by the mid-nineteenth century of a distinct European sub-field of classification, plus increasing ease of travel and improved systems of information collection, made voyaging less

momentous. Blumenbach accounted for over half, and with fellow Göttingen professors, over 60% of my database citations of German works from 1777-1814, and three canonical classifiers. Outside the big three countries, Dutch, Swedish and Swiss publications appear most consistently in my database before 1800. Aside from Linnaeus and Blumenbach, who published in Latin, most citations in non-native languages up to the 1790s in my database were of Dutch classifiers, publishing in French in the Netherlands. The little non-native language publishing at this time was often local, perhaps continuing into the 1820s, before anthropological journals or societies facilitated foreign publishing. After the 1790s, some Swedes and Czechs began to publish in German, and mostly in Germany. The heavily cited 1842-64 works of the Swedish anatomist Anders Retzius were mostly written in Swedish but translated into several languages. They were largely cited in German but also in French and published mainly in Stockholm, but also in Germany and Switzerland.

Early modern Germany, and especially 1770s-80s Göttingen scholars*, coined most race classification discipline names and along with Central Europe was central to the development of *Linguistik*, *Ethnologie*, *Ethnographie*, *Statistik* and archaeology (Vermeulen 1995 :47; Stagl 1995: 234-44). The Renaissance German humanist Magnus Hund, writing in Latin in 1501, is identified as the first to use the term ‘anthropology’, meaning a ‘a very inclusive, very general “science of humanity [Menschen]”, though with heavy stress on natural science’, including biological and mental (or cultural) aspects (Stagl 1995: 233; Schwidetzky 1974: 7). Schwidetzky said ‘anthropology’ kept this general meaning until the mid-nineteenth century (Schwidetzky 1974: 7). Western Europeans called this *science de l’homme*, combining physiology with progress to civilisation. The seventeenth-century ‘specifically German science’ named *Statistik* in 1749, empirically studied the ‘physical aspects, illnesses, thoughts, customs, virtues, vices’, and political, social, administrative, scientific, economic, military and religious ‘constitution of states’, in order to improve statecraft (Rupp-Eisenreich 1984: 95 & 97). *Völkerkunde*, a historiography focussing on peoples rather than on states, periods or scientific and artistic development, developed from this and was termed ‘ethnographic’ in 1770 by a Göttingen professor (Rupp-Eisenreich 1984: 91-92). Once ‘ethnography’ and ‘ethnology’ (or *Volkskunde*) were coined by 1784 for the study of cultural diversity, describing and comparing specific cultures, German *Anthropologie* became a study of what united humanity, like physiology, psychology and philosophy, but the term was adopted in Western Europe with its original broad German meaning of the study of humanity (Stagl 1995: 234;

*Rupp-Eisenreich calls Göttingen professors ‘typical representatives of the rising bourgeoisie,’ whose role was ‘to educate young statesmen’, and who ‘perfectly’ accepted ‘the reign of reason assuring prosperity and well-being’ to the powers that be (Rupp-Eisenreich 1984: 94-95). She adds that although politically powerless, they symbolically shared power over conquered extra-European territories through their scientific erudition (Rupp-Eisenreich 1984: 95).

Vermeulen 1995 :47; Rupp-Eisenreich 1984: 91). These disciplines' names and comparative approaches to cultural diversity spread throughout Central Europe by the early 1820s, and gradually filtered into the West, 'ethnology' entering France in 1787, and 'ethnography' sporadically after 1826 (Rupp-Eisenreich 1984: 91; Vermeulen 1995: 50).

After 1815, the centre of race classification switched dramatically from Germany to France, German language citations in my database dropping from over 30% to just 2.5%, and German classifiers all but disappearing from my canon. Germany slipped to second or third place as a publishing centre until 1918. Eickstedt's canon gives Germany just six nineteenth-century schemes, and the German language eight, but makes classification an overwhelmingly French speciality in 1800-30, backed weakly by Germany and England, and with the emphasis changing to ethnic race classifications. 'Soon after 1800', he said, 'the great Blumenbach's shadow' stifled all 'new life' in German anthropology, but immediately, under 'strong' German influence, anthropology thrived 'almost' as vigorously in France (Eickstedt 1937b: 87). Almost all race classifiers listed by Blumenbach until the late 1820s are French. French language works in my database, which initially dominated but plunged to under 20% in the heyday of Göttingen, soared to 82.5% in 1815-32. Eickstedt said that despite German inspiration, a social and cultural rather than racial focus repeatedly undermined British anthropology. In the battle for its direction, the 'sociologist' Prichard utterly defeated 'the German' biological approach of William Lawrence, leaving both Germany and England 'quiet for a long time' (Eickstedt 1937b: 88). Dutch race classification briefly achieved British levels of citation before 1814, but apparently went into decline with Germany and Britain, never again recovering.

Classifiers established national societies in two major international waves, from 1839 and 1859, and a third wave established professorial chairs in anthropology in the 1880s. Institutionalisation intensified 'a concern for defining the boundaries and content of' race science, and provided alternative communication channels to book publication (Spencer 1981: 355; Sklenář 1983: 86). It also entrenched the roles of dominant figures like Morton in the American school, Virchow and Bastian in Germany, Broca in France, Sergi in Rome, Mantegazza in Florence and Czekanowski in Lwów. Successful institutionalisation reflected the triumph of confident positivism. The 'immense progress' of natural science made its positivist 'determination... and consistent systematisation of' 'unambiguous facts' 'most attractive for other sciences' (Sklenář 1983: 108-9). Seeking scientific recognition, anthropology took natural sciences like anatomy and zoology as models, while Balbi in 1826 aspired to the natural science 'model of scientificity' for linguistics, banning 'rhetorical and literary' flourishes (Dias 1989: 206; 1991: 19). Mid-nineteenth-century middle-class Germans

founded popular natural science associations and devoured journals with ‘entire sections’ on geography and ethnology (Bunzl & Penny 2003: 5). Biology and specifically race felt like the most ‘natural scientific’ approach to studying humanity. From 1800, and especially in 1860-1915, as the medical profession dramatically expanded in numbers and ‘biopolitical power’, ‘biological concepts, methodologies, metaphors, “laws,” and hereditarian attitudes had a powerful influence in the “softer” scientific disciplines’, creating an ‘imperium of biology’ which climaxed around 1900 (Massin 1996: 120-21; MacMaster 2001: 49; Blanckaert 1988: 49). Leerssen says ‘the racial classification of humanity became dominant in all spheres of life’, as Knox’s *The races of men*, which ran to a second edition in 1862, and Beddoe’s *The races of Britain* ‘became widely popular’ (Leerssen 1996: 94). Arnold attributed this to the impact of ethnological science which a generation before had been ‘slowly acquiring consistency and popularising itself’, giving educated people a ‘strong and real... sense of sympathy or antipathy, grounded upon real identity or diversity in race’ (Arnold 1962 [1867]: 301).

In my canon, the leading pre-1800 race classifiers were academic biologists, including anatomists and botanists but especially zoologists, but these subsequently share dominance with leading ethnologist-physicians, like Prichard, Edwards, Morton, Virey and Latham. These entered the canon by establishing ethnology societies, publishing best-selling race schemes and figuring as privileged disciplinary ancestors for later anthropologists*. As Blumenbach and later influential anatomists like Retzius and Morton made craniology the key race classification method, medical faculty anatomists replaced zoologists as the main canonical classifiers (Blanckaert 1988: 46). Many attribute the growing nineteenth-century dominance of physical over cultural anthropology to most anthropologists being medical men and anthropology’s close links with medical teaching (Milcu 1954: 7; Day 1997: 110). Most leading German anthropologists, including Virchow, Bastian, Luschlan, Ranke and all three original leaders of the physical anthropology society founded in 1926 were medically trained, while 16 of 19 founders of the Paris society were medical doctors and one was a natural scientist (Proctor 1988: 141; Vallois 1959: 78; Dias 1991: 50). While race classifiers were generally doctors, Dias says France stands out for the exclusive medical training of all anthropologists (Dias 1991: 238). Medical men also presumably mobilised mass anthropometric surveys. Broca was a surgery professor and pioneering neuroanatomist, localising a brain area involved in speech, that is still known as Broca’s area, while most other physicians in my canon led

*Paul Broca’s chosen forefathers, Edwards and Amédée Thierry, account for well over half the French citations in my database for 1815-32. Broca’s massively influenced European classification, ranking behind only Prichard for non-scheme database citations. Quatrefages by contrast ‘claimed priority... for his own professional corps, the naturalists’, saying Edwards merely applied their race concept to historiography (Blanckaert 1988: 19).

anthropological societies (Spencer 1997g: 221). In countries like Germany and Poland, where race classification remained central, most 1930s anthropologists were still doctors.

Ethnological and anthropological societies

In a letter to Amédée Thierry (1797-1893) in 1829, William Edwards, a polygenist naturalised Frenchman of Anglo-Jamaican origin, defined the research program of ethnology, ‘designed to confirm Thierry’s national history’, by combining two previously distinct race study traditions (Spencer 1997e: 357; Blanckaert 1988: 19). These were the comparative anatomy tradition of naturalists like Blumenbach who tried ‘to distinguish racial types’, and the insights of travellers and romantic historians like Thierry and his brother Augustin, who distinguished ‘the various peoples who constituted the nation,’ and followed ‘the vicissitudes of their fate’, uncovering ‘ethnic and organic factors underneath cultural practices and social revolutions’ (Edwards 1841: 2; 1845: 14; Blanckaert 1988: 19; Spencer 1997e: 357). Thierry thanked Edwards for ‘unexpectedly’ backing his conclusions with ‘new evidence’ from natural history (Blanckaert 1988: 28). Edwards, whose ‘science of man in general’ covered ‘physical’, ‘moral and intellectual traits’, called it ethnology, adding race to this previously purely Central European ‘geographical, historical, linguistic’ science of human groups (Vermeulen 1995: 50; Stocking 1987: 56; Dias 1991: 18-20). The term ethnology demarcated Edwards’s project from the ‘linguistic connotation’ of ethnography and anthropology’s equally limiting ‘strictly anatomical study of physical characteristics’* (Dias 1991: 18-20). At this dawn of nationalisms, anthropologists and linguists competed furiously to be the discipline defining ethnicity (Dias 1991: 18). Blanckaert says 1820s scientists ‘generally’ equated ‘language and race’, and this ‘gave romantic anthropology its disciplinary matrix and its body of assumptions’ (Blanckaert 1989: 182). In 1829, Edwards said linguistics was vital for solving ‘a horde of historical questions’, because race and language agreed ‘often and to a great extent’, while the monogenist English ethnologist Prichard saw language as the ultimate arbiter of race (Edwards 1841: 82-83; 1845: 32-33). They were seduced by two related linguistic novelties. In 1788, Sir William Jones, a British judge in Bengal, launched the Indo-European theory, by showing that Indian and European languages were related. Then early nineteenth century German scholars like Grimm, Bopp and Pott developed comparative philology, a systematic, reliable and widely accepted new method for judging relationships between languages (Bunzl 1996: 31). Philology’s dominance in race classification was only finally effectively challenged in the 1860s by Broca.

*The famous Venetian geographer Adriano Balbi popularised the German term ethnography in France from 1826 for his scientific linguistic classification of peoples (Dias 1991: 18-19). Ethnologists classified races instead (Dias 1991: 21). Associations with phrenology, in vogue in the 1930s-1940s, may have helped disqualify anthropology (Dias 1989: 224)

After Edwards founded the Ethnological Society of Paris in 1839, similar bodies appeared in a ‘relatively sudden and spontaneous burst of scientific enthusiasm in the 1840’s’ in most Western European capitals and in New York, crystallising ‘many’ current race theories (Curtis 1968: 29; Fischer 1923: 7). Edwards’s ethnological ‘alliance between historiography and physiology,’ a ‘natural history of man’, which ‘claimed to understand’ the ‘reciprocal ties’ between ‘the *physical* and the *moral*’, supported by ‘the science of travel’, ‘philology and geography’ skilfully compromised between these race classifying disciplines (Blanckaert 1988: 38-39 & 46; Spencer 1997e: 357). Founders of his society included archaeologists, geographers, the leading historian Michelet, and the biologists Milne-Edwards (William’s brother) and Pierre Flourens, professor of the Natural History of Man at the Paris *Muséum d’Histoire Naturelle* (Blanckaert 1988: 41). Edwards restored study of Europe to ‘a major branch’ of race biology, after naturalists, ‘the only accredited’ early nineteenth-century specialists in systematic race study, had ‘practically abandoned’ it, classing ‘all white peoples’ in one Caucasian type (Blanckaert 1988: 27-28). Geographers began “‘ethnographic” studies’ even before natural historians, variously classing ‘nations’ by language, physical traits, customs or ‘aptitude for civilisation’, but Edwards subordinated these aspects of human diversity to ‘biological explanation’ (Blanckaert 1988: 26). Wilde in 1844 therefore saw architectural and artistic antiquarianism, philology, history and ‘natural history of man’, which studied physical traits, ‘habits and moral condition... geographical distribution’, and above all, skull form, as branches of ethnology (Wilde 1849: 212-14).

Ethnology’s all-encompassing race definition, including psychological form, language and political identity, gave such non-biologists as linguists, sociologists, political and historical philosophers, students of national psychology and even literary critics a claim to pronounce on it. These insisted that their ‘ethnology’ was objective science* though often ignoring evidence from physical form, and identifying races with nations or even, like Knox’s Celtic Stuarts and French Revolution, with political causes (Knox 1850: 15; Arnold 1962 [1867]: 298-99; DUM 1855: 721; see pp.332-33). Eickstedt said Linnaeus, Buffon and Meiners brought ‘emotional or cultural valuations’ into classification in 1758-86, but because nation and race were widely equated, the inter-ethnic clashes of 1848-49, in which nationalism lost its liberal, democratic innocence, were an important spur (Eickstedt 1937b: 82). Robert Knox congratulated himself in 1850 for predicting ‘the coming war of race against race, which has convulsed Europe during the last two years’ and for questioning political definitions of Germany that included Bohemia (Knox 1850: 17). The 1840s-1860s was the apogee of philosophical ethnology, ‘normative [*wertenden*] race philosophy or political race study

[*Rassenlehre*]’ with popular works by de Gobineau, Renan and Clavel in France, Klemm and Carus in Germany, Knox and Matthew Arnold in England, and Nott and Gliddon in America (Eickstedt 1937b: 42 & 82). Racist ideologues and propagandists’ translated scientific racism ‘into popular forms and slogans’, publicised from the 1850s by new mass marketing techniques (MacMaster 2001: 8-9). Convinced that race was a key to history to rival Hegel’s *Geist*, Count Arthur de Gobineau (1816-82) and others developed full-blown racial philosophies of history, some even defining races by political-historical role. One linked Magyars with Celts, mainly because in 1848 they ‘so bravely joined... Celtic and indigenous’ Italy against ‘Gothic’ Hapsburgs (DUM 1855: 734).

The major ethnological controversy was whether human races had a single (monogenist) or multiple (polygenist) origin (Stocking 1992: 350). The leading English ethnologists were committed monogenists, while a strong polygenist current suffused the Paris society (Stocking 1991: 246; 1992: 350; Blanckaert 1988: 43-44). Most French monogenists nevertheless accepted Edwards’s raciological compromise, as it had the ‘stamp of authority by influential naturalists of the Muséum’ like Saint-Hilaire, Jean Louis Armand de Quatrefages (1810-92) and Etienne-Renaud-Augustin Serres (Blanckaert 1988: 45). The Paris *Muséum d’Histoire Naturelle* was founded as the Royal Garden of Medicinal Plants in 1640 with a medical school, appointing a human anatomy professor in 1769 (Ferembach 1986: 21-23). Blanckaert says it was ‘largely due to Edwards’ influence’ that this became a chair in ‘Anatomy and the Natural History of Man’ under Serres in 1839, so that “‘the natural history of man,” marginalized and almost abandoned before 1840, became again a scholarly discipline’ (Blanckaert 1988: 45). Serres, whose job description was to ‘study the characters of Human races’, ‘their filiation’ and their influence on ‘physiology, philology and history’, came to focus on craniological race classification, titling his course ‘or anthropology’ from 1845 (Ferembach 1986: 23-24; Blanckaert 1988: 45-46).

The Ethnological Society of London of 1843 borrowed the French term ‘ethnological’, which was ‘still new to English usage’, for a fusion of ‘comparative linguistics and comparative anatomy’, the ‘regnant’ human and biological sciences respectively up to the 1860s (Stocking 1991: 244; 1992: 350). British ethnologists like Prichard and Knox, and later Huxley, Davis and Thurnam led an internationally important revival of Anglophone classification, which also included the polygenist ‘American school’ of Philadelphia anatomist Samuel George Morton (1799-1851), Agassiz, Nott and Gliddon. The monogenist English ethnological leader Prichard, whose widespread international

*The literary critic Arnold argued that Saxons must accept ‘the Celt’s’ demands to have ‘his genius and its works fairly treated, as objects of scientific investigation’ as long as these demands ‘are not mixed up with extraneous pretensions

contacts included Grimm and Thierry, has been variously called ‘the founder of modern physical anthropology’, by ‘far the most influential ethnologist in England’ in 1800-50, and Edwards’s ‘only theoretical adversary’ with comparable influence in 1820s anthropology (Blanckaert 1988: 35; Collis 2003: 57-58; Horsman 1976: 396). In the 1830s-1860s, British contributions made up 25-30% of my database, edging ahead of France. In Eickstedt’s canon, German and American schemes dominated in 1829-54. Broca ‘adopted in detail and built upon’ the work of Morton, whose American School ‘was held in high regard’ in France, England and Germany (Brace 1997: 865; Erickson 1997: 832).

The British and French ethnological societies both rapidly declined, the latter fading to ‘nominal existence’ after 1848 (Blanckaert 1988: 44; Curtis 1968: 29; Stocking 1991: 248). But a second wave of anthropological societies, with different scientific and political agendae, emerged in the 1860s in ‘a burst of enthusiasm’ and ‘controversy’, beginning with Broca’s Paris Society in 1859 (Curtis 1968: 29). Just then, a new generation of archaeologists and anthropologists like Barnard Davis, then ‘the country’s leading craniologist’, John Thurnam (1810-73), John Beddoe (1826-1911), Robert Knox (1791-1862) and James Hunt (1833-69) reinvigorated the London Ethnological Society (Stocking 1991: 246-47; Allen 1971: xv). This anatomically-oriented ‘racialist current’ bickered with the ‘older Quaker humanitarian element’, so Hunt formed a separate Anthropological Society in 1863, modelled institutionally and programmatically on ‘our parent society’ in Paris (Hunt 1864: xcii; Stocking 1991: 247-48). Similar bodies were founded in Göttingen (1861), Moscow (1863), Madrid (1864), Cracow (1864), St. Petersburg (1865), New York (1865), Oxford (c.1865), Manchester (1866), Berlin (1869), Munich (1869/70), Vienna (1870), Germany (1870), Kiel, Münster, Stuttgart, Wurttemberg, Florence (1871), Seville (1871), Stockholm (1873), Kazan (1878), Washington (1879), Havana (1879), Lyon (1881), Brussels (1882), Burdeos (1883), Bordeaux (1883/84), Tokyo (1884), Bombay (1886), Porto (1887), Rome (1893), Sydney (1895), Amsterdam (1898), The Hague (1898), Coimbra (1898), Frankfurt (1900) and the United States (1902), though not all of these lasted long (Fischer 1923: 8; Lebzelter 1938: 74; Făcaoăru 1938: 210; Sanemeterio Cobo 1999). The societies flourished. London’s welcomed floods of members and issuing a stream of publications, far outstripping its Ethnological parent, while Manouvrier said that if the spectacular membership growth of Paris continued, it would reach 25,000 in 1959 (Stocking 1991: 248; Vallois 1959: 77; Keith 1917: 20).

which jeopardise them’ (Arnold 1962 [1867]: 298-99).

An international programme

One British anthropologist saw increased international co-ordination in turn-of-the-twentieth-century science and ‘the political and economic... rough-and-tumble “scramble for Africa”’ as ‘the same general and rather sudden’ global ‘scientific and practical exploitation under modern conditions of intercourse’ (Myres 1930: 23). Scientific authority and advance relied on open international exchange of ideas and information, which was meant to guarantee the absolute universality of positive scientific conclusions. Since the Enlightenment, natural scientists constructed ‘a vocational identity... of invincible rectitude, indifferent to social contrivance and corruption, and absolute personal autonomy’ (Outram 1997: 469). The reigning ‘scientific universalism’ demanded that a ‘researcher’s national, religious, political and social background’ be irrelevant to their positive, universally valid results (Kühl 1997: 37-38). National egotism was increasingly viewed as an unscientific transgression, as with improving transport and communication, the legitimacy of scientific ideas came to depend on their international acceptance. Sklenář says professional archaeologists abandoned populist romanticism nationalism in the 1850s-1860s, for positivist ‘calm objectivity’, emphasising what primitive people ‘had in common’ rather than ethnic differences and adopting an ‘anthropological approach’ which ‘deliberately transcended national boundaries’ (Sklenář 1983: 101, 104-5 & 124). Broca and his student and heir, Paul Topinard (1830-1911) tried to shelter anthropology from political controversy, making it ‘as much like’ a professional and neutral ‘natural or medical science as possible’, influenced by scientific evidence alone (Harvey 1984: 402-3; Hammond 1980: 118 & 128; Ferembach 1997: 400; Myres 1930: 27; Dias 1991: 26; Pogliano 2005: 442). The ‘international congresses, organisations’, ‘research initiatives’ and common ‘methodological standards’, needed by race sciences for acceptance as scientific disciplines therefore popped up ‘like mushrooms out of the earth’ (Kühl 1997: 37-38). Pre-War international anthropological congresses were widely scattered, in Portugal, Belgium, England, Denmark, Sweden and Hungary and two each in France and Moscow. A ‘marked object’ of the London Anthropological Society, according to Hunt, was to translate and publish ‘the most important’ continental European anthropology works (Hunt 1864: lxxxiii). Classifiers backed their theories by arguing that they had international support, a trend leading to universally accepted technologies like the Deniker and Ripley schemes. Kühl argues that despite no ‘systematic campaign to internationalise eugenics’, and its concern with improving national breeding stock to compete with other nations, ‘international cooperation was essential to establish’ it ‘as science’, and a stream of proposals after 1918 showed the ‘supranational and international... thinking’ of ‘influential eugenicists’ (Kühl 1997: 38 & 69). The discipline developed through intensive British-German ‘cross-fertilization’ and most European countries attended its first international conference in London (1912) (MacMaster 2001: 49; Mosse 1978: 75).

As experiment and measurement become ‘ever more central to scientific activity’, international networks of laboratories and ‘a transnational culture’ of intensified ‘scientific communication’ emerged, increasingly demanding standard methods (Kühl 1997: 38). In anthropology, the need for common measurement techniques to allow researchers to compare their work was an important spur to international collaboration. Countries opted for different techniques and instruments (Perier, Bertillon & Lagneau 1861: 332; Grattan 1858: 231). Kollmann complained in 1880 that the six competing graduations (including his own) of the crucial cephalic index directly affected race classification, Hölder for example including all Württembergers in one race, by defining dolichocephaly broadly (Kollmann 1880: 92-93). The German Anthropological Society therefore quickly attempted to standardise anthropometric techniques, in 1882 agreeing a text formulated by Kollmann, Ranke and Virchow, the three foremost German anthropologists (Sjovold 1997: 404; Spencer 1997h: 87; Spencer 1997d: 428). Though this ‘went some way towards’ standardising Germanophone practice, ‘elsewhere the French system was widely employed’, causing ‘increasing confusion’ and ‘open competition’ between systems (Sjovold 1997: 405; Spencer 1997h: 87; Beddoe 1912: 38). Early 1890s lobbying by the French anthropologist René Collignon led to international agreements at Monaco (1906) and Geneva (1912) to unify anthropometry on ‘the basis’ of Broca’s work, and create a framework for agreeing later revisions (Spencer 1997h: 87; Pittard 1924: 41; Sergi 1900: 10). Rudolf Martin in 1914 and Ales Hrdlička in 1920 ‘further extended’ these agreements (Sjovold 1997: 405; Spencer 1997d: 428). Anthropological congresses and in 1930, eugenicists attempted to unify international methods and in 1934, the Bologna anthropologist Fabio Frassetto founded a committee and journal called *S.A.S. Bulletin*, later printed in four languages, for this purpose (Kühl 1997: 76; Myres 1931: xxviii; Chiarelli & D’Amore 1997: 408).

German, French and British liberal positivist anthropologists formed the core of a very cosmopolitan international anthropology with craniological race classification at its heart. Their race classification was increasingly international. French 1860s debate on Aryans, Celts, Basques and fossil races was almost confined to Paris, with just sporadic British, Italian, Scandinavian, German and Italian participation. Though British and Irish research contradicted the internationally dominant Scandinavian race succession theory since the early 1840s, French anthropologists only absorbed this evidence in the 1860s, when they turned against the theory. The 1870s debates and especially later ones on the Aryans, appear much more genuinely international. My database confirms this steady internationalisation, with later nineteenth-century classifiers forming a particularly cohesive international group. I measured the degree to which classifiers accepted

common canons of contemporary expertise on European race classification by calculating the percentage of total citations made in each pair of source texts, that were common to both. To avoid the ‘standard history’ effect, I omitted citations of classification schemes. The greatest degrees of similarity united a small clot of late nineteenth-century Western European works. In the 18 highest correlating pairs, 18 works were French, nine English, five Francophone Belgian or Swiss, just two German, and another two American. Their degree of similarity ranges from 86% to 36%, which is extremely high, as the vast majority of the almost 16,000 pairs of source texts share fewer than 5% of cited authors. The close British adherence to a French-dominated bibliography on European race confirms Stocking’s argument that the British only turned decisively from the European focus of archaeological and physical anthropologists towards colonial anthropology after the 1880s (Stocking 1991: 261). Ten texts from the eight closest correlating pairs were from the period 1881-85 and just one text in the 15 highest correlations was originally published outside the period 1865-1900. *Crania ethnica* (Quatrefages & Hamy 1882) was the source text right in the centre of this web of connections*. Many of the next closest correlations involved the eight ringleaders of this group: Quatrefages, Hamy and Deniker of the Paris *Muséum d’Histoire Naturelle*, Topinard, who collaborated closely with Hamy, Houzé of Brussels, the London anthropologists Thurnham and Beddoe and the Basel anatomist Kollmann, a leading figure in German liberal anthropology. Hamy, Deniker and Topinard were all Broca students. These are involved in almost 65% of pairs in the 20th-100th highest correlating pairs, and constitute both members of 15 pairs.

German-speakers wrote three of the four 1874-80 works which also share most citations with the 1880s group, but which include cultural ethnologists and so have lower correlations, somewhat correcting the Franco-English bias of the 1880s group. They seem to correlate as or more closely with French as with German source texts within the group. The 1880s-centred group was the closest approach to a common canon of authorities on European race classification, whose wide acceptance helped it to remain dominant, in updated fashion, until the 1920s. A cluster of six closely-linked works from 1890-1902 correlate with it so strongly as to form a later fringe. Five source texts from 1920-24, (two British, American, Swiss Romand and Italian) and a 1933 French book shared a significant proportion of bibliography, but most have stronger 1880s and 1890s connections than with 1920s colleagues. Several have robust links with later works, and two are among the earliest to cut largely free of the 1880s bibliography. Rudolf Martin, the ‘foremost’ and last leading positivist-liberal figure in early 1920s German anthropology, drew on positivist French and German ‘anthropometric tradition’ in his massively influential 1914 textbook (Proctor 1988: 142).

*Ironically, it was partly a nationalist response, on a greater scale, to the national *Crania* works of Morton (1939) and Davis and Thurnam, His and Rüttimeyer and Ecker in the mid-1860s (Dias 1989: 208).

French, German and English speakers and nationals, always in that order, dominate my nineteenth century canon and 1880s group of closest correlating source text bibliographies, Eickstedt's positivist period (1853-89) canon and Ripley's 1900 data, which gave them 31%, 22% and 16% respectively for publication location and 38%, 29% and 20% for language*. France was the foremost positivist anthropology and race classification centre, early in establishing university institutions and ethnological and anthropological societies that inspired those of London (Stocking 1984: 422). Broca's *Ecole* began as the world's 'largest institution' teaching 'human physical and cultural evolution' (Hammond 1980: 118). Until 1860, French classifiers were in absolute majority in my canon, and remained *primus inter pares* of positivist international anthropology, significantly ahead of German speakers. The 1880s group of closest correlating source text bibliographies was heavily Francophone dominated, with five among the eight core members, and six Francophones if four marginal figures are included. In Ripley's 1899 bibliography, publications in French and from France dominate despite a temporary German rise to parity in the late 1870s and 1880s, and French use as an international lingua-franca, throughout Europe, was more than double that of German, which was largely confined to Scandinavia and the east and centre. French was more popular in Russia, Britain, Hungary and Scandinavia, where both languages were used. In my database, French was initially the sole foreign language for citations of Italian, Dutch, and Polish classifiers, German for the Czechs only and both for Retzius in Sweden. German competition cracked the French position as principle international language in the 1860s but only seriously challenge it in the 1870s. The French language was more international, with 7% in my database published in non-native-speaking European countries, but just 4% of German works. Eickstedt said French anthropology flourished from the 1860s after a brief lull, reaching its zenith in the 1870s-1880s. All but three of the French schemes in his canon were from 1801-89, concentrated in the romantic (1801-27) and positivist (1853-89) periods. In the latter, six of the 13 schemes were French. Francophone countries also dominated pre-1914 international anthropological congresses. Ten of the 18 took place there, half in Paris and the others in Brussels, Neuchatel, Geneva and Monaco. Broca chaired the 1876 Budapest congress and French was always the official language, though the Germans tried in 1874 to add German, English and the local language (Comas 1956: 30). The main conference language remained French until 1939, despite a 1912 vote for subsidiary use of German, English and Italian (Comas 1956: 30). A proposal to add Spanish failed (Comas 1956: 30).

*British works usually held second or third place in my database, mostly fluctuating within a rather stable 16-30%. A vast empire distracted British anthropologists from European race relations, while insular Britain may also have felt more secure about, and less interested in, its racial place in Europe. A sociological rather than raciological oriented anthropology, civic nationalism and enthusiasm for the classical roots of its civilisation may have been further factors. One British anthropologist in 1869 complained the authorities were steeped in classical history but 'sadly ignorant' of the racial realities 'under their very noses' (Bedford Pimm 1869: ccxxxvi).

Commentators note massive positivist French influence on emerging Italian, Portuguese, Polish and Czech anthropology, and the importance of leading French anthropologists attending Moscow anthropological events in 1879 and 1892 (Matiegka 1924a: 7; Godycki 1958: 30; Eickstedt 1937b: 88; Godina, Butovskaya & Kozintsev 1993: 3). Czekanowski claimed ‘French influence was so dominant’ that late nineteenth-century Cracow, Berlin and Moscow school were mere local manifestations (*eksposytura*) (Czekanowski 1948: 17). Up to 1914, there was little Central European study of the Palaeolithic, so that ‘the French Palaeolithic scheme was applied there without correction’ (Sklenář 1983: 139). Towering founding figures of national anthropological establishments, like the American Ales Hrdlička, Dimitri Anucin, who Eickstedt credited with founding both geography and anthropology in Russia, the German Felix von Luschan, the Czech Lubor Niederle, Eugène Pittard of Geneva, the Hungarian Carl von Ujfalvy and C.O.E. Arbo of Norway meanwhile all trained at Broca’s *Ecole* (Spencer 1997c: 61; Eickstedt 1940: 174; Matiegka 1924a: 8; Santemeterio Cobo 1999; Holck 1997a: 755; Ujfalvy 1903: 26). In 1896, Hrdlička tried with moderate success to replicate Broca’s ‘institutional complex’ and give American physical anthropology ‘both coherence and a powerful impulse’ (Spencer 1997c: 61). Fraipont’s anthropology school in Liège in 1919 also overtly copied Paris (Winters 1991).

Positivist internationalism had limits. In the first of very many battles against ‘scientifically’ packaged, biological interpretations of politics, it very gradually excluded the non-anatomical, political wing of ethnology as subjective and unscientific (Blanckaert 1988: 48; Dias 1991: 47-48). Politicisation and xenophobic nationalist impulses continuously arose however. Even Broca used ‘nominally apolitical’ positivism to master rather than disconnect from politics, praising Edwards for showing how race strongly influenced ‘the social and political destinies of peoples’ and calling science as ‘the august goddess enthroned above humanity to lead and not to follow it’ (Blanckaert 1988: 19 & 48; Pogliano 2005: 442). A still skimpier scientific figleaf hid the radical politics of 1860s London Anthropological Society leaders like Hunt, who wanted to popularise anthropology and yoke it to politics, and Knox, who proudly identified with an ethnology tradition in which philosophy ‘recovered its hold of physiology’ (Knox 1850: 16; Keith 1917: 19). Big three language source texts in the 1880s group meanwhile all cite about twice as many speakers of their own languages as either of the other two, citing the latter in roughly equal degree. Britain’s anthropologists particularly preferred home-grown anthropometric methods and their main journal seldom summarised foreign work (Grattan 1858: 231; Taylor 1880: 449). Terminology was not unified. The meaning of ethnology consistently centred on divisions of humanity but was very unstable (Barnard & Spencer 1996: 604; Stagl 1995: 236-40; Vermeulen & Alvarez Roldan 1995:

9-10). The Fraench and Broca's *Ecole* 'always' linked ethnology to race classification and it was taught by biologically-orientated professors (Sanemeterio Cobo 1999; Broca 1859: 8; Bunzl & Penny 2003: 1). In Germany and Poland by stark contrast, ethnologists studied the mental and material cultural diversity and social structure of peoples, while anthropology was purely concerned with 'morphological, physiological and psychological differences' in 'the physical side of the person' (Poniatowski 1929-30: 5-6; Bunzl & Penny 2003: 1). The British combined these (Bunzl & Penny 2003: 1). In E.B. Tylor's turn of the twentieth century anthropology syllabus at Oxford, the physical ethnology section studied physical races, while cultural ethnology had the same remit as Central European ethnology (Read 1906: 56-57). Britain's long-term stress on an evolutionary physical-cultural synthesis facilitated this solution, one 1850s Irish researcher calling ethnology a 'progressional history of' human races, establishing 'the social and mental status of... our predecessors' (Grattan 1853a: 198).

The anthropological programme and discipline complex

Like other professionalising social sciences, anthropology embraced positivism to establish its disciplinary independence (Köster 2002: 60). Broca declared in 1869 that the 'unity and... individuality' of anthropology, encircled by the 'speculative questions' of related disciplines, demanded 'a central set of positive knowledge', which 'the natural history of humanity', as 'the most positive part of anthropology', could best supply (Vallois 1959: 78). The much clearer 'dominance of physical anthropology', than 'ever' in ethnology, gave anthropology something like 'a unified research paradigm', centring firmly on measurement and classification of polygenist physical race (Stocking 1991: 268; 1995: 54; Blanckaert 1988: 48; Dias 1991: 22-23 & 47). 'Leading physical anthropologists' were much more prominent among Britain's 'anthropologicals' than Ethnological Society members, who even in the 1860s, were mostly traditional philological ethnologists and antiquarians (Stocking 1991: 249-50). The British Association classed anthropology under biology in 1866, and left ethnology with geography, but even the ethnologist Huxley defined anthropology in 1865 as the zoological study of humanity (Stocking 1991: 254; Huxley, Th. 1950: 107). The physical anthropology section of Germany's Anthropological Society was meanwhile 'older and larger' than its ethnology or prehistory branches (Proctor 1988: 141). Broca particularly 'wanted to emancipate anthropology from the "tyranny of the linguists"' in ethnology, basing it 'more soundly on anatomical foundations' (Blanckaert 1989: 187). Bonté said an 'immense majority' in the Paris Anthropology Society were 'completely edified on' the primacy of physical anthropology over linguistics (Bonté 1864: 629).

Physical anthropology was just one section of the eclectic old ethnology, on an equal footing with history, linguistics, archaeology and folklore. Positivist British and French anthropologists however demoted ethnology, ‘the history or science of races’, studying their physical, ‘intellectual and social’ ‘distinctive characters’, ‘present and past’ geographical distribution, ‘historical role’, origin, relationships and evolution or rank order, to a subdivision of anthropology (Stocking 1991: 248; Blanckaert 1989: 187 & 189; Huxley, Th. 1950 [1865]: 107; Mucchielli 1997: 2; Sanemeterio Cobo 1999; Dias 1991: 22). Anthropology was ‘the science of the whole nature of man’, including his ‘relation to animals,’ ‘connection with the physical universe, the laws regulating his physical nature,’ and ‘psychological characteristics’* (Hunt 1864: xcii; Stocking 1991: 247-48). Positivist biologists like Broca and Virchow interpreted this ‘natural history of humanity’ so broadly, that to consolidate it academically, they annexed the internationally familiar term anthropology, qualifying the vague pre-1850s ‘theological/philosophical’ anthropology as ‘philosophical anthropology’ (Schwidetzky 1974: 4 & 7). The term was rarely defined as purely biological in French or German lexica until about 1860, when its use in institutions and publications rapidly made it the main sense of the term, stabilising in the 1880s and accounting for almost all interwar German usage (Stocking 1992: 350; Schwidetzky 1974: 4; Dias 1991: 21).

Though structurally demoted, ethnology and its eclectic race classification project remained central to the new anthropology, and were the key to holding together its cluster of auxiliary disciplines. An 1861 Paris Anthropological Society report, leading members of the Society and the Polish anthropologists they influenced, and the 1874 anthropology programme of the British Association all described a complex of emerging professional disciplines like morphology ‘archaeology, ethnography, ethnology, and even linguistics’ combining their positively proven ‘facts’ in a common ethnological race history project (Godycki 1958: 30). The ‘natural history of man’ embraced his ‘origin, age, and distribution’, environmental conditions, ‘physical conformation’, physiology, ‘degrees of intelligence’ and ‘susceptibility of cultivation’, beliefs, ‘laws, habits, manners, customs’, art, language, writing systems, and varieties of present and past ‘material culture’ (Wilde 1874: 245; Perier, Bertillon & Lagneau 1861: 327-28 & 338; Godycki 1958: 30). Evidence came from skeletal material, modern ‘physical and psychological characteristics’, language ‘vestiges’, ‘dim traditions, genealogies, heroic and bardic tales, rhymes, legends, religions, popular superstitions, folk-lore, romances’ handed down from pre-historic times, supplementing written histories of peoples (Wilde 1874: 245; Liétard 1864: 270-71; Ranse 1866: 478; Perier, Bertillon & Lagneau 1861: 327-28 & 338). By assuming ethnic groups were originally

*Huxley used the term ‘modification’, which could be zoological, linguistic or cultural, to avoid the purely biological associations of ‘race’ (Huxley, Th. 1950: 107).

biological races, even philologists like Félix de Ranse could accept Broca's programme, entreating rival 'tributaries to anthropology', which all threw light on race history, to agree methods to 'converge towards the same goal' (Ranse 1866: 478). Dias identifies throughout nineteenth-century France a tendency to combine linguistic and ethnographic research (Dias 1991: 41). Though Victorian Britain widely accepted the new anthropological definitions of ethnology and anthropology and rivalry between their respective societies often strongly influenced their meaning, Curtis says that 'in practice' the societies did not limit their work to these definitions, and the terms 'were often... synonymous' (Curtis 1968: 67-68). Ethnology sometimes even expanded into vital physical anthropology theoretical questions, like gender relations or 'the causes or conditions of existence' of races (Huxley, Th. 1950 [1865]: 107; Mucchielli 1997: 2).

Ripley in 1899 showed precisely how the physical anthropology core of European 'Anthropology and Ethnology' race classification drew on a diverse discipline complex, while dismissing important physical anthropology questions like 'developmental anthropometry' as often 'not of ethnic significance' (Ripley 1899: vii-viii). His bibliography on the physical anthropology of the present population was 'practically exhaustive', and he included '[h]istorical or philological ethnology, referring to the Aryans, Celts, Etruscans' etc., but just 'the more important titles' on prehistoric archaeology of 'the culture and physical characteristics of the primitive inhabitants' and selected classical archaeology works (Ripley 1899: vii). Peripheral fields like 'regional geography', travel-writing, demography and folklore 'often involve ethnological problems', he said, while linguistics works were 'often of peculiar ethnic value' (Ripley 1899: vii-viii). Six decades later, Vallois reiterated the important supporting role of 'prehistory, ethnography, sociology, demography and psychology' in the Paris Anthropological Society (Vallois 1959: 79).

Institutions were organised around this broad subject complex. Many linguists, prehistorians, geographers and archaeologists joined 'omnibus' late nineteenth-century "'anthropological" societies', and their professions overlapped (Massin 1996: 126; Dias 1991: 45 & 245-46). Professors of ethnology and other neighbouring disciplines are the next best represented after anthropologists in my post-1900 canon. Haddon and Montandon, the most prominent professional ethnologists, had natural science backgrounds and concentrated on physical race. Multi-professorial Parisian and Viennese anthropology schools had chairs for several branches, including linguistic anthropology in Broca's *Ecole* (Dias 1991: 42). Broca and Quatrefages in France, and the British and German anthropology societies all theoretically and institutionally fused physical anthropology with 'ethnology', as 'two sides of an anthropology in the broad sense', Bastian and Virchow alternating as president of the German Society in the 1870s (Dias 1991: 31 & 245-46; Taylor 1880:

448). This and many of its local components were officially consecrated to *Anthropologie, Ethnologie und Urgeschichte* (Prehistory). They included cultural anthropologists like Bastian, who collected ‘customs and traditions... of vanishing tribes’, ethnologically-inclined geographers like Karl Ritter, and cultural historians like Gustav Klemm (Proctor 1988: 140-41). Contemporary Italian anthropology and Polish anthropology journals from 1876 on had similar discipline ranges, while the Americans differed only in adding linguistics to the mix, and until around 1900, terming the entire discipline complex ‘ethnology’ (Eickstedt 1940: 156; Schwidetzky 1935: 78 & 82; Spencer 1981: 355). Talko-Hryniewicz in Poland classified anthropological types within ‘a broader framework’ including prehistory and ethnology (Schwidetzky 1935: 80). German, Scandinavian and Austria-Hungarian university philosophy faculties had natural science sections, allowing both biological and cultural anthropology to co-exist within the same faculty, so relatively few medical faculties hosted anthropology, though (natural) science faculties often did (MacCurdy 1899: 915-16; Bounak 1926: 359-60; Făcaoăru 1938: 212 & 216; Nemeskéri 1975: 138). Nine out of twelve German universities taught anthropology in philosophy faculties in 1929, and the rest in medical faculties (Aichel 1929). German and Central European countries tried to preserve the united discipline complex into the 1920s, despite the centrifugal forces of specialisation, by establishing ‘Anthropology and Ethnology’ departments.

Anthropology differed crucially from the earlier ethnology in relying more on prehistoric archaeology than philology to study race-history (Schwidetzky 1935: 79). In 1890, the German archaeologist Georg Buschan championed the priority of artefact archaeology, aided by its ‘closely related’ ‘sister-science’ of ‘somatic prehistory’, over linguistics as an ethnic history source (Buschan 1890: 2 & 36). Stocking says archaeologists and physical anthropologists ‘largely dominated’ the 1870s-1880s RAI (Stocking 1991: 261). Despite some reservations, Pruner-Bey said archaeological evidence ‘scarcely’ clashed with that of history and linguistics, and positively confirmed anatomical data (Pruner-Bey 1864b: 666-68). The typical romantic period archaeologist was an ‘isolated dilettante’ with primitive methodologies, but added field-work and folk-lore to the textual sources of Enlightenment predecessors, allowing positivist prehistoric archaeology to gradually become a professional discipline (Sklenář 1983: 69, 97 & 105). After Leiden in 1818, prehistoric and (usually) classical archaeology chairs were established in Vienna, Prague, Cambridge, Copenhagen and Lund in 1849-55 and then Cracow in 1863 (Sklenář 1983: 82-85). Romantic period archaeology worked closest with historiography, but as this became increasingly suspicious of material evidence, archaeologists ‘found new partners in physical anthropology and ethnology’, especially in the ‘1860s to 1880s’ and traded an ethnographic model for their old nationalist romantic mission (Sklenář 1983: 87, 97 & 105). A Scandinavian group including the

leading craniological classifier Anders Retzius, the naturalists Eschricht and Nilsson, the linguist Rasmus Rask, the historian Rudolf Keyser and the archaeologists Jens J.A. Worsaae and Johannes J.S. Steenstrup led the way (Blanckaert 1989: 182-83). Positivist prehistorical archaeologists borrowed enthusiastically from natural science and other ‘social-historical sciences like anthropology’ and ethnology, applying evolutionary theory, diffusionist and functionalist models of cultural change, Linnean taxonomy and in stratification, geological principles* (Sklenář 1983: 108-9; Kurnatowska & Kurnatowski 2002: 97). They had such ‘an almost naïve belief’ in physical anthropology, that Kostrzewski in 1939 assumed their complete familiarity with race geography† (Kostrzewski 1939: 218-19; Wijworra 1996: 170). Davis and Thurnam lamented the lack of research on ancient British crania before the early 1850s, but Sklenář says prehistory with time became the most influential element in all anthropological-archaeological societies (Grattan 1853a: 200; Sklenář 1983: 106). Even Virchow ‘moved gradually away from physical anthropology towards archaeology’ (Sklenář 1983: 105).

International positivist anthropology contained important local differences of programme and discipline complex. Mantegazza’s ‘demo-etno-antropologia’ in Florence tried to synthesise an exceptionally ‘vast domain’ of physical anthropology, ethnography, ethnology and folklore studies (Dias 1991: 31). In Britain, the older British monogenist ‘historical and linguistic ethnology’, allied with evolutionists, and opposed the polygenist ‘classificatory physical anthropology’, but these later merged in the ‘post-Darwinist tradition of evolutionist and bio-cultural positivism’ of the unified Anthropological Institute in 1871‡, and in the US Bureau of Ethnology (Stocking 1984: 421-22 & 427; 1992: 351-52; Blanckaert 1988: 48). These two traditions stayed separate in France, where Darwinism’s unifying force was weaker, and ‘almost everywhere in Europe’ (Stocking 1984: 421-22 & 427-28; 1992: 352). The separate French ethnographic and anthropological societies established on the same day in 1859 split ethnology§ into quite distinct physicalist and culturalist counter-models, in ‘more or less systematic’ opposition, focussing on ‘nationalities’ and races respectively (Blanckaert 1988: 48; Dias 1991: 31; Vermeulen 1995: 51; Stocking 1984: 425 & 427). Broca’s school warned that the British synthesis ‘threatened a loss of anthropological rigour,’ and that ‘Prichardian ethnology “easily leads to the type of social applications which the English will never let go of”’, but Blanckaert says this criticism was really aimed at the French ethnographers

* Portuguese anthropology began with an 1857 geological commission, which soon began prehistoric anthropology research and established a museum (Făcaoăru 1938: 211). Geological stratification inspired the evolutionism of Gabriel de Mortillet, who in the 1860s established the world’s first scientific prehistory journal (Hammond 1980: 120).

† Classical archaeologists were an ‘unforgivable’ dead loss by contrast, discarding human remains, ‘the most precious study material’, in Greece (Pittard 1920: 20).

‡ The journals of the two British societies had ‘a largely overlapping intellectual field’ and even membership overlapped, facilitating the merger (Stocking 1991: 249). They even met at the same premises (Keith 1917: 19-22).

§ No ex-ethnologists joined Broca’s society, but three joined the Ethnography Society (Dias 1991: 49).

(Blanckaert 1988: 48; Dias 1991: 23-24). Geographers, linguists, archaeologists, ‘and some (rare) naturalists’ established the religious, ‘resolutely monogenist’ and socially and morally active French and Dutch ethnographic* societies to study the religion and literature of Asian and American ‘high civilisations’ (Blanckaert 1988: 48; Stocking 1984: 425-27; Dias 1991: 50-51). Insisting that language made human society exceptional, they criticised anthropology for studying humans as mere animals, and for looking at human spatial diversity alone, ignoring social evolution (Stocking 1984: 426-27). Unlike British Darwinists however, ethnographers disdained prehistory and Darwinism and their amateurish ‘descriptive study of peoples’, from languages and travel accounts, refusing ‘all generalisation and theoretic construction’, was more historiography than natural science (Stocking 1984: 427-28; Dias 1991: 23-24 & 51).

Institutionalisation

The anthropological societies inaugurated a new era of professional institutionalisation, in journals, congresses and, signifying state acknowledgement, at university and in mass surveys. In most major countries, anthropological and ethnological societies published the leading journals in my citations database. The journals of interwar Polish anthropology by contrast, which had very developed university institutions, appeared irregularly or on a small scale, or were crippled by ‘financial difficulties’, forcing anthropologists to publish in journals of scientific societies or of neighbouring disciplines (Schwidetzky 1935: 81-82). The German society printed three periodicals by 1896, including ‘an international bibliographical review of anthropological literature’, while several German local societies also had publications (Massin 1996: 83). France was the only major anthropological power where other institutions (Broca’s laboratory and school of anthropology) came close to matching the journal-publishing role of societies. Journals allowed a pulpit for anthropological factions, regular publication of research and wider communication, especially through review articles of foreign works (Taylor 1988: 48). Most foreign language works in a Polish interwar anthropology bibliography were journal articles (Czekanowski 1948a: 124-174). National anthropological societies very quickly established international meetings. Myres attributed the emergence of peripatetic periodic scientific congresses in the 1830s-1840s to the rapidly spreading ‘general interest’ in science in the early industrial revolution, which ‘led to establishment of many local societies’ in ‘new industrial districts’, that were often ‘remote from the capital cities and universities’ (Myres 1930: 19). International conferences began in Britain and Belgium in the early 1850s, discussing meteorology, statistics, social sciences, astronomy and horticulture (Myres 1930: 19-20). Myers suggests that anthropology was early in organising an international congress,

*In mid-century Britain and Sweden however, ‘Ethnography’ meant the racial physical element, including psychology, of race ethnology (Wilde 1849: 212-14).

founding the *Congrès International d'Anthropologie et d'Archéologie Préhistorique* (CIAAP) in Paris in 1867 after informal preparatory talks in Spezzia and Neuchâtel, while the first international Geography congress was not until 1871 (Myres 1930: 19-21 & 26). Anthropology conferences were initially meant to be annual, but soon became bi-annual and then even less frequent before falling victim to the First World War (Myres 1930: 20).

Anthropological societies were a vital link between self-declared anthropologists, but offered no career structure or professional recognition. Museums 'inaugurated' 'institutionalisation' (Dias 1991: 245). Especially after universities began teaching natural science and acquiring collections, flourishing museums gave ethnologists, anthropologists, and particularly archaeologists in countries like Britain and Germany with very late university institutionalisation, their main 'institutional setting' and 'technical and financial means' for career opportunities up to the 1890s (Stocking 1991: 263-65; Bunzl & Penny 2003: 15; Dias 1991: 244). Zoos, natural history museums and by the 1870s, ethnology museums were established 'all across Germany', including the world's 'first free-standing' purely ethnology museum in Berlin in 1873 (Bunzl & Penny 2003: 5). The Anthropological-Ethnographical Section of Vienna Natural History Museum developed an important 'collection complex', and its staff, along with Vienna anatomists, were the backbone of the Anthropological Society 'for decades' (Lebzelter 1938: 74; Făcaoăru 1938: 210). Copenhagen set up the world's first ethnographic museum in 1836 or 1849, but though Danes also organised expeditions and research, anthropology 'was not represented in any centre' in 1938 (Făcaoăru 1938: 216; Fischer 1923: 7). Athens University meanwhile founded an anthropology museum in the 1880s, and expatriates helped fund an ethnological museum in 1915, though there were few other Greek anthropological institutions until the 1920s (Făcaoăru 1938: 215). Lajos Bartucz at Budapest Ethnographic Museum almost single-handedly relaunched Hungarian anthropology after 1918, assembling a world-class osteological collection (Nemeskéri 1975: 140; Făcaoăru 1938: 212). The Paris *Muséum d'Histoire Naturelle* was a key early centre of race classification. Buffon, the main French scientist in my canon before 1800, and in the early nineteenth century, a third of the French contingent, including Cuvier and Lacépède and almost half of all the naturalists were based there. My database gives them a more modest role, but after 1860, leading *Muséum* naturalists like Saint-Hilaire, Quatrefages and later Deniker are significantly better represented than the physicians of the Anthropology Society, and in my canon, account for over half the Francophones after 1860. The *Muséum's* monogenist medical professors, like Saint-Hilaire and Quatrefages, formerly of the Ethnological Society, were pillars of the Anthropological Society (Harvey 1984: 388-89). Six of the founders, including Broca, were professors of the Sorbonne medical faculty, but three were *Muséum* based (Vallois 1959: 75).

Positivist anthropology reproduced the dependence on collections of anatomy and zoology, its disciplinary models (Dias 1989: 206). Blumenbach's late eighteenth-century Göttingen collection was the first 'strictly anthropological collection', methodologically arranging series of skulls and skeletons (Dias 1989: 205). Davis (Shelton), Morton (Philadelphia), Retzius (Stockholm), von Baer (Saint-Petersburg) and Van der Hoeven (Leiden) established anatomic collections in 1830-40, often originally private but later 'integrated in the public institutions', and three important Paris museums were created in 1855-72 (Dias 1989: 204). Especially before mass surveys of the living began in the 1870s, favouring less collectable classification features like pigmentation and stature, public and private collections were, as Blumenbach said, 'a fundamental source' for comparative anatomic race classification, and by favouring laboratory work and anthropology's experimental aspect, sharpened its biological focus (Dias 1989: 205, 212 & 225). Even from 1872-73 to 1891-92, the *Muséum's* anthropological collection grew from 5,000 to 24,000 pieces, and Broca's museum from 450 skulls to 6,000 (Dias 1989: 216 & 220-21). Collections were pedagogically important, with Morton beginning his as a teaching aid (Dias 1989: 207 & 220). They were also vital for communication, as craniologists visited one another's museums, borrowing skulls and casts to test local race historical theories in a broader transnational context. One nineteenth-century Freiburg anatomist exchanged material with Italian, Austrian, Hungarian, German, Dutch, Scandinavian, Russian and American colleagues, while Thurnam or Wilde could not visit Paris without pilgrimages to its anthropological collections (Fischer 1926: 100). Major nineteenth-century race classification treatises, with Latin titles like *Crania ethnica* and *Crania britannica*, catalogued museum skulls (Dias 1989: 206). Dias argues that after Thomsen's 1820s-30s three-age system began methodical ordering of collections, the 'framework', 'choice of pieces' and order of the many collections on public view illustrated and reinforced the curators' taxonomic ideas (Dias 1989: 215, 218, 221-23; 1991: 145).

Anthropologists convinced the governments of several western countries to support mass anthropometric surveys of military recruits or school-children, by public health doctors, following technical guidelines. Like the common practice of allowing anthropological measurement of World War I prisoners of war, this important form of state support for anthropology, indicated integration into official power structures (Huxley & Haddon 1935: 44; Czekanowski 1967: 44; Bounak 1926: 352). Surveys gave race classifiers an institutional base, but left them limited time for academic careers. Army surgeons like Collignon, Livi, Arbo, Bryn and Mydlarski are almost the only practicing physicians remaining in my canon into the twentieth century. Krzywicki said the first mass survey recorded stature and colouration of 1,500,000 American Civil War troops, followed by pigmentation surveys on seven million German schoolchildren in 1875, Belgians in 1879 (600,000),

Swiss in 1881 (c. 400,000), and Austrian in 1884 (2,500,000) (Krzywicki 1969 (1897): 350). Beddoe and others collected pigmentation data on around 100,000 British adults, though without major state backing, Topinard made a similar survey in France in the 1890s and Livi and Ammon published major survey of Baden (1886-99) and Italian (1896-1905) conscripts respectively (Krzywicki 1969 (1897): 350). British scientists set up a committee in 1875 to study the ‘physical condition’ of the British and Irish, which the Anthropological Institute revived and extended in 1905 (Keith 1917: 24 & 27). French anthropometrists ‘very zealously’ took 12-15,000 cephalic index readings, including 8,700 in Collignon’s 1890 study (Krzywicki 1969 (1897): 350; Retzius, G 1909: 292). Eastern European anthropologists demanded similar surveys. In Russia, Zograf complained in 1892 that ‘our experts’ studied ancient Russian skulls and minority populations in detail but there were ‘almost zero’ up-to-date anthropological studies on living Great Russians (Zograf 1893: 1). He went on to study 30,000 Great Russians (Krzywicki 1969 (1897): 350). The Bulgarian government meanwhile formed a committee in 1896 ‘for research on the population’, and anthropometrically studied ‘many thousand of soldiers and schoolchildren’ (Făcaoăru 1938: 217). In 1920, Pittard welcomed recent ‘vast surveys’ in the Balkans, calling Romania and Bulgaria, and then Bosnia ‘the best known’, but warned that much more was needed (Pittard 1920: 16 & 21).

The world’s first chair in anthropology was generally seen as that created in 1855 by converting Serres’s chair in ‘Anatomy and the Natural History of Man’ at the Paris *Muséum* for his successor Quatrefages (Făcaoăru 1938: 209). However some authors mention early posts in Germany, Poland and Italy, and several note that Quatrefages taught at a museum, making Paolo Mantegazza in Florence the first ‘proper’ university anthropology professor in 1869 (Eickstedt 1940: 146 & 156; Puccioni 1938: 81; Pullé 1941). Next came six chairs at Broca’s *Ecole d’Anthropology* in 1876, though this did not offer degrees and only achieved official state recognition in 1889 (Harvey 1984: 401; Glowatzki 1983: 115; Puccioni 1938: 81). The Medical Faculty and private subscriptions provided funding (Harvey 1984: 401). Moscow apparently established the next, short-lived chair in 1876, followed by Naples (1880), Budapest (1881), Philadelphia (Ethnology and Anthropology), Brussels and Rome in 1884, Coimbra in Portugal (1885) ‘with an institute and a rich museum’, and Munich in 1886 (Făcaoăru 1938: 211). The Paris *Ecole* was an immediate success, expanding from 8,383 students in 1877 (Ferembach 1997: 400). It was informally but tightly linked with the Paris Anthropology Society and Broca’s anthropology laboratory (founded 1867 and soon incorporated in the university system) to form his so-called *Institut d’Anthropologie*, which Ferembach calls ‘the institutional and intellectual hub’ of French anthropology until the early twentieth century (Ferembach 1997: 399-400; Harvey 1984: 401). It provided ‘the institutional bases’ for knowledge ‘production and diffusion’, a ‘scientific community’, and professional specialisation for medical

graduates (Dias 1991: 237-238). Seven of the twelve anthropology professors in my 1860s-1900 canon were French. The establishment of anthropology and ethnology as recognised academic disciplines after 1860 transformed my canon of classifiers. The proportion of naturalists soon declined to about a quarter (who included famous scientists like Haeckel, Huxley and Saint-Hilaire) and then a mere handful after 1900. Almost half the 1860s-1900 canonical writers were anthropology professors. Professional anthropologists and ethnologists accounted for most canonical classifiers up to World War II.

University anatomy departments were a key base for early and mid-nineteenth-century classifiers in my canon, and a springboard for university anthropology, linking the medical and academic worlds and providing vital collections of skulls and skeletons. Towering race classifiers, like Blumenbach and Anders Retzius, were anatomy professors (Blanckaert 1989: 167). Quatrefages's *Muséum* chair was converted from an anatomy professorship, while Kollmann only added anthropology to the title of his anatomy chair in the last five years of his 47-year tenure (Sanemeterio Cobo 1999). In 1902-3 physical anthropology in Germany was mostly taught in anatomy departments (Massin 1996: 84-85). The anatomist Hermann Klaatsch meanwhile 'directed and largely funded' the Breslau anthropology institute (Massin 1996: 84). Swedish academic anthropology remained particularly long 'the domain of anatomists' and never gained organisational independence in Norway (Holck 1997a: 754-55; 1997b: 1007).

French university anthropology organisation was atypical. There were a comparable number of positions to Germany, but they were almost all in Paris. Unlike in most countries, relatively few were in universities, though the Sorbonne set up an ethnology institute in 1925. The other homes of anthropology were Broca's *Ecole*, the *Muséum d'Histoire Naturelle* and the Institute of Human Paleontology established by Prince Albert of Monaco in 1912. Another exceptional feature was that all but the *Muséum* established a range of posts in various branches of ethnology, anthropology and prehistory, Făcaoăru counting a total of 17 chairs in Paris in 1938 (Făcaoăru 1938: 210). The *Ecole* began with six chairs, in ethnology, anatomical anthropology, prehistory, linguistics, biological anthropology, and in demography and medical geography, expanding to between eight and eleven posts from the 1880s on (Făcaoăru 1938: 209-10; Sanemeterio Cobo 1999). Several professors switched chairs so often that these resemble mere courses. Elsewhere, universities generally had one, or exceptionally two anthropology chairs, often combined with ethnology or anatomy, and a strict association between professor and post. Only Austria reproduced the French organisational model of several metropolitan institutions, each with multiple chairs, and little in the provinces. Vienna University established three separate chairs and departments in anthropology and ethnology,

prehistory, and *Völker- und Volkskunde* in 1910, and in 1923, the Natural History Museum also established three separate chairs and research institutes (Făcaoaăru 1938: 210; Lebzelter 1938: 74).

What determined institutionalisation?

In nineteenth-century development of anthropological institutions, countries fall into three categories. France, Italy and the United States established a strong university base for the discipline (Dias 1991: 244). Britain, Germany and Russia had a scattering of chairs, but there and in the Netherlands, Sweden, Japan, India and Germanophone Austria, societies, backed by museums and anatomy departments, were long the most important institutions. Finally, elsewhere in Scandinavia and the Baltic, in the Balkans and outside Europe, even this level of institutionalisation was lacking, though museums and government commissions sometimes provided a base. State sponsorship was crucial. Lacking the funding, training base and career structure provided by Broca's *Ecole* or the American Bureau of Ethnology* (founded 1879), Britain's ethnology and anthropology societies were tormented from the outset by fluctuating membership, precarious finances and spasmodic leadership (Stocking 1991: 268; Keith 1917: 16, 23 & 25). Though Oxford set up a readership in 1883, he says Oxbridge anthropology teaching only began in earnest in the 1890s, with the first chair in 1895 (Stocking 1991: 265). There were 'no more than a dozen' full-time professional anthropologists in Britain 'until nearly 1900,' probably none of whom were 'regularly involved' in training younger researchers (Stocking 1991: 267). In 1886, a year after the first Portuguese chair, Germany's first, and until 1907, only chair and institute were founded in Munich for Ranke, while just six German universities taught 'physical anthropology proper' in 1902-3 out of 20 universities in the Reich (Massin 1996: 84-85; Sklenář 1983: 137). Massin says that though numbers of academics almost quadrupled in Germany in 1864-1910, 'fewer than ten' were full-time academic professional physical anthropologists in 1900, most in badly paid posts below the level of full professor (Massin 1996: 84-85). Most anthropologists in both countries were 'gentleman amateurs' or professionals in other sciences, law and especially in Germany, medicine, treating anthropology as 'an occasional or a vocational' 'unremunerated hobby' (Massin 1996: 84-85; Stocking 1991: 262 & 267). Eickstedt claimed German race classification sunk to its nadir in the early 1870s as a result (1937b: 87-88). Similarly, the main institutions of Russian 'physical anthropologists... in the 19th and early 20th centuries', who were quite active,' but had 'no official university recognition', were professional societies, publishing an anthropological journal from 1900 (Godina, Butovskaya & Kozintsev 1993: 4-5). In contrast, foreign anthropologists jealously attributed 'the good and secure position' of interwar Polish anthropology to its 'firm installation' in universities, having 'long risen

*This, the local society and the Smithsonian Museum made Washington 'one of the most important centres of anthropological research and teaching', through their 'joint action' (Dias 1991: 243-44).

out of the ranks of the luxury subjects, and established a firm footing' in medical and physical education courses with 'hundreds of students... yearly in every university' (Schwidetzky 1935: 82; Făcaoăru 1938: 209).

Official backing was the key to vital university institutionalisation. The Polish state secured and enlarged anthropology's 'material basis', but while societies reflected popular and scientific interest in Germany and Britain, there was little official support (Schwidetzky 1935: 80). German anthropology, though very well organised and influential, instead relied 'more on public enthusiasm and commercial sponsorship', while in Britain, government saw hardly 'any serious need for anthropology', refusing periodic pleas for funds (Massin 1996: 84; Stocking 1991: 266; Weindling 1993: 54; Dias 1991: 243; Keith 1917: 24 & 29). Myres complained in 1931 that pragmatic Colonial Secretaries considered it 'a mild joke' (Myres 1931: xxix). Anthropology did not become technically complex enough to inhibit 'the layman or the gentleman amateur', but was too dry to stir popular support as an exotic literary genre (Stocking 1991: 266-67). Without political impetus, the scientific community and amateur anthropologists themselves mostly supplied a trickle of funds and gradual momentum for institutionalisation, though British anthropologists envied the German Society's state-provided grant and headquarters (Stocking 1991: 267; Taylor 1880: 448-49; Keith 1917: 24).

Nationalism helps explain why it was not always the leading scientific states that best supported anthropological institutions. Ethnological sciences emerged from the same romantic middle-class milieu as nationalism, drawing on Herderian patriotic study of the national population, and were used by 'patriots, enthusiasts' in Central Europe to promote national unification (Rączkowski 1996: 195; Stocky 1924: 55). Central European and Scandinavian archaeology turned to 'the national past' of idealised 'prehistoric forefathers' to win popular relevance (Sklenář 1983: 67-68; Dias 1991: 144 & 146). Patriotic Danish archaeology was the first to acquire 'a growing importance' beyond isolated intellectuals, as part of the country's coping mechanism for territorial losses in 1815 (Díaz-Andreu & Champion 1996: 4 & 13). Non-classical archaeology crystallised and strengthened after 1848, with Vöelz's Prague archaeology chair (founded 1850) concentrated on Czech prehistory for example (Sklenář 1983: 64-65 & 83). The German public 'was gripped by a fever of measuring, mapping and digging' for 'science and national identity', linking human and zoological unity 'with the politics of national unification' (Weindling 1993: 54). Dias says French museums 'after 1870' also combined 'exaltation of national values' with 'pedagogical concern' while Broca's museum in 1875 collected 179 French but only 155 foreign skulls (Dias 1989: 220; 1991: 146). Race anthropology offered cultural national ethnic groups a scientific foundation in

biological race, and, like international sport later, a showcase of national accomplishment and positivist scientific discipline. Von Hölder of Stuttgart argued in 1876, for instance, ‘that at least the German anthropologists should classify skulls’ by form alone (Hölder 1876: 4). Italy established its first chairs in 1860-69, immediately after national unification. Polish and Czech anthropologists meanwhile dramatised institutional demands as a nationalist struggle against Viennese inertia and jealousy. Schwidetzki cited 1870s-1880s Russian measurements of Polish recruits as a major spur to Polish raciology, inciting ‘a series of Polish doctors’ to prove recruits were not short due to of national degeneration, but as a natural race trait (Schwidetzky 1935: 78). Newly independent Poland, Czechoslovakia and Hungary introduced anthropology into ‘all universities’, as part of ‘an intense development of historiography and archaeology’ in search of identity in the ‘national past’ (Făcaoăru 1938: 209-12; Schwidetzki 1935: 82; Barford 2001: 275; Sklenář 1983: 155-56). Polish anthropology saw a ‘lively upturn’, with new or upgraded institutions in three centres in 1920-21, more money and staff in two others and critically, a series of *Habilitationen*, or university teaching diplomas, in 1925-34, while Helsinki University established anthropology chairs in 1926 and 1935 (Schwidetzky 1935: 80-81; Făcaoăru 1938: 209 & 213).

The German and Italian fascist regimes funded disciplines supporting their own nationalist race agenda, and marginalised or silenced dissenting voices. The leading German anthropologist Eugen Fischer said German and Austrian university institutionalisation had already ‘improved somewhat’ by 1923, with anthropology chairs in five cities, ethnology in two, prehistory in three and teaching of these subjects in several universities, but complained that France and Italy had far more chairs (Fischer 1923: 9-10). Făcaoăru said the Nazis generously funded growth from six anthropology institutes and chairs in 1933, to eight in 1935 and thirteen in 1938 in the ‘oldest and most attended’ of Germany’s 24 universities, and even founded posts in conquered cities like Posnan and Prague in the 1940s (Făcaoăru 1938: 207-8). Italy’s fascists initially largely ignored anthropology and raciology, but under Hitler’s influence from 1936, offered ‘broad support’, funding expeditions and founding ‘as many as nine new’ professorial chairs ‘in one year’ (Făcaoăru 1938: 210; Taylor 1988: 45, 48 & 53; Pogliano 2005: 379).

Nationalism garnered political support for anthropology, but an even more important reason why Europe’s first professorial chairs were in France, Italy, Brussels, Madrid, Coimbra (Portugal), Prague, Budapest, Munich and Cracow was liberal scientific anti-clericalism, a powerful political

force which thrived on Roman Catholic anti-scientific conservatism*. Political backing for early chairs benefited from left-wing political upheavals. The Porto and Lisbon professorial chairs of 1911, which gave Portugal exceptional anthropological institutions, were founded in a major educational overhaul following a 'bitterly anticlerical' republican revolution (Făcaoăru 1938: 211; Roberts 1974: 73). The Bolshevik revolution at first fostered anthropological institutions, and equally strangely, leftists into the 1920s admired the scientific outlook of eugenics, its social responsibility, opposition to the 'genetically regressive' monarchy and aristocracy and belief that better conditions genetically improved the working class (Godina, Butovskaya & Kozintsev 1993: 5; Graham 1977: 1139-40; MacMaster 2001: 52). Graham says the German eugenics leader Ploetz favoured 'all aspects of socialism except' that it stopped the unfit dying off and French eugenics only turned to the political right from about 1900 (Graham 1977: 1137; Dias 1991: 249-50). Anthropology stressed the role of the 'people' rather than the elites, the British evolutionist Tylor calling it 'essentially a reformer's science' (Hammond 1980: 125).

French anthropology and even early eugenics were left wing and republican for the entire nineteenth century (Dias 1991: 249-50). Historians blame the demise of the Paris *Société des Observateurs de l'Homme* of 1799-1804, seen as the first ethnographic Society, and the Paris Ethnological Society, on their political radical turn from science to campaigning for Greek independence or abolition of slavery (Fischer 1923: 7; Vallois 1959: 76; Blanckaert 1988: 43; Dias 1991: 48). The proto-sociologist social reformer Saint-Simon was fascinated with 'the Science of Man' and his acolytes helped finance the Ethnological Society and form its 'active core', getting it embroiled in the 1848 Revolution and closed by the second Empire (Blanckaert 1988: 41 & 44; Harvey 1984: 388-89). *Ecole* professors and directors like Gabriel de Mortillet, Abel Hovelacque, Henri Thulié and Charles Letourneau, who as a Communard, had to flee to Italy until the late 1870s, were politically radical 'scientific materialists' (Harvey 1984: 399-401; Mucchielli 1997: 3-5). Several became presidents of Paris city council, extreme left deputies in parliament or even, by the late 1880s, government ministers, helping to secure political support for the *Ecole* from the council, which also funded a chair in evolution at the Sorbonne from 1888 (Harvey 1984: 400 & 402; Hammond 1980: 126). Materialists also took a lead in founding the German Anthropological Society. Materialists and positivists like Broca shared a commitment to republicanism, religious free thought, polygenism and progressive social evolution, in which science would replace religion, and initially agreed a common research programme for Broca's institute, including race classification (Harvey 1984: 387, 391 & 399; Hecht 2003: 60 & 71). Through influential figures

*Catholicism without anti-clericalism was pure poison to race anthropology. Church disapproval of biology diverted Irish Catholic scholars towards the humanities, making Irish Celticist ethnology 'much less scientific' than in England

like the Geneva-based German scientific materialist and polygenist evolutionist Carl Vogt, materialists became important allies in Broca's institutions, influenced the London Anthropological Society and led the push to establish the CIAAP international congresses in 1866-67 (Harvey 1984: 390-92 & 400; Hammond 1980: 118). Harvey believes a similar materialist-positivist alliance conditioned reception of Darwinism in Mantegazza's Florence (Harvey 1984: 405). London's Ethnological Society meanwhile was a science-oriented offshoot of the Aborigines Protection Society of 1837, which combined Quaker liberal campaigns against slavery and colonial abuses with 'scholarly interest in the dark-skinned non-European races' and inspired the Paris Ethnological Society (Stocking 1991: 242-44; Keith 1917: 13). Leading historians of German anthropology reject accusations by one 'body of literature', 'stressing social and economic factors', of widespread 'racism, anti-Semitism, and bourgeois conservatism' in the German anthropology of 1871-1918, instead claiming it was 'self-consciously liberal' and anti-racist (Massin 1996: 80 89 & 92; Bunzl & Penny 2003: 1-2 & 11). They claim it was 'guided by a broadly humanistic agenda' of documenting 'the plurality and historical specificity' of peoples to determine the 'truly universal' 'aspects of human life'. The 'substantial Jewish membership' of the Berlin Anthropological Society helped liberal leaders like the cultural anthropologist Adolf Bastian (1826-1905) and physical anthropologists Rudolf Virchow* and Johannes Ranke (1836-1916), to isolate 'anti-Semitic outsiders' (Massin 1996: 89).

Renaissance 'anthropologists' aimed to liberate the science of humanity from theology and their nineteenth-century successors challenged one of religion's last redoubts in what became the scientific domain (Stagl 1995: 233). Biologists like 'Galton and Huxley in Britain, and Haeckel and Virchow in Germany, propagated scientific values as surrogates for Christianity', and Britain's scientific establishment feared ethnology might 'introduce political or religious polemic' (Weindling 1993: 7; Stocking 1991: 245). Broca founded his anthropological society on the night when his speech on animal hybridisation at the Biology Society was stopped mid-way for fear of its applicability to human races (Vallois 1959: 75; Hecht 2003: 56). The biologists opposed the politically unorthodox polygenism that was common at the School of Medicine where Broca taught (Harvey 1984: 388-89). Anthropology and especially Darwinian evolution 'was a powerful weapon in the secularising campaigns against clerical dominance' (Weindling 1993: 55). Thomas Huxley defended Darwinism against creationism in the 'now-famous contestation with Bishop William Wilberforce' in 1860, and is credited with coining the word agnostic (Hannaford 1996: 278).

(Curtis 1968: 114-15).

*A Reichstag deputy whose Progressive party so systematically opposed anti-Semitism that adversaries called it the 'Jews Party'.

Particularly in France, polygenism burnished its scientific credentials by opposing monogenist 'religious dogma' (Wolpoff & Caspari 1997: 96; Hecht 2003: 41-43).

Leading anthropologists like Broca, 'a freethinker and a republican', Hunt and Virchow were all polygenists, and France's anti-clerical, 'free-thinking' evolutionist materialists were still more 'militant', dedicated to political 'combat anthropology' in 'the humanitarian, anticlerical, and politically radical' Enlightenment, French Revolutionary and Lamarckian tradition (Hammond 1980: 118 & 126-27; Erickson 1997: 833; Mucchielli 1997: 3-5). They dismissed conservatism and religion as 'remains of the savage and barbaric in our modern civilisation', several converting to evolution before Darwinism, as it challenged biblical history and legitimised social evolutionary ideas like Marxism (Hammond 1980: 119 & 126-27). Evolutionism was so strongly associated with political radicalism and religious controversy, that the government of Napoleon III only authorised Broca's Society after long negotiations and with a plain-clothes policeman attending all sessions to prevent 'seditious or morally outrageous' discussion (Hammond 1980: 118; Vallois 1959: 76). However Broca's institute 'quickly became a... left-wing, antireligious' bastion 'in French science', attacked by Catholic papers for promoting religious 'libre pensée' (Harvey 1984: 401; Hammond 1980: 118 & 127). The virulently anti-scientific and politically powerful and conservative Catholic church was 'the prime target of the enmity of German biologists', and drove French anthropology into the arms of anti-clerical republicanism (Weindling 1993: 55; Hecht 2003: 44). Despite official indulgence before 1870 therefore, the amateurish and non-natural scientific Catholic conservative Paris ethnographicals* were increasingly marginalized as Broca's anthropology 'gained progressively in stature and professional reputation' (Stocking 1984: 427-28; Dias 1991: 23-24 & 50-51). Britain's less reactionary clergy may explain the weaker political promotion of a less radical left-wing anthropology. The deeply religious 'orthodox Quaker majority' of the London Ethnological Society rejected Knox and Hunt's race ideas, but advocated liberal race science, while a 'large proportion of clergy' helped launch the Anthropological Society in Manchester in 1866 (Keith 1917: 13; & 19 Heath 1967: ix).

Anthropological liberalism was highly ambiguous however. Though liberal French romantic historians promoted race to celebrate the defeat of aristocratic Franks, Kenan Malik ties their polygenism to 'conservative/Romantic', 'antiegaltarian' critiques of the Enlightenment and French Revolution for destroying deference to a religiously mandated aristocracy (Malik 1996: 82). Revolutionary atheism encouraged left-wing French republican polygenism while conservative, Catholic ethnographers believed in monogenism and racial equality, while militant pro-slavery

southerners like the race classifiers Nott and Gliddon, promoted polygenism in America (Dias 1991: 58; Beddoe 1912: 19; Massin 1996: 86; Stocking 1987: 49; Odom 1967: 7 & 9). Though Broca saw himself as liberal for believing inferior races could eventually be civilised and did 'not necessarily' justify imperialism, some of his inferior races were doomed to extinction and he attributed Edwards's anti-slavery ideology to a lack of anatomical data (Blanckaert 1988: 48-49; Gould 1981: 95; Dias 1991: 47-48). Topinard, whose *laissez-faire* capitalist views and tolerance of organised religion may date from childhood years in the United States, meanwhile publicly attacked the politicisation of the populist, campaigning Mortillet group (Hammond 1980: 128-29; Ferembach 1997: 400). London ethnologicals belonged to the more humanitarian, rising, middle-class 'intellectual aristocracy' of university educated Liberals and wanted to improve colonial peoples, but the anthropologicals, as Tories from the margins of the traditional establishment, fêted their inevitable extinction and took an equally racist hard-line against the lower classes (Stocking 1991: 251). Though Keith in 1917 criticised their politicisation of science however, he saw race anthropology in support of colonial administration as 'really liberal' (Keith 1917: 15 & 21). However the more apolitical factions dominated. The anthropologicals, as wild men of radical conservatism, and the radical-left French materialists, though politically exonerated after 1870, were marginal to the scientific establishment (Stocking 1991: 253). The Scotsman Knox railed against 'Norman' southern English elites, whose 'views and policy are antagonistic to the Saxon race it governs', urging freedom-loving Saxons to complete the 1688 revolution and found 'an Anglo-Saxon republic, looking again to Scandinavia' (Knox 1850: 5). The Darwinist ethnologicals, 'confident that their' still unorthodox 'ape-theory' 'was on its way to scientific orthodoxy', conducted themselves in a more staid manner (Stocking 1991: 253). Mortillet's group meanwhile collaborated with Broca because 'the two dominant institutions,' the largely anti-evolutionist *Muséum* and Academy of Sciences, excluded them (Hammond 1980: 127).

An expanding cosmopolitan community

Gradually from the mid-nineteenth century on, and spectacularly after 1900, anthropology and race classification were transformed from a north-west European, to a pan-European and global discipline. After maintaining a level of 80% of all citations in my database from the mid-nineteenth century, the proportion of works from the big three countries dropped to half in 1905-18, though it partly rebounded to 68% in 1918-39. The number of cited countries grew fairly steadily from around eight before 1832 to 16 in 1833-71, then fluctuating in the 18-23 range. The two major increases were around the 1830s and 1890s-1900s. While the 1880s group defined by my list

*The 'resolutely monogenist' ethnographers were determined to 'defend religion and morality' (Dias 1991: 53).

comparison analysis was mostly from the big three countries, half the 1890s group were American or Italian. Berlin, London, Paris and Lyon bracketed the densest cloud of cities of publication before 1814 (see Fig. 1.2a-d). It expanded over the century to Naples and the easternmost German cities, while a second centre emerged in the mid-Baltic. The earliest countries appearing in the database were France, Britain and Germany, the Netherlands and Sweden, plus a trickle of American, Italian, Russian and Polish texts. The German university in Dorpat had a brief early nineteenth-century vogue. Smaller, mostly Northern and Central European countries next joined as very minor and often inconsistent contributors (Belgium and Hungary in 1815-32, Finland, Denmark, Norway, Bohemia and Italy in 1833-52). The first expansion out of Europe, to Algeria and Canada, followed in 1853-71. Expansion continued rapidly in concentric rings into the Mediterranean, Eastern Europe and outside Europe, generally starting in larger countries. Europe's weakest area was the Mediterranean, where I recorded no citation at all, outside of France and Italy, until 1815, followed by gradual expansion up to 1914. Bosnia and Spain joined the contributors in 1872-88, Romania, Portugal, Egypt and Bulgaria in 1889-1905, Monaco and Greece in 1906-18, and the Dutch East Indies, Latvia and Ireland in the Interwar period. Eickstedt said in 1937 that South America was just beginning to 'swing in more strongly', while Indian, Chinese and South African anthropology was 'still struggling to start up' (Eickstedt 1937b: 89). Before the 1890s, classifiers from the big three language areas dominate my canon and monopolise that of Eickstedt, but geographical diversity then increases greatly. He introduces schemes by Slavic writers (Russian, Polish and Slovene) from 1889 and from six new countries in the twentieth century. In my canon, nine of the 24 post-1900 classifiers were Italian, Polish, Scandinavian or Dutch, and within the big three language zones, American, Austrian and Swiss contributions increased.

Works from non-big three language country were generally first cited in my database long before the first international language publications by its nationals. This gradual engagement with 'international' classification accelerated rapidly however. The delay declined from 60-200 years in countries first cited before 1700, to around 20 by the later nineteenth century. Nationals of the very small and late Danish, Latvian and Balkan publishing centres published abroad in international languages before a single citation from their countries appeared on my list. Non-native use of German and French spread and intensified in the 1870s* and still more in the 1890s, when foreigners also began writing in English. Before 1870, Dutch, Italians, Poles, Czechs and Swedes used French or German in my database, joined in the 1870s and 1880s by Russians, Hungarians, Bulgarians, Greeks and Finns. Around 1900, Romanians and Spaniards began, a little later, Serbs and Croats, and in the Interwar period, Portuguese, Slovenes, Norwegians, Danes, Georgians,

Latvians and Chinese. Most minor contributing nationalities published their cited foreign language works in big three language speaking cities. However cited works published in the home country increased significantly after 1918, especially in newly independent countries. Big three language works are published in Finland, Poland, Norway and Romania by local writers in this period only, as are most (post-1791) Dutch citations of this type.

By 1802, classification works in my database had already been published in five living languages, the big three plus Italian and Dutch. Norwegian and Swedish joined them around 1840, but the number of languages more than doubled in the late nineteenth century, with works in Russian (1867 - after one work in 1846), Hungarian (1875), Spanish (1876), Polish (1878, aside from a single publication in 1824), Serb (1884), Bulgarian (1891), Portuguese (1898), and Danish and Romanian (both 1902). Though the numbers of works cited are often very small, the overall trend towards internationalisation is clear. Ripley's bibliography supports this conclusion. His publications in Russian and Italian increase in the 1880s from previously negligible levels. Dutch, Polish, Scandinavian languages (combined) and Spanish, which all hover at around 1%, and tiny traces of Serbo-Croat and Bulgarian also mostly enter his bibliography in the last decades of the century. Countries were divided quite sharply between those in the west (Norway, the Netherlands, Spain, and Italy) which published in their own languages from the start, and eastern countries, which began many years later or not at all. The eastern group included Poland, Russia, the Czech lands, Hungary, Greece and most of Scandinavia. In several cases, the first cited authors publishing in those countries were foreigners, but these languages were also cited late because few earlier source text authors could read them. Though first cited in their own languages, Portugal and most of the Balkans were probably no less peripheral, as works from these countries were first cited from the 1890s on, when the linguistic capabilities of source text authors had already increased dramatically.

The expanding classification community produced several new classification 'powers'. My database had few Italian works[†] until unification and anthropological institutionalisation from 1859-60. Italian language texts rose from 2% in 1853-71 to 27% and second place in 1906-1918, while publication in Italy went from 5-6% in 1872-1905 to 29% and top place in 1906-1918. After 1860, the country replaced Sweden as the biggest contributor to my canon outside the big three, represented in particular, as Eickstedt's canon confirms, by Sergi (1892), and later Biasutti and others in 1908-13. Italian schemes account for half those of countries entering Eickstedt's canon in the twentieth century. U.S. publications had small percentages in my database until after 1900,

* Anders Retzius was solely responsible for a mid-century boom in use of 'international languages'.

† Aside from one heavily cited seventeenth-century work.

when they sometimes reached the 8-9% range, while its publication centres expanded from a Swedish to a British scale after 1918. American wealth supported interwar European anthropology including through Rockefeller Foundation grants for eugenics and social anthropology (Făcaoăru 1938: 217; Stocking 1992: 356; Czekanowski 1956a: 25). The Czech-American anthropologist Ales Hrdlička created a wealthy foundation to subsidise interwar Czech anthropology research and the Prague-based international journal *Anthropologie*, which became an important forum in Poland and elsewhere (Făcaoăru 1938: 211; Czekanowski 1948a: 124-174). Vallois said Czekanowski (Lwów), Eickstedt (Breslau), Bunak (Moscow) and he himself (Paris) led Europe's four main 1930s anthropological schools (Pogliano 2005: 492). Russia, which first contributed to my database in 1859, never breached the 5% threshold, but from 1872, 1-3% of texts are in Russian. Eickstedt claimed 'human research' had won 'rapidly growing interest' there (Eickstedt 1940: 174). An intermittent trickle of works from Poland were cited from 1824, but it became a major classification centre in the Interwar years, accounting for a dramatic 7.5% of my database, largely due to the Lwów or 'Polish' typological school, founded by Jan Czekanowski (1882-1965) in 1913. This school began Poland's 'tradition of anthropological typology', exerting 'strong influence' on interwar and 'early postwar' Polish anthropology (Kaszycka & Strkalj 2002: 330). In 1938, Făcaoăru placed Polish anthropology second only to German for its 'multiplicity of schools, 'extremely important place... in Polish culture', and 'especially' its 'very advanced' research (Făcaoăru 1938: 209). Most of the country's five university centres had several anthropological institutions 'and works of value' (Făcaoăru 1938: 209). Sklenář says international archaeology began opening up to Central and Eastern Europeans around mid-century, when the Vienna and far more active Prague archaeology chairs were founded in 1849-1850 (Sklenář 1983: 83 & 86). As many of the earliest prehistory chairs, in 1899-1906, were in Hungarian, Polish and Czech universities, as in Germanophone cities (Sklenář 1983: 137).

International congresses

International conferences promoted and reflected anthropology's geographical diffusion (see Fig. 1.6a-b). The earliest CIAAP conferences (1866-75) were confined to Western Europe (France, Belgium, Switzerland, Italy, England, Scandinavia), but 1876-92 saw more adventurous locations. Several writers stress how congresses or exhibitions in Budapest (1876), Moscow (1879 & 1892), Portugal (1882) and Bucharest (1939) 'promoted and influenced greatly' early anthropology in those countries, often stimulating institutionalisation (Nemeskéri 1975: 138; Godina, Butovskaya & Kozintsev 1993: 3; Sklenář 1983: 106; Dias 1991: 245). The 50% increase after World War I in countries attending international congresses was largely due to 23 colonies and independent countries in Africa and Asia. Only Algeria, Egypt, Palestine, Turkey, Siam and Japan had attended

before the war. Latin America sent fewer delegations after the war, while the increased number of European delegations was mostly due to border changes. Attendance at the 1927 Amsterdam congress and the close relationship between anthropologists and eugenicists, whose international organisation barred non-white national organisations from India, China and Japan, suggests that most colonial delegates to anthropological congresses were probably European ex-patriots (IIA 1928: ix-xi; Kühl 1997: 73).

The European contingent accounted for almost 80% of all pre-war congress delegations, and although slightly more extra-European than European countries participated after 1918, more consistent European attendance meant the continent's domination was only slightly eroded. European delegations were also much bigger, representing over 80% of delegates in 1927. However although Interwar Western Europe* remained dominant, with 63% of the European and 46.3% of the world total of delegations, this was about 9% down on equivalent proportions before 1914. Apart from Russia, Eastern Europe saw the greatest increase in its weight at conferences. Poland, Romania, Serbia and the successor states of Austria-Hungary accounted for 24% of all European delegations to interwar congresses, compared to 14.3% for the same region, pre-War. Balkan (including Romania and Greece) delegations correspondingly rose from 5.1% to 14%. Newly independent Poland and Czechoslovakia sent anthropologists to most interwar conferences and Yugoslavia, Greece and Turkey to about half. In 1927, the Poles and Russians tied with the Americans as the seventh biggest delegations, while the Czechs were in eleventh place and the Romanians in a respectable thirteenth. Regular conference attendance was vital for international networking. European countries, minus the Balkans but including the US, attended international conferences consistently in 1870-1912, joined at intervals over this period, by Monaco, Romania, Japan and a few Latin American countries. This pattern repeated after 1921. Initially, only Britain, France, Belgium, Netherlands, Switzerland, Italy, Czechoslovakia, Algeria and the U.S. resumed regular conference attendance. They were joined by other Eastern European allies (Poland, Romania and Yugoslavia) in 1924, and Germany, Austria, Japan and most remaining larger European countries in 1927, followed in the 1930s by the rest of Europe, Turkey, Egypt and Mexico. Russian or Soviet delegations religiously attended the first few conferences after the war, but stopped abruptly in the early Stalin period.

Weak participation of peripheries

Russia and Poland established anthropological societies in the 1860s, and along with Hungary and the Czech Lands, had anthropological chairs by 1900. Though most of these areas in no way lagged

behind in university institutionalisation of anthropology, several signs, including unsustainable new institutions, suggest they remained somewhat peripheral. Majer and Kopernicki in Poland, like Wilde earlier in Ireland, were respected internationally, but give the sense of full participants in the international anthropological community, corresponding from the boondocks, rather than representatives of Polish or Irish anthropological communities. In smaller and more subjugated nationalities like Slovakia meanwhile, ‘prehistory was not cultivated’ before 1918, apart from some unsystematic amateur studies (Stocky 1924: 55). My database suggests the nineteenth century eastern expansion of the main cloud of publication centres only reached Vienna, Breslau and perhaps Budapest. Despite enthusiastic intellectuals, pre-1918 imperial authorities were unhelpful, due to anthropology’s nationalist and liberal associations. In 1854, the Cracow physiology professor Josef Majer transferred to anthropology, and in 1886, his colleague Isidor Kopernicki became extraordinary professor of the subject there, organising a Committee in 1873 to organise research and publish an important journal (Schwidetzky 1935: 78). In Budapest meanwhile, ‘systematic’ anthropology studies began in 1875, followed by an international Congress in 1876, one of the world’s first chairs and institutes of anthropology in 1881 under Aurel von Török, and an anthropological laboratory set up in 1900 by Janos Janko (Făcaoăru 1938: 212; Nemeskéri 1975: 138-39). However Cracow physical anthropology was ‘orphaned’ and ‘the development of Hungarian anthropology came to a standstill’ following the deaths of Majer (1899), Kopernicki (1891), Janko (1902) and von Török (1912), with only one zoologist continuing anthropological work in Austrian Poland (Schwidetzky 1935: 79; Nemeskéri 1975: 139). The Cracow chair remained vacant until 1907 and the Budapest chair until at least 1937 (Schwidetzky 1935: 79; Nemeskéri 1975: 139). Prague’s archaeology chair similarly disappeared after Vocel’s death in 1871 (Sklenář 1983: 108). Russia had scantier pre-war institutions than Poland, Moscow’s 1876 anthropology chair converting to geography after 1884 due to ‘reactionary repression’, and other pre-1917 chairs existing just briefly (Schwidetzky 1988; Czekanowski 1956: 10). Bunak said anthropology chairs spread from Moscow in ‘the first years’ after 1917, to ‘almost all’ universities, but were almost all suppressed in economic cutbacks to the university network after 1921, and many key figures died in the hardship of the early 1920s (Bounak 1926: 346-47 & 359-60).

Eickstedt said interwar anthropology faltered in Russia and did not take off in Hungary and Greece, but Central European anthropological institutions mostly flourished after 1918 (1937b: 88). ‘Anthropology was introduced in higher education’ throughout Czechoslovakia, becoming eligible for doctoral studies and obligatory in certain courses (Făcaoăru 1938: 211). Greece established an anthropological society in 1924 and an extraordinary professorship in 1925 (Făcaoăru 1938: 215).

* West of the Soviet Union, Poland and the old Austrian Empire.

However although anthropology courses were increasingly introduced into medical, pedagogical, physical education and even legal syllabi, few full chairs were established (Făcaoăru 1938: 215). An institute founded in Vilnius Institute in 1920 soon disappeared (Schwidetzky 1935: 81; Făcaoăru 1938: 209). In my incomplete but indicative survey of institutions established in 1887-42, 70 out of 97 were founded in English, French and German speaking lands, and only 15 in Eastern and Central Europe, of which only nine were interwar posts, compared to 17 in Germany. One bibliography suggests interwar Polish anthropologists preferred foreign works from Germany, Paris and Prague, still largely looking to a Western core, while my interwar Central and Eastern European source texts cite almost three times as many Germanophone writers as other Westerners put together (Czekanowski 1948a: 124-174). The fairly common Eastern practice of establishing anthropology sections within institutions like academies of science or natural science societies may also indicate lack of resources for independent societies. Various anthropology, ethnography, serology, genealogy and eugenics institutions, including professorial chairs and journals in Cracow, Kazan, Warsaw, St. Petersburg/Leningrad and Ljubliana were all organised in this way from the 1870s on (MacCurdy 1899: 913; Schwidetzky 1935: 78 & 82; Făcaoăru 1938: 208 & 212-14).

Infant anthropological establishments of countries outside the core reeled from the organisational burden of organising international conferences. Only one of 13 locations which offered to host congresses in 1874-1912, but were defeated by rival bids or overcome by organisational difficulties, was from a Western European country which had already acted as host. Moscow, Bucharest, Constantinople and Dublin each made failed attempts, Madrid made two and Athens no fewer than three. Aware of the 'broad and careful preparation' needed, the Romanian delegate offered Bucharest in 1889 for two congresses ahead, but when the time came a Romanian anthropologist said Bucharest gave 'no affirmative response', due to the backwardness of anthropology there (Comas 1956: 27; Borcescu 1918: 9-10). In 1892, three cities vied for the next congress, but the Paris Anthropological Society soon reported that Athens and Constantinople had not 'the least possibility' of doing so, while Bucharest 'was also unable', so it finally met in Paris (Comas 1956: 28). When exotic bids failed, congresses often returned to the French speaking heartland, where they were presumably easier to organise at short notice (Comas 1956: 26 & 28). After 1900, the CIAAP retreated to exclusively French speaking cities. A Dublin congress was repeatedly postponed due to the ill-health of its apparently irreplaceable organiser, and ultimately took place in Geneva (Comas 1956: 28). Although two congresses were finally held in south-east Europe in the late 1930s, the old pattern continued. The 1935 IIA congress went to Brussels due to management breakdowns in both Warsaw and Bucharest (Comas 1956: 51). The volatile attendance of extra-Europeans at conferences also suggests peripherality. Japan and Argentina were among the four

most frequent extra-European pre-1914 participants, but slid to a mediocre interwar attendance, replaced by Algeria, Turkey and the Dutch East Indies.

The peripheries also fell behind in anthropometric surveying. Houzé's 1883 scheme lacked detail and had serious omissions for Prussia, Austria, and the West of the British Isles, but this became extreme in the east, classing vast groups of Slavs *en bloc*. Stojanowski said Tsarist Russian anthropology collected copious material, but made little effective synthesis (Stojanowski 1935: 33). Deniker said that despite 'important work' throughout Europe in 1897-1904, including in 'Bulgaria, Portugal and especially Russia', data was still 'completely lacking' for parts of Russia and the Balkans, and 'incomplete' for Prussia, Romania, Serbia, Luxembourg and elsewhere in Russia (Deniker 1904: 186). Classifications were mostly based on Western European data. Deniker and to an extent, Czekanowski criticised Ripley for neglecting Eastern European material (Deniker 1904: 183; Czekanowski 1967: 45). The 'remarkable' 1860s discoveries that launched prehistoric archaeology were 'mainly in Switzerland, northern Italy and south-eastern France' meanwhile (Myres 1930: 40). In 1877-78, Broca said palaeolithic archaeology had studied 'only western and part of central Europe', and Kopernicki added that 'archo-anthropological studies' were lacking for Moravia and Hungary (Broca 1878: 191-92; Kopernicki 1877: 618).

Nineteenth-century Spanish conceptions of Celts trailed behind those in France, and 'nationalism and Romantic ethnocentrism' delayed the emergence of Central European positivist archaeology, but twentieth-century Polish and other Slavic classifiers may have chosen the prestige of their exaggeratedly 'scientific' statistical approach, to escape peripheral status (Zapatero 1993: 37 & 44; Sklenář 1983: 104; see pp.112-21). Eickstedt says this was 'particularly cultivated in the Easteuropid-Slavic cultural area' including by Ivanovski (1911) in Russia, Poland's Lwów school (1928-34), by Skerlj (1936) in Slovenia, and partly in Deniker's 1889 system (1937b: 88). The Lwów school believed its mechanical statistical technique placed Poland among countries with 'the highest degree of exactitude' in anthropological research (Stojanowski 1924: 760). Mitu says a powerful nationalist 'spirit of competition' spurred Romanians to improve the 'scientific and professional quality' of Cluj university, borrowing the latest German and American organisational models, when they annexed it from Hungary in 1918 (Mitu 2006: 106). Pursuing scientific esteem, self-consciously scientific 1890s Irish anthropometrists like Browne meanwhile were much less open to ethnological speculation than British contemporaries working on Ireland, even in studies containing detailed anatomical, craniological, sociological, demographic, ethnographical and economic data (Haddon 1893a: 304-5; 1893b: 766). He accepting for example that Irish regions

differed in racial purity, but claimed too few data for ‘any broad or comprehensive generalization’, and limited himself to publishing them raw (Browne 1893: 649; 1900 [1898]: 272).

Breakup of the positivist discipline complex

From about 1900, the positivist anthropology discipline complex began unravelling into its original components (Sklenář 1983: 134). The meagre positive results of craniology caused severe self-doubt, while the ‘auxiliary disciplines’ were increasingly unhappy in subsidiary roles. They began to organise separate institutions, hone core methodologies and specialise in issues arising from their own research. Tellingly, philology, which fell out with eclectic ethnology four decades earlier, blazed this professionalising trail. While Broca’s generation assumed scientific positive facts about reality were interchangeable bricks in an edifice of knowledge, experience gradually showed that even if still interested ‘in physical anthropology and racial classification,’ ‘disparate approaches led to conflicting answers’ (Barkan 1992: 19). Linguistics, artefact archaeology, and prehistoric physical anthropology each refused to believe the others could solve the crucial question of Indo-European origins, for example...

...and controversy within each discipline did not allow the other two to draw safely on its results. With the growing specialization, no scientist mastered them all, and each field jealously monopolized its right to speak in its own name and to judge the scientific competency of its own members. Prehistoric anthropologists venturing into linguistics or linguists into prehistory risked their reputations as serious scholars. (Massin 1996: 128)

The Paris Anthropological Society was sapped after 1880 by the foundation of Prehistoric, Americanist, Africanist, Morphological and provincial anthropology societies, the IIA and *Institut français d’Anthropologie*, and weakened by World War I (Vallois 1959: 77; Harvey 1984: 404). This, and especially the French prehistoric society of 1903, reduced the role of ‘prehistory, ethnography, sociology, demography and psychology’ within the Anthropological Society (Vallois 1959: 79). This happened to anthropological societies everywhere (Vallois 1959: 79). German, Viennese, American, Italian and Cracovian physical and cultural anthropologists, archaeologists, prehistorians, linguists or folklorists began establishing independent societies from 1909 into the interwar period, or felt rising pressure to do so (Sklenář 1983: 134-35; Stocking 1992: 353; Schwidetzky 1935: 81; Pogliano 2005: 405 & 415; Zangl-Kampf 1997: 99-100). Though American anthropologists generally still received some training in several fields into the 1950s, most now specialised in one (Stocking 1992: 353). Especially after Virchow died in 1902, nationalist Central

European archaeologists like Gustav Kossinna (1858-1931) moved from natural science towards the new positivist historiography after 1890, using cultural instead of skeletal prehistoric evidence (Sklenář 1983: 135 & 138; Puschner 2001: 93). The biggest wave of new German and Central European archaeological chairs, concentrating on prehistory, were founded in 1889-1913 (Sklenář 1983: 137). Divergent interests of Americanists and Orientalists, anthropologists and linguists meanwhile weakened French ethnography (Dias 1991: 52). Schippers identifies a Europe-wide ‘institutional “divorce”’ between interwar folklore and overseas anthropology, both establishing separate societies, journals, museums and university departments (1995: 235). As interwar German scholars were ‘allergic’ to the idea of the same academics studying traditional European and non-European cultures, their folklorists joined others from northern Europe in a series of pan-European specifically folklore institutions (Schippers 1995: 238). In France, ‘theoretical... and personal’ ‘hostility’ between Durkheimian ethnologists like Mauss and the leading folklorist, Arnold Van Gennep, helped keep folklore out of universities (Schippers 1995: 237). The Austrian ethnologist Friedrich Müller proposed in 1894 that physical anthropology move to university medical faculties while ethnology, linguistics and archaeology remain in philosophy (MacCurdy 1899: 916). After 1918, this division began to appear, with Finland, Romania and Czechoslovakia all teaching anthropology in science or natural science faculties, Finland placing physical anthropology in the Medical faculty and Romania putting ethnography in Letters and Philosophy (Făcaoăru 1938: 211, 213 & 216).

By 1931, due to rapidly increasing numbers of scholars, specialisation, and prehistorians’ demands for more disciplinary autonomy, most countries favoured separate international prehistory conferences (Myres 1931: xxvi; Comas 1956: 47). Anthropologists were then free to establish their own congresses, though hindered by the ‘enormously wide’ range of subjects in ‘physical and cultural anthropology’, and in particular the ‘profound distinction’ between ‘the study of anthropometry and racial anatomy’ and ‘the rest’ (Myres 1931: xxvii). Physical anthropologists like Topinard, and later Léonce Manouvrier and Joseph Deniker already felt constrained by the old discipline complex, and narrowed anthropology towards the purely physical after 1880 (Dias 1991: 241-46; Mucchielli 1997: 18-21). Franz Boas in the U.S. meanwhile proposed a purely biological concept of race (Bernasconi & Lott 2000: xiv). Physical anthropologists complained that pre-1914 international congresses, and from as early as 1873, German anthropology and its society lacked ‘a proper perspective and proportion among’ branches of anthropology’s, focussing too much on archaeology (Myres 1930: 40; Sklenář 1983: 105 & 134-35). Zangl-Kampf says the old German Anthropological Society dissolved in 1936 because the new Physical Anthropology Society became ‘Germany’s premier anthropological society’ (Zangl-Kampf 1997: 99-100). Proctor’s list of ten of

its founders in 1925 and Massin's list of the nine physical anthropology teachers in German universities in 1902-3, demonstrate the transition. Of the latter, five had anatomy posts, one lectured in anatomy and anthropology, another taught anthropology and ethnology and only two were officially anthropologists (Massin 1996: 84-85). In the 1925 group were five professional anthropologists, three anthropologists combined with other disciplines, a *Völkerkundler* and one anatomist (Proctor 1988: 154). Interwar anatomists like Loth and Reicher in Poland still worked in anthropology, but with a less racial focus than anthropologist colleagues (Schwidetzky 1935: 81). Many physical anthropologists refused to recognise some 'ethnologically, pedagogically, and/or philosophically oriented' early Italian anthropology chairs in humanities faculties, stressing repeatedly that Mantegazza created the first *real* university anthropology chair by insisting it be transferred to the science faculty (Puccioni 1939; Chiarelli & D'Amore 1997: 530). Făcaoăru complained that the Iași Palaeontology and Anthropology chair was not a 'pure anthropology' institution (Făcaoăru 1938: 216). A number of specifically 'physical anthropology' chairs did appear, especially in twentieth-century Germany and Central Europe, but they were probably limited by the fact that the term anthropology referred there to physical anthropology in any case.

The irresistible centrifugal force of positivist professional specialisation ultimately exploded the anthropological discipline complex, but met resistance from unifying factors. Politics demanded a link between biological race and politically important cultural groups, studied in the humanities, and physical anthropologists jealously guarded their disciplinary domination of this chain. Topinard renounced an 1876 drive to oust cultural ethnology from anthropology when ethnographers colonised the field (Dias 1991: 24-26). Switzerland encapsulated the balance of forces (Schlaginhaufen 1938: 73; Făcaoăru 1938: 210). Rudolf Martin became the first anthropology professor there in 1899, teaching 'both physical and psychological anthropology', but ethnology was soon transferred to the geography chair and Basel and Bern established separate ethnology chairs. However Pittard still combined anthropology and ethnology in Geneva into the late 1930s, and Swiss anthropology, geography and psychology chairs allowed students to take overlapping subjects. Interwar Dutch humanities faculties meanwhile taught 'ethnology and ethnography', but physical anthropology was divided between them and medicine (Făcaoăru 1938: 210-11).

Decline of Western race anthropology

Theoretical divergences, Great War legacies and changing balances of influence pulled the international interwar community of race classifiers apart. While classification declined in the West, German eugenics-orientated *Rassenkunde* thrived, simultaneously attracting foreigners with its vitality and resources and repelling them with its aggressive nationalism. The Polish school, the

Germans, Bunak in Russia and British biometricians all developed profoundly incompatible raciological methodologies. Nazi and especially Bolshevnik isolationism was another centrifugal force, while the French alienated Anglophones and Scandinavians by fighting to maintain international dominance and exclude Germany and its allies.

Physical anthropology used the race concept to dominate a discipline complex, and its decline meant drastic retrenchment. The physical anthropologist William Flower attributed the late-1870s decline of the Royal Anthropological Institute (RAI) to 'the neglect of' race study, which had helped French and German anthropology to flourish (Stocking 1991: 261). Physical anthropologists like Francis Galton led the Institute in its mid-1880s revival (Stocking 1991: 261). Commentators say French physical anthropology 'rapidly declined' after Broca died in 1880, leaving a 'theoretical void', as Mortillet's materialists 'infiltrated' and gradually oriented it away from race, so that after 1900 it 'was decidedly unpopular' and went into steep decline after Manouvrier's death in 1927* (Ferembach 1997: 400; Dias 1991: 242 & 247; Eickstedt 1937b: 88; Vallois 1959: 77). After 1900, French writers almost disappear from my race classification canon, and in my citations database drop to around 10%. Francophone Belgium's citations halt abruptly in 1904. French is the language of 28-41% of publications in my database in 1832-1906, occupying first or second place. It then plummets to the low teens. While similar numbers of nineteenth-century foreigners wrote in German and French meanwhile and French often represented most use of international languages by foreigners, German pulled far ahead after about 1890, consistently more than doubling the French proportion. Even English temporarily overtook French, which fell to about a fifth of foreign language use and lost its status as main foreign language in many regions. Right across northern and western Europe, disenchantment with race anthropology grew, sometimes apparently since the mid-nineteenth century. Though eugenics, 'genetics, social and cultural anthropology, sociology and psychology' studied race, 'fewer scientists were devoting their career' to it by the 1930s (Barkan 1992: 4). After 1814, Dutch participation in CIAAP conferences and my database was continuous, but the latter rarely topped 1%, very little given the country's wealth, imperial interests, technological development and population. Switzerland also peaked very early. Eickstedt says 'anthropology took very much a back seat to geography' after the late 1870s merger of the Swedish anthropology and geography societies (Eickstedt 1940: 140). Smaller northern European countries joined the CIAAP in the 1860s meanwhile, but attended irregularly, with no Finnish and Dutch delegations at all after 1879 and 1900 respectively. In Eickstedt's canon meanwhile, French, British and American schemes are interrupted by enormous gaps, from the 1880s or 1890s until the 1920s.

* Paul Rivet in Paris attempted institutional reforms to revive the earlier broad anthropological synthesis of races, civilisations and languages in the 1920s (Dias 1991: 246 & 250).

Italian race classification fell off the map after World War I. Eickstedt said that under strong French influence and unlike in Germany, ethnology and prehistory advanced at anthropology's expense (Eickstedt 1940: 156). Italian texts in my database sink below 5% after 1918, disappearing from Naples, while works in Italian drop to just 1%, and in Eickstedt's canon vanish entirely after 1913. After 1911, Italian ethnologists and anthropologists were exceptionally committed to the African colonial policy, distracting from European race, and after 1938 even the fascists disputed whether race was fundamentally spiritual or a scientific physical category (Pogliano 2005: 369; Puccioni 1938: 81). There was also however a broader Mediterranean downturn, as many smaller regional publishing centres disappear from my database after the Great War, and raciological publishing retreats north almost to Vienna. Italy never played host to international anthropology congresses after 1918, Spain was proposed for congresses which ultimately took place elsewhere and France lost its previously dominant position. Few Mediterranean Europeans published after 1918 in the big three international languages in my database, though this may well be a statistical quirk. Raciologists complained that race anthropology often heavily depended on private donations in Scandinavian and the Baltic, where lack of state 'understanding and solicitude' left it 'weakly represented' at universities (Făcaoăru 1938: 213-17). Swedes attended interwar anthropological congresses very patchily. Danes devalued anthropology 'in the hierarchy' of sciences, establishing a chair in Nordic prehistory long after classical archaeology, and founding just one anthropological institution, a committee in 1903, while the Baltic states had no institutions, their medical faculties treating anthropology as an occasional afterthought (Făcaoăru 1938: 216-17). Citizens of smaller countries may have distrusted disciplines legitimising great power geopolitics. A German commentator noted the 'antipathy towards raciology', world and 'culture history, ethnography, geography and philology' of Baltic intellectuals (Făcaoăru 1938: 217). The northern turn from race also accompanied rising Anglophone influence, competing with a traditional German orientation. In my database, English replaced French as the principle linguistic competitor of German in late nineteenth-century Sweden, and Finland and the Netherlands around the 1910s.

A shift to purely cultural anthropology undermined Western race classification. Ethnographical study of society and culture 'tended to separate from and to dominate' the rest of anthropology in Anglophone countries, where all the social or cultural anthropology chairs in my database were established, accounting for half the new British chairs in 1901-42 (Stocking 1992: 357). Eickstedt ascribed this to British anthropology's traditional sociological orientation, which hampered the late-nineteenth-century recovery of racial anthropology there (Eickstedt 1937b). *Ecole* courses meanwhile reflected the French shift towards cultural anthropology. Of the original six chairs, all

but linguistic anthropology were biologically orientated, but by 1920, four of ten were strongly cultural and only three unambiguously biological, and even they linked ‘physiology’ with ‘ethno-cultural phenomena’ (Sanemeterio Cobo 1999). Spencer suggests that as Broca made anthropology ‘synonymous with physical anthropology’, late nineteenth-century archaeology and ethnology gradually merged into the separate discipline of social or cultural anthropology (Spencer 1981: 355). Early twentieth-century French prehistorians developed less linear understandings of evolution and Durkheimian cultural anthropologists like Marcel Mauss, whose *Institut d’Ethnologie* shifted the French meaning of ethnology from race to culture in the 1920s, ‘drew on different sources and a different vision of science’, largely excluding race (Hammond 1980: 129; Stocking 1992: 357). Despite the unifying four fields system, American anthropology, led in the late 1890s-1920s by Franz Boas (1858-1942), who developed the ‘pluralistic, relativistic,’ and largely non-biological ‘modern’ anthropological culture concept, also steadily inclined ‘towards ethnology and archaeology’, marginalising physical anthropology, especially in universities (Spencer 1981: 355-56; Stocking 1992: 353 & 357; Sanjek 1996: 71). As professor at Colombia (1899-1936), Boas trained most leading early twentieth-century North American anthropologists, who helped spread his anthropological model throughout North America. Boas separated biology and culture and claimed ‘as much as possible’ of their ‘boundary zone... for cultural determinism’, but his student A.L. Kroeber aimed to oust biology from study of culture (Stocking 1988: 11). As interwar Boasian culturalism grew in power, ethnologists, who by the 1930s were being rechristened cultural anthropologists, came to dominate the American Anthropological Society (Founded 1902) (Stocking 1988: 11; 1992: 353-54).

Overseas imperialism distracted from both Europe and physical race. Bunzl and Penny say the ‘overwhelming focus’ on Anglophone and French anthropology in recent historiography has created a narrative of ‘a quintessentially colonial’ nineteenth-century science, becoming ‘ever more progressive,’ and ‘anti-colonial’ in the twentieth (Bunzl & Penny 2003: 1). However the extended participant observation of modern cultural anthropology had roots in lengthy sea voyages to ‘the darkest reaches of the World’s largest empire’, as that European focus of archaeological and physical anthropologists contrasted with colonially-oriented cultural ethnographers, like those of the resolutely culturalist Paris Ethnographic Society (Stocking 1984: 425; 1991: 261; 1992: 354; Dias 1991: 23-24). There were meanwhile ‘very few’ anthropometric studies outside Europe at the turn of the century, the largest measuring just a few hundred skulls (Krzywicki 1969 (1897): 351). They only began in India in 1903, for example (Făcaoăru 1938: 216). Less than a quarter of the skulls Broca’s museum acquired in 1875 were non-European (Dias 1989: 220). Leading British anthropologists enthusiastically backed the ‘liberal’ project of assisting colonial administrators, and

stressed the ‘great importance to an imperial nation’ of colonial anthropology (Read 1906: 56; Temple 1914; Keith 1917: 15 & 29; Myres 1931: 28). Keith said the London Ethnological Society was largely founded to study ‘native races’, Britain’s special imperial ‘responsibility’ (Keith 1917: 14-15). In 1931, the President of the RAI said it was ‘primarily concerned with... native habits and beliefs’, and had ‘the duty’ to convince government and universities that fieldwork and ‘systematic teaching’ of anthropology was needed to give ‘Europeans involved in native affairs’ a ‘sound and adequate knowledge of native observances’ (Myres 1931: xxviii-xxix).

The Dutch also appear to have appreciated this, offering chairs and courses in specifically colonial anthropology, ethnography and geography ‘and therapeutics of natives of the Dutch colonies’, obligatory ethnology or anthropology studies for future colonial and judicial officials, and in Batavia (now Jakarta), for medical students (Făcaoăru 1938: 210-11 & 215). Rescue anthropology of Native American cultures justified a key American anthropological institution, the Bureau of American Ethnology (founded 1879), whose focus on collecting ‘ethnolinguistic data’ shifted attention from physical race to culture (Spencer 1981: 355). Boas foresaw in 1904 that the ‘biological, linguistic and ethnologic-archaeological methods are so distinct,’ that they would break away, leaving ‘anthropology pure and simple’ to ‘deal with customs and beliefs of the less civilized people only’ (Stocking 1992: 346). Empires generally had stronger colonial research orientations. Dutch and Scottish classifiers in my database devoted 36-42% of citations to studies of specific distant regions, followed by the USA and England, and other big colonial powers like France and Germany. Figures for Poland, Austria, Scandinavian countries and smaller countries of South-East Europe and Iberia were below 2% meanwhile.

Evolution undermines classification

The Anglophone Darwinist ‘dialectical synthesis’ of monogenist ethnology and polygenist anthropology retarded disciplinary fission by studying physical and social evolution as a single historical process, an approach embodied in Boas’s inclusive ‘four fields’ organisation of cultural and physical anthropology, archaeology and linguistics as separate sections within the composite anthropology departments of American universities (Bunzl 1996: 72; Stocking 1988: 9; 1992: 351-52; Blanckaert 1988: 48). Stocking says the ethnologicals and Darwinists largely controlled the unified RAI from 1871 meanwhile, precluding an anthropology ‘conceived solely in physical anthropology terms’ (Stocking 1991: 255). An early twentieth-century Oxford syllabus had zoological, palaeontological, archaeological, sociological and technological anthropology sections, alongside the race-focussed ethnology section (Read 1906: 56-57). Interwar British anthropologists wanted to extend the RAI’s ‘happy family’ of ethnology and anthropology to the international level,

and though they could not keep prehistory and anthropology within the same congresses; they blocked a separatist campaign by German ethnographers (Myres 1931: xxvi; Comas 1956: 66; Pogliano 2005: 42). British ethnologists and folklorists meanwhile remained closer than elsewhere, both attending RAI meetings and publishing in its journal (Schippers 1995: 236). Stocking attributes the ‘quite separate development,’ of Durckheimian French sociology and ethnology, despite *Ecole* chairs in both, to the relative weakness of Continental Darwinism, while Dias says the approach to culture of ‘English evolutionist anthropology’ and the Parisian ethnographical rivals of anthropology were ‘very close’ (Stocking 1992: 352; Dias 1991: 56). Germany and Central Europe were also ‘relatively unaffected by the Boasian critique’ (Stocking 1992: 357).

Evolutionists saved the discipline complex, but cared little for the fixed, unchangeable polygenist races, and ‘increasingly rejected’ physical anthropology for more culture-oriented archaeology, linguistics, ‘sociology, religion, medicine, and psychology’ (Ferembach 1997: 400; Dias 1991: 56). Fixists like Virchow therefore ‘vigorously opposed’ evolutionary race hierarchies like Haeckel’s and saw history as autonomous from biology (Weindling 1993: 55; Bunzl & Penny 2003: 11). In France, Darwinism was accepted very late, ethnography confined itself to cultural evolution and anthropology shifted from race to culture as Mortillet’s left-wing, transformist (polygenist evolutionist), philosophical materialist group seized power in Broca’s institute (Hammond 1980: 118; Dias 1991: 56). In the charged atmosphere of 1868-70, they overcame arguments by anatomists and morphologists like Franz Pruner-Bey, Gustave Lagneau, Quatrefages (all important contributors to my citations database), for fixity of form and human-primate separateness (Harvey 1984: 393-95). Transformism progressed rapidly in 1870s French anthropology against Broca’s atemporal polygenism and remnants of Quatrefages’s ‘Christian monogenist school’ (Mucchielli 1997: 3). Transformist professors dominated the *Ecole* (founded 1876), with materialists gaining half the chairs; Broca accepted enough transformism to maintain his authority, while fixists ‘remained silent’ or dropped out of the Society’s work (Harvey 1984: 395 & 399-401; Hammond 1980: 118 & 127). After Broca and other positivists died in 1880-85, the Mortillet group rapidly expanded its influence, capturing further *Ecole* posts (Harvey 1984: 401; Hammond 1980: 128). The positivist-materialist coalition finally collapsed after 1889, when the materialists forced out Paul Topinard, achieving full control of the *Ecole*, and many more moderate members ceased participation in the Society (Harvey 1984: 402-4; Hammond 1980: 118 & 128; Ferembach 1997: 400; Myres 1930: 27). Dias says Topinard claimed Broca’s legacy to control it, preventing materialists from drawing ethnology, via culture, into sociology and then politics (Dias 1991: 26). While journals edited by Topinard were the second and third most heavily cited in France in my race classification database, Mortillet’s journal had few citations and the *Ecole* journal barely did

better after 1889. The database representation of the six leading materialists is just a fifth that of Topinard's alone, about an eighth of Broca's and barely a tenth that of Quatrefages, Hamy and then Deniker at the *Muséum*, who continued to oppose the *Ecole* materialists (Mucchielli 1997: 18-21). There are no materialists in my canon.

Materialists like Letourneau, Eugène Dally and Hovelacque made ethnology a synonym of sociology, and shocked positivists by founding a 'History of Civilisations' or 'sociology' chair in 1885*, implying 'a truly new' departure from the Society's traditional 'raciological social science' (Dias 1991: 27; Harvey 1984: 403). Letourneau was 'close' to René Worms, and prominent in the French sociology institutions Worms founded in the 1890s, trying 'to impose his evolutionist and polygenist' approach on French sociology (Mucchielli 1997: 4 & 6). However sociologists liked to attribute social phenomena to social causes, on their own academic turf, rather than give biologists the final word. Durkheim began in the late 1880s to criticise anthropologists, and Letourneau specifically, for using ethnography as a bridgehead to subject sociology to their racial paradigm (Mucchielli 1997: 6-7). Durkheimians invaded anthropology to combat its encroachments into sociology, but using new methods and sharing 'the preoccupations of the leaders of the Third Republic', occupied the cultural and social ground vacated by Topinard's purely physical anthropology (Mucchielli 1997: 23; Dias 1991: 241-42). Hammond says the materialists' 'combat anthropology' disappeared around 1900 with the decline of monarchism and resistance to evolution, the spread of secular education and the deaths of its leaders (Hammond 1980: 129). French anthropology thus became a colonial sociology, accepting the primacy of society over biology.

Right-wing race science

Pure, apolitical physical anthropology jettisoned its race-centred discipline complex and the politicised left-wing biology of the materialists, just as the public and right-wing political activists demanded scientific confirmation for their own racism. Despite the liberal and republican tradition of much nineteenth-century ethnology and anthropology, the sociologist Gunnar Myrdal argued that 'biological and medical arguments about human nature' were always 'conservative and even reactionary', legitimising inequality was as biologically natural and therefore unchangeable[†] (Gould 1981: 21). Gould accuses race science of seeking only to prove the biological superiority of 'successful white males' over minority groups, 'women, blacks, and poor people', who were

* Sanemeterio Cobo calls this 'the first' sociology chair, 'not just in France, but in Europe' (Sanemeterio Cobo 1999).

[†] *This inherent orientation may be exceptional. Graham argues that each 'political and scientific' establishment instils scientific theories with its own particular political values (Graham 1977: 1162). Evolution's political meaning for example variously reflected its promotion by positivist period French radicals and British liberals, post 1890s German radical conservatives and twenty-first century American liberals.

demanding greater political and economic participation, attributing empirically discovered physical differences to race (Gould 1981: 85; MacMaster 2001: 9). A British anthropologist and military captain was sure in 1869 that if the authorities ‘became anthropologists’, familiar with ‘race distinctions... there would be fewer political mistakes... less pandering to Negroes, the working classes, and the Celtic Irish, with party clap-trap’ and ‘some hope’ of implementing ‘sound patriotic projects’ (Bedford Pimm 1869: ccxxxvi). Among German liberal and *völkisch* anthropologists, 1860s English ethnologicals and anthropologicals and French materialists, positivists, Christian conservatives of the *Muséum* and anthroposociologists, the right-wingers were always more race-obsessed. From 1860, *Muséum* anthropologists were mentioned as classifiers in my canon more than twice as often as those based at the *Ecole*, which had many more professors, students and journals, and greater influence on professional societies. Topinard, himself an important canonical race classifier, collaborated with *Muséum* anthropologists, after falling out with the materialists (Hammond 1980: 129). Fee says the London Anthropological Society broke with the ethnologists at least partly to keep out women members, and like Broca, sought to restore ‘the cool light of objective reason’ to the 1860s women’s rights debate, by proving the natural science basis of female mental inferiority (Fee 1979: 415-17). Skull variation in an ancient tomb proved to Grattan ‘that differences of rank and station are an inevitable law of our nature’, as ‘gradations of moral and intellectual endowments’ ‘destined’ some ‘to be governors and teachers,’ and others ‘to be governed and taught’ (Grattan 1858: 245). Disorientated by rapid, sweeping change, all social groups sought scientific substitutes for enfeebled religious certainties. Unable to halt the spread of universal male suffrage from the 1860s on to a literate, politically organised proletariat, elites diverted them from dangerous egalitarianism to nationalism and racism (MacMaster 2001: 26).

Fin-de-siècle conservative political scientists, geographers and sociologists tried to revive the mid-nineteenth century tradition of philosophical ethnology, creating para-anthropological disciplines in which (race) biology was the key to history, politics and society. Cesare Lombroso launched a criminal anthropology in 1876, in which criminals were ‘evolutionary throwbacks’ (Gould 1981:124). The zoologist Ernst Haeckel (1834-1913), Germany’s best known Darwinist interpreted evolution as racial struggle (Odom 1967: 16). Though convinced that German Aryans were ‘the highest form of human evolution’, his *The Riddle of the Universe* (1899) was translated into 25 languages (MacMaster 2001: 38-39). German territorial expansionists enthusiastically took up the *Anthropogeographie* and 1889 *Lebensraum* or living-space concept of Friedrich Ratzel (1844-1904). The ‘bold sociological theories’ of the French anti-Semite George Vacher de Lapouge (1854-1936) and Otto Ammon (1842-1916) in Germany created the elitist discipline of anthroposociology in 1893-1909, correlating anthropological with socio-economic statistics to

prove race largely determined social class (Deniker 1971: 318). A right-wing front of eugenicists, archaeologists and the highly popular race theories of Madison Grant, Scheemann's translation of Gobineau and Houston Stewart Chamberlain (1855-1927) challenged anthropology's role as the main socially-mandated font of race knowledge (Herz 1925: 14). German and Central and Eastern European anthropologists successfully established new discipline complexes in the 1920s around the extreme right-wing physical anthropology race classification projects of raciology (*Rassenkunde*) and blood group or sero-anthropology. The rise of biologicistic nationalism in Europe from the 1890s on was particularly pronounced in Germany. Massive and rapid industrialisation, coupled with economic crises, the trauma of 1918 and extreme geopolitical and social stresses created 'a host of critics of modernity, of individualistic liberalism,' and their supposed 'main agents: the Jews' (Massin 1996: 88). A new Manichaeic racism, which made Jews 'the key to' all problems, 'past and present', suddenly replaced traditional European anti-Semitism in the late 1880s (Massin 1996: 88). Anti-Semitic parties peaked politically in 1893, but continued to win hundreds of thousands of votes as anti-Semitism gained social acceptability up to 1914 (Massin 1996: 89; Proctor 1988: 143).

Linked to the call for Germanic solidarity and purity, it spilled over as diffuse "social code"... or overt ideology into many different associations, political movements, and the popular press, spreading to large segments of German society, including most ominously the academic and medical community, and student organisations. (Massin 1996: 89)

An aggressive, militaristic and racist German nationalism, which assumed race determined culture, ultimately became Nazi state dogma. It was a complex melange of anti-Semitism, Gobineau's Aryanism, Kossinna's Aryanist archaeology, Pan-Germanism, the Beyreuth circle, Ammon's anthroposociology, a belated Darwinism, eugenics, Nordic studies and the *Führerprinzip*, or cult of the omnipotent leader (Proctor 1988: 143-45; Massin 1996: 116 & 130-31; Mees 2000: 317-19). These were linked culturally by the romantic right-wing nationalist *völkisch* movement, which Bernard Mees traces to 1870s Pan-Germanist campaigns in Austria for unification with the German Empire (Mees 2000: 317). The movement's members, recruited from lifestyle reformists, the esoteric subculture, organised anti-Semitism and the national culture movement, were 'men with flowing beards, who wanted to drink mead out of horns' and 'women who liked playing valkyries', obsessed with 'pagan Nordic antiquity', runes (like the swastika), the archaic *Fraktur* script, race purity, and direct German descent from ancient Teutons (Puschner 2001: 87-89; Mees 2000: 317). *Völkisch* thought met eugenics and Nordic Supremacism in the *Mittgart-Bund*, founded in 1904 with the enthusiastic support of Alfred Ploetz, the anti-Semitic and Pan-Germanist leader of

German eugenics, to regenerate Germany through racially high-value rural breeding communities, each ideally containing 100 women and 10 men (Ackermann 1970: 132-33; MacMaster 2001: 52; Field 1977: 528). Colonialist Pan-Germanists gained seats in the German parliament in the 1890s, but popular success eluded *völkisch* parties until the ‘workers’ branch of Munich’s Thule society, the publisher of *Runen*, rejected’ the ‘typical’ *völkisch* elitism, aimed for ‘a mass following’ and ultimately achieved ‘a *völkisch* victory in 1933’ (Mees 2000: 317). Mosse believes ‘the young Adolf Hitler’ probably read *Ostara, Journal for Blonde People*, the *völkisch* newspaper of the anti-Catholic, paganist, pan-Germanist Jörg Lanz von Liebenfels in Vienna, finding ‘striking’ parallels between their ‘Manichaeic, spiritualistic’ world views (Mosse 1978: 99). Lanz advocated Aryan world dominance and the ‘physical extermination’ or enslavement of the ‘ape-men’ or ‘dark people of inferior race’ (Mosse 1978: 99).

The position of many German academics ‘in the monarchical authoritarian state’ ‘clearly shaped’ their *völkisch* opposition to Weimar democracy (Lixfeld 1994: 12; Mazumdar 1990: 196-97). *Völkisch* mystical nationalism and fascination for ancient Teutons helped draw German anthropology from liberalism towards Nazism, assisted by three interwoven academic strands: the Nordic supremacism of Ludwig Woltmann and the rediscovered Gobineau, the eugenics (social bio-engineering) of Ploetz’s *Rassenhygiene* society (founded 1905), and the 1900 ‘rediscovery of Mendelian genetics’ (Proctor 1988: 143-45). Mostly medically-trained and racially-orientated eugenics and anthropology overlapped significantly in membership and ideals, while Nordicism was scientifically based on anthropological race classification (Proctor 1988: 144-45; Weindling 1993: 7). Woltmann and Ploetz’s journals (founded 1902 and 1904) published raciology and helped politicise German biology (Massin 1996: 137; Field 1977: 528). Eugenicist psychiatrists, criminologists and demographers made ‘great use of craniometric methods’ (Dias 1989: 224-25). Kühn calls genetics ‘an insolubly allied partner-science’ of eugenics rather than ‘an auxiliary discipline’ (Kühl 1997: 56-57). By the 1910s, ‘many scholars argued that “the science of man” should be subsumed as a branch of genetics’, breaking with ‘the earlier morphological or anthropometric tradition’ (Proctor 1988: 147). As ‘the founder of human genetics’ in Germany and interwar leader of both genetics and anthropology, Eugen Fischer linked the two disciplines (Proctor 1988: 139). In the 1920s, geneticists, especially in Germany, were ‘frequently racialists’ and eugenicists, arguing that Mendel provided evidence for racial differences of intelligence and the dangers of race-crossing (Stocking 1988: 13; Proctor 1988: 147).

The Scandinavian Aryan origin theory of the Austrian prehistorian Karl Penka and the anthropologist Ludwig Wilser launched bitter politicised controversy and intense research,

reintroducing Gobineau's Aryanism 'into serious academic German science' (Massin 1996: 127-28). Their ideas united with 'Teutonic nationalism' and hyper-nationalist scientific movements like Haeckelian Darwinism, and anthroposociology, but around 1900, were mostly 'manifest in' linguistics, prehistoric archaeology and folklore (*Volkskunde*), rather than physical anthropology* or overseas ethnology† (*Völkerkunde*) (Massin 1996: 80, 100 & 128). Historians and anthropologists therefore criticise the 'historiographical tendency' to trace 'the "Aryan myth"' and Nazi race crimes to nineteenth century craniology (Massin 1996: 80; Wiercinski 1962: 9). Wijworra identifies 'an unprecedented increase in popular and pseudo-scientific' prehistoric literature, towards the end of the nineteenth century, as the very few professionals of the not yet institutionalised discipline mixed in societies with 'dilettantes' like Penka and Wilser, and cited their findings (Wijworra 1996: 171). In 1890-1914, archaeology again became politicised and nationalistic, especially in Kossinna's 1909 German Society for Prehistory (after 1913 the Society for German Prehistory), leading the authorities to 'take it into account' (Sklenář 1983: 131-32 & 135). Kossinna's exceptionally popular archaeology, which from 1895 located 'Indo-Germans' in northern Europe since the Neolithic, drew on the German 'historical-linguistic' philology that he trained in, rather than an archaeological tradition (Sklenář 1983: 147). The Nazi regime 'downright institutionalised' and heavily funded the most *völkisch* disciplines, boosting the international influence of *Volkskunde* in Central, Eastern and Northern Europe after 1933 (Lutzhöft 1971: 23; Schippers 1995: 238). German prehistoric archaeology remained more Germanicist than physical anthropology (Coon 1939: VIII: 3-4). After just one previous ordinary chair since 1927, institutionalisation of this 'ideological' or 'official' Nazi science accelerated after 1933, with at least eight new chairs, mostly for Kossinna followers, teaching 'in schools and in the army' while official propaganda used artefacts like the swastika (Wijworra 1996: 178; Guidi 1996: 113; Sklenář 1983: 159-60).

Right and left wing science fought discipline by discipline for control of French and German race science. The relatively liberal consensus in 1890s French and German anthropology and from 1907-8 on, in French sociology, marginalised extreme social Darwinists like Lapouge, who had published freely in leading anthropological journals in 1885-93, and then in the main sociological periodicals (Massin 1996: 132; Clark 1984: 151; Mucchielli 1997: 12 & 22). Blocked from a metropolitan post, he remained a 'provincial intellectual' (Pogliano 2005: 446). After expunging anthroposociology from sociology, the Durkheimians attacked the race paradigm within anthropology, allying with

* Despite Ratzel's social Darwinist anthropogeography and other indications, Köstler says German geography also only became a politicised nationalist discipline after 1918 (Köstler 2002: 74; Sandner and Rössler 1994: 115 & 119).

† The 1918 defeat abruptly terminated German colonial ethnology and its funding, eradicating networks that 'international German scholars had built up over the previous four decades' (Bunzl & Penny 2003: 6). In a reverse of the situation in the West therefore, *Volkskundler* took most university positions and government patronage in Germany, while *Völkerkundler* sought institutional refuge in specialist museums.

purist physical anthropologists like Manouvrier and Deniker, who also refuted the social importance of race, to isolate Lapouge after the victory in 1900 of the pro-Dreyfus party (Mucchielli 1997: 8-10, 18-21). As a politically radical *Ecole* professor, Manouvrier worked with Letourneau, but relentlessly and successfully attacked the scientific credibility of right-wingers like Lapouge and Lombroso (Mucchielli 1997: 19-20; Harvey 1984: 404-5). By 1906, anthroposociology had little open support in professional anthropology and disappeared as a separate discipline, while academic sociologists like Lapouge and Ripley, whose *Races of Europe* was subtitled 'A Sociological Study', vanished from my race classification canon* (Clark 1984: 152).

In Germany however, historians agree that especially after von Luschan's occupied the Berlin chair in 1900, anthropology 'began to abandon' its liberal 'cosmopolitan heritage' of cataloguing human variation, and become 'a state-organized applied discipline', addressing problems like degeneration (Bunzl & Penny 2003: 2; Weindling 1993: 54). Over the next three decades, Virchow's politically liberal but scientifically conservative establishment adapted to eugenics and 'Germany's new political atmosphere', transforming itself into a scientifically radical *völkisch* community (Massin 1996: 80, 114 & 142). After 1918, Rudolf Martin's liberal-positivist physical anthropology already seemed outdated, as a 'narrowly nationalistic and overtly colonialist orientation became virtually hegemonic, culminating in the discipline's willing involvement' in Nazism (Bunzl & Penny 2003: 2; Proctor 1988: 142). In the mid-1920s, a new generation arose with *völkisch* ideology as its 'driving force', whose leader, Eugen Fischer, plus Lenz and Günther later actively participated in the Nazi sterilisation campaign (Proctor 1988: 161; Spencer 1997j: 875; Mazumdar 1990: 196-97). This transformation is variously attributed to a generational transition, professional factors, 'closer' collaboration with 'the colonial project' and an elitist conservative reaction to capitalist 'mass culture' and rising socialism (Bunzl & Penny 2003: 17-18 & 21-22).

From 1922, the 'nationalist and anti-Semitic' Munich publisher Julius Lehmann, who helped finance the Nazi party, began to print the hugely popular *Rassenkunde* popularisations of Hans F.K. Günther, followed by more academic *Rassenkunde* textbooks, an illustrated raciology and eugenics journal and the serology society journal (Proctor 1988: 149 & 154; Pogliano 2005: 91-93). In Cogni's bibliography, Lehmann published almost 40% of German works on race. Munich was an important *völkisch* eugenics centre, pushing during World War I for closer links with Austrian and Hungarian extreme right organisations, in opposition to Berlin's more 'technocratic and welfare state oriented' eugenicists (Kühl 1997: 48). Günther's raciology works 'ran to several editions' and were seen as the standard works in their field (Ackermann 1970: 110). He was 'the main

*Some geographers, like Biassuti and Fleure, continued close collaboration with anthropological race classification.

theoretician' of 'Nordic Supremacy', helping transform it into a 'socio-political movement' (Stojanowski 1930: 3; Wiercinski 1962: 11; Lutzhöft 1971: 16). Günther became Germany's first *Rassenkunde* professor in 1932, in Jena, and in 1937, the physical anthropology society changed its name to the German Society for Race Research (Proctor 1988: 155-56). Leading anthropologists like Fischer and Walter Scheidt praised Günther's work, but were also critical (Field 1977: 524; Lutzhöft 1971: 92). His humanities education, somewhat dubious science, and 'immense' popularity and extremism (he was nicknamed 'Rassen-Günther'), made him more populariser than scientific anthropologist (Czekanowski 1967: 47; Lutzhöft 1971: 21 & 92). Though the Nazi authorities established Günther's Jena chair 'over the strong protests of other faculty members', anthropology profited from Nazi support (Field 1977: 526). Făcaoăru says that in 1935-38, Germany established five chairs in 'pure anthropology' or in anthropology plus 'heredo-biology or eugenics', and that students pressed for chairs in 'raciology and eugenics' (Făcaoăru 1938: 207-8). The state 'supported raciological research with major funding', and there were 'numerous specialist journals' (Făcaoăru 1938: 208). In my institutional database, five of the eleven German anthropology chairs established in 1933-42 had titles like *Rassenkunde* and Heredity, Race and Law, Racial and Cultural Biology, or Anthropology with Heredo-biology or Eugenics.

The 'best-loved discipline' of Günther and German Nordicism was raciology, but their 'almost baroque' dilettantism embraced 'theology, philosophy, psychology, sociology, ethnology, history, prehistory, musicology, art history, literary history, Nordic studies, human genetics, eugenics and genealogy' (Lutzhöft 1971: 27). The main partners in this new disciplinary complex were eugenics and genetics, which provided scientific grounding, and from the late 1920s on, drew in issues like 'twin research, the doctrine of constitutional types... blood-group research, paternity diagnostics, genetic psychology' and 'genetic pathology' (Proctor 1988: 156). *Volkskunde* (folklore) and prehistoric settlement archaeology were more peripheral but prehistory was central to the allied discipline complex of mainly humanities disciplines concentrating on Germanic cultural superiority, which Third Reich universities heavily favoritised over anthropology (Lutzhöft 1971: 23). Demographers, 'geneticists, psychiatrists and social hygienists' meanwhile 'formed the core' and scientific basis of 'mainline eugenics' (Mazumdar 1990: 194; Köhl 1997: 38). Nordicist anthropology was therefore just one pole of several within a diverse field of right-wing German race science, held together by *völkisch* politics and the inter-disciplinary Aryan question. Scientists and unscientific race theorists cooperated on a holistic race history, outflanking liberal opponents isolated by problematic disciplinary boundaries. Though most historians draw 'a deep line... between university race scholars and cruder publicists', Field insists there were 'important areas of overlap, shared attitudes and assumptions' (Field 1977: 528). The professors saw eugenics as a 'life

and death' issue and lent their 'enormous prestige' to popular race propaganda (Field 1977: 528). While Chamberlain attacked liberal positivist German anthropology in 1899, the Nazi ideologue Alfred Rosenberg in 1930 and his Italian fascist counterpart Julius Evola in 1941 enthusiastically cited and derived race classifications and concepts from anthropological authorities (Rosenberg 1930; Evola 1941: 34-35 & 73-75). Science was 'an outcome of blood', so Rosenberg welcomed this product 'of Germanic creative powers' (Rosenberg 1930). Anthroposociologists cited Nordicist historians and prehistorians, and the linguist-archaeologist Kossinna aggressively combined language, archaeology and ethnicity (Banu 1939: 202-3; Kurnatowska & Kurnatowski 2002: 98; Kossinna 1909: 18-19). Interwar German anthropologists tried to scientifically integrate Nordicism with other elements of the eclectic *völkisch* race ideology, combining the emotive popular political force of nationalism, with legitimisation by science, the dominant, truth-producing discourse.

A purely German problem?

The total *völkisch* package of eugenics, Mendelian genetics, raciology, Nordicism, anti-Semitism and conservatism found most favour in Germany and many historians seek purely German roots for it. Poliakov calls 'anthropological theory' a 'disguised' recurrence of the 'permanent' German confusion between blood and language, since the humanist nationalist historians of 1450-1550 (Poliakov 1971: 89, 92 & 95). He and leading theorists of nationalism distinguish German ethnolinguistic nationalist tradition from the state-orientated Western European civic form (Poliakov 1971: 87-88; Hermet 1996: 139). Brubaker and Banti signal the 'extraordinary continuity' in French and Prussian/German law since 1791 of defining citizenship by place of residence and descent respectively (Banti 1995: 160). German law progressively strengthened the blood descent principle from 1870 to 1840 (Banti 1995: 156-57). Others link *völkisch* 'missionary zeal' with Germany's exceptional religious fragmentation (Hölscher 2001: 46-47). Haeckel's mystical equation of 'matter and spirit' has been traced to Goethe and *Naturphilosophie*, a popular romantic German pantheism, 'romanticizing links between the human spirit, the land, and nature' (Wolpoff & Caspari: 132-35). However other historians, like Massin, criticise those who trace Nazi science and the Holocaust to 'German biology', anthropology, and specifically German scholars since 'Herder and the Romantics' or before (Massin 1996: 79). They trace Virchow's cultural pluralism from Herder's criticism of the 'homogenizing' French Enlightenment ideal of civilisation, which went 'to the heart of German historiography' (Massin 1996: 80 & 92; Bunzl & Penny 2003: 1-2 & 11). German anthropology of 1860-90 was less narrowly nationalist and on 'Aryanism and anti-Semitism', more 'anti-racist' than 'the dominant French and American schools', refusing to racialise the 1870-71 war and giving race theorists and nationalist anthropologists like Gobineau and Wilser their 'most critical' or indifferent reception (Massin 1996: 80, 92 & 100; Hölder 1876: 4; Herz 1925: 14; Bunzl

& Penny 2003: 1-2, 11 & 15; Wijworra 1996: 172; see pp.244-45). Tracing the long history of racist Western science, Sven Lindqvist says we 'do not want to remember; it is most comforting' for 'genocide to have begun and ended with Nazism' (Lindqvist 2002: 141).

Massin emphasises that race science and eugenics were internationally seen as scientifically legitimate (Massin 1996: 80 & 100). The broader anthroposociology movement included Lapouge in Montpellier, Lombroso in Turin and Ripley in Boston. Gobineau and Lapouge's hyper-conservative tendency in French race science went back to Cuvier's anti-evolutionism, which with monarchical governments and the Catholic Church, sidelined radicals like Lamarck and the *Observateurs* (Hammond 1980: 118). Cuvier, who served in Louis Philippe's government, reconciled archaeological and Biblical evidence by proposing repeated acts of creation and natural catastrophes; a supporter likening the latter to 'the nonmonarchist periods in French history' (Hammond 1980: 121). Siân Jones meanwhile sees '[m]ost archaeological traditions' as 'probably nationalistic' (Jones 1998: 6-8). In the 1910s, almost every European country was active in eugenics conferences, laboratories, or 'well advanced' studies* (MacMaster 2001: 49). Empowered by late nineteenth-century national health systems, Western doctors were emboldened to demand state backing for their social programmes against 'crime, vagrancy and poverty' (Weindling 1993: 6-7). Frassetto's 1934 S.A.S. Committee to synthesise 'anthropology, eugenics, and biometry' included mostly right-wing anthropologists, eugenists and demographers from Russia (Bunak), Italy, the United States, Germany, France (Montandon) and Austria (Pogliano 2005: 57; Chiarelli & D'Amore 1997: 408). Even the French-dominated IIA congresses organised some international eugenics fringe meetings (Pogliano 2005: 41). Anglophone countries, and especially the United States, were international leaders in eugenics and shared the German obsession with white, or sometimes blond or Nordic race unity (Graham 1977: 1149; Kühl 1997: 66-68). Americans and Scandinavians led the world in introducing forced sterilisation laws, beginning with Indiana in 1906 (Kühl 1997: 23). By 1918, American eugenicists had developed new, politically important national institutions, influenced immigration law, and taken leadership of conservative international eugenics (Kühl 1997: 54-55). Boasians had to wage 'hard-fought struggles' with 'racialists' in 1920s anthropology to organise 'an anti-Nazi scientific consensus on... race and culture' (Stocking 1988: 11). The Nordicist British archaeologist Arthur Keith accepted inter-national, but not racial inter-breeding, praising North America's racially segregated melting pot (Barkan 1992: 46 & 49).

Scandinavians were schizophrenic regarding race science. Eugenics and genetics sustained raciological research there, heavily supported by private donations and the generosity of the

Swedish government, which set up two important research institutes in 1918-21 (Făcaoăru 1938: 213-17; Kühl 1997: 50). Scandinavian countries were among the first to found eugenics societies in 1909-13, and consistently held about a third of the seats on the leading interwar eugenics committee (Kühl 1997: 34, 53, 58-59 & 87). The Norwegian Jon Alfred Mjöen and the Swedish *Rassenkundler* Herman Lundborg were leaders of international eugenics and '[l]ike many Scandinavian scientists' since at least the start of the twentieth century, were strongly pro-German (Kühl 1997: 60 & 87; Eickstedt 1937b: 88-89). However although local Nordacists, fascists and race biologists embraced 1920s German romanticisation of Teutonic Scandinavia, their governments and liberals rejected it as a cover for German expansionism (Field 1977: 532-33). Race anthropology therefore declined in the 1930s, by 1940 reaching 'a rapid and apparently almost complete collapse' in Norway, and in Sweden a 'sad end', with reports of human biology teaching 'including genetics' even being forbidden (Eickstedt 1937b: 88-89; 1940: 140-41).

The post-1815 romantic nationalist reaction to enforced French universalism was most intense in Germany, stimulating folklore research on isolated rural communities, seen as being least polluted by cosmopolitan influences, which as *Volkskunde* gradually gained academic respectability (Johnson 1992: 147; Stagl 1995: 241). In England, by contrast, the term folklore was first noted as late as 1846 (Stagl 1995: 241). However anthropological obsession with national culture and race and demands for ethno-national independence, took deep and durable root throughout Central and Eastern Europe, frequently reacting to pushy German cultural nationalism (Johnson 1992: 147). Weidlein argues that around 1900, Hungarian conservative nationalism was intensely racialised, reacting to cultural Magyarisation of the largely German and Jewish cities (Weidlein 1961: 14-15). Russian intellectuals almost universally welcomed social Darwinism, promoted from the 1860s by native and translated works, and early twentieth-century Russian scientists were in the vanguard of international genetic research (MacMaster 2001: 53; Graham 1977: 1144-45). Leading physical anthropologists like Bunak heavily promoted eugenics there. The Bolshevik state, not shy of social engineering, initially funded eugenics organisations, including a society in Moscow (1920) and a genetics office in Leningrad (1921) (Kühl 1997: 93; Făcaoăru 1938: 213). Eugenics institutions popularised and helped institutionalise raciology in Poland and Slovenia, and were key sponsors of raciological research in Romania and Bulgaria (Schwidetzky 1935: 82; Făcaoăru 1938: 211 & 216-17). Interwar Polish anthropologists constructed their own raciological discipline complex to connect race and politicised ethnicity, Czekanowski seeing anthropology-archaeology collaboration as invaluable for race history research (Czekanowski 1920: 65). He trained in the German tradition and matched the nationalism and arguably even the Nordicism of German colleagues, while

*Nineteenth-century Russia intellectuals welcomed Western and anti-conservative Darwinism (Graham 1977: 1144).

Kossinna's student Kostrzewski rivalled his master's rabid nationalism (see p.361). Czechoslovakia was represented on the committee of the eugenics international in 1921 and set up a raciology chair and institute in Prague, though perhaps at the German university (Făcaoăru 1938: 211 & 214; Kühl 1997: 59). Făcaoăru said Indian anthropology was also eugenics oriented (Făcaoăru 1938: 216).

Like raciology, the *völkisch* interwar race classification science of serology was weakest in Western Europe, but flourished in ethno-nationalist zones like Austria and Germany, among Russian anthropologists, who launched a journal in Kharkov, plus in Italy, and elsewhere on the continent, with important Polish, Finnish and Czech researchers (Pogliano 2005: 85-92 & 99; Mazumdar 1990: 187). Leading serologists listed Russia and particularly Germany as the best studied serologically, and Britain France and Spain as among the worst (Pogliano 2005: 47 & 91). Anglophone serology was late, half-hearted, and mostly studied the colonies, with no articles on English blood groups until after 1935, while a Serb and a Viennese mainly promoted serology in France and the US (Pogliano 2005: 107, 114 & 118; Mazumdar 1990: 187). Most founders of race serology meanwhile were hyper-cosmopolitan Central European Jews like Ludwik Hirsfeld (1884-1954) (Pogliano 2005: 85-92). These were excluded from the *völkisch* German Blood Group Research Society of course and several fled to America (Pogliano 2005: 85-93 & 98; Mazumdar 1990: 191). The German society, founded in 1926 by the Austrian anthropologist Otto Reche and German serologist Paul Steffan, both later Nazi or SS officers, was an 'almost exclusively' race-focussed Austro-German project, with half its members from Austria, and the largest contingent in Vienna (Mazumdar 1990: 188, 191 & 218; Pogliano 2005: 90-91). Mazumdar finds however that just 12% of 1920s serology literature dealt with race, which seems therefore to have piggybacked on therapeutic interest in transfusion (Mazumdar 1990: 188). The leading German serologists were well connected with senior Nazi figures and collaborated with *völkisch* disciplines like folklore (Mazumdar 1990: 216).

The rise of Germany

In Eickstedt's canon, Germany took a back seat to France for much of the nineteenth century, aside from some well cited schemes by mid-century 'philosophical anthropologists' like Gustav Klemm. However in my database, German-published works increased fairly steadily from 3.5% in 1815-32 to 38% and first place in the interwar period, while the proportion in German gradually rose to about 44% after 1872. It was the leading language in 1872-88 and 1918-39. A deep but temporary turn-of-the-century dip interrupted both trends, as many new countries began to be cited in the database. My canon also has more Germans towards the end of the nineteenth century, when Eickstedt said German race classification enjoyed a 'rapid and strong upswing' under French

influence, and after a second fallow period, once again became the strongest contingent in the Interwar period (Eickstedt 1937b: 87-88). His canon shows an overall German language majority of eleven schemes in 1903-36. Six were by non-native speakers, demonstrating German's importance as an international language. All sources confirm Germany as the leading power in interwar race classification. It was the best represented country in my canon for 1900-45, represented by three anthropology professors, including Eickstedt. Giulio Cogni judged in the late 1930s that German works accounted for two thirds of important race works, and over three quarters of eugenics and political philosophy works as opposed to anthropology. Though perhaps exaggerated, this reflects the rampant Germanisation of contemporary race studies. Schwidetzky meanwhile calls the period 1924-42 'the boom years of the anthropology textbook' in Germany (Schwidetzky 1974: 5). In my database on institutions, interwar Germany established a record 17 new university anthropological chairs, which with four new full professorships in Vienna, brings Germanophone foundations to over 40% of the interwar world total. Eleven of the German chairs dated from 1933-42.

From the late nineteenth century, Germany projected growing influence in international race classification and anthropology, especially in its 'hinterland'. The Austrians, Swiss, Belgians, Czechs and Bulgarians emulated Virchow's 1870s pigmentation survey of 6.76 million German schoolchildren for example, generally using his techniques (Czekanowski 1967: 44; Schwidetzky 1982; Gloor 1986). Massin says turn-of-the-century German physical anthropology dominated 'German-speaking Switzerland, Austria, Hungary, Bohemia, Poland, and the Baltic countries,' plus 'parts of the Netherlands, the Balkans, and Scandinavia' (Massin 1996: 83). Czech anthropologists attended meetings of the German society, only establishing their own in 1946 (Matiegka 1924a: 6-7). Eickstedt said the rapid rise of German anthropology stimulated Italy and Portugal, which remained in the vanguard of research, plus 'Russia, Bohemia, Poland,' and the Balkans in the late nineteenth-century, and then, powerfully, interwar 'Yugoslavia, Romania and Poland' (1937b: 88). Dutch and German research, he added, also had a 'really close relationship', while Nazi backing for German anthropology and other 'strong impulses from Mitteleuropa' influenced Dutch, Swiss and Balkan anthropology (Eickstedt 1937b: 89; 1940: 139).

Attracted by the prestige and power of German science, scientists and students from much of continental Europe outside the French sphere came to study and work at German universities and museums (Massin 1996: 83).

Sklenář emphasises the exceptional 'degree of unity in the scientific life' of positivist period Central Europe (Sklenář 1983: 107). Czekanowski, who trained most of the next generation of

Polish anthropologists, Lubor Niederle, who founded Czech anthropology, and Drontschilov of Bulgaria studied with von Luschan in Berlin, Rudolf Martin in Zurich or Ranke in Munich (Schwidetzky 1935: 79; Eickstedt 1940: 177 & 180; Matiegka 1924a: 8). Foreign students attended Kossinna's prehistoric archaeology school as it was 'one of the few' in pre-1914 Europe, and the leading Neolithic school (Lech 1997/98: 34). The anthropometric system of Rudolf Martin's 1914 textbook was a major instrument of German international influence. German, Swiss, Norwegian, Polish, Russian and Yugoslav, and many but not all American anthropologists polled informally in 1927 favoured a version of this system, while only the French made 'much attempt at following the Monaco-Geneva convention' on anthropometric methods and even they were 'far from unanimity' (Tildesley 1928: 353-54). In 'Germany, Switzerland, and Norway' at least, 'an unbroken line' of practical demonstrations of the technique went back to Martin himself (Tildesley 1928: 358). Other sources confirm that Germanophones, Eastern Europeans and others mainly followed Martin and other German authorities, with a few references to French standards (Tildesley 1928: 354; Pöch 1925: 296; Reche 1909: 223-25; Schwidetzky 1935: 165-66; Talko-Hryniewicz 1916: 411 & 419; Mydlarski 1926: 186-87; Stojanowski 1924: 664). Massin says 'Central European anthropologists often published... in German' (Massin 1996: 83). French and German both served as international languages in Sweden from 1847, but German increasingly became an alternative in previously French-using countries, such as the Netherlands from 1862 and Poland from 1872. When Russian, Spanish and Hungarian classifiers began to be cited in foreign languages from the late 1870s on, French and German competed from the start. However Holck says 'the first anthropological paper in Norway', in 1878, was in German, then considered 'the primary language for scientific publication' (Holck 1997a: 754). In Eickstedt's canon, twentieth-century Dutch, Slovenes and Norwegians published in German, in Austrian or German journals. Though Croats were cited in my database in German, French retained the overall advantage in the Balkans and Finland. Only Italians remained decidedly Francophone until after 1889, and then chose English over German. Interwar folklore scholars from Scandinavia and Germany's eastern neighbours also often studied in Germany, and communicated internationally in German, though in the 1930s, English diffusionist ideas were also influential (Schippers 1995: 236). From 1935, Scandinavian, German, Scottish and Dutch folklorists founded European institutions, like a society in Copenhagen in 1938, and a journal founded by a Berlin-trained Swedish anthropologist.

Vienna's Empire promoted German influence in south-eastern Europe. Turn-of-the-century 'Croatian scholars spoke and read German, published in German language journals and had close ties with Vienna' (Wolpoff and Caspari 1996: 111). Bosnian publications only enter my database due to an official scientific mission established after the Austrian occupation in 1878 (Pittard 1920:

21). The 1913 Viennese prehistory society covered all Cisleithania (Sklenář 1983: 135). Russian physical anthropology got its ‘first impetus’ from the Baltic German von Baer of Dorpat, who gathered a large craniological collection in Saint Petersburg in 1834-67 (Godina, Butovskaya & Kozintsev 1993: 2; Eickstedt 1940: 174). My database suggests a steady progression in Russian anthropological publishing from Baltic ethnic German centres, to St. Petersburg and then Moscow. Interwar Russian sero-anthropologists, whose journal was bilingual Russian-German, had an intimate relationship with their Austro-German counterparts, while Germany was the greatest influence on early 1920s Russian eugenics due to the two countries’ close ‘scientific relations’ and common ostracisation (Pogliano 2005: 91; Graham 1977: 1145-48). Eickstedt said Sweden had also long cooperated closely with Germany and traced the ‘sometimes late and hesitant stimulation’ of late nineteenth-century North American anthropology to ‘earlier English and later German research’ (1937b: 88-89). Franz Boas made liberal positivist German ‘intellectual and institutional’ models the ‘dominant paradigm of American cultural anthropology’, just as they were disappearing in Germany itself, and like other immigrant victims of German anti-Semitism, opposed racist interwar German anthropology (Bunzl & Penny 2003: 3 & 22; Vincent 1996: 26). Many non-German immigrants, from Agassiz to Hrdlička, also influenced the American discipline however. Historians of Balkan race science stress more or less exclusive German influence. Promitzer says early twentieth-century Balkan physical anthropologists and race scientists ‘mainly studied... in Vienna, Berlin, Munich, Braunschweig etc.’ and after 1933, were sympathetic to ‘the Third Reich or tried to be neutral’ (Promitzer 2004: 2 & 8). The interwar ‘new generation’ of South Slav and Romanian race scientists ‘carefully observed Eugenic measures’ in Nazi Germany and elsewhere in Europe and accepted the German race hierarchy (Promitzer 2004: 8). All 1930s Romanian raciologists used Eickstedt’s race diagnosis system (Papilian & Velluda 1941a: 629; Necrasov 1941: 80; Făcăoaru 1936a: 22). Trubeti meanwhile accuses the leading interwar Greek anthropologist, Ioannis Koumaris, of admiring ‘German Anthropology and race science’ and of an ‘affinity’ with Nazism (Trubeti 2004: 5-6).

Geographical disintegration of race science

French anthropologists, despite their fading international dominance and Anglophone and Scandinavian objections, clung to their control over interwar international congresses, stubbornly excluding Germany. Given Francophone dominance of the CIAAP and then the *Institut International d’Anthropologie* (IIA), post-1870 and interwar bitterness may also have played a part in the complete absence of conferences in German speaking lands, and after 1918, in Hungary and Russia also. For instance Quatrefages, who ascribed the barbarous bombardment of the *Muséum* in

1870 to Prussian racial origins, chaired the committee charged in 1889 with deciding the next location (Comas 1956: 27). Congresses planned or proposed for Vienna (1900) and Berlin (1911) ultimately met in Monaco and Geneva (Comas 1956: 28). Pre-1914 Europe however effectively had two separate conferences series. German Anthropological Society meetings were also itinerant, held regularly in German, Swiss and Austrian cities from 1870 on, and performed the same role for Central Europe, including Slavs and Hungarians, as the CIAAP in the West (Sklenář 1983: 107). *Ecole* teachers led the foundation in 1920 of the ‘Franco-centric’ IIA, which was legally based at the *Ecole*, adopted a journal edited by *Ecole* professors as its organ, had almost entirely Francophone executives and held three of its eight conferences in France or Belgium (Comas 1956: 33 & 52; Myres 1930: 28; Pogliano 2005: 42). Over a third of delegates to its 1927 Amsterdam congress were French, Belgian or Algerian, while only about 5% were British or American. Most egregiously, its 50-member council of management in Paris had 26 French members, and other countries a maximum of four each (Myres 1930: 29; Comas 1956: 37). The *Institut*, which the French government officially recognised and paid an annual subvention from 1927, argued that French law required all this (Myres 1930: 29-30). However the British anthropologist John Myres claimed the *Ecole* exploited IIA subscribers to subsidise its journal and objected to the IIA setting congress agendas, rather than the host country as before the war (Myres 1930: 22 & 30). Its ‘nationalistic spirit’ ‘implicitly excluded’ Germany and the central powers, one founder member declaring it ‘the permanent central institute’ of all anthropology, ‘apart from the exception that you know’ (Comas 1956: 33-34). A French anthropologist claimed in 1931 that it promoted the ‘disinterested research, independence of thought, the intellectual and moral value’ that Germany’s ‘nefarious influence’ threatened (Comas 1956: 33).

Myres described repeated, frustrated attempts in the 1920s to persuade the French to reform the IIA and allow equal and open international participation, cataloguing successive ‘misunderstandings’, lack of communication, French perfidy and sporadic, half-hearted participation by Britain, Italy and others (Myres 1930: 32-42; Pogliano 2005: 42). In 1929, the Britain’s RAI voted not to recognise IIA congresses, as the *Institut* had taken no ‘serious actions’ to meet its concerns (Myres 1930: 42). Comas says resistance to German participation softened very gradually. In 1924, the IIA voted to ‘admit all nations’ with ‘complete equality’, but failed to implement this (Comas 1956: 39; Myres 1930: 33). The uncontested internationalism and prestige of the old CIAAP led Dutch and English delegates in 1924 to propose its merger with the IIA, with directors from both bodies and all countries represented equally (Comas 1956: 39; Myres 1930: 34). This was agreed in 1927 but the 1930 Lisbon congress was described as a simple organisational annexation by the IIA of the CIAAP name or ‘a private reunion’ of a Parisian society, and the accompanying social activities as merely

‘an excellent demonstration of cordial Franco-Portuguese friendship’ (Comas 1956: 44; Myres 1930: 39). Further talks led in 1931 to appreciable progress, but it was already too late. Myers opened contact with Eugen Fischer, who let the question of restarting German participation in British hands (Pogliano 2005: 43). Noting the ‘rich’ anthropological and ethnological contributions at the 1912 International Congress of Americanists in London, the RAI had already proposed separate anthropological and prehistorical congresses ‘in liason with the Americanists, the Orientalists, the Archaeologists,’ and the CIAAP (Myres 1930: 40; 1931: xxviii; Comas 1956: 62). They would coordinate meeting schedules with the Americanists in boost numbers ‘of American and other workers’ (Myres 1930: 40; 1931: xxviii; Comas 1956: 65). A 1912 meeting of 29 leading anthropologists, of whom 17 were Anglophone and all but four were Anglophone, Germanophone or Scandinavian, agreed this proposal, but it was stillborn due to the War* (Comas 1956: 62-63). Reviving the idea in 1927, the surviving organisers launched two new international congress series, for *Sciences Préhistoriques et Paleolithiques* (CISPP - 1931) and *Sciences Anthropologiques et Ethnologiques* (CISAE - 1933) (Myres 1930: 41; 1931: xxviii; Comas 1956: 65; see Fig. 1.6b). Their permanent councils used the German, Spanish, French, English and Italian languages on an equal footing, and every country had equal representation (Comas 1956: 65). Both bodies held small preliminary meetings in Switzerland, before full congresses in London, and then Scandinavia, but never in French-speaking lands. Though the official language of the 1934 London CISAE was French, most speakers used English (Pogliano 2005: 52).

Myers insisted that the aim was not to establish yet another rival congress series and that the British abandoned a planned 1927 meeting to avoid clashing with an IIA congress (Myres 1930: 20, 32, 37 & 41). They may nevertheless be accused of geopolitical manouvering against Eurocentric internationalisation. Their plan to coordinate with the Americanists was meant to boost Anglophone representation at international congresses, and no French delegate attended the 1928 Americanist meeting in New York that deputed the British to coordinate with the IIA (Myres 1930: 40-42). British eugenicists meanwhile resisted joining a German-dominated international organisation, which might obstruct their established contacts with British medical and social reform organisations (Kühl 1997: 25). After Ploetz failed to create a united German, American and Swedish front for a centralised international body, a decentralised organisation along British lines was established in 1913 (Kühl 1997: 33). British Euroscepticism, German internationalism and French commitment to internationalism in a French image might be ingrained national habits!

*In the international eugenics federation similarly, Scandinavians and Americans, with British backing, campaigned from 1921 to readmit Germans, Austrians and Hungarians, against French and Belgian opposition (Kühl 1997: 59-61).

International eugenicists split along similar lines to anthropologists. Their international body remained right-wing and Mendelian in the early 1930s, overruling proposed neo-Malthusian, Lamarckian, and from German, American and especially British eugenicists, feminist and socialist alternatives (Kühl 1997: 87). Scandinavian and French dissidents were particularly active, but the former united decisively with their German, British and American colleagues against medically-orientated French Lamarckian eugenics, which stressed social medicine and hygiene (Kühl 1997: 87 & 90). Growing interwar tension between French and orthodox German, Anglophone and Scandinavian eugenicists led to schism in 1926, when the French merged their society with ‘the social anthropology-oriented’ IIA, linking up instead with Italian, Spanish and Latin American eugenicists, who also criticised Germanic eugenics (Kühl 1997: 91). Negative eugenics and racial theories clashed with the Catholic principles of many Italians and the French political right, which justified anti-Semitism on religious rather than racial grounds (Mosse 1987: 57; Kühl 1997: 35). While positivist anthropologists opposed the Catholic Church’s anti-scientific authoritarianism, twentieth-century *völkisch* race scientists disliked its anti-nationalism and associations with Mediterranean decadence. Catholicism impeded both, countering Nordicism in the Viennese ethnology school for example (Bunzl & Penny 2003: 21-22). A Polish anthropologist who worked at the school and had strong church links, insisted that racial and social groups were entirely separate and that ‘fundamental’ relationships with God, ‘the world’, friends and family, were ‘rooted significantly more deeply than racial characteristics’ (Klimek 1939: 31-32 & 40).

As increasingly racist Interwar German anthropology diverged from ‘the progressively liberal’ discipline elsewhere, it became ‘increasingly isolated’ internationally (Bunzl & Penny 2003: 7). This was exacerbated both by exclusion from international contacts and the resentment this created. German eugenicists refused for example to participate in international eugenics meetings until 1927, in protest at French occupation of the Ruhr (Kühl 1997: 61-63). My analysis of correlation between source text bibliographies suggests a powerful drift of German writers from citation practice elsewhere from the mid-1920s, creating an increasingly separate interwar German classification canon. Quite high degrees of similarity link a 1925-36 group of six German works plus one by Czekanowski and German-language articles by Bunak in Russia and Skjerl in Slovenia. However 1930s German citation correlates less well than Bunak and Czekanowski with a more traditional Anglo-international 1920s group of source texts, including three English works, two Italian, and one each of American, Swiss Romand, French and Yugoslav. Later non-German source texts from 1928-41, are also most closely linked to the 1920s group, while German texts from 1923-25 leaned towards the German dominated 1930s group. Even moderates like Hella Pöch used anthropometric methods from five German authorities and just one French (Pöch 1925: 296)

Bolshevik Russian anthropology came much closer to international isolation however. Leading Russian and Polish researchers said Soviet anthropology was limited by being ‘only very weakly linked to the European science’ and largely unknown in the west (Bounak 1926: 346; Stojanowski 1935: 33). Participation in international congresses was dramatically less than in Tsarist times. Soviet anthropology initially prospered modestly, led by Bunak, until his rivalry with Debetz became enmeshed in the ideologisation of Soviet science (Stojanowski 1935: 33; Godina, Butovskaya & Kozintsev 1993: 6). Research within the ‘rigid’ ‘officially established and approved’ framework got ‘quite generous governmental and financial support’, but Bunak complained of the ‘great difficulty’, ‘miserable conditions’ and poor funding of anthropological teaching and research (Godina, Butovskaya & Kozintsev 1993: 8; Făcaoăru 1938: 213; Bounak 1926: 360). Stojanowski said early 1930s Soviet anthropology suffered a political ‘catastrophe’, with regional journals liquidated and a 1932 programmatic article attacking bourgeois and “‘openly” reactionary’ foreign and Soviet work and demanding that anthropologists actively oppose French, German, Polish and Japanese racism (Stojanowski 1935: 33-34). Bunak was marginalised, anthropological institutions destabilised, and research ultimately driven in an utterly different direction from foreign trends. New institutions were set up even during World War II, but the USSR’s only anthropological journal closed in 1937 for two decades and Bunak was forced from his Moscow posts (Godina, Butovskaya & Kozintsev 1993: 8-9). Soviet eugenicists also ‘worked for full international recognition’ and cooperation, but after briefly joining the international movement, the former Allies ‘ostracized’ them and the authorities stopped them meeting foreign counterparts (Graham 1977: 1148; Köhl 1997: 93). In 1934-64, the agricultural biologist Lysenko’s theory that new plant forms and implicitly, a new Soviet man, could be created in a few generations, became official dogma, and Mendelian genetics was condemned as ‘bourgeois’ and suppressed until the late 1950s (Sigmon 1993: 4 & 7; Godina, Butovskaya & Kozintsev 1993: 8). Serology research, though promoted by an official committee set up in 1927, therefore ceased until the 1960s (Godina, Butovskaya & Kozintsev 1993: 10).

Despite these centrifugal forces, strong bonds of positivist scientific community held international anthropology together. The IIA and new conference series were not openly hostile to one another and most countries attended both. The French, Belgians, British and Dutch, the main protagonists of the IIA reform dispute, attended all or most sessions of the ‘rival’ series. Even the vanquished powers were allowed into IIA conferences from 1927, though German, Austrian and Hungarian attendance was far more regular at the other series, and significantly below their pre-War congress attendance. Their combined delegations in 1927 were the same size as Portugal’s and smaller than

Romania's. Smaller participants were the most partisan. British and French colonies largely opted for the 'home' series, Romania much preferred the Paris organisation, and the CISPP and CISAE were more popular in Scandinavia and the Baltic states. Though eroded, positivism remained a powerful ideology for German and non-German fascist raciologists, who clung to and vaunted a professional identity and integrity as objective international scientists, and avoided full immersion in Günther's dubious propaganda-science. Coon called Eickstedt 'the most articulate' modern German raciologist, and his 1933 classification scheme 'the most ambitious... yet made' (Montandon 1933: 113 & 115; Coon 1939: VIII: 4). He applied to join the Nazi party in 1933 and edited 'probably the single most important' Nazi period anthropological journal, but avoided the most incriminating Hitlerian projects and was able to rescue his career after 1945, when periodically updated editions of his *Rassenkunde* were still used as textbooks (Proctor 1988: 158, 162 & 168-69). Though hailed in 1934 as German anthropology's 'recognised Führer', Fischer did not always automatically take the most pro-Nordic, nationalist stance, if scientific evidence did not warrant it (Proctor 1988: 157). More dedicated Nazi colleagues therefore criticised him in 1933, but Fischer retorted that for twenty-five years he was the only German academic arguing that the Nordic race alone created advanced civilisation (Proctor 1988: 146). Czekanowski calls him 'an outstanding specialist, but most of all an opportunist – a moderate nationalist' before 1914, Catholic under Weimar, National Socialist after 1933 (Czekanowski 1967: 48). The journal of the Physical Anthropology Society, though launched only in 1924, was cited almost twice as much in my database as the main German eugenics, Nordicist and *völkisch* racist journals combined. Close traditional Central European and Scandinavian links, though some were relations of dependency, may also have countered German extremism and isolation.

Conclusion

Political support promoted institutionalisation and required anthropologists to link biological race with nations, generally through culture. Physical anthropology therefore formed discipline complexes with humanities subjects, offering them its natural science prestige, but disciplinary specialisation continuously undermined these alliances. The interaction of successive ethnological, anthropological, raciological and numerous less significant race classification discipline complexes (i.e. ethnography) with domestic political struggles and academic disputes about the organisation of social science, gave race classification a turbulent history. Its many overlapping and interacting geographical patterns, influenced by varieties of nationalism, degree of industrial and scientific development, ethno-cultural tradition and especially by the nexus between politics and science were a further complication.

The geography of anthropology as a whole, and of its race classification project, matched that of advanced scientific modernity exceptionally closely, though classification was less practiced in Britain and the Netherlands than their scientific development would suggest. Linguistics and archaeology, for example, matched it far less well. Classification was consistently centred in a broad north-west continental Europe, its centre of gravity shifting from Paris to interwar Germany. The big three language areas and core-periphery (or centre-province) relations were vital structural elements. Though the peripheries did not always fall far behind the core in number and size of institutions, the work they produced was just not taken as seriously as that from the core. Paris and England's south-east meanwhile provincialised not only the rest of France, the U.K. and their empires, but also Belgium and to an extent even the United States and Iberia. Central Europe and Scandinavia similarly functioned as part of a wider Germanophone zone, which used German as an international language, had strong traditional links with Germany and shared (though perhaps less in Scandinavia) an ethno-nationalist political tradition. Germany was clearly most influential in this zone, but other parts were not always simple tributaries. All the main anthropological 'powers' of interwar Central and Eastern Europe were geopolitical enemies of Germany and resisted its influence when possible. However their German training and the fact that the interwar race classification disciplines of raciology and serology largely corresponded with the Germanophone zone meant that this was not always possible.

At least three political programmes gave race anthropology the crucial support it needed to develop institutions: nationalism, nineteenth-century progressive ideologies like liberalism and anti-clerical republicanism, and theories of racial superiority. Nationalism was the most pervasive and continuous influence. Mid-nineteenth-century positivist anthropologists criticised the politicised antiquarians and romantic ethnologists, who researched the national past to glorify it, but they themselves aimed to demonstrate the advanced scientific civilisation of their own nations. This oneupmanship was most pronounced in peripheral countries with most to prove, but it was Western Europeans, and especially the French who, confident in their international leadership, most blithely manipulated positivist science for nationalist purposes. Liberals championed positivist anthropology for illuminating the march of modern progress and dispelling the reactionary superstitions that succoured conservatism. However this appeal gained most significant official support in the Latin countries, where a muscular positivist republicanism had emerged to oppose anti-scientific Catholic conservatism. Finally, race classifiers, usually as Nordicist raciologists or serologists, inveigled themselves from the 1890s into neo-romantic scientific racism, which especially flourished in the

ethnic rather than civic nationalist tradition of the wider German-influenced zone, including Central and Eastern Europe.

Protestant-Germanic, Catholic-Latin and Slavic blocs all appear to have affected how the scientists behaved, partly through cultural commonalities and partly through imagined ethnic community. In Latin countries, Catholic opposition to natural science spurred anti-clerical institutionalisation of anthropology but then inhibited participation in the neo-romantic raciological revival. Catholic Slavic subject nations developed anthropology as a positivist claim to be as scientifically advanced as the West, and therefore worthy of independence. They were enthusiastic raciologists like the Germans but allied to France. Exemplifying Brubaker and Cooper's distinctions, they had greater groupness with the West, despite their stronger commonality with Germany, and therefore tried to shift their connectivity westward, for example in congress participation. They also asserted their independence by cooperating on a common Slavic research project. Austria and Ireland present further complex Catholic variations. Eugenics and a very strong common Germanic-Nordicist narrative of superiority meanwhile united the Germanic countries. However although English speakers felt less bitter than Francophones towards the Germans after 1870 and 1914 as their congress politics show, they nevertheless allied with the French, and shared their civic nationalism and gradual abandonment of race classification. The Protestant bloc therefore sometimes divided between British and German poles of influence, with the U.S. and Scandinavia intermediate. In the twentieth century, this split divided the whole race classification community into a liberal West which tired of race science and an authoritarian East which revived it. This split was just the deepest of those which dismembered the classification community. The united Paris-centred community of the late nineteenth century became increasingly unwieldy as it expanded dramatically in size. Just as the Concert of Europe split into rival and then enemy blocs, race classifiers increasingly separated into semi-incompatible national schools. Despite this expansion, disintegration, politicisation and nationalist localism however, race classification remained in many respects a strongly European-centred, cosmopolitan positivist activity.

How Classification Worked

Nations, like families, are fond of counting up their ancestors, of enhancing the length of their genealogy, and of regarding the antiquity of their origin as a title of nobility.

Paul Broca, the leader of French positivist anthropology (Broca 1878: 200)

This chapter revolves around the ‘central tradition’ of European race classification, a remarkably durable set of concepts and practices which formed the rigid spine of European race classification from the 1830s to the mid-twentieth century. Edwardsonian ethnology, positivist anthropology and interwar raciology all focussed on classifying fixed, distinct races, which determined culture but were largely defined by unique patrimonies of inherited biological (physical and psychological) traits (Wolpoff & Caspari 1997: 121). I argue that the approaches which best survived the turbulent history of race classification were those which biologically explained society or politics. Competing race definition criteria like language and physical features were systematically chosen for their fixity, or changlessness over time, making races into eternal bodies of descent, and study focussed on linking them historically with modern ethnic, class or gender groups (Dias 1991: 20-21). While all the component disciplines of ethnology already ‘presupposed the governing idea of the permanence’ of either linguistic or physical race in the 1820s, the interwar Lwów school still claimed that as their race diagnosis recognised modern race types among Neolithic skulls, ‘they go back to a very distant past in a slightly changed form’ (Blanckaert 1988: 19; Dias 1991: 18; Stojanowski 1924: 762-63). As in other large-scale social scientific paradigms like class and culture, race anthropologists argued that the patterns they discovered in tangible characteristics represented a hidden, abstract, but very real underlying force, which ‘explained’ the original observed study data, for example ‘certainly’ attributing a case of diminished stature to racial ‘Mediterranean elements’ (Necrasov 1941: 134). Knox for example amalgamated the French and Irish enemies of Britain in a common Celtic race, and explained 1848 by dividing German speakers into two races with different political outlooks (Knox 1850: 17). Influenced by Hegel’s dialectics, political race histories were often Manichaeic conflicts of two races, representing the ‘them’ and ‘us’ of most concern to the author (Bieder 1909: 27-28; Woltmann 1903: 228-29 & 287).

The symbiosis between anthropological scientific legitimacy and nationalist romantic political purpose was ill-matched and repeatedly disrupted, but so politically useful that for over a century they always found ways to recombine. Due to the mutually supportive symbiosis of science with socio-political forces, and to disciplinary inertia, neither the bitter monogenism-polygenism dispute, evolutionism, palaeontology nor Mendelian genetics made much appreciable difference to the core polygenist race concept. Like Indiana Jones leaping along a disintegrating ledge, this survived the serial adoption and collapse, due to internal or external inconsistencies, of successive sources of evidence, including classical texts, philology, serology and mendelian genetics. Gustaf Retzius claimed with some justice in 1909 that his father's 1847 work was 'still recognised as valid and authoritative', embodying the current 'underlying principles and essential programme' of craniology (Retzius, G 1909: 286). In this hyper-conservative field, innovators like Beddoe, Kollmann, Sergi, Deniker, and later Stołyhwo and Czekanowski justified new methodologies or races by identifying them with those of 'the great names of German and French anthropology', from up to four decades before (Sergi 1900: 36 & 41-44; Massin 1996: 108; Czekanowski 1967: 20 & 62-63; Deniker 1904: 203; Stołyhwo 1926b: 151; Beddoe 1912: 40; Wiercinski 1962: 14). In the 1880s, Topinard adjusted theoretical positions to pose as Broca's heir and maintain leadership of the institutions he had founded (Dias 1991: 24-26). Change was often generational, as the faithful reproduction of successive German methods by Romanian raciologists illustrates (see pp.423-24). Generations of scientists gave their working lives to collecting data* on the physical form of European populations and classifying them on the basis of this and supporting information. They created institutions, practices and a body of data and theory, firmly believed in them and were determined to continue the work. Like freely floating convertible currencies since Bretton Woods monetary system collapsed, the value of race classification was supported only by its tradition for soundness, its continued use and the faith of those using it.

This chapter examines the emergence and content of the central tradition, how it adapted to major threats like positivist scientific purism, which gradually stripped away its political rationale, and its revival in twentieth-century raciology. It emerged from the monogenist-polygenist debate on whether human races had a common parent or were separate creations, and was developed by 1830s ethnology (Blanckaert 1996: 26-28). Ethnologists forged an alliance of scientific enlightenment anthropologists who classified the world's human physical types, in the tradition of zoological classification and medical and artistic anatomy, with romantic period antiquaries, who used historical texts, linguistics and archaeology to study ethno-historical tribes like the Celts and

*Pittard 'consecrated the totality' of his summer holidays for five years, forcing himself, 'with the daily and precious collaboration of my wife – to do nothing else, from morning to evening, but accumulate measurements' and

Teutons, which they saw as direct ancestors of modern nations. Within the central tradition, philologists, Retzius, Broca, Sergi, Kollmann, Czekanowski, Stołyhwo and serologists proposed significant and often deliberately revolutionary variations in diagnostic technique, with varying degrees of success. The central tradition was opposed meanwhile by the alternative but overlapping race anthropologies of monogenist early ethnology and the pure physical anthropology tendency which grew in strength in the West from the positivist period on. The chapter also repeatedly visits two key central tradition dichotomies: progress-degeneration and description-quantification. The latter pitted the interpretative, conjectural and descriptive tradition of human sciences, whose methodological independence was championed by Dilthey, against the irresistible rise of quantitative natural science methods. The Italian fascist race theorist Evola's book, 'Revolt against the Modern World', meanwhile encapsulated the sentiment of monogenist narratives of physical degeneration from Noah's racially homogeneous family, philological nostalgia for classical languages and neo-romantic obsessions with race purity. Their direct contradiction of the progressive values of evolution was characteristic of race science because it was endemic to European modernisation more broadly, especially after about 1870. The conservative nationalist mission of cultural preservation was entirely incompatible for example with national glory and success in almost any field of modern international rivalry.

Monogenism and polygenism

Polygenism produced the central tradition. Leading monogenist ethnologists like Prichard in London, and the much more isolated Franz Pruner-Bey in the Paris Anthropological Society, were separated from it by their failure to decisively opt for physical classification criteria. For Prichard, culture and language were reliably inherited together over long periods of time within ethnolinguistic biological racial groups like the Indo-Europeans. In his Christian and Enlightenment^{*} scientific assumption of a single creation less than 6,000 years ago, physical type adapted rapidly to the environment, so physically diverse ethnic races could be traced back to Babel and the sons of Noah by their cultural features (Spencer 1997k: 841; Collis 2003: 58). As climate modified skin colour more quickly than linguistic change, Prichard saw language as a more reliable indicator of race than physical characteristics (Day 1997: 109; Collis 2003: 58). Beddoe said nobody then doubted the 'powerful' and 'most direct' 'influence of external agencies' on the individual 'both morally and physically', especially after the newly discovered geological time scale in the 1850s allowed so much more time for these mutations (Beddoe 1912: 17-19). Tropical climates made

descriptions (Pittard 1920: 12).

^{*}While many London ethnologists were Quaker campaigners 'to protect the native races' of Britain's empire, Enlightenment scholars, optimistically assuming any race could be civilised, favoured a single creation, and their

Europeans 'languid and indolent', Negroes were 'black because the sun had burnt' them, 'Red Indians' were red from generations of exposure 'to sun and wind' and 'dirt and smoke within their wigwams', Irish peasants had 'prognathous features' from chewing 'large quantities of half-boiled potatoes "with the bones in them"' while Thomas Price ascribed dark irises in parts of England to 'coal-fires' (Beddoe 1912: 17-18). Prichard argued that 'the process of nature' was 'the transmutation' of Negro into pale European, mainly due to the civilising process (Prichard 1973 [1813]: 232-33; Blanckaert 1988: 36).

Polygenism in contrast privileged biological race, rejecting eighteenth-century environmental determinism of superiority and inferiority (MacMaster 2001: 13). It was first proposed in the sixteenth and seventeenth centuries, including in Isaac de la Peyrère's 1655 theory of pre-Adamite races (created before Adam), to explain the peopling of America, which was apparently cut off from the biblical lands (Stocking 1988: 5; Bernasconi & Lott 2000: viii). Napoleon's Egyptian expedition then discovered images of a modern-looking racial mix on 4,000 year-old monuments, or over two thirds of the way back to the biblical creation date, and only a few centuries after the flood and tower of Babel, from which Christians traced human diversity (Beddoe 1912: 19; Stocking 1992: 349; Hazard 1961: 46). If environment had not since changed humans physically, polygenists reasoned they were created different. The failure of old world animals and colonists to transmogrify in America, and the perceived stability of the Jewish nose from ancient and Renaissance representations apparently supported this (Blanckaert 1988: 35; Bernasconi & Lott 2000: viii-ix). While Prichard's monogenist goal of ethnologically linking all the world's peoples was 'institutionalised in several of the "ethnological" societies', Edwards's conviction 'that human physiognomy was impervious' to environmental action, was 'the foundation' of French anthropology, 'naturalistic polygenism and political racism' in 1850-1900 (Stocking 1992: 350; Blanckaert 1988: 43-44; Spencer 1997e: 357; Dias 1991: 20-21; see pp.37-40). His ethnological society saw physical characteristics as 'deeper, more general and surer', because more permanent than 'the intellectual and moral character, languages and historical traditions' (Dias 1991: 20-21). Morton, who made the first proper Anglophone depiction of 'distinct' polygenist-style races in 1839, 'gave full credit to the emerging polygenism in France', and even 'most French monogenists' accepted 'the irreversibility of racial characteristics and the historical stability' and inequality of races (Brace 1997: 865; Blanckaert 1988: 45). Partly under polygenist influence, the monogenist doctrine that racial physical features were due to degeneration of an original common form under climatic influences, was already being reformulated in the 1810s (Blanckaert 1988: 29). Ever 'more

human taxonomies and determinist theories stressed culture or climate rather than biological race (Erickson 1997: 832; Keith 1917: 13).

faith was put in the continuing and necessary heredity of the great primary races', as naturalists gradually adopted Kant's 1775 monogenist theory that they had been formed once and for all in a distant period when humans were uniquely susceptible to mutation by climate (Blanckaert 1988: 29; Bernasconi & Lott 2000: viii-ix). By making races effectively fixed, Kant's reformulation removed the main monogenist obstacle to participating in the polygenist project of classifying and historically tracing fixed types. Virchow therefore argued that monogenism and polygenism 'do not really differ in principle', but only in how far back the division of races could be traced (Virchow 1950 [1896]: 178). To sideline the issue, Broca chose the term race instead of variety or species, which implied mono or polygenist positions (Dias 1991: 30). Even Prichard saw physical characteristics as important, with 'considerable remains of the original type' often appearing in 'divided branches of the same nation', though 'subject to great diversities' and deviation over time (Prichard 1973 [1813]: 248).

Classifiers sometimes attributed physical features to environmental causes like diet, climate and lifestyle, but the mostly medically trained anthropologists generally preferred race explanations (Latham 1852: 27; Czekanowski 1948: 22; Pré 1883: 91; Houzé 1883a: 91; Czekanowski 1948: 22; Potkański 1902: 256 & 261). From Broca on, leading race anthropologists generally assumed that environmental influence on physical type was 'nothing, beside... racial origin', though they very often made some show of considering environmental influences before concluding that 'anthropological and ethnological factors' such as 'racial composition' gave 'more satisfactory explanations' (Popoviciu 1938:15; Malinowski & Wolański 1985: 37; Majer & Kopernicki 1877: 23-24; Beddoe 1890: 488; Papilian & Velluda 1941: 616). Lutzhöft argues that the hard struggle of German anthropologists against environmental theorists to win university places caused their strong belief in race and the Nordic (Lutzhöft 1971: 20-21). 'Linguistic and cultural' data could meanwhile only be 'auxiliary indications in the search for the origins... migrations and relationships' of 'peoples' (Talko-Hryniewicz 1914: 191). While monogenists took the infinite gradations of physical type as proof of human unity, polygenists explained this by cross-breeding, locking ethnology into a hermetical concentration on race (Blanckaert 1988: 33). Nineteenth-century anthropologists saw hybridisation as 'the main factor' in forming new races or physical change, at least since human artifice removed natural pressure to adapt (Wiercinski 1962: 9-10; Talko-Hryniewicz 1902: 760; Kollmann 1880: 82). Vagueness about racial heredity mechanisms gave considerable play to imaginative interpretation. Broca explained away inconsistencies between ethnic theory and empirical data by arguing that races 'do not mix like liquids', that hybrids took certain characteristics exclusively from one component race and that their influence often does not correspond to their numerical contribution (Broca 1873: 607-8). He even ascribed a shorter local

cross-breed of two tall races to a genetic anomaly caused by crossing pure breeds, with parallels in animal breeding (Broca 1871: 307). Beddoe meanwhile proposed that non-native Irish people were lighter pigmented than ‘either the Scots or the English’ in Britain, despite intensive interbreeding with dark-haired natives, because cross-breeding these with English and other immigrants could have created ‘a certain condition of instability’ allowing ‘an opportunity for the play of those influences of media’ (Beddoe 1898: 167 & 170). Ireland’s ‘cool, damp and sunless’ climate was ‘precisely’ ‘supposed to be favourable to blonds’ but was ‘powerless... to affect established breeds’ like the dark native Atlanteans (Beddoe 1898: 170). Right into the 1930s, Mydlarski and Eickstedt credited traits in supposed hybrids that matched ‘none of the parent components’ to ‘recessive hereditary structures [*Erbanlage*]’, appearing only ‘in particular crosses’ or the slowness of race harmonisation, giving them immense freedom from actual anthropometric data to decide racial family trees (Schwidetzky 1935: 154; Eickstedt 1934: 366).

Backers of the politically useful polygenist race model adapted with astonishing agility to new circumstances, cherry-picking compatible elements of major scientific breakthroughs and leaving the rest undigested (Stocking 1992: 349). Among them were ‘two independent but interrelated intellectual events’ that ‘fundamentally’ transformed ‘anthropological thinking about human physical and cultural differentiation’ (Stocking 1988: 7). In 1858, the geological strata and accompanying extinct animal relics of biologically pre-modern human remains found in Brixham Cave in Kent, and by Boucher de la Perthes in France, confirmed that they and similar previous archaeological discoveries were far older than biblical chronology suggested (Stocking 1992: 350; Broca 1878: 189). Once the ‘English *savants*’ and the new Paris Anthropology Society were convinced, ‘all Europe, geologists, archaeologists, anthropologists’, ‘threw themselves into’ the search for fossil humans ‘with startling energy’, finding vestiges of successive waves of palaeolithic ‘races’ ‘in most parts of Europe’ (Broca 1878: 189-92). This ‘revolution in time’ gave evolution a workable timescale. A year later, Darwin’s *On the Origin of the Species* supported monogenism by arguing that species evolved by natural selection, while the American Civil War eliminated a pro-polygenist political programme (Brace 1997: 865; Stocking 1988: 7). Polygenism largely disappeared in the English speaking world, though still a force in continental Europe (Brace 1997: 865). Darwinism replaced the mono-polygenism polemic with controversies over evolution and most logically supported ‘racial nominalism’, but despite initial suspicions, race classifiers generally just inserted ‘dubiously evolved types’, otherwise identical to those of polygenism, straight into ‘their former methodology’ (Odom 1967: 14 & 17). The point when races diverged simply receded thousands of years, from Biblical creation to prehistory, while evolutionary progress provided a useful new scientific rationale for race hierarchies. Even when they accepted evolution

and a single creation, few anthropologists understood it until after 1900. Even leading evolutionists preserved the essence of polygenism by maintaining ‘that races had long, separate evolutionary histories and were just as distinct’ as if they had separate origins (Erickson 1997: 833; Wolpoff & Caspari 1997: 122). Social Darwinists like Wallace and Haeckel argued that races, evolving from a pre-human common ancestor, ‘became human separately’ (Bernasconi & Lott 2000: xi). Haeckel believed ‘the essential fundamental qualities’ and ‘conservative inheritance’ of types limited evolutionary adaptation, while in Britain, Huxley and in the late 1930s, Fleure, hinted at separate creations (Beddoe 1912: 20; Odom 1967: 16; Fleure 1937: 207).

Ethnology unites two race classification traditions

Eighteenth-century naturalists, applying the late eighteenth-century natural science ‘obsession with classification’, including of ‘animals’ and objective, ‘scientific’ ordering of natural and human phenomena to travellers’ accounts of exotic peoples, produced the earliest modern anthropological classifications* of languages, peoples, races and artefacts (Pittard 1924: 40; Blanckaert 1988: 28; MacMaster 2001: 5; Dias 1991: 44; Bernasconi & Lott 2000: vii). They turned antiquarian cabinets of curiosities into ‘scientific documents’, on a par with ‘botanical or zoological collections’, and to produce more scholarly travel reports, provided explorers with questionnaires or, like the Russian Imperial Academy, incorporated experts into exploration teams (Dias 1991: 45; Harbsmeier 1995: 22-25; Vermeulen 1995: 45). After Linnaeus’s crucial 1735 classification of living creatures into species, genus etc., whose Latin vocabulary, including the term *Homo sapiens*, were universally accepted, science more generally shifted focus ‘from the universal human species’ to race classification in the 1760s-70s (Eickstedt 1934: 7 & 135; Horsman 1976: 391). Early nineteenth-century science and the public largely accepted the black-white-yellow global classification, sometimes supplemented with browns or reds, of early classifiers like Linnaeus, Blumenbach and Cuvier (Eickstedt 1934: 137; Coon 1939: VIII: 1 & 6; Brace 1997: 862). The Göttingen scholars developed their new disciplines to systematically examine the masses of fresh data about non-European cultures and place it in a new synthesis of human history (Harbsmeier 1995: 20; Stagl 1995: 252-3). My canon confirms that up to the late 1820s, naturalists concentrated on humanity’s major taxonomic divisions, following ‘Cuvier and Blumenbach in grouping all white people’ as Caucasians†, named by Blumenbach in honour of the ‘loveliest real skull-form of the picture-pretty head of a young Georgian woman’, whose beauty in death, only a ‘receptive eye’ like his own could appreciate (Blanckaert 1988: 27; Eickstedt 1934: 137; Broc 1836: 23). It was presumably easier to

* Into the 1930s, anthropologists like Montandon insisted that ‘one must’ place each race ‘somewhere’ ‘in the racial tables’ (Montandon 1933: 258).

† Blumenbach however laid the groundwork for European classification by collecting and describing ‘in a Linnean spirit’ ‘the skulls of different nations’ (Retzius, A. 1864: 27).

see exotics than one's neighbours as classes of animal, but in any case, European physical variation was paltry in global terms. In the 1770s, these zoological physical classifications became the speciality of Germans like Blumenbach and Kant (Eickstedt 1937b: 81). To the end, race classifiers focussed heavily on 'the configuration of the skull', because, Virchow explained in 1892, it enclosed 'the most important organ... the brain, and developed in a recognizable relationship' to it (Prichard 1973 [1813]: 46; Massin 1996: 107). Pittard identifies Spigel in 1625 as the first skull-measurer, followed by Daubenton in France and Pieter Camper in Holland (Pittard 1924: 41). Craniology had precursors in artistic anatomy, physiognomy (character analysis from the face) developed in France in 1781, and phrenology (reading brain functions from skull shape), which followed in 1796, had a 'great vogue' from the 1820s on in Britain and France but 'was deserted by the serious scientists' in the 1840s (Mosse 1978: 27; Dias 1989: 224; 1991: 40; Grattan 1858: 27-29; Horsman 1976: 398). Retzius nevertheless said it was 'perfectly in agreement with the foundations of physiology', though regretting it did not focus 'ethnographically' on the 'study of peoples' (Retzius, A. 1864: 28). 'Most of the greater Renaissance artists' meanwhile had 'anatomical and anthropological interests' and Leonardo especially 'loved to distinguish different physical types of men' (Huxley & Haddon 1935: 38). Interwar raciologists still used skull indices reflecting differential development of parts of the brain, which 'fulfil functions of different intensity and quality' (Făcăoaru 1936a: 10).

Ethnicity was at the foreground of European intellectual discourse. The rediscovery of Tacitus' *Germania* revitalised German nationalism for example, and the politically momentous Aryan theory arose from William Jones's 1786 discovery that Sanskrit was related to European languages (Poliakov 1971: 95). In 'the late Enlightenment and romantic period,' ethnic groups were increasingly recognised as breeding communities with common descent, and both physical and cultural characteristics (Eickstedt 1937b: 84). Horsman claims a 'surge of interest in primitive European peoples' as 'the main thread' of Romanticism (Horsman 1976: 390). Following early attempts by Liebnitz (1728) and Buffon (1749), Germans like Meiners and Herder (1786) also dominated among the pre-1810 classifiers distinguishing races, including in Europe, by ethnic descent, or in practice, by language, 'supported by historical records and national traditions' (Eickstedt 1937b: 81; Broc 1836: 23; Morant 1939: 152). The linguistic turn was so marked that Retzius claimed craniology was 'the most retarded' division 'of natural history' in the 1820s and 1830s (Retzius, A. 1864: 28). Many contemporary 'zoologists and anatomists' were therefore happy to slot their evidence into culturally based race theories or traditional Biblical, classical and medieval classifications like that of Noah's sons (Morant 1939: 153).

The pan-European popularity of Napoleonic period English novelists like Walter Scott, who delighted in racial stereotypes, helped inspire the general educated mid-nineteenth century European belief that nations were formed of historical races like Gauls, Goths and Anglo-Saxons, and commit many professional historians ‘to an ethnic and racial interpretation’ of history (Curtis 1968: 8-9 & 21). Romantic period historians like the Thierry brothers appropriated ancient tribes from classical texts as literal biological ancestors of modern national or class populations providing nationalists with prestigious national unification symbols, rooted in antiquity (Blanckaert 1988: 25-27). This was the early nineteenth-century ‘heyday of polygenism’, when it became fashionable to see ethno-linguistic races as immutable Romantic ‘essences’, separately created, ‘categorically distinct’ and unrelated, as opposed to the common human origin and nebulous races of Christian and Enlightenment monogenism (Erickson 1997: 832; Poliakov 1971: 63; Brace 1997: 865). Antiquaries of the 1830s-1840s brought together romantic concepts of national character and *Volksgeist* with a ‘new enthusiasm for scientific method in history, anthropology, philology, psychology, and other disciplines’* (Curtis 1968: 11). Under polygenist influence, medical doctors like Louis-Antoine Desmoulins and William Edwards, reasoning that ethnic history, language, physical type and moral climate all coincided with one another, created composite ethno-biological races in 1820s and 1830s France, (Spencer 1997e: 357; Blanckaert 1988: 19). These first ethnologists applied the comparative anatomy techniques and scientific authority of Linnean taxonomy to European ethnic nations and to the antiquarian historical and linguistic disciplines which traced the eternal ethnic past. In return, craniologists gained a voice in the politically vital process of nationalist myth creation, flattering what Wilde called the eternal ‘feeling and the failing of mankind, individually and collectively, to boast of their antiquity’ (Wilde 1849: 213). Broca called Edwards the first to give ‘moral’ traits, and so a strong ‘social and political’ role to previously purely physical races (Blanckaert 1988: 19). Ethnology demonstrated the (pre)historical descent of modern from ancient peoples by comparing their physical and psychological traits, assuming that anthropometry would prove ethno-historical races were racially pure biological entities (Wiercinski 1962: 9-10). By involving ethnicity, classifiers expanded the meaning ‘of race and species’ from Blumenbach (1795), who ‘excluded virtually everything non-physical’, to

*Citing work by Saint-Simon and Georges Cabanis, Blanckaert sees the period after 1800 as particularly receptive to a ‘new organicism’ in interpreting history (Blanckaert 1988: 23). Auguste Comte’s positivism helped shift the ‘view of human beings’ from being ‘primarily social’ to ‘primarily biological’, governed by natural rather than social laws (Malik 1996: 86). He made the scientific ‘intellectual order... the basis of every other order’, and liberty the ‘rational submission to... the laws of nature’ (Malik 1996: 86). Blanckaert sees the inclusion of culture within biology as a logical ‘extension of the principle of the uniformity and constancy of nature’ demanded ‘since the end of the eighteenth century’ (Blanckaert 1988: 32). The natural history tradition in philosophy of history, ‘often used’ by Vico, Buckle, Saint-Simon, Comte, Tylor and Spencer, meanwhile suggested societies were organisms going through life stages (Stoianovich 1976: 30; Tilly 1984: 97-100). This tradition classified social phenomena, from ‘individual careers and family lives’ to civilisations, as members of classes of similar objects (Tilly 1984: 97). They ‘typically begin with a well

Prichard (1813), who added psychological instincts and Knox (1850), who admitted ‘customs, laws and manners’ (Odom 1967: 8).

Ethnological race schemes erased the already blurred eighteenth-century distinction between classifications based on physical form and cultural ethnicity, systematically merging the two traditions (Eickstedt 1937b: 81 & 86). Malte-Brun (1812), and the polygenists Bory de Saint-Vincent (1827), Desmoulins (1824) and P.-P. Broc (1936) proposed larger global divisions, ‘usually based on rough geographic criteria or on single [purely physical] traits’ and ‘subdivided into a great number of smaller... ethnic or regional’ units, pioneering the racial subdivision of Caucasians (Wiercinski 1962: 9-10; Broc 1836: 23 & 28). Their European races and those of Prichard in 1836 (who identified 29) and Morton in 1939, were language groups named after ancient peoples (Eickstedt 1937b: 37-38; Wiercinski 1962: 9; see Fig. 2.1). Desmoulins was typical in identifying four white species, the Scythian, Caucasian, Semitic, and Atlantic, ‘each divided into distinct races’, from classical texts and then using natural science ‘to demonstrate the fixity of human types’ (Blanckaert 1988: 31-32; Broc 1836: 23 & 28). The tradition prospered from Retzius in 1840 to Isidore Geoffrey Saint-Hilaire in 1860, both of whom divided Europeans primarily by skull shape, and then by ethnicity (Saint-Hilaire 1861: 144).

The craniological tradition

The main technique for identifying race features was anthropometry, the systematic measurement of physical characteristics, and especially craniology. Building on the work of the ethnologists and Morton in the U.S., Retzius and Broca in 1840-61 established the central structuring techniques of racial craniology, which had previously held back by technical limitations and ‘essentially impressionistic’ technique (Gould 1981: 25; Blanckaert 1988: 38 & 46). Edwards, and sometimes even Beddoe and Broca just travelled about, observing ‘the form of the head’ and proportions of facial features of passers-by, which Broca said ‘lend themselves with difficulty to rigorous studies’, and to a lesser degree colouration and stature (Edwards 1841: 37-39; Broca 1873: 582-83; Zaborowski 1890: 246). Race classification needed compatible measures, like the standard forms of electrical plugs, as each study had ‘little value’ until ‘inserted in a broader’ comparative framework* (Pogliano 2005: 89; see p.42). The ‘whole of modern craniometry’ therefore ‘unanimously celebrated and adopted’ the distinction between long (dolichocephalic) and broad (brachycephalic)

known sequence, break [it] into a sequence of events or a set of stages, then propose the extension of the sequence of stages to’ many other instances (Tilly 1984: 97).

*Race serology similarly chose a preferred measure at the start, and neglected later-discovered blood factors like M and N (Boyd 1950: 232; Râmneanțu 1939: 326 & 329-30).

skulls, as seen from above, that the Swedish anatomist Anders Retzius invented in 1840, the year of Blumenbach's death (Mosse 1978: 27; Huxley & Haddon 1935: 43; Blanckaert 1989: 166-67; Retzius, G 1909: 283). This usefully synoptic indication of general skull shape was anticipated however by Edwards's classification of 'long' Kymric and 'round' Gallic skulls, by which Serres arranged the *Muséum's* skulls from 1839 (Dias 1989: 214). Skulls whose 'greatest breadth' was more than four fifths of their length were brachycephalic, with the proportion for particularly elongated dolichocephalic skulls dropping as low as 58% of length (Deniker 1971: 57; Beddoe 1912: 38). Gould attributed the huge popularity of the measure entirely to its 'ease of measurement', but it was also the first important skull measure which differentiated European, as opposed to global races (Gould 1981: 98).

From soon after Retzius until about 1900, craniology held such an 'undisputed supremacy', that French anthropology was 'really only craniology', laypeople 'virtually equated' the two, and 'long rows of skull measurements were considered... the embodiment of anthropological scholarship' (Eickstedt 1934: 34; Czekanowski 1967: 44). Broca's 'ethnological characters' included head shape, 'the main facial features', eye, skin and hair colour, and 'the general dimensions of the body', but the Paris Anthropological Society in 1861 called for public donations of photographs, skeletons and, 'above all', skulls (Broca 1859: 8; Perier, Bertillon & Lagneau 1861: 338). Measurement work was so often dubbed craniology that Francis Galton only brought the term anthropometry into English from French in the late nineteenth century (Hannaford 1996: 330). Ancient or colonial bones, like the 'twelve Negro heads, massacred after a revolt' that a Madame Masmenier posted in a box to the Paris Anthropology Society, were easier to procure than modern European ones (Dias 1989: 209; Hecht 2003: 81). Alexander Humboldt bemoaned Lapps' 'suspicious fears' of his craniometer, but boasted of removing 'a large collection of skulls' 'with extreme caution' from 'their old heathen burial-places' which they considered 'sacred', guarding them 'from all intrusion with suspicious care' (Humboldt 1877: 321). European remains came from unclaimed bodies in hospitals, bequests to science and battlegrounds (Dias 1989: 209). Visiting 'the very place of the carnage of the Armenians by the Turks' in 1917 with the invading Russians, the Russian anthropologist V. Bunak collected 'Armenian skulls of exceptional value' (Bounak 1926: 351-52). Though 'extreme scarcity of means' and 'awkward exterior conditions' prevented him from fully studying 'these sad trophies of modern barbarity', he collected '106 well preserved skulls of adult males, and several dozen skulls of women and children' (Bounak 1926: 351-52). Sources like common graves and deformed individuals had the disadvantage of not being 'representative', so it was proposed to recoup the 'brains of intelligent men' from the Mutual Autopsy Society (Dias 1989: 210).

While Prichard's linguistic fixity allowed physical diversity in pure-race nations, observation quickly made clear that modern nations were mixtures of physically-fixed polygenist races. Wilde already saw modern nations as more racially mixed than ancient ones in 1844 (Wilde 1849: 230; Blanckaert 1988: 34). As the rare types of original races represented the norm from which observed phenomena deviated and each individual's 'essential nature', mid-nineteenth-century anthropologists saw classifying them as their 'primary and proper function' and 'the key to a general science of man', with answers to 'significant social or philosophical' problems of 'the very widest ramifications' (Odom 1967: 5-8). Beddoe said the longer he observed Scottish Highlanders, 'the more diversity' he saw, but 'subordinate' types still clustered round 'a certain central type' (Borlase 1897: 1042). Early craniologists therefore depended on pinprick studies of a few dozen, or even just a handful of 'representative European crania', assumed to be typical of original ethnic races (Smith & Spencer 1997: 300; Daresté 1860: 82; Thurnam 1864: 402). The angle-stones of Retzius's ambitious pan-European race theory in the 1840s and Obédénare's in 1877, were two Basque and eleven Croat crania respectively (Obédénare 1877: 253). A supposedly comprehensive list of 1850s-60s craniological work in Ireland (admittedly not the best researched country) gives just three skulls examined in an 1856-65 study, six in 1857, two in 1860, and 38 crania plus five casts in 1867 (Haddon 1893b: 759). In 1841-57, Prichard, Wilde, Retzius, Davis, Thurnam and Haddon all studied the supposedly representative or 'classical prehistoric Irish crania', excavated in 1838 in Dublin, while an 1850s craniologist regretted 'the absence of any authentic standard of the Scandinavian skull' (Haddon 1898: 574-76 & 582-83; Grattan 1858: 240-44). In 1861, the Paris Anthropological Society called for skulls 'presenting to the maximum the characteristics of the observed population' (Perier, Bertillon & Lagneau 1861: 338). Picot in 1883 stressed the importance of Dacians portrayed on Trajan's columns, as no skull of undoubted 'Dacian origin' had been identified (Picot 1883: 96). So strong was the expectation of 'representative' national skulls that Wilde, to the hilarity of his hosts, 'at once pronounced to be ancient Irish', some Etruscan skulls in a Paris museum (Wilde 1849: 230). Pure race types were identified in ancient skulls or urgently salvaged from isolated areas, before modernity introduced race mixture. Anthropologists 'generally recognised' that studies 'in every part of the world' proved 'primordial' inhabitants were found 'on the highest mountain peaks,' or 'remote' islands, 'where there is less migration', because people 'in out of the way corners, far from rivers and main tracks,' kept 'specimens of absolutely pure types' 'incomparably' 'better than the mixtures on the communication routes' and in 'fertile, commercial and rich' plains (Talko-Hryniewicz 1914: 191; Olechnowicz 1893: 31; 1902a: 40-41; Malinowski & Wolański 1985: 37; Keane 1896: 151). Broca proclaimed that Brittany's last vestiges of pure race, conserved by 'the little local patriotism... around the church bell... a last

vestige of feudal organisation’, ‘will certainly not survive the century of the railways’ (Broca 1871: 297). Retzius recommended seeking study material for ‘civilised nations’, more ‘among the actual people’ and ‘in isolated villages’ than in ‘the upper classes’ and towns (Retzius, A. 1864: 28; Broca).

Morant said ‘more or less systematic collection’ of anthropometric data began in the 1850s, ‘principally in France and Germany’ (Morant 1939: 153). Study samples increased from Camper’s eight crania towards Blumenbach’s 245, creating a gradually clarifying pointillist craniological map of Europe in the 1840s-60s, but early ethnologists and positivists like Broca, Quatrefages and Topinard remained unsatisfied, complaining that anthropology had been ‘almost completely neglected’, continually demanding larger studies and bemoaning the current ‘very small number of positive facts’ (Dias 1989: 206; Wilde 1849: 240; Blanckaert 1988: 34; Lagneau 1860c: 538-39; Broca 1859: 12; 1871: 301; Grattan 1853a: 199; Périer, Bertillon & Lagneau 1861: 417). Realising that a few dozen skulls could not represent a population’s racial composition, classifiers sought large sets of statistical data (see Fig. 2.2). Beddoe compared lists of police descriptions of military deserters with the ethnic origin suggested by their names (Beddoe 1898: 164 & 166). Collignon measured recruits ‘from every point in France’ at the fortress of Verdun (Collignon 1883: 470). British craniologists and then the Paris Anthropological Society decided in 1860 to systematically collect anthropological data and material on their countries, by distributing a standardised questionnaire to ‘anthropologists, naturalists and doctors’, a method used to study overseas ‘native races’ for twenty years (Allen 1971: xv; Lagneau 1860c: 538-39; Keith 1917: 15). The first British attempt was ‘an abysmal failure’, with country doctors ‘frightened off by the amount of labour’ involved, and though Beddoe revised and simplified the form and two thirds were returned, the amount of clerical work involved inhibited follow up surveys (Allen 1971: xv). (Allen 1971: xv). Anthropologists also did their own studies. Beddoe says money sometimes overcame the ‘frequent’ reluctance to be measured, ‘without going to the extent of the new hat always jocularly demanded’, but he used ‘other means’ to get ‘a valuable series of head-measurements in Kerry^{*}’ (Beddoe 1971 [1885]: 8). Whenever Beddoe’s team met ‘a likely little squad of natives’...

...the two archaeologists got up a little dispute about the relative size and shape of their own heads, which I was called in to settle with the callipers. The unsuspecting Irishmen usually entered keenly into the debate, and before the little drama had been finished were eagerly betting on the sizes of their own heads and begging to have their wagers determined in the same manner. (Beddoe 1971 [1885]: 8)

*If the Irish are traditionally the dimwits of British jokes, Kerry people perform the same service within Ireland.

While craniology, requiring time-consuming, skilled use of expensive equipment, remained a specialised tool for detailed study of select material, like excavation in archaeology, surveys by anthropologists initially concentrated on the pigmentation of living subjects rather than dead skulls. Even before abandoning his early legal studies for medicine, John Beddoe (1826-1911) in England pioneered pigmentation studies, proposing a scientific measure of eye and hair pigmentation, his index of nigrescence, to standardise witness testimony (Czekanowski 1967: 44; Huxley & Haddon 1935: 45; Allen 1971: xiv; Beddoe 1971 [1885]: 1-2). Beginning in 1846, he made a ‘long series of observations on the hair and eye colours... chiefly of the British Isles,’ but also on the continent (Gray 1911: 151). He had already helped put measurement of the living ‘more strongly in the foreground’ when Virchow in Germany, and then others in Central Europe carried out enormous schoolchild surveys, and expanded further ‘with the boom’ of the German colonial Empire (Gray 1911: 151; Czekanowski 1967: 44; Eickstedt 1934: 35). In France at least however, the ‘profound’ opposition of ethnographic ‘observation and description’ to anthropological ‘theoretic elaboration’, embodied by the rival Paris societies founded in 1859, inhibited surveying (Dias 1989: 223-24). Dias says that visual ‘observation of external characteristics’ of the living by colonial travellers was very separate and subordinated within anthropology to measurement of dead crania by medically and scientifically trained laboratory craniologists (Dias 1989: 212). Around 1900 however*, Manouvrier and Boas pushed for including pigmentation, stature and body proportions beside crania in classification (Dias 1989: 225). Although Broca used French military stature data in 1859-60 to produce ‘racial’ maps, large scale military surveys from the 1880s on first caused anthropology to give this ‘due attention and notice’, and a European synthesis of this measure had to await Deniker in 1908 (Zaborowski 1890: 246; Broca 1871: 302; 1873: 583; Retzius, G 1909: 292; Czekanowski 1967: 44).

Description versus quantification

Precisely defined measures and standardised statistical techniques for isolating average traits facilitated mass data gathering by students and local doctors[†] and especially after the 1950s-1960s recognition that most individuals were mixed-race, helped tease out racial factors among Europe’s hyper-subtle physical variation. Craniology however suffered chronic tension between quantitative measurement and the ‘methodical description of all parts of the cranium’ exemplified by Blumenbach’s popular *Decades Craniorum*, which pioneered anatomical comparison of ethnic groups and was ‘regularly published in instalments from 1790 on’ (Blanckaert 1989: 170; Retzius,

* This coincided with the rising popularity of wax museums.

† Though anthropologists sometimes questioned their skills (Giuffrida-Ruggeri 1918: 81-83 & 95).

G 1909: 280). Early nineteenth-century anatomists like Prichard, Carus, Morton and Retzius accepted that quantification would give craniology ‘scientific legitimacy’, but Blanckaert says Retzius ‘accorded as much importance, if not more, to’ Blumenbach’s non-metric description (Blanckaert 1989: 169-70; Retzius, A. 1864: 27; Grattan 1858: 28). Describers like Pruner-Bey and Anders Retzius saw quantifications like Broca’s cephalic index as reductive oversimplifications, incapable of capturing the subtle individuality of crania and tending ‘towards critical and mathematical atomism’ (Blanckaert 1989: 175 & 196). Retzius stressed links between descriptive characteristics, such as that long skulls were often low, and his brachy-dolichocephalic key was a sparing and even apologetic recourse to quantification, never precisely defined numerically (Blanckaert 1989: 169-71 & 196). Following Blumenbach’s ‘empiricism of the glance’, Sergi also classified skull shape by eye rather than measurement, while His and Rüttimeyer in 1864 combined both methods (Blanckaert 1989: 169; Sergi 1900: 41). Hölder and Pruner-Bey considered ‘not just the individual measures’ but a ‘more traditionally holistic conception’ of ‘the proportions of harmony of the head’ ‘as a whole’, ‘more than the sum of its parts,’ grasping ‘the finesse of the features, their regularity and their dissymmetry’ (Hölder 1876: 4; Blanckaert 1989: 196). Hölder lined up rows of skulls from longest to broadest, ‘according to the usual method’, declaring that ‘with more precise examination... of the form of each individual skull’, distinct types ‘spring at once to the eye’ (Hölder 1876: 4). As doctors, craniologists were used to making diagnoses from practised, semi-intuitive inference, weighing evidence from symptoms, and in the twentieth century even spoke of ‘race diagnosis’. No anthropometrist could neglect the practical craft of measuring an irregular organic form. Only ‘an unbroken line’ or ‘apostolic succession’ of ‘practical tradition’ in which successive operators demonstrated measurements to one another ‘(not merely defined verbally)’ could guarantee comparable results (Tildesley 1928: 358). Judgement by eye flattered the morphologist’s skill and experience. Both Anders and Gustaf Retzius believed ‘craniological practice should be qualitative’, because intuitive ‘sensibility... to “national” differences’ depended primarily on the ‘scientific culture of viewing,’ by ‘an eye trained in... natural history research’ (Blanckaert 1989: 173 & 176; Retzius, G. 1909: 286). Grattan said of one skull that even if ‘the intellect should fail to appreciate their moral and intellectual import, the eye instinctively recognises the beauty and symmetry of its proportions, the impressive dignity of its lofty profile’ (Grattan 1858: 244).

Clifford Geertz and Carlo Ginzburg identify the descriptive, inferential approach in several disciplines, which place ‘a set of (presumptive) signifiers’, such as symbolic acts in cultural anthropology, ‘within an intelligible frame’ (Geertz 2000 [1973]: 26). Ginzburg traces the ‘highly qualitative’ tradition in history, art criticism, palaeontology and philology of interpreting by signs

and conjecture, from hunters, soothsayers and physicians, seeking hidden realities in ‘individual cases’ of animal tracks, stars, entrails or symptoms (Ginzburg 1992: 102-8 & 116-17). Plato’s more prestigious rival model and still more the scientific paradigm of Galileian physics instead tried to ‘subsume’ observations ‘under a governing law’ and demand ‘quantification and the repetition of phenomena’ (Geertz 2000 [1973]: 26; Ginzburg 1992: 105-8 & 116-17). Much late eighteenth and early nineteenth-century science came to see ‘sensory refinement and bodily skill,’ knowledge ‘from the living voice, from gestures and glances’, once openly and deeply entrenched’ in their practices, as incompatible with scientific objectivity, banishing to the province of artists and artisans this sub-conscious knowledge, which could not be put into words and communicated or subjected to ‘the powerful and terrible weapon of abstraction’ (Datson 2001: 264 & 266; Ginzburg 1992: 114-15). ‘Measurement was glorified as the essential basis of science’ (Fee 1979: 419). Though demographic statistics introduced a Galileian element, the humanities ‘remained firmly anchored to the qualitative’ (Ginzburg 1992: 113-14). Like anthropology however, they all ‘attempt to relate themselves’ in the early nineteenth-century to medicine or linguistics, which alone solved the dilemma of producing ‘noteworthy results’ with ‘a lax scientific system’ or insignificant results with ‘a meticulous, scientific one’ (Ginzburg 1992: 114-15, 118 & 124). Even the ‘amphibious status’ of medicine ‘between science and art’ ‘became intolerable’ in the mid-nineteenth century, and many physicians invented objective measuring instruments to rescue it from the need for skill (Datson 2001: 274). Pittard calls anthropologists ‘the first biologists... to put their observations in figures’, adding ‘craniometry’ to descriptive craniology (Pittard 1924: 41). Physical anthropology ‘largely’ claimed ‘scientific status’ from its...

...veritable equation with anthropometry* – the careful measurement of different human anatomical features, in substantial populations, for comparative study, in order more precisely to characterize human racial groups. (Massin 1996: 107).

Frazer advocated ‘careful measurement and calculation’ as ‘the most accurate of all modes of testing’ (Frazer 1888: 48). Once the need for mass surveys was appreciated, the ‘very limited’ ‘number of good morphologists’ became a vital advantage of mechanistic quantification (Czekanowski 1928: 353). Broca’s drive to make ‘craniometry a mathematical science’ satisfied the youthful passion for engineering which his parents had blocked (Dias 1989: 208). He dismissed as ‘artistic’, ‘lacking rigour’ and subjective, the self-consciously ‘selective’ descriptive approach of Retzius and others who investigated ‘national type’ or original racial purity by using selected rather

*The seventeenth-century term *Anthropometria* emerged from the medical and artistic tradition of mathematical analysis of body proportions, whose most famous example is Leonardo da Vinci’s Vitruvian Man (Bernabeo 1989: 170, 172 & 179).

than random crania (Blanckaert 1989: 176 & 196; Massin 1996: 91 & 108). In 1861, he converted Retzius's 'descriptive' breadth-length proportion into the numerical cephalic index, which became the central racial trait for a century of physical anthropology, and added an intermediate *mesocephalic* category, with an index of 77.7-80, between brachycephaly and dolichocephaly* (Sergi 1900: 9-10; Deniker 1971: 57; Blanckaert 1989: 166-67 & 196). Broca, Beddoe and others made massively influential concentrated efforts to improve measuring instruments and quantitative methods, increasing accuracy, speed and statistical comparability (Pittard 1924: 41; Huxley & Haddon 1935: 43; Blanckaert 1989: 196; Curtis 1968: 71; see Fig. 2.3). Broca successfully promoted his stripped down metric race classification, with all other factors reduced to a supporting role, against opposition from Franz Pruner-Bey's defence of the old eclectic but holistic ethnology (Blanckaert 1989: 196). As 1860s measurement data systematically undermined Pruner-Bey's defence of Retzius's race theory, he abandoned even Retzius's simple brachy-dolichocephal dichotomy as 'artificial', contradicting 'the laws of nature', and like Blumenbach and Prichard, proposed cranial 'law of architecture' as the decisive ethnic identifier, meaning skull circumference shapes like the oval Indo-European and lozenge-shaped Mongoloid (Blanckaert 1989: 193-94; see pp.215-16). He dismissed cephalic index variations as 'just normal "discordances"' within many European race types, of just 'secondary value,' when all other traits agree (Blanckaert 1989: 193; Pruner-Bey 1864b: 673). However his approach was a desperate refuge of obstinate protest against a quantifying age. Craniology largely became a collection of measurement techniques used to collect and collate statistics (Fee 1979: 419). In the 1890s Sergi also classified by circumference form, meeting no more approval than Pruner-Bey's proposal, while the twentieth century turned to ever more refined but mechanical statistical virtuosity. The human subject matter still prevented a total natural science victory however, as the political need for race history, failure to agree measuring techniques and the organic complexity of the subject being measured all impeded quantification.

Race psychology and superiority

Theories that racially determined brain-forms determined culture through individual psychology were vital for linking politics and race. Wiercinski argued that 'the real basis of racism' was...

...not any particular anthropological concept of race, but rather the judgement that differences in cultural capacities among races constituted the main factor in the history of mankind. (Wiercinski 1962: 9).

*These three technical terms are indispensable: brachycephalic – broad head, dolichocephalic – long head, mesocephalic - intermediate.

Anthropological type was seen as ‘a sort of larger individual’, with specific psychological inclinations and abilities (Odom 1967: 8-9). Ethnologists from Edwards on saw as a key task ‘to suitably distinguish the moral’ and intellectual ‘character of the races who form a nation’, which was ‘natural’, ‘truly exists’ and caused ‘social phenomena’ like European conquests since the Greeks (Edwards 1845: 43; Blanckaert 1988: 40; Omalius 1864: 189-90; Lagneau 1860c: 538-39). Quatrefages said ‘the instincts, aptitudes, qualities and faults which give each civilisation, each human society, its physiognomy, its historical meaning’ were racial ‘characteristics like the others’ (Quatrefages 1871: 73). Bastian, who taught Boas, and was ‘pivotal’ ‘in the development of German Anthropology’, insisted that ‘communal cognition always preceded and shaped individual thought’ (Bunzl 1996: 46 & 49). This theory, known as race psychology in the twentieth century, was a cornerstone of the hierarchical ordering of races into natural leaders or subjects (Günther 1933: 9). Disraeli told Britain’s parliament in 1849 that ‘Race implies difference, difference implies superiority, and superiority leads to predominance’ (Odom 1967: 9). Gould sees this ‘propensity for ordering complex variation as a gradual ascending scale’ as ‘among the most pervasive in Western thought’ (Gould 1981: 24). Leading nineteenth-century anthropologists like Broca aimed to ‘determine the relative position of races in the human series’ and race features that correlated with intelligence (Gould 1981: 86). Leading classifiers like Desmoulins and Retzius insisted that the ‘psychological [*psychisch*] individuality’, ‘intellectual and moral faculties and inclinations’, behaviour or even languages of races and peoples ‘must be... manifested in the construction of the brain’, influencing individual psychology (Blanckaert 1988: 30-32; Retzius, A. 1864: 28). Skulls were the best classification criterion, because ‘an exact measure of... cerebral organization... intellect, and feelings’ (Grattan 1853a: 199-200; 1858: 27). An Irish craniologist called one specimen ‘truly a noble skull, and noble must have been the aspirations of the mind of which it was once the tabernacle’ (Grattan 1858: 244). Its ‘exceedingly thin, fine and delicately regular’ bone texture suggested ‘some family where originally high endowments had been hereditarily improved by moral and intellectual culture’ (Grattan 1858: 245). Superiority was otherwise inferred from anecdotal stereotypes, physical beauty, race history accounts and association with high prestige categories such as Europeans, whites or the home nation. Later classifiers identified evolutionarily advanced features, used IQ testing and compared anthropological and sociological data.

Up to the late 1930s, ‘nearly all’ anthropologists perceived ‘some linkage’ between physical ‘and mental features and race differences in ‘mental characteristics’, but this remained the least scientifically satisfactory element of race science (Fleure 1937: 224; Schwidetzky 1935: 297; Lutzhöft 1971: 95). They recognised that research was in its ‘infancy’, and too ‘subjective... to be

really scientific', with no widely accepted methodology not 'based on intuition' and informal observation, while disassociating environmental and innate factors was perhaps impossible (Fleure 1937: 224; Stołyhwo 1926b: 149; Lutzhöft 1971: 95-96; Rosiński 1929: 274; Eickstedt 1934: 354). Most anthropologists thought race dictated a style or way of thinking rather than total mental ability, but Fischer, Lenz and Eickstedt noted that as almost everyone was a race mixture, their psychological and physical features would not necessarily match (Lutzhöft 1971: 94-97). Others complained that 'social and political' factors tainted even scientifically 'serious and important' studies, making it unfruitful to compare the relative worth of races, while even supposedly descriptive race psychologies usually implied value judgements (Stołyhwo 1926b: 149). Despite the abject failure to institutionalise race psychology analysis however, the international race classification formed an informal but consistent consensus on the mentalities of races, which chapter III and the case studies examine in detail.

Race psychology drew on the physiological tradition and phrenology. Classifiers like Linnaeus in 1758 gave his races 'humours', drawing on Galen's 'medical and physiological' theory, which linked 'irritable', 'torpid', 'Sanguineous and Phlegmatic', 'choleric and melancholic temperaments' to bodily form, colouring and function (Brace 1997: 862; Prichard 1973 [1813]: 169-72). Arnold said 'the physiologists' tied the French 'expansive, eager Celtic nature' to their 'more developed organs of respiration' while Germans had a 'larger volume of intestines' (Arnold 1962 [1867]: 343). Beddoe argued that as physically and 'morally' different 'types of men... gravitate towards different lines of life... Calvinistic theology is attractive to the man of melancholic' rather than 'sanguine temperament', each of which had different 'external signs', and frequencies in different races (Beddoe 1912: 33). Fee said the entire point of craniology, beginning with phrenology, which popularised a link between skull form and mental activity, was 'differential psychology', switching from an earlier focus on 'mental operations common to the human race' (Fee 1979: 419; Grattan 1858: 27-29). Most biologists, including the neuro-anatomist Broca, accepted its 'fundamental principle' that parts of the brain had different functions, and thought '*some*' measurement, whether 'cranial capacity, facial angle, cephalic index, brain volume or brain weight', would accurately indicate 'innate ability,' arranging 'each race its proper position in the social scale' (Malik 1996: 88; Grattan 1858: 27; Mucchielli 1997: 2; Dias 1991: 22). The American phrenologist George Coombe emphatically rejected the usual ascription of national differences to 'religious and political institutions', tracing the latter to 'natural propensities, sentiments and intellectual faculties' (Coombe 1839: 274). Up until the 1850s, leading classifiers like Desmoulins and Retzius recognised and drew on the phrenological contribution to race psychology (Retzius, A. 1864: 28; Grattan 1858: 27; Blanckaert 1988: 30-32).

For '200 years', classifiers 'endlessly' proposed and disputed defining features of racial mental difference (Beddoe 1912: 41; Pogliano 2005: 380; Brace 1997: 263). Brace says the first hierarchy of racial worth based on a physical feature was the facial angle of Petrus Camper (1722-1789) in 1791, invented by comparing the idealized intelligence of 'elevated and dignified... ancient statuary' to the 'proportional stupidity of expression in' African and Kalmuk faces (Brace 1997: 263; Prichard 1973 [1813]: 47-48). Camper, Prichard and Cuvier, who proposed a ratio of face (sensation) to head (thought) size, believed brain shape influenced intelligence by the proportion of 'intellectual' to 'merely sensitive' elements, noting that native Americans and Africans had much better senses of smell than Europeans (Prichard 1973 [1813]: 49 & 52-54; Fee 1979: 420-22). Several theorists applied this argument to women, children and 'the lower races', one in 1869 claiming women were more 'sensitive and emotional' because, like animals, they had more developed sense organs than mental capacities (Fee 1979: 418-19). Though Prichard, Retzius and Weisbach accepted Camper's idea that prognathism (lower-face protrusion) was 'especially general among the rudest and most savage peoples', forming 'a transition from' apes 'to the nobler human form', the facial angle was not entirely successful (Retzius, A. 1864: 32; Weisbach 1876: 8). Retzius placed European craniological racial divisions on the same theoretical level as global races. Prognathism was exceptional among Europeans, but if facial index could measure human worth, so might dolichocephaly and brachycephaly (Retzius, A. 1864: 32). In analogy with muscles, mid-nineteenth-century anthropologists proposed skull volume (calculated by filling with seed) and size (absolute or proportional to body size) as intelligence indices (Huxley & Haddon 1935: 42-43; Fee 1979: 420-22). Broca made 'an exhaustive study' of the 'remarkable relationship between' intelligence and brain volume, and how to measure it (Gould 1981: 83-85). However like all such measures, this was a chimera. Research found that brain weight and volume 'constitute no proof of intellectual superiority'; entirely inconsequential individuals had 'brains of an appreciable weight', and one anatomist, 'after numerous years' of autopsies 'in the Dutch East Indies,' could not differentiate native from European brains (Banu 1939: 204-5). Keane suggested in 1896 that degree of brain convolution was more important than weight, and that skull sutures recorded 'mental power' because 'always more complex' in 'higher' races (Keane 1896: 44). He surmised that 'intense cerebration acts almost mechanically on the brain-cap, tending by its throbbing to keep the frontal sutures free till late in life' (Keane 1896: 45). In increasingly complex late nineteenth-century race anthropology, the 'direct relationship to intelligence' became 'less and less clear'

*The narrative strategy of 'emotional', 'feminine' races like the Celts was important in European ethnology (see pp.288-96).

however, and some even reverted to 'simple indices' of intelligence like brain size (Fee 1979: 427-28).

Evolutionists of both left and right animated the early nineteenth century static race hierarchy, based on the medieval chain of being, with development from primitive to advanced, reprising eighteenth-century theories of civilised development. The Saint-Simonians of the Paris Ethnological Society for instance believed 'ethnography' could help situate races 'in the scale of civilization,' assigning each an 'appropriate' place in 'the world harmony to be realized by their church' (Blanckaert 1988: 41). Wolpoff and Caspari say 'Darwin viewed races as the links between humans and their anthropoid ancestors' (Wolpoff & Caspari 1997: 116). French scientific materialists applied a 'racial evolutionist paradigm' to subjects from prehistory to history of religion, giving certain races greater inherent aptitude for progress (Mucchielli 1997: 3-5). In the late 1860s Mortillet began a synthesis of parallel human 'physical and cultural evolution', ranking 'extinct races of man' 'in an inevitably linear' 'organic hierarchy' progressing towards perfection (Hammond 1980: 120 & 124-25). Edward Burnett Tylor (1832-1917) in 1871 in England and Letourneau 'simply' arranged 'descending' 'social series' from the 'cultured life' of educated Europeans, through 'Caucasians, Mongoloids, and Negroids' to 'savage tribes', though Letourneau said lower races and women could catch up in 'the distant future' (Hammond 1980: 124-25; Stocking 1987: 162). Haeckel claimed 'the lowest humans' were psychologically closer to the 'highest animals' than to the 'highest' humans and the Caucasian 'degree of civilization' raised 'man above the rest of nature', deviating 'furthest from the primary form of ape-like men' (Odom 1967: 16; Weindling 1993: 55; Bunzl & Penny 2003: 11). Colonial contact with subject peoples of unfamiliar physical appearance and culture presumably encouraged biological race hierarchies within Europe. Lindqvist says the Nazi's fought on the east according to the racist 'special rules' of 'a colonial war' and places the Holocaust in a tradition of overseas colonial genocide (Lindqvist 2002: 157-60).

Though evolution reformed the chain of being that polygenist classifiers like Morton and Broca had smashed into discrete races of varying worth, and undermined their fixity, it offered an invaluable hierarchical key (Brace 1997: 264). Retzius, Beddoe, and Hermann Schaaffhausen (1816-93), who first examined the Neanderthal fossils and whose evolutionary ideas influenced Darwin, all linked certain physical features with evolutionary progress or retardation (Zängl-Kumpf 1997: 909). While Weisbach's signs of racial inferiority, like disproportionately long arms and probably brachycephaly, came from comparison with apes, Schaaffhausen in 1868 found that certain fairly

obscure craniological measures systematically ordered adult men and higher races before women*, children, animals and inferior races (Weisbach 1876: 8; Fee 1979: 421-23; Beddoe 1912: 41). However Ecker criticised one of them, prognathism, as not applicable to women, arguing that infantile beauty characterised the most typical female features, so ugly or intellectual women, with large brains and facial bones 'were not true representatives of the sex' (Fee 1979: 423-24). Ecker's theory was widely accepted though his belief that cranial height signalled intelligence was criticised because black races had tall skulls (Fee 1979: 425). Beddoe questioned Schaaffhausen's claim that intelligence increased as skulls broadened, so brachycephals were more advanced and intelligent (Beddoe 1912: 42). For Woltmann, dolichocephaly was a necessary, but because shared by Africans, an insufficient sign of racial superiority (Woltmann 1903: 253). 'The line of development from dog to ape, Australian, Negro up to the Aryan people particularly shows a progressive growth of the forehead region', which with a long head gave the Nordic a big brain, making him 'the highest product of organic development' (Woltmann 1903: 254). In an age of overseas colonialism, colour inevitably competed with cranial indices of racial worth, as in the 1881 scheme of Gustav Fritsch, while the polygenist Hermann Klaatsch (1863-1916) paralleled cultural with evolutionary development (Stratz den Haag 1903: 189-90 & 198). Less evolved European peoples were equated with inherently backward non-European races. Eickstedt noted that both the body-shape and 'easy-going nature [*Gemütlichkeit*] and honesty... patience and carefreeness' of Lappoids were 'typical... of all old strata of humanity' (Eickstedt 1934: 394). He and other interwar raciologists distinguished evolutionarily progressive races like the Dinarics, 'capable of further evolution' from more primitive relatives like the Alpines in Europe (Coon 1939: VIII: 4; Eickstedt 1934: 15-16). Evolutionary 'maturity' incontrovertably proved racial superiority. Eickstedt described the infantile 'soft' and 'childlike' mouths, 'low and small, but also wide' noses, 'particularly low and round' faces and 'particularly round and spherical' heads of Alpine-race women, as primitive 'to the extent we can speak of phylogenetic ranking within the Europoids at all' (Eickstedt 1934: 385-86).

The ethnic tradition

The political attraction of ethnic nationalism, a secular religion in which nations were bodies of descent and destiny, claiming the ultimate loyalty of their members, long held anthropological race classification in an uneasy coupling with history and linguistics. Race was the vital conceptual glue, bonding together language, culture, race psychology and nationality (Tristram 1996: 57). In both

*The theory of racially archaic women explained potentially embarrassing gender differences in racial data. Czekanowski claimed women and men differed craniologically in the same way as recent and ancient skulls (Czekanowski 1928: 353).

ethnology and ethnic nationalism, prehistoric and early historic tribes were immortal organic races, and modern ethnic groups their direct descendants, adding the naturalising legitimacy of prehistoric antiquity and natural science to national and class relations. Pittard thus claimed Romanians, via their Dacian ancestors, were among ‘the most primitive inhabitants’ of their region, and an 1860s ethnologist believed classifiers had to distinguish ‘between Jutes, Frisians, and Saxons’ to ‘make much progress’ (Pittard 1920: 32; Park Harrison 1883: 252). This made history the key to interpreting both racial and cultural diversity. From the first ethnologists to interwar raciology therefore, classifiers intently traced links between ancient skeletal remains and ‘the ethnic physiognomy’ or frequencies of racial types in modern populations, to reconstruct the early history, migrations and interconnections of ‘peoples’, ‘ancient inhabitants’ or ‘ethnic elements’ and ‘follow’ them ‘in space and in time’ to the first prehistoric human inhabitants or at least the tower of Babel (Stagl 1995: 234, 238 & 249; Stocking 1987: 21 & 49-50; Bielicki, Krupinski & Strzalko 1985: 8-9; Edwards 1845: 43; Wilde 1849: 212-14; Perier, Bertillon & Lagneau 1861: 337; Ranse 1866: 478; Kopernicki 1883: 40; Quatrefages 1889: 488; Potkański 1902: 248; Pittard 1920: 33; Necrasov 1941: 6-8). This helped ensure the primacy of craniology in classification as even Beddoe recognised pigmentation was hard to judge in prehistory, despite favouring this race criterion (Beddoe 1912: 40).

Sklenář says most Enlightenment-period scholars turned away from prehistory, lacking almost any ‘reliable factual basis’ for studying it*, but some looked to ‘previously neglected’ archaeological evidence (Sklenář 1983: 58). The three-ages system of the 1820s-30s allowed archaeologists to look beyond ‘the peoples of classical antiquity’ and they soon started linking ancient sites and artefacts to ethnic groups, though this was very haphazard until the 1870s (Dias 1991: 343; Díaz-Andreu & Champion 1996: 19; Rączkowski 1996: 190-91; Sklenář 1983: 95). In the 1850s, Davis and Thurnam ‘led the way’ in the anthropological investigation of prehistoric sites and by the 1860s, prehistoric studies were central to classification (Retzius, G 1909: 292; Myres 1930: 40). Distinctions between the work of positivist anthropologists and archaeologists were ‘not very precise’, the leading archaeologist Worsaae saying they had ‘no difference of nature’ and the same aim of ‘historical reconstruction of the past of peoples’ (Dias 1991: 44 & 148). Researchers like Pittard put faith in archaeology as much as anthropometry, attributing the geographical distribution of anthropological features to ethnic history, and especially migrations, while neglecting racial typology. Rapidly expanding archaeological data extended ethnic-style race histories back to paleolithic ‘fossil races’ like the Neanderthal and Crô-Magnon. Up to 1900 at least, races were named after ethnic groups known from classical history, each believed to have specific physical

features (see Fig. 2.4). Tacitus gave the Germans their blue-eyed blond type very early, but anthropologists largely identified physical ethnic features from ancient skeletons and ‘racially pure’ modern populations who were considered their descendents (Wijworra 1996: 169). The positivist fashion for Basques, Thracians, Illyrians, Iberians and Ligurians replaced romantic period Phoenicians and Etruscans (Sklenář 1983: 126). Anthropologists continuously disputed the ‘distinctive’ physical, linguistic and mental traits and migration routes of peoples like the Saxons, Belgae, Celts or a Goth-Vandal-Gepid composite race within the larger Teutonic category, whether ‘Britons were really Celts,’ and whether the Saxons wiped them out or ‘mixed their blood with them’ (Périer, Bertillon & Lagneau 1861: 371; Grattan 1853a: 199; Curtis 1968: 21).

Anthropology’s eclecticism stemmed directly from its ethno-historical concerns. Classifiers systematically linked anthropometric, ‘archaeological, historical and linguistic’ data and advised that ‘local histories, legends’, dialects, personal and place names, ancient monuments and inscriptions should all be ‘researched with care’, attributing localised anthropological anomalies to historical colonists, conquerors, refugees and pure race vestiges (Perier, Bertillon & Lagneau 1861: 337-38; Zograf 1893: 8-9; Pogliano 2005: 35). Broca unhesitatingly used the term race for ‘the two anthropological groups’ forming ‘the two great Gallic confederations’ for example but anthropologists also deduced the races of ‘sometimes very small localities’ from very local ethno-historical lore[†] (Broca 1873: 599; Périer, Bertillon & Lagneau 1861; Quatrefages 1861: 406). From Edwards on, ethnologists used historical sources, linguistic clues and local uniformity of type to decide which isolated area preserved descendants of what ancient peoples, in order to isolate the types of each ethno-historical element of the mixed modern population (Broca 1859: 11-12; 1871: 313; Ranse 1866: 481; Périer, Bertillon & Lagneau 1861: 360-62; Majer & Kopernicki 1877: 4). ‘The rule, of course,’ agreed Beddoe, Broca and the interwar serologist Steffan, pointing to ‘plenty’ of Western European examples, ‘is that conquerors seize on the fat plains’ and ‘best agricultural’ coastal and valley land, which therefore were racially very mixed, ‘and leave the hungry mountains to the vanquished’[‡] (Beddoe 1905: 220; Broca 1871: 313; Mazumdar 1990: 193). Broca

* Some early modern antiquaries believed nature ‘made the soil give birth to’ ancient urns (Rączkowski 1996: 190-91).

[†] Local stories reputed Bohemian (Roma) settlements and young girls ‘remarkable for’ fine and delicate features, or distinguished lively, hot-tempered, argumentative villagers where red wine was preferred, from sedate, law-abiding, white wine-drinking areas (Quatrefages 1861: 408; Bert 1861: 409). Broca insisted there was ‘neither in history nor tradition any hint of... foreign’ settlement in one village, while his remarkably pure-blooded Kymric and Celtic Breton communities differed ‘a lot in their moral characters’, ‘almost never marry outside their parish’ and even in medieval times pursued a lively rivalry, inspiring ‘interminable diatribes’ by chroniclers (Broca 1871: 295 & 297-98; 1873: 601).

[‡] As natural scientists, anthropologists adored race-historical rules. Girard de Rialle said Celtic peoples repeatedly used the same southward invasion routes and Pruner-Bey and others proposed a ‘law of ethnic movement’ that ancient and modern migrations had a ‘general’ east to west tendency, trying ‘to reach... the sea’ (Rialle 1864: 554; Pruner-Bey 1864c: 223-24; Bertillon 1864: 300; Rameau 1864: 222). Omalius and E. Dally, one of Broca’s closest students, criticised this theory as analogous to ‘atmospheric and maritime currents’ (Dally 1864: 299; Omalius 1864b: 266).

investigated the Celtic race with skulls from Auvergne, ‘the centre’ of the Celtic confederation, and finding them ‘brachycephalic to a remarkable degree’, confidently concluded that ‘*the Celtic race was therefore brachycephalic*’, and used this conclusion to diagnose Brittany’s racial composition (Broca 1873: 600-1 & 609 & 618-19; Zaborowski 1890: 246).

By seeking untainted racial material in isolated inbred uplands and islands like Poland’s Carpathians, Transylvania, Lower Brittany, the Auvergne, West of Ireland and Scottish Highlands, and sometimes ideal locations of enhanced purity within these areas, like the high Tatry, Munții Apuseni or Aran Islands, anthropology publicised and helped turn these supposedly pure-race enclaves, whose dramatic romantic landscape ensured local poverty and isolation, into symbolic ethno-national heartlands. This and the ascription of race-mixing to ‘foreign influences and infusions [przymieszek]’ created an almost intrinsic affinity between even liberal optimistic positivist anthropology and the conservative, anti-modern face of ethno-nationalism (Majer & Kopernicki 1877: 4). The ‘idyllic imagination of country life’ in mid-nineteenth century European literature was a ‘widespread’ middle class ‘nostalgic reaction against... technological modernization’, in which ‘native’ the peasant language and ‘correspondingly picturesque lifestyle’ provided ‘symbolic goods’ of ‘authenticity’ and the indispensable ‘unbroken link with past traditions’ which nationalist intellectuals lacked* (Leerssen 1996: 164 & 197). Marginal communities, idealised as archaic ‘last custodians’ of national cultural tradition provided, like the glories of lost ages, suitably romantic ideal representations of ‘the people’[†], and unlike mainstream peasants or workers, were politically unthreatening (Hutchinson 1987: 88). Ironically, their supposed archaic purity, represented by use of minority languages like Irish or Breton, or membership of a specific mountain sub-ethnic group like the Górale, Moți or Scottish Highlanders, actually distinguished them from the mass of the national population. Romanian, Serb, Bulgarian and Finnish nationalists perhaps chose Transylvania, Kosovo, Macedonia and Karelia as symbolic heartlands meanwhile, precisely because neighbouring nations claimed them. Certain economically or geopolitically weaker nations even claimed romantic authenticity for the whole nation. Chapter

* The English and Anglo-Irish anthropologists Haddon and Brown for example studied the ‘relics of... millenniums of savagery and barbarism’, which poked through the modern veneer of civilisation in the Aran Islands off Ireland’s west coast (Haddon 1893a: 304). Their islanders were ‘kindly, courteous, and decidedly pleasing’, ‘exceptionally honest, straightforward and upright’, ‘decidedly good-looking’ and ‘unusually healthy’, despite rare interbreeding with outsiders, and on a particularly isolated island, were especially tall and fair (Haddon & Browne 1893: 791-92 & 800). Haddon and Browne cited judicial testimony to their exemplary conduct, such as convicted persons travelling independently to jail on the mainland for incarceration (Haddon & Browne 1893: 802-3). Earlier Anglo-Irish visitors meanwhile found ‘scarcely a virtue’ lacking there, judging the ‘handsome, courteous, and amiable’ ‘native Irish’ to be of ‘pure ancient stock’, ‘very superior... physically, morally, and even economically’ to mixed-race mainlanders, and free of their ‘gross or sordid sentiment’ until outside settlers eroded their ‘primitive simplicity’ (Haddon & Browne 1893: 781 & 800-2; Haddon 1893a: 306). One visitor saw the islanders ‘as a striking example of what’ the ‘wild Irish... race might generally be under circumstances more happy’ (Haddon & Browne 1893: 802).

[†] Romanticisation could focus on parcels of land as well as their peasants, Zionism being an extreme example.

IV (see pp.288-94) examines this identity strategy in detail. Dietler meanwhile considers archaeological evidence particularly useful politically, supplying ‘the symbolic hardware of invented traditions’, because it ‘provides for the popular imagination tangible connections’ such as places or objects, ‘to an identity rooted in an awe-inspiring past’ (Dietler 1994: 597). Nineteenth-century ‘Romantic statues and paintings of Gauls’, he says, were ‘replete with weapons and armour copied carefully from archaeological specimens on view in museums’, though often anachronistically combining elements from several periods (Dietler 1994: 597-98).

A succession of consequences cascaded into race classification practice from its ethno-historical focus. Especially from the 1880s on, says Wijworra, racial and archaeological arguments were often ‘mixed together’ and Germans spoken of back to the Stone Age, ‘the unchangingness of race’ justifying the ‘interchangeability of eras’ (Wijworra 1996: 170-71 & 178). Prehistoric peoples had to migrate, feel, fight and sometimes even calculate like their supposed modern descendant nations, as coherent political actors in an endless historical drama. Kostrzewski believed defeated Illyrians from Silesia probably withdrew ‘to their compatriots on the Adriatic’ rather than fleeing east, assuming an ethnic consciousness and some form of political unity (Kostrzewski 1927: 6). Hölder thought the Celts migrated from Asia along the Mediterranean coast to avoid the ‘very inhospitable [unwirthlich] Teutons’ (Hölder 1876: 19). In geopolitics as in inheritance, races were as distinct and impervious as billiard balls. Broca and Bertrand attacked this ethnological convention of ‘primitive peoples as pushing one another,’ like ‘flocks of sheep’, noting that large hordes could not then be provisioned and that writers like Strabo rarely described true movements of entire peoples, as opposed to certain tribes only, or temporary conquests by foreign aristocracies (Broca 1864d: 309-10; Bertrand 1873: 238-39 & 241). However Broca himself applied physics metaphors of momentum, inertia and collision to entire races, arguing that gradual piecemeal immigration had less racial impact than ‘one single and unique immigration’, while Beddoe continued to believe the Germanic ‘Wandering of the Peoples’ probably displaced the ‘German physical type’ ‘*en masse*’ (Broca 1873: 604; Beddoe 1912: 55). The race history emphasis strongly conditioned interpretations of anthropometric data. In 1900, Ripley demanded that anthropologists go beyond mere observation, using the historical context of origins and genealogical relationships as the ‘key’ to interpreting physical features and ‘their possible origins’ (Ripley 1900: 600). With the help of geography, ‘historical ethnology and prehistoric archaeology’, anthropologists had to ‘eliminate’ non-hereditary traits, ‘seek for similarities, not of diversities of traits’ (Ripley 1900: 600).

To serve as historical actors and bodies of ethnic destiny, with similar geographical dynamics to ethnic groups, races had to be unified or even sentient, geopolitical organisms, occupying discrete geographical territories (Wolpoff & Caspari 1997: 121). Anthropologists attacked 'irrational' geographical race distributions which could not be slotted into the timeless narrative, illustrated and analysed with race maps, of race migration, expansion and war. Kollmann's colleagues ignored his races as they could not be linked with nations, griping that their geographical distribution was irrational or never systematically indicated (Sergi 1900: 11; Deniker 1897: 126). Two were scattered 'from Norway to Sicily, and from the Black Sea to the Ocean', and from the earliest times, 'several or all' of them, 'intertwining like the strands of a rope', lived in 'every community' in Europe (Kollmann 1881: 18; Beddoe 1912: 38-40). A Russian anthropologist classed one type as a hybrid because it had no strong spatial pattern and Ripley complained that Deniker's Dinaric race was 'scattered broadcast all over Europe' 'in utter defiance of geographical probability', 'wherever a darkish and broad-headed contingent happens to be tall' (Zograf 1893: 8; Ripley 1900: 602). Eickstedt similarly dismissed 'extreme combinations' like Dixon's numerical races, which 'can naturally appear in all areas of the world', as artificial, 'and even' affected (1937b: 70). Gould points out that race scientists used a scientifically flawed concept of rationality to criticise colleagues' results rather than their procedures. Topinard distinguished 'empirical' traits with 'no apparent design' from "rational" characters "related to some physiological opinion", while Broca used his own prejudices about the intelligence of races to discover 'meaningful' physical measurement of the brain, correlated with intelligence (Gould 1981: 87). Measurements putting whites below the top of the list were deemed not to correlate with intelligence (Gould 1981: 86-87). For the convinced English evolutionist A.H. Keane, comparisons of ancient and modern skulls which indicated 'apparent retrogression instead of progress' were 'valueless' (Keane 1896: 43). Like standard histories of disciplinary forefathers (see p.14), the reasonable results concept was a highly conservative mechanism for protecting existing paradigms, and ensuring group cohesion.

The legacy of antiquarianism

The historical interests and methods of ethnology drew heavily on antiquarianism. Antiquaries and several later ethnologists studied ancient Greek and Roman texts, etymological comparison and artefact archaeology, defining a 'people' by 'religion, manners and institutions', the 'construction' of its language, and the political consciousness expressed by an ethnic name, but rarely by physical features (Betham 2000 [1834]: 3). Ancient customs were also compared with modern ethnographic descriptions. Romantic period German and Slavic ethnologists had 'almost unlimited confidence' in ancient texts, supported by philology, 'as practically the only reliable foundation' for race history (Sklenář 1983: 91). Scholars had examined classical texts since the sixteenth century, and their use

until the twentieth century as ‘standard fare’ in ‘all’ Central and Western European education systems, ‘at least for the middle and upper classes’, entrenched their scientific authority (Collis 2003: 61). ‘[L]iterary methods and a classical tradition’ dominated history teaching, ‘which took only national and ancient classical cultures seriously’ and even many race scientists ‘were primarily Classics scholars’ (Myres 1931: xxxiv; Barkan 1992: 57-58). Until about the 1870s, race classifiers, including leading medically-trained craniologists, mined the classics for useful remarks on customs, language or physical anthropology (Prichard 1973 [1813]: 477; Morton 1839: 13; Broc 1836: 31; Pruner-Bey 1864b: 659-60). The Irish and Gauls were related because both had elected monarchs for instance, and if Caesar said a Germanic chieftain learned the Gallic language it proved he was not Celtic (Betham 2000 [1834]: 114; Holzmann 1855: 3). Classical writers left few crumbs for students of physical race. Holzmann’s 1855 volume on Celts and Teutons devoted less than three pages to ‘the physical constitution [Leibesbeschaffenheit]’ in a chapter also dealing with customs, legal relations and religion and relying almost exclusively on classical accounts (Holzmann 1855: 7). He dealt with the physical make-up of modern peoples, though it backed his position, in seven lines, with no reference to anthropological scholarship (Holzmann 1855: 57). A vital classical legacy was the values and understandings communicated by a classical education to most educated nineteenth-century European men. The ancient Greeks and Romans taught modern antiquarians, philologists and ethnologists that conflicts and migrations of peoples and tribes lay at the heart of history, while Roman martial values resonated in the later imperial age. The nineteenth century could relate to Tacitus’s praise for the Britons, who ‘not yet enfeebled by long peace,’ had ‘superior courage’ than Gauls (Betham 2000 [1834]: 400). Greek and Roman ‘attitudes towards native populations... as backward, bizarre, uncivilised, unchanging unless change was forced upon them’ ‘were used’ meanwhile to justify nineteenth-century imperialism (Collis 2003: 61).

However the extreme ambiguity of ancient texts caused constant and intractable disputes of interpretation. The lack of ‘reliable historical information’ to plausibly contextualise ancient artefacts ‘severely vitiated’ eighteenth century antiquarianism, which turned in speculative circles trying to trace national origins to migrating descendents of Noah’s sons or vague classical accounts of Celtae, Scythae and Hyperboreans (Leerssen 1996: 68-69). Antiquaries and ethnologists widely recognised the inaccuracies, inconsistencies and unreliability, insufficient ‘geographic notions’, inexactitude and ‘ignorance, even of the names of peoples’ of the classics, extending local terms or descriptions of barbarian groups to their allies and neighbours, just as Europeans called Native Americans Indians (Betham 2000 [1834]: 329 & 383; Périer 1864: 593; Bertrand 1873: 242 & 247-48; Pruner-Bey 1864b: 659; Collis 2003: 61). They were also accused of dealing exclusively with warrior elites, ‘because of their turbulence’, ignoring the common mass that interested ethnology

(Topinard 1877: 474). As their lack of a common terminological standard led ancient writers to make a great range of apparently conflicting assertions, race scholars advocated ‘the modern critique’ in history, ‘the most minute sifting’ of data to distinguish ‘what, in their position,’ they could and ‘could not have know’ (Pruner-Bey 1864b: 659; Bertrand 1873: 237; Collis 2003: 61). Bertrand explained that ‘we have argued in vain for over two centuries’ due to ‘confusion of texts and epochs’, indiscriminately citing sources from Greek and Roman ‘historians, moralists, poets or simple compilers’ from a period of up to fifteen centuries long (Bertrand 1873: 236-37). A common solution was to choose a preferred classical author like Polybius or Caesar. Ideal candidates stuck with evidence from observation and ‘direct’ local tradition, ignoring ‘fabulous’ tales (Bertrand 1873: 425). Their reliability was confirmed by agreement with other ancient writers, but ethnologists also used their champions to assess the value and meaning of other classical texts (Périer 1864: 597-99). Every ethnologist criticised their colleagues’ interpretation or choice of classical texts however, before presenting their own (Omalius 1864b: 265). Von Hölder scolded Celtomaniacs for interpreting evidence from ancient writers unfavourable to their position as mistakes, but himself dismissed one conclusion from Caesar, arguing that error was ‘something human’ (Hölder 1876: 18-19). The emergence of rival techniques and the frustrations of studying a fixed number of incompatible texts, ultimately led most late nineteenth-century anthropologists and archaeologists to abandon classical sources (Rączkowski 1996: 199).

Antiquaries devoted volumes to comparing superficially similar words from languages of which they were often ‘utterly ignorant’, including almost entirely undocumented dead languages (Leerssen 1996: 71-72). Tocilescu based theories on Dacian in 1880 on just 53 names of plants, 125 place names and smaller numbers of personal names (Picot 1883: 91).

Etymology – the study of linguistic derivations and similarities – was conducted on a purely lexical basis: languages were seen simply as collections of individual words, which in turn were combinations of radical syllables; grammatical structures governing the morphology of word-formation were not taken into account*. (Leerssen 1996: 72)

Betham in 1834 considered place names ‘important and valuable’ for studying ‘ancient history’, but warned there was ‘something very bewitching in etymology’, agreeing with Prichard that ‘the most learned and intelligent historians’ made ‘erroneous and delusive’ use of it (Betham 2000 [1834]: xvii & 12; Prichard 1973 [1813]: 245). Antiquaries criticised etymological speculation, based ‘wholly’ on ‘dictionaries only’, to support race theories, before doing the same themselves (Betham

2000 [1834]: 331). Betham himself found Irish roots for most Mediterranean place names. Charles Vallancey, the ‘most celebrated’ late eighteenth-century Irish antiquary, now seems ‘a by-word for hare-brained fancy’, basing ‘elaborate theories’ on comparing Gaelic, Algonquin and Chinese, but Leerssen says this made sense in the contemporary biblical model that ‘all linguistic difference dates back only to the tower of Babel’ (Leerssen 1996: 71-72). It was ‘unquestioned doctrine’ ‘until the later eighteenth century’, that Hebrew-speaking descendants of Noah peopled the post-diluvian world, leading William Cowper to mock...

Those learned philologists who chase
A panting syllable through time and space,
Start it at home, and hunt it in the dark,
To Gaul, to Greece, and into Noah’s Ark. (Piggott 1966: 7).

Leerssen says that in an early nineteenth-century Kuhnian scientific revolution, the ‘Biblical/classical frame of reference collapsed under the weight of [new] ethnographical and philological information’ (Leerssen 1996: 69). The ingenious speculations admired in the eighteenth century ‘became the province of amateurs’ with antiquaries seen as slightly ridiculous eccentrics ‘riding amusing hobby-horses’, while ‘serious scholarship’ became ‘painstaking... rigorous and critical’ (Leerssen 1996: 69). The antiquarian project and evidence was taken over by the new sciences of ethnology, archaeology and comparative linguistics, and inspired ‘the nascent phenomena of the historical novel, historical monuments, and the historical museum’ (Leerssen 1996: 69). Antiques traders, still called antiquaries in several European languages, preserved its collector’s instinct. In its eclecticism and ethnic history preoccupation, ethnology may be the truest successor of antiquarianism, but with greater stress on physical race rather than language, artefacts and customs (Leerssen 1996: 69). Prichard supplemented written history by comparing ‘civil and religious institutions’, mythology, ‘manners and customs’ (Prichard 1973 [1813]: 244 & 247). Methods long abandoned by professional linguists survived right into 1870s ethnology, showing ‘remarkable tenacity’ if accessible to and serving the ideology of ‘the educated layman’ (Holzmann 1855: 158; Pruner-Bey 1864b: 659-60; Davis 2002: xvii; Tristram 1996: 37). Prince Lucien Bonaparte asserted that language corresponded with race in all but ‘exceptional’, albeit ‘numerous’ cases, while Hyde Clarke declared no ‘complete’ anthropological study could exclude philology, adding that ‘nothing is more valuable and more certain than’ philological and historical study of place names (Bonaparte 1876: 22-23; Hyde Clarke 1876: 24). Davis says mid-nineteenth-century Welsh nationalists studied Celtic languages to explore the history of ‘the Celtic peoples’, producing

*There were however unsystematic attempts to analyse the common grammatical structure or ‘*peculiar construction*’ of

texts with a 'clear nationalist discourse' (Davis 2002: viii). Pruner-Bey devoted pages to old-fashioned etymological comparison of word-lists showing Celtic influence on French toponomy, pronunciation and vocabulary (Pruner-Bey 1864b: 659-60 & 666). He ignored other explanations for similar words, such as Celtic borrowing from Latin languages, and argued that the common Indo-European lexical inheritance of Latin and Celtic demonstrated 'Aryan Celtism', suggesting the parent resembled the child (Pruner-Bey 1864b: 664). As late as 1897, one ethnologist argued that the shadowed, peaty river Finn in Ireland, could not derive from the Gaelic word *Fionn*, meaning bright, so was probably related to the Finnish river name Dwina (Borlase 1897: 1036).

Race-language correspondence led Edwards and many others to the methodologically useful conclusion that even when a race changed its language, traces of the original remained, for example in accent (Edwards 1841: 85). He derived north-south French dialect differences from linguistic differences between Kymric and Gaelic races, identifying grammatical correspondences between Kymric Breton and northern French (Edwards 1845: 36-38). Later anthropologists meanwhile argued that various waves of settlers influenced French dialects, especially in their areas of concentrated and durable settlement (Périer, Bertillon & Lagneau 1861: 404-5; Ranse 1866: 487-88). Julien Girard de Rialle and others said 'we have never seen a people dissolve in another without leaving a trace of its traditions, or... language' (Rialle 1864: 553; Boyd Dawkins 1876: 22). Ranse praised an Anthropological Society questionnaire with questions on local dialects, because their archaic forms were invaluable for deciphering the ethnic components of each complex local racial mix (Ranse 1866: 480-85). He blamed linguists for neglecting these patois, which they saw as merely 'a more or less irregular and crude composite of worn Latin or Romance words and bad French' (Ranse 1866: 480-85).

Monogenism & philology

The new method of comparative philology, inspired by recognition that Indian and European languages were related, created a paradigm shift in linguistics and linguistic ethnology, and 'soon was regarded as the sole correct scholarly approach' (Tristram 1996: 36-37 & 43). It borrowed the idea of parent languages from what it called 'pre-scientific' linguistics, though with Indo-European as the original tongue instead of Hebrew, but while earlier methods used 'synchronic surface level word resemblances' and ignored 'historical change', the philologist Bopp proved languages were '*genetically* related' by showing in 1816 that earlier forms of related languages were more similar than later ones (Tristram 1996: 36-37 & 42-44). Antiquarians did not grasp the 'true importance' of linguists like Jacob Grimm and Franz Bopp, who 'systematized... etymological analysis,'

linguistic families (Betham 2000 [1834]: 3 & 6-7).

emphasising ‘grammatical and structural’ comparison rather than just ‘incidental similarities’ between words (Leerssen 1996: 89-90). Exclusively focussing on one single type of evidence would have been beyond most of them, if indeed they saw the need to. Antiquarian ethnology used any methods it thought might illuminate ethnic history and identity, while philology developed around a demanding methodology, requiring a vast programme of scholarly work, comparing ‘vocabularies and grammars of a large number of languages, and... careful hypothesizing, ordering, and checking of the rules of sound change’ (Davis 2002: ix). Many ethnologists therefore just borrowed philological results or practiced *philology-lite*, superficially copying elements and techniques, rather than the entire system. While philological texts were comprehensible only to experts, ‘the more accessible writings of ethnographers’ ‘quickly assimilated’ ‘the basic structures of difference and relation’ between the world’s languages (Morash 1998: 209). Philologists like Prichard and Pictet saw language as far superior to traditional antiquarian evidence. They said it was difficult or even ‘vain’ to use myths and manners, because similar customs often arose from common circumstances rather than common origin, saw classical historians as of little use in tracing prehistoric ethnic movements and noted that ancient non-classical texts were accused of being a medieval forgeries (Prichard 1973 [1813]: 244 & 247; 2000 [1831]: 16; Pictet 1836: 270).

Nevertheless, comparative linguistics was from the outset ‘a handmaiden to ethnological history’, with ‘strong racial overtones’, which ‘automatically’ equated the affinities and ‘spread or retreat’ of ‘languages and language families’ with those of political, cultural and biological ‘nations and races’ (Leerssen 1996: 94; Horsman 1976: 392; Tristram 1996: 56). Comparative philology emerged from Herder’s equation of people, nation and language, and romantic enthusiasm for the medieval past, vernaculars, and exotic cultures, and was heavily influenced by Zeuss’s focus on the historical study of ethnic identity (Tristram 1990: 52; 1996: 43). While historians assimilated ancient tribes like Saxons, Franks and Goths into larger ethnic units like the Teutons, philologists bundled Europe’s languages into a limited number of families descended from conjectured ancestor languages. Nineteenth-century linguists focussed on reconstructing relations between (especially Indo-European) languages on the analogy of ‘family relations, branchings from a common trunk’ through historical migrations ‘from an original home’ (Thiesse 2001: 176; Bunzl 1996: 31). Even the late technique of comparative reconstruction allowed speculation about prehistoric ethnic migrations, and Davis says that professionals like Zeuss, Rhys, Atkins and Arbois de Jubainville used ethnic history to illuminate language or vice versa (Davis 2002: viii). They drew on biblical and classical ethnic histories, which traced the descent of peoples through their ruling families, and the earliest theories of biological evolution, proposed by Lamarck in 1809, but physical anthropology in turn welcomed the philological family tree structure, ethnic taxonomy and ‘abrupt

divisions' between 'races' (Thiesse 2001: 176; Morant 1939: 152). The success of philology convinced Prichard and most ethnologists that language comparison would 'furnish great and indispensable' data on 'the history and affinity of nations' (Prichard 2000 [1831]: 4 & 17). However although the Grimms were philologists and folklorists, very few scholars managed, like Prichard and Zeuss, to effectively combine broad ethnology and deep philology.

The philological family trees of the 1830s-1840s allowed monogenists like Prichard to 'link all human groups to a single source', and gave ethnology with an apparently 'stable and coherent' race classification scheme (Morash 1998: 209). Prichard therefore claimed 'permanency of languages is a remarkable fact of history', only abandoned by races 'under very peculiar circumstances' (Prichard 1973 [1813]: 245-47; 2000 [1831]: 8). With Pruner-Bey and his ally Girard de Rialle, he saw language as the prime definer of race, offering 'proof, or... strong presumption of kindred race' and descent 'in great part from the same stock', because less mutable than physical type, which environment affected (Blanckaert 1989: 194-95; Girard de Rialle 1864: 551; Prichard 1973 [1813]: 244; 2000 [1831]: 8). Comparative philologists like Prichard and Pictet considered languages with 'more or less' similar vocabularies, 'laws of grammatical construction' and phonetic systems, as 'cognate' (Prichard 2000 [1831]: 9-10; Pictet 1836: 272 & 274). Antiquarian linguists selected language resemblances that supported their ethnological theory, but philologists had to be systematic and thorough, methodically comparing each declension of nouns, adjectives and pronouns, conjugations of verbs, and degrees of comparison of adjectives (Pictet 1836: 429 & 433). Prichard compared Sanskrit, Greek, Latin, Gothic, Old High German, Russian, Persian, Welsh and Irish in his way, drawing on grammars by other philologists (Prichard 2000 [1831]: 95-125 & 139). Some speculative reasoning was used, such as the claim that Celtic irregular forms preserved fossil vestiges of Sanskrit grammatical structures, just as English irregular plurals like 'women', 'children' and 'fish' indicated an originally more complex system (Prichard 2000 [1831]: 93; Pictet 1836: 425-26).

The great innovation of comparative philology, making it seem such a reliable guide to language filiation, was the sound shift theory. Philologists argued that at given moments in history, language communities changed their habitual pronunciation of particular sounds, affecting their entire vocabularies and following 'certain rules' of interchanging sounds rather than 'merely accidental variation or corruption' (Pictet 1836: 288; Prichard 2000 (1831): 36; see Fig. 2.5). Tristram traces this 'method of segmenting words into sounds and morphemes' to Indian scholarship (Tristram 1996: 43). It explained how dialects and then separate languages became differentiated, while retaining a coherent internal phonetic structure. The proto-Indo-European */p/ sound passed

unchanged for example into Latin and Sanskrit, but turned into */f/ in Germanic languages and was dropped altogether in a separate Celtic sound change (Davis 2002: viii; Prichard 2000 (1831): 42). Sound shift relationships between languages were discovered by systematically comparing all their vowel and consonant sounds for regular correspondences, and tested by applying the shift to vast numbers of words (Pictet 1836: 276-90). Philologists recognised uncertainties or complexities. Pictet said that while the /p/ in Kymric languages often corresponded with the Gaelic or Sanskrit /p/, it sometimes also matched their /k/ sound, while flexible correspondence between voiced and unvoiced versions of consonants (i.e. /d/ and /t/ or /b/ and /p/) was 'most ordinary' (Pictet 1836: 282). Prichard meanwhile believed that some sound changes were confined to particular grammatical situations (Prichard 2000 [1831]: 24). He accepted that some proposed sound shifts were so drastic as to make certain words look entirely unrelated and warned of the care needed in devising such rules, and the 'ridicule and contempt' which 'vague conjectures' have 'too frequently' brought upon philology (Prichard 2000 [1831]: 36 & 44). Grammatical features like word endings also had to be explained by 'regular sound change' or 'plausible' theories of grammatical change (Davis 2002: ix). Philologists dated word borrowings from before or after each general sound shift, by whether it had affected them, a somewhat circular process, as a list of supposedly native words defined the sound shift (Davis 2002: ix). Philologists believed however that original vocabulary could be identified by excluding words which seemed to be introduced late 'by foreign commerce', conquest, or 'a new religion or system of manners' (Pictet 1836: 271; Prichard 2000 (1831): 65). Borrowings and independent development, Prichard said, could give cognate languages large separate vocabularies, but 'the most simple and apparently primitive' words, which alone suggested 'a much more ancient and intimate connexion', were rarely borrowed (Prichard 2000 [1831]: 9, 13 & 65). He argued that 'cognate words' for feelings and 'the most familiar objects and relations, for which no tribe or people' even 'in the primitive ages' lacked 'expressive terms', 'strongly indicated' 'an affinity' between languages (Prichard 2000 [1831]: 22, 65 & 91-92).

Race psychology and the ethno-historical tradition

Race psychology both drew on and ostensibly shaped history. Blanckaert traces the concept of racialised ethnic character to the sixteenth century, and sees its fusion with race classification by early ethnologists and romantic historians as the foundation of modern race science (Blanckaert 1988: 24-25). As social order needed 'permanent' social distinctions' and 'some form of aristocratic élite, the Romantics reformed this old idea of race', which had already distinguished rival early modern social estates in Britain and France as permanently separated races with distinct psychological gifts (Malik 1996: 83). In a period of American slavery and European overseas

colonialism, almost all ethnologists presumed races were mentally unequal. Curtis says Victorians often assumed ethnic races had ‘quite distinct traits or patterns of behaviour’, sustaining ‘the ‘sword and buckler’ historical novels’ of Scott, Lytton and Kingsley and pervading English governing class attitudes to the Irish, Scots and Welsh (Curtis 1968: 21). Inspired by Herder, Wilhelm von Humboldt, who founded Berlin’s Humboldt University, proposed a comparative anthropology of distinctive *Nationalcharakter*, as expressed in ‘traditions, customs, religion, language and art’ (Bunzl 1996: 22). Broca and Omalius argued that as ‘aptitude for civilisation’ was the ‘most distinctive’ human characteristic, it ‘should be’ used ‘in classification’, for example to rank taxonomic criteria (Blanckaert 1989: 180). Broca therefore objected to Retzius combining Europeans and ‘abject races’ like Australian aborigines in the dolichocephalic category (Blanckaert 1989: 172-3 & 180). Using the same logic, ‘the primeval spirit in Kossuth’s speeches’ helped less scientific ethnologists to class Hungarians among the primary races, which had a ‘natural tendency’ ‘to be *great thinkers*’ (DUM 1855: 722-23 & 734). Race psychology was fixed, so that ‘characteristic differences’ between the ‘mores’, ‘manners, dispositions and capacities’ of modern Irish and Scots, individual fair Kymris and dark Celts or areas where ‘one or other’ predominated, went back to ‘remotest antiquity’ (Coombe 1839: 273-74; Périer 1864: 614-15). Classical accounts of the personality, behaviour and contrasting historical roles of tribes from which modern nations supposedly descended were at the core of race psychologies (Morant 1939: 152). Successive histories characterising ancient Aryans, Celts or Teutons as freedom-loving, martial or creative were taken as proof that these were racial characteristics, which could then be fed back into race histories. Rialle justified his race theory theory by crediting Aryans with a ‘tendency’ to ‘kill or... drive out... foreign and inferior’ races (Rialle 1864: 553 & 568). The Belgian anthropologist Vanderkindere believed Greeks and Italians could not have assimilated Semites because morally, ‘these races have absolutely nothing in common’; Semites excelled in creating monotheistic faiths, but lacked Aryan artistic talent and ‘political sense’ (Vanderkindere 1883: 93). Anthropologists similarly took the Finnish Kalevala epic as evidence that ‘some physical and intellectual’ traits linked Karelian Finns with Aryans, or that cross-breeding with Aryans ‘modified their primitive Mongol aptitudes’ (Quatrefages 1889: 482; Vanderkindere 1883: 92). Races also needed a ‘natural’ aptitude to fruitfully imitate, assimilate and congenially restructure ‘foreign cultural elements,’ like ‘social institutions, mental ideas or technical works’, so ‘German tribes adopted’ Greek and Roman culture ‘quickly and automatically’, but Jewish culture, ‘only in an adapted Greek form’ (Woltmann 1903: 158).

MacMaster distinguishes the ‘more or less systematic’ racist ideas ‘of the educated élites’ from ‘the more ‘common-sense’ racism of the masses’, unscientifically formulated in ‘stereotypes, ‘jokes’,

insults and platitudes... embedded in popular culture' (2001: 7). However popular class, social and national stereotypes proved fruitful raw material for supposedly scientific race psychologists (Arnold 1962 [1867]: 359). 'I believe you will find', Beddoe claimed, that many 'men with dark straight hair enter the ministry' but 'red-whiskered men' like 'sporting and horseflesh' (Beddoe 1912: 33). Knox's sport-loving young Saxon, who 'cannot sit still for an instant, so powerful is the desire for work, labour, excitement, muscular exertion', seems drawn directly from the schoolyard (Knox 1850: 54). Popularisations like Hitler's *Mein Kampf* intensively appealed to readers' 'common sense' prejudices, invited them to conclude with him for example, that it 'is only natural' that nature 'opposes with all its means' mating between species (Hitler 1936: 311-12). Anecdotal evidence for Günther's race ranking led trained anthropologists to criticise its 'highly questionable scientific basis' (Ackermann 1970: 112). Günther stated that 'inequalities in racial psychology ultimately' affected individual behaviour, so that 'from a thin narrow-faced person, one generally expects a different manner, behaviour and feeling than from a stocky, wide-faced one' (Günther 1933: 57-58). Race psychologists also derived proof from sources with a smidgeon more social authority than the reader's own 'common sense', like a novelist, who was a 'keen observer of his countrymen', and artists and cartoonists who used recognisable race types for personality or social types (Günther 1933: 59 & 62; Olechnowicz 1902: 296-97; Borlase 1897: 1024). Woltmann found evidence in folk sayings like 'long-headed', which in England or Germany meant intelligent, while 'Quadratschädel' (square-skulls) were stupid (Woltmann 1903: 281-82). One anecdotal variant, popular with Enlightenment classifiers, equated superiority with beauty. Races degenerated with distance from Blumenbach's Caucasian ideal of perfect human beauty in the Garden of Eden, while Meiners divided beautiful from ugly humanity in 1793 (Brace 1997: 863; Bieder 1909: 13-14). Carus's based racial worth in 1849 on 'the sense of beauty' in its 'widest meaning', and though this approach became obsolete, remarks on race beauty nevertheless slipped into twentieth century scientific texts, sometimes as subjective personal opinion (Eickstedt 1937b: 42).

Philosophical ethnologists used religion, politics, literature and philosophy of countries, to speculate on ethnological psychology. Arnold said racial 'physical marks,' like square, round and oval head-shapes, and literary, 'spiritual marks' like the Greek, Teutonic or 'Celtic genius', both determined 'the type of the people', and that the latter 'test is one which I may perhaps be allowed to try my hand at' (Arnold 1962: 340-41). Keyser in Norway attributed Hans Christian Andersen's 'light and airy' style to Celtic race vestiges in Scandinavia (DUM 1855: 730). Knox believed each race had a scientific and religious orientation, so 'the Celtic race universally rejected the reformation', while 'the Saxon race as certainly adopted it' (Knox 1850: 3-4). Ironically, this self-styled racial Saxon traced his own 'transcendental anatomy' to the Slavonian race alone, while his

Saxon had ‘contempt for science’ and ‘hatred for genius’, because unable to ‘endure the idea that any man is really superior in anything to himself’ (Knox 1850: 16 & 58). An Irish Protestant ethnologist, defining races largely by philosophy, believed leading German, Swedish and Irish Protestant writers like Fichte, Schelling, Hegel, Swedeburg and Bishop Berkeley, cherished ‘the philosophical ideas’ which ‘distinguished’ the Celtic race family and also ‘strongly exhibit’ this type ‘in their personal appearance’ (DUM 1855: 728-30). Druidic thought was another ‘great bond of affiliation among all the Celtic... nations’, echoed by later ‘Celts’ like Anselm, Aquinas, Campanella, Vico, Dante, Kant and possibly Shakespeare and Milton (DUM 1855: 721, 724-25 & 731)! While ‘pantheistic’ Celts contemplated a ‘Universal Presence’ in all things, Gothic mythology ‘propitiated and obeyed’ an ‘[a]nthropomorphic... mighty Power or Will’ (DUM 1855: 733).

Fortified by the widespread association of language with ethnicity and race, many ethnologists and philologists considered some languages more perfect than others. However their dominant superiority narrative of progressive evolution competed and was infused with older regrets about degeneration from Latin, Greek and Hebrew. Renan believed ancient grammatical structures conditioned thought and communication, permanently hard-wiring inferiority and superiority into cultures (Todorov 1993: 117). Welsh antiquaries claimed ‘philosophical value’ for the ‘common’ word formation system of ‘Welsh, Latin, and Greek’, whose ‘general principle’ ‘embodies the remnant of a logical system’ that might even explain the origin of language (Davis 2002: xv-xvi). Professional philologists saw this as ‘absurd’, but also betrayed nationalist bias. Pictet praised one uniquely Celtic grammar feature as proof of an ancient and precociously ‘very developed culture’, while its survival ‘even among the most illiterate’ Celtic peoples proved their ‘uncommon’ linguistic ‘permanence and vitality’ (Pictet 1836: 275-76). Prichard suggested that civilisation improved language, linking the ‘different stages’ of cultural ‘advancement’ of ‘tribes’ with the ‘very different degrees of refinement’ of their languages (Prichard 2000 [1831]: 187). Influenced by the prestige of Greek and Latin, refinement included evolution towards inflecting grammar, marking tense, case, person etc. with suffixes rather than separate pronouns and prepositions. Prichard, Pictet, Grimm and ‘many’ philologists argued or ‘conjectured’ that Celtic languages and ‘older forms’ of Greek showed suffixes were originally pronouns (Prichard 2000 [1831]: 93, 120-24 & 133; Pictet 1836: 436 & 441). Darwinism encouraged linguistic hierarchies of evolution from ‘lower to the higher’, by philologists and anthropologists, which fed back into biological race rankings (Keane 1896: 206; Ripley 1900: 478-81; Todorov 1993: 147; Woltmann 1903: 158, 263 & 260). Leading nineteenth-century physical anthropologists and philologists ‘commonly assumed’ that languages, including Indo-European, evolved from ‘the most inferior’ and ‘more primitive non-inflectional’ isolating structure of ‘Indo-Chinese and Tibetan’ towards the most perfect ‘inflecting’

languages, spoken by '[m]ost Caucasian peoples', the 'races which have attained the highest degrees of civilisation' (Ripley 1900: 478-9; Keane 1896: 205-6; Quatrefages 1871: 23-24; Omalius 1864b: 265).

The irony was that modern Europe was clearly evolving from inflection towards isolation, with English as the 'most monosyllabic' Aryan language (Keane 1896: 206-8). Keane therefore said opinions on the evolutionary order 'vary greatly', arguing that words naturally 'decay' towards the monosyllables of isolating languages, and that agglutination, the Hungarian or Turkish system of packing grammatical information into complex words, was 'the first morphological state', from which all other language forms evolved (Keane 1896: 206-8). Pruner-Bey lamented the decline of the inflecting form of classical languages, but but said that in all European languages, it had 'given way before the modern spirit which seeks clear and precise exposition of scientific ideas' (Pruner-Bey 1864b: 665). Despite Darwinian influence, philology sometimes 'still clung to the pre-scientific concept of the inevitable corruption or degeneration' from a more perfect or beautiful 'proto-language', paralleling monogenist theories of degeneration from initial racial perfection (Tristram 1996: 44-46; Blanckaert 1988: 29). As the Reformation nationalised scholarship, 'the emerging self-awareness' of European nations 'encouraged scholars to make extravagant claims' to the most ancient possible roots, tracing their languages to Hebrew, 'Babel, or even to the position of mother-language', and their ancestry to pre-Greek and Latin peoples (Chapman 1992: 203; McKendry 1999: 182). Traditional 'great respect' for Greek and Latin, 'the classical languages of learning' and the bible, was transferred to other languages with an ancient written tradition, and '[l]iving dialects and unwritten varieties' were dismissed as 'corrupt' derivations (Tristram 1996: 44). Late eighteenth and mid-nineteenth century Welsh antiquarian linguists sought the 'oldest' and most perfect language, or at least that 'which maintains most transparently the form of the original' clear, parsimonious system for forming words from prefixes, suffixes and roots, which derived languages had corrupted (Davis 2002: xvii & xiv-xv). Drawing on the older biblical paradigm of Goropianism, which made Celtic languages 'the parent of all languages, either as the language of Adam or even' heaven, they compared 'Welsh as a key to other languages', with Latin and Greek, and found it much 'nearer the original composition of language,' with 'relatively transparent' word formation (Davis 2002: x, xv & xvii). In professional philology, Prichard suggested that Gaelic was purer than Sanskrit because it resisted the 'natural propensity of all languages which become polished and soften', keeping a guttural consonant at the end of words which Sanskrit may have

shortened to a vowel ending (Pictet 1836: 421). Medieval Welsh was ‘much more perfect’ than modern Welsh meanwhile, whose pronouns were in a ‘corrupt state’* (Prichard 2000 [1831]: 121).

The positivists expel ethnicity

Like other professionalising social sciences after mid-century, anthropology idealised the deliberately apolitical objective ‘dry positivism’ of natural science, rejecting patriotic inventiveness (Köster 2002: 60). Physical anthropologists insisted on making anthropometric race dominant over, if not autonomous from ethno-cultural features of race. Broca and other French positivists, liberal Germans like Virchow and Rudolf Martin, and the London anthropologicals (influenced by ‘German and French transcendental biologists’) shared a common, physical anthropology-centred research programme (Stocking 1991: 249-50; Proctor 1988: 142). They were committed to race classification through ‘exact, empirical measurement’, anthropometry and especially craniology, ‘factual evidence and, where possible, experimentation’, using comparative anatomy and physiology, craniometric tools, statistical demographic techniques and stratiography in archaeology (Harvey 1984: 389 & 391; Proctor 1988: 142; Stocking 1991: 249-50). They generally resisted ‘speculative’ and suspiciously monogenist Darwinist ‘premature theorizing’ until ‘after the mid-1890s’ or later, and ignored Mendelian genetics (Harvey 1984: 389 & 391; Proctor 1988: 142; Stocking 1991: 249-50; Massin 1996: 80). The positivist anthropological race concept judged race stringently on physical appearance, as in the United States or South Africa, where heavily diluted hints of African ancestry, that would pass unnoticed around the Mediterranean, were treated as signs of total difference. Culture and descent were entirely subordinate. This contrasted radically with the romantic ethnological race concept of, for example Israeli, and until 1998, German nationality laws, plus the Nazi definition of Jewishness. Cultural practices like religion provided corroborating evidence, but the most culturally alien Ethiopians or Central Asians could nevertheless become citizens due to ethnic ‘descent’. ‘Anthropological’ physical characteristics were completely ignored.

Positivist anthropology clamped down on two previously important elements in ethnology, linguistics and politicised philosophical ethnology. The latter ‘saw race as a key to historical explanation’, but rarely used much physical ethnology, selecting the parts they found ‘attractive’, and discarding ‘the rest’ (Horsman 1976: 401). Arnold’s sole ‘physiological’ reference was Edwards’s 1829 letter to Thierry, while even the anatomist Knox made few references to physical,

*However he also argued that Welsh simply failed to evolve case suffixes, its prepositions failing to coalesce ‘with the words governed by them, as they appear in other languages to have done’ (Prichard 2000 [1831]: 185).

as opposed to psycho-political race traits, citing Livy for his physical description of Saxons (Arnold 1962: 339-40; Knox 1850: 49-50). *Dublin University Magazine* meanwhile accepted the ethnological commonplace that Teutons resembled ‘Celts in their large stature and xanthous [fair] complexion,’ but instead grouped Celts with Iberians, whose ‘lighter forms, dark hair, and swarthy complexions’ contrasted ‘strongly’ with their Celtic fellows (DUM 1855: 722-23). The positivists therefore expelled this tradition from its camp, rarely citing 1850s-1890s historians like Hippolyte Taine and Renan, ‘the high priest of the cult of science’, and the hugely popular psychologist Gustave Le Bon, ‘whose works, translated into some ten languages, sold hundreds of thousands of copies’, and used science to establish an influential and sometimes extreme race ideology* (Todorov 1993: 106 & 114, 118 & 159). Anthropologists still maligned popular interwar race historians like H.G. Wells, whose ignorant use ‘of ‘Gothic’ and ‘Celtic’ as racial terms’ was ‘enough to make an anthropologist shudder’, (Morant 1939: 156-57). This aversion may have been more about scientific style than political conviction however. The ‘invocation of science’ by the racist Scottish anatomist Knox and Woltmann, a physician ‘knowledgeable in anthropology’, ‘was far more influential’ in a ‘predominantly liberal and forward-looking’ age, than Gobineau’s aristocratic nostalgia, despite their essentially similar messages (Malik 1996: 84 & 89; Massin 1996: 93; Puschner 2001: 96). As we see below, political racist theorists thrived from the 1890s outside scientific anthropology, and were reabsorbed into right-wing twentieth-century raciology.

Relinquishing language

The partial and piecemeal shift to physical anthropology purism also downgraded linguistics. From Linnaeus on, race taxonomy ‘oscillated between’ geographic, linguistic or ‘morphological’ race concepts, but schemes structured around language families generally lost ground over the nineteenth century, as more comprehensive anthropometric data offered a physical anthropology alternative (Blanckaert 1989: 172; Dias 1989: 205). By the 1860s, Broca and most French anthropologists, including monogenists like Quatrefages, privileged ‘natural science’ over linguistics, assuming that the inherited physical brain determined the psychological mind, which then produced cultural artefacts (Broca 1864d: 305-6; Blanckaert 1989: 195; Spencer 1997b: 857; MacMaster 2001: 13; Dias 1989: 222). The vogue for Aryan theories and a powerful new linguistic biologism made philology a serious candidate for race classification pre-eminence, which Broca and other craniologists were determined to challenge. The neogrammarian school which dominated linguistics after mid-century drew on Linnean biology and Darwinian evolution to portray

*Todorov says these three theorists, of whom Renan and Le Bon joined the Paris Anthropological Society, ‘simply transpose’ the usual race prejudices onto a ‘no less inflexible’ cultural determinism, sharing anthropologists’ belief in normative race ranking and the primacy of science over ethics (Todorov 1993: 114 & 145; Hecht 2003: 58 & 77). They

languages ‘as living organisms governed by natural laws’, descended from a positively proven proto-language (Tristram 1996: 45). From Zeuss on, they used the ‘invariably operating sound laws’ to built ‘sophisticated mechanisms of linguistic *reconstruction*’, speculatively recreating extinct tongues by comparing daughter languages, and reconstructing their culture and geography from vocabularies for trees, crops, maritime activities, metals and so on (Tristram 1996: 45; Davis 2002: xiii; Girard de Rialle 1864: 552). Claude Blanckaert portrays Franz Pruner-Bey, defending an interrelated complex of older ethnological ideas like mutable physical type, priority of language in classification, descriptive craniology, monogenism, and Retzius’s race succession theory, as Broca’s main 1860s opponent. Broca and his allies underlined the incompatibility of cranial and linguistic classifications and criticised Pruner-Bey’s ‘more eclectic’ ethnological 1860s race-history for combining them and selectively extrapolating from ancient costume details, carvings, or a few lexical items (Blanckaert 1989: 187 & 189; Bertrand 1873: 238).

Prichard kept race and ethnicity together by making languages inalienable. They were ‘never communicated’ between nations ‘by intercourse or even by conquest’, except in ‘rare examples’ where sustained colonisation changes ‘the mass of the population’ (Prichard 1973 [1813]: 244). He used this rule to dismiss one race history, calling it ‘absurd’ ‘to imagine that a whole nation could at once learn a new language and forget their old one’ (Prichard 1973 [1813]: 516). Blanckaert sees the 1840s Scandinavian race succession theory as an attempt to protect craniological race classification, by aligning it with the dominant linguistic paradigm (Blanckaert 1989: 182). Mantegazza agreed that the ‘more robust, more adult and better-fed’ discipline of philology had beguiled anthropology into ethnic theories (Orsucci 1998: 9). However unlike Prichard, for whom language was the principal fixed point in race, studying ancient crania convinced Retzius, like Edwards, that skull traits were permanent and closely tied to ethnic groups (Blanckaert 1989: 168-69). Although later accused of slavishly equating linguistic groups with skull types, Retzius progressively diluted this equation over the 1840s and 1850s, systematically attaching race to skull form when this clashed with ethnicity. Even his earliest scheme (1840) divided linguistic Aryans into broad and long-heads (Blanckaert 1989: 172-3 & 180). As ‘experience shows’, he said, ‘traces’ of original races often ‘persist since’ antiquity, so the French and British ‘great territories’ were ‘formed by different races’, and therefore ‘not natural’ (Retzius, A. 1864: 124). He contrasted craniology with ‘how difficult and almost impossible’ it was to classify peoples by combining several physical features ‘and language’ as had ‘in general been done’ (Retzius, A. 1864: 27).

accepted ethnology’s bio-cultural race composite, but with culture firmly dominant, focussing on ethno-linguistic races like Aryans and Semites and admitting environmental influences on race (Todorov 1993: 106, 109, 156 & 159).

Jean-André-Napoléon Périer and Louis-Achille Bonté called linguistics ‘a beautiful and difficult science, born yesterday,’ with unresolved problems and ‘much to do... to be in agreement with itself’, only bringing race into ‘perfect accord’ by ‘sacrificing the physical characteristics’ (Bonté 1864: 632; Périer 1864: 617 & 620). Anthropologists believed race-historical research had to concentrate on ‘anatomical and physiological’ traits, which apart from well understood ‘modifications... are fixed’, and were ‘very reserved’ about linguistic classification, because unlike ‘bird-song, a simple consequence of the organisation’, ‘languages change’ under socio-political influence (Bonté 1864c: 196-97; Omalius 1864: 202; 1864b: 265; Périer 1864: 621). In 1876, the German craniologist von Hölder emphatically refused to accept philologically based hypotheses that matched ‘the actual craniological relations’ so badly and lambasted wild philological claims such as that Malay and Semitic were Indo-European (Hölder 1876: 6 & 19). Forcing craniology into a linguistic mould, he added, would be like making it subsidiary to theology or philosophy (Hölder 1876: 7). Bonté believed philologists and their allies grouped physical types to suit their linguistic Aryan taxonomy (Bonté 1864: 629-31). Their ‘great pivot of Arianism’ was that all linguistic Indo-European were racial Aryans, whose physical variety, including at least three cranial forms, was due to race mixture, but he noted that the Mongol and Negro races each had ‘just a single’ unique form, citing ‘Pruner-Bey himself’ that ‘diversity of forms’ proved race diversity (Bonté 1864: 629-31). Bonté added that European Aryans resembled Arabs, Finns and Basques more than Aryan Indians, and that non-Aryans also had supposedly Aryan oval skulls (Bonté 1864: 630-31). Encouraged by classical accounts of ‘peoples’ expunged from history by conquest, monogenists like Prichard, Pruner-Bey and most pre-1860 anthropologists preserved the equation of race and language by assuming that invaders like the Aryans in Europe wiped out their predecessors (Blanckaert 1989: 183 & 193-94). The linguist Girard de Rialle argued that pre-Aryans could not have adopted Aryan language because:

A people of some importance has never been seen to change its idiom in this way. A language is intimately linked to the essence of a race and one cannot go without the other (Rialle 1864: 568-69).

Broca and his polygenist supporters, plus Knox, Beddoe and Ripley countered that larger native populations, formed by and adapted to the local environment, usually absorbed smaller groups of conquerors not ‘continually’ reinforced by ‘primitive pure breeds’ (Knox 1850: 48-49; Broca 1864d: 308 & 310; Allen 1971: xii; Quatrefages 1871: 48 & 78; Ripley 1900: 104). Edwards, Broca, Bonté and Bertrand added that pastoral conquerors preferred ‘slaves to cadavers’, while extermination required ‘a perseverance of cruelty and of rage which is scarcely in human nature’ (Broca 1871: 365; Edwards 1841: 25-26; Bonté 1864: 627; Bertrand 1873: 239-40). Broca said

historical language change was generally gradual, even if ‘inaugurated by’ violence, arguing that Celtic speech survived for centuries in Roman Gaul, and that modern French also spread slowly (Broca 1864a: 569-70). Genocide theorists argued that the conquerors would not even have spared native women and interbred with them, allowing the aboriginal race to survive, but Broca answered that far from inspiring ‘reciprocal repugnance’, slight physical differences between Aryans and pre-Aryans, who resembled modern Finns and Basques, would actually excite the conquerors’ ‘lust’ for native women (Broca 1864d: 309; 1871: 365).

It was generally assumed that in the distant past at least, each pure biological race had its own linguistic culture. While some, like the cultural anthropologist Bastian, believed society and environment conditioned culture, many physical-anthropology race classifiers preferred biological explanations (Wolpoff & Caspari 1997: 109). Pruner-Bey claimed race shaped language directly, so that in Spain, ‘the Iberian and Semitic stocks’ ‘principally... prepared the organ [i.e. the mouth] to mould Latin words’ (Pruner-Bey 1864b: 664). The leading linguist Honoré-Joseph Chavée, who founded the first French linguistics journal in 1867, was an extreme proponent of the theory that as language was ‘a spontaneous product of the cerebral organism’, ‘two radically distinct languages, distinct in their phonetic elements, that is in their anatomy, distinct in their grammatical constructions, that is in their physiology’ were presumably products of ‘radically distinct’ organisms (Chavée 1864: 192). For Chavée, philology studied ‘language on the same basis as all other physiological acts and with methods perhaps more rigorous than... in other branches of natural science’ (Chavée 1864: 191). He identified the ‘pathological laws’ created by successive ‘phonetic changes which constitute veritable illnesses’, in order to trace ‘the primitive, normal, perfect form’ of the original languages (Chavée 1864: 191). Though he accepted that conquest could impose new languages, he said their ‘organic formation and development’ went back to an earlier time (Chavée 1864: 202-3). Chavée’s racial determinism of language subordinated language to the now dominant physical paradigm, but Broca’s ally Bonté objected that he still made language ‘the surest criterion for recognising a race’, and ‘proof of... the flesh and bone of a people’ (Bonté 1864: 629; 1864c: 196-97). By the 1870s, leading philologists like Hovelacque, confident in their own very complex comparative techniques, joined physical anthropologists and other Broca allies in declaring that the two disciplines produced entirely independent classifications, each valid in separate spheres (Hovelacque 1873: 499; Bertrand 1864b: 370). One ethnologist declared in 1876 that nothing was ‘more common’ among the most prominent naturalists than ‘an utter ignorance of philology’ (Hyde Clarke 1876: 25). Despite these protests, anthropologists like Périer and Omalius still used linguistic evidence, like history, as ‘an indispensable auxiliary’, though only in a ‘consultative’ role

and not subordinating ‘the characteristics properly called’ (Périer 1864: 620-21; Omalius 1864b: 265).

Separating ethnicity and race

Mid-nineteenth-century anthropological research, and especially detailed mass-survey data from the 1870s on, demolished the Romantic period assumption that each European ethnic groups had its own racial type (Poliakov 1971: 119). Due to ‘the first extensive anthropometric surveys’ and especially Virchow’s study of the coloration of five and a half million German schoolchildren*, leading German anthropologists like Kollmann and Virchow recognised that European physical types were not ‘national’, but ‘cut across the “existing political and linguistic units”’ (Massin 1996: 100). While Prichard, Edwards and Wilde’s ethnology in the 1820s-40s studied ‘peoples’ or ‘nations’, Quatrefages in 1889 told classifiers to ‘recognise and... characterise’ the ‘ethnic elements’ of modern nations (Stocking 1987: 49-50; Edwards 1845: 43; Wilde 1849: 212-14; Quatrefages 1889: 488). By the 1870s or early 1880s, ‘almost all’ anthropologists and informed non-scientists stressed ‘the capital distinction’ between linguistic people and race, understanding well that although their European races, based purely on observed physical features, were conventionally named for the pure ethnic groups they were supposedly once associated with, present-day nations were mixtures (Coon 1939: VIII: 1; Müller 1879: 5 & 26-27; Houzé 1883: 80; Todorov 1993: 141 & 144; Majewski 1905: 162; Leerssen 1996: 94; Pogliano 2005: 395). Vanderkindere in Belgium and Hölder and Kollmann in Germany called in 1876-83 for skull classification exclusively by ‘form, independently of political geography and linguistics’, dismissing racial, as opposed to linguistic Celts for instance, as meaningless, confusing and ‘absolutely contrary to the rules of terminology’ (Vanderkindere 1883: 95-96; Hölder 1876: 4; Kollmann 1881: 18). The many anthropologists still using ethnic terms were on the defensive, arguing that although scientifically untenable, their use by a ‘great number of anthropologists’ had made them scientific conventions (Houzé 1883: 96). Though their broad subdivision was hardly more detailed than the several 1870s-80s schemes that grouped all Europeans together, Thomas Huxley and Hector MacLean in 1870-1872 were among the first to divide Europeans into two entirely biological races with non-ethnic names, ‘one fair and the other dark’ (Deniker 1904: 181; MacLean 1872: xl). A fellow London ethnologist praised Huxley, who put ‘our old friends the Aryans and Semites into his crucible and melted them away completely’ (Campbell 1870: 410).

Positivist anthropologists saw observable physical and associated mental traits as quite permanent in inheritance, surviving ‘into our times,’ and even if race mixture ‘in full activity’ ‘shakes up all

the features', 'strictly follows... either the father or the mother' (MacMaster 2001: 13; Prichard 1973 [1813]: 16-17; Beddoe 1971 [1885]: 2; Ripley 1900: 467; Pruner-Bey 1864b: 674; Talko-Hryncewicz 1902: 760; Kollmann 1880: 82; Sergi 1900: 8; Woltmann 1903: 292). Thomas Huxley's races were 'persistent modifications of mankind', and therefore fixed bodies of common descent, whether by biological or cultural reproduction (Huxley, Th. 1950 [1865]: 107). Kollmann's 'strongest proof' for this was that even within families, 'different races emerge with all their sharpness', but he also noted American colonists retaining a European appearance, persistent differences between neighbouring East Indian races, the darkness of Negro body parts hidden from the sun, and the failure of Eskimos to turn blonde (Kollmann 1880: 81; 1881: 37). He praised French anthropologists like Broca, Quatrefages and Hamy for linking modern Basque and Canary Island skulls with prehistoric crania like Crô-Magnon (Kollmann 1881: 12). Kollmann observed that in crossbred animals, 'combining factors do not produce a new third form, but continue to exist beside one another', resembling 'mechanical and not chemical mixing' (Kollmann 1880: 82). Furthermore, humanity responded to environmental change by creating 'an artificial climate' with clothing, dwellings and fire, instead of evolving physically (Kollmann 1880: 82).

Anthropologists needed biological explanations for how the ancient sets of features of fixed physical races hung together despite millennia of inter-breeding and environmental influence in Europe. Knox proposed in 1850 that 'nature so abhorred hybrid races' that these 'people of uncertain character, indefinable' soon simply 'die out of course, or return to the pure races' (Knox 1850: 349-50; Broca 1859: 7; Curtis 1968: 69-70). An Anthropological Society colleague saw no evidence that races changed over time or blended 'their blood' (Avery 1869: ccxxii). Knox's mixed nations of largely pure-race individuals were soon superseded however. Virchow's finding that 54.15% of Germans had 'intermediate' 'mixed type' helped convince Quatrefages, Broca and ultimately all anthropologists that most modern European individuals were 'multiple racial crosses' (Quatrefages 1889: 488; Orsucci 1998: 3; Mosse 1978: 92; Keane 1896: 151). They likening race and colour mixing, both creating an entirely 'new type' or random 'métis of all heights and all colours', with 'no solidarity' between characteristics (Quatrefages 1871: 77-78; Broca 1873: 590). Broca argued that if race had to be 'single origin, a descent without mixture and a uniform type', the term could hardly ever be used, especially for Europe (Broca 1873: 599). Interwar raciologists continued to accept mixed-race individuals were much more common than 'pure racial forms', some developing complex theories of full and peripheral race membership to cope with this (Necrasov 1941: 97; Făcăoaru 1938a: 22; 1939: 30-31). Though race could no longer be perceived directly, Broca nevertheless believed the 'distinction of two races is legitimate and necessary' when

* Published in 1885-86, with provisional results in 1876-77.

the ‘great’ majorities of two populations, like the Celts and Kymris in France, had ‘such important’ differences of physical traits in their statistical ensembles, especially ones ‘distinct and general enough to maintain themselves’ over generations (Broca 1873: 591 & 599). This enabled Broca to maintain the ethnological race history tradition, unhesitatingly referring to ancient ‘Gallic confederations’ as ‘anthropological groups’ (Broca 1873: 599). In a ‘rational’ geographical distribution of races, spatial separation inhibited miscegenation. However atavism, the tendency to spring back towards ancient racial types after cross-breeding, became the main type-maintenance mechanism. Beddoe and Quatrefages’s races were the frequent ‘recrudescence of certain putative ancestral strains, consistently recognisable, from amongst a now largely undifferentiated mass produced by centuries of wholesale crossing and re-crossing’ (Allen 1971: xii; Quatrefages 1871: 78). Broca thought atavism operated ‘to the profit of the predominant race’, repurifying mixture by returning ‘much rarer’ offspring to minority types, which in mixed populations therefore tended to die out (Quatrefages 1871: 78). Many anthropologists believed only atavism could explain blonds and brunettes in the same family, proving colour was racial rather than environmental (Bonté 1864d: 279-80; Broca 1873: 619-20; Dickson 1896: 159).

Many of those who, like Rudolf Pöch in 1917, saw European race traits as permanently dispersed by thorough mixture, believed in the ancient pure races which supported national and Aryan race histories, though accepting their features were ‘really difficult’ to establish (Pöch 1917: 79). If Virchow’s German survey apparently convinced him that pure races did not even exist in antiquity, this seems to have put him in a minority, and even self-declared sceptics often assumed original race purity in practice (Orsucci 1998: 3; Krzywicki 1969 (1897): 396-97). From the 1830s to after 1900, most anthropologists assumed that as ‘human races enter history sharply characterised in physical and psychological relations’, ancient or even medieval European peoples were of ‘pure race’ and ‘uniform type’ (Betham 2000 [1834]: 422; Wilde 1849: 230; Retzius, A. 1864: 124; Knox 1850: 48-49; Périer, Bertillon & Lagneau 1861: 373; Quatrefages 1889: 488; Buschan 1890: 41; Ripley 1900: 600; Kossinna 1909: 19; Beddoe 1912: 55; Proctor 1988: 142; Orsucci 1998: 3; Ujfalvy 1903: 27). They disputed only which types those were. From Wilde in 1844 to Kossinna in 1909, theorists argued that while ‘we find every variety of head among the modern mixed races of civilised countries’, the ‘crania and general physical condition’ of savages was ‘more and more stereotyped’ and ‘the substantive difference’ between “‘race” and “people” disappears’ ‘as we recede from civilisation’ or go ‘further back in prehistory’ (Wilde 1849: 230; Kossinna 1909: 19). The originally connected biological race and ethno-linguistic group therefore ‘belonged’ to one another, making other pairings somehow illegitimate. Talko-Hryniewicz called Slavicised dolichocephals ‘culturally but not anthropologically Slavic’ for example, while Günther’s Nordic

was the 'irreplacable' nucleus of Germanic cultures (Talko-Hryniewicz 1902: 761; Lutzhöft 1971: 96 & 98).

Original pure races helped maintain the incongruity of absolute types and quantitative scales. Gustaf Retzius said 'Broca's minute subdivision' of the cephalic index scale into five categories 'wholly distorted and misapplied' his father's scheme, turning his 'typical shapes of the cranium' into 'mere arithmetical conceptions' (Retzius, G. 1909: 290). Describers like Blumenbach, Edwards, Retzius and Hölder found pure, uniform and distinct racial skull types with different 'architecture... in its basic principles' 'by seeking the features most different from one another' which formed 'more or less considerable groups' and ignoring variations within these (Hölder 1876: 4; Blanckaert 1988: 38; 1989: 176; Retzius, G 1909: 282). Broca's cephalic index projected these separate types onto one numeric scale, adding intermediate categories like sub-dolichocephal and mesaticephal from 1861 (Blanckaert 1989: 176). He and other quantifiers 'accepted uncritically' from the describers, the vital concept of distinct, separate types, like Retzius's two skull forms and dark and fair pigmentations, reifying portions of numerical scales as 'different basic forms of the species' (Kollmann 1880: 115; Blanckaert 1989: 193; Czekanowski 1948: 15; Stojanowski 1948: 1). Huxley, Salmon, Kollmann, Kopernicki, Talko-Hryniewicz, Haddon and many others, despite criticism by Virchow, assumed that 'intermediate' hair colour or mesocephaly 'doubtlessly prove a mixture of two types' while extreme values represented basic races, because race-crossing had to produce intermediate values (Haddon 1898: 581; Orsucci 1998: 3; Kollmann 1880: 108; Buschan 1890: 38; Talko-Hryniewicz 1902: 758; Keith 1928: 317; Kopernicki 1883: 37-38). Wentworth Webster saw in assumptions that brown-haired people must be 'offspring of a mixture of fair- and black-haired races', 'a strange reluctance' to conceive of 'a natural type' with intermediate characteristics (Wentworth 1876: 16). Evidence for intermediate types was discarded. Zograf, finding that central Russians clustered into tall and short groups, and a larger third group of medium stature, assumed the latter was just a mixture (Zograf 1893: 3). Collignon measured 'exclusively' subjects with supposedly the purest Celtic and Kymri characteristics, ignoring those 'who were too crossbred' (Collignon 1883: 470).

Crisis in anthropology

Craniologists had no 'articulated theory', merely indulging in an 'orgy of quantification' from which they hoped 'important insights would eventually emerge', but which by the 1890s, had led racial anthropology 'into an epistemological, methodological, and conceptual blind alley' (Fee 1979: 419; Massin 1996: 106). 'Ripley estimated that by 1899 one and a half million adults and ten million children had been measured for their racial identity', mostly in Europe, and data still poured

in (Malik 1996: 119). Italian anthropologists claimed comprehensive regional averages of skin, hair and eye colour, height, hair form, cephalic index, nasal index, cranial capacity and brain weight (Giuffrida-Ruggeri 1918: 81-83 & 95). '[N]ew techniques', 'craniological angles and indices multiplied' prodigiously in 1870-1900, appearing faster than others were abandoned, each researcher using their 'own favourite measurements' and choosing among 'over six hundred different measuring instruments' (Fee 1979: 426-27). Anthropometrists tested military conscripts, detected medical degenerates and criminals and aided ergonomic design (Massin 1996: 106). But as the inflation in 'number and precision of anthropometric surveys' in 1860-90 brought no 'major scientific breakthrough' in understanding race, senior anthropologists and other scientists began to question 'the value of physical anthropology' and complain that craniology was becoming 'unprofitable', 'dull', vain or 'worthless' (Massin 1996: 106; Blanckaert 1988: 49; Retzius, G 1909: 278; Fee 1979: 427-28). In France 'towards 1900', museums almost stopped acquiring new skulls as a result (Dias 1989: 222 & 225). In 1896 Virchow said the dolichocephaly-brachycephaly key was 'no thoroughgoing success', and that 'a practiced craniologist', knowing nothing of a skull's provenance, could not tell its race 'for certain' (Virchow 1950 [1896]: 191).

Though cephalic index and pigmentation underpinned the widely accepted three-race division of Europe, the 'hopeless chaos' of competing taxonomic criteria, worse even than with 'geographic or ethnic... criteria', blackened the image of race anthropology (Wiercinski 1962: 9-10). In 1860-90, 'Europe was rife' with attempts by leading anthropologists like Huxley, Flower, Topinard, Haeckel, Müller and Quatrefages, using the new European mass survey data, 'to classify mankind into orderly systems' of primary and secondary races (Coon 1939: VIII: 1). Right up to the interwar period, most schemes ordered classification criteria hierarchically, picking one physical feature for primary racial classification, a second for subdivisions, and further features for still more detailed subdivision* (Montandon 1933: 109). Skjerl said most of these 'and especially the oldest' including very early attempts from Bernier to Retzius, but also Deniker and Günther's proposals, 'were based on intuitive combinations' of traits (Skjerl 1936: 285). From the romantic to interwar periods, equally authoritative lists of classifiers proposed hair form, pigmentation and the cranium as rival 'basic' taxonomic features (Virchow: 1896: 13; Montandon 1933: 72; Coon 1939: VIII: 1; Stołyhwo 1926b: 151; Prichard 1973 [1813]: 16-17; Olechnowicz 1893: 9; Talko-Hryniewicz 1902: 760; Woltmann 1903: 292; Pogliano 2005: 389; Retzius, A. 1864: 27; Ripley 1900: 467; Beddoe 1912: 40). Classifiers chose criteria because they corresponded 'in locality' with other anthropological features and dismissed them because they were affected by environmental factors

*This developed from the older compromise classification, but with further physical traits replacing language and ethnicity.

like nutrition (Beddoe 1912: 19-20; Făcăoaru 1936a: 9-10). Lack of data made craniology a weak candidate for global schemes (Keith 1928: 309). Some researchers favoured criteria popularly used to distinguish race differences. Sergi and Edwards (whose anthropometric technique was to note features of passers-by) therefore stressed the features or shape of the face (Blanckaert 1988: 38; Sergi 1900: 7). Erwin von Bälz, a German anthropologist who served as private physician to the Japanese Emperor, similarly criticised Kollmann's races for combining 'often united ill-assorted individuals [whom] any layman would recognise as different' (Massin 1996: 113). Theorists also probably chose taxonomic features to produce preferred racial subdivisions and histories. Theories like Ripley's of a common descent for dolichocephalic Nordics and Mediterraneans for example assumed 'head form' was 'decidedly more permanent... than pigmentation' (Ripley 1900: 467). However fixity was as usual the key criterion. Sergi, Kollmann and Beddoe believed hereditary 'internal' skeletal characteristics had an 'eternal tendency... to keep together in indissoluble groups' possibly since 'the Miocene age', and over 'a wide geographical distribution' 'despite interbreeding' (Sergi 1900: 7; Allen 1971: xii; Beddoe 1912: 38-39). Kollmann added that they retained 'forms most persistently' in animal breeding (Kollmann 1880: 82). Though 'hereditary and... persistent', Sergi dismissed stature as liable to great individual variation, while science poorly understood the laws governing body proportions, and race mixing, climate and diet affected pigmentation, which varied among many 'groups of uniform internal or skeletal characteristics' (Sergi 1900: 6-7 & 168). Johannes Ranke, a leading German anthropologist, identified another 'two insoluble problems' with race anthropology in 1897, ...

...the head shapes of the whole of mankind were distributed in a continuous series "in which the most extreme members were connected by gradual and uninterrupted transitions";... [and] the great individual variability within each ethnic group surpassed the differences among the various "racial types" (Massin 1996: 110-11).

The work of Budapest anthropology professor, Aurel von Török, was the summit of 'craniometrical study', calculating '178 indices and more than 2500 angles, triangles, and polygons of determination', making a total of '5371 measurements on a single skull' (Massin 1996: 107). However, his conclusions, if taken seriously, 'signalled the end of nineteenth-century racial craniometry', throwing into question the cephalic index, and two fundamental anthropometric tenets, the originally homogenous headshapes of pure prehistoric races, and Cuvier's 'universally accepted' 'law of correlation', which proposed mathematical harmony between different craniological measures (Massin 1996: 107 & 110; Keane 1896: 156). Török showed that only one of the 150 skulls in his collection conformed to Cuvier's law, and pointed out that both isolated primitive tribesmen and prehistoric Swedish skeletons had 'very heterogeneous' skulls (Massin

1996: 109-10). By about 1900, classifiers reluctantly began to accept the mounting evidence eroding the legitimacy of original purity (Potkański 1902: 247). In 1905, the Polish archaeologist Majewski warned of race mixture in Europe's oldest graves, from 5,000-6,000 years ago, preceding modern European language families, but still accepted pure races tens of thousands of years ago and traced all members of each physical type from a single point of origin or 'nest' (Majewski 1905: 164-66). His German colleague Buschan accepted Virchow's thesis that Slavs and Teutons were always racially mixed, but preferred racial migration theories to much simpler environmental explanations for pigmentation darkening towards the south (Buschan 1890: 38-40). Anthropologists like Julien Kollmann (1934-1918) of Basel, who Massin calls 'the third most influential' in Germany, Giuseppe Sergi in Rome, Otto Reche in Basel and Deniker in Paris all made reforming attempts from 1880 on to replace the defunct hierarchy-of-criteria approach, while criticising Török and one another (Massin 1996: 107). In 1880-83, Kollmann divided Europeans into 'five distinct races', using Cuvier's law to mathematically combine several cranial measures (Massin 1996: 91; Deniker 1897: 126; Kollmann 1881: 1; Czekanowski 1967: 44). Others reformers wanted to dump the cephalic index. Reche, later a 'zealous Nazi', proposed replacing it with another measure, which 'really distinguished the "dolichocephalic races"', while Sergi put forward a classification based, like Blumenbach's, on 'the circumferential profile of the head when seen from above' (Massin 1996: 108; Coon 1939: VIII: 2; Jantz & Spencer 1997: 186). He argued in 1900 that nature grouped the 'architecture' of cranial outline shapes 'constantly together in human groups' (Sergi 1900:169). Sergi and Kollmann both sought consistent correlation in nature of cross-referenced, purely cranial features, taken more from 'crania than the living', focussed on craniological history and largely ignored geographical distribution (Kollmann 1881: 1; Sergi 1900:169; Coon 1939: VIII: 2). Though none of these reforms were very popular, they anticipated the mathematical turn of twentieth-century classification methodology and, exacerbated by the international tensions described in chapter I, its greater disunity.

The Deniker-Ripley revolution

Realising that competing terms for the same races caused much of 'the chaos reigning in anthropology', Kollmann pioneered the systematisation of anthropological terminology, systematically listing other classifiers' types that were equivalent to his own (Kollmann 1881: 17-18; Czekanowski 1967: 43). Classifiers like Sergi, Beddoe, Deniker and interwar raciologists used this racial synonyms technique* to legitimise their own new races by association with established ones (Sergi 1900: 41-44; Deniker 1904: 185; Wiercinski 1962: 14). At the turn of the century, this method signally helped knit locally identified types together in a rough consensus on European

* See for example Eickstedt 1934: 384 or Haddon 1898: 583-84.

synthesis, gradually abolishing the habit of subdividing larger types into sub-tribes or nations and smoothing a path towards the unification of European race classification around the Ripley and Deniker schemes. Dybowski (1899) and Olechnowicz (1902) placed their Polish findings within the Ripley-Deniker European context for example (Schwidetzky 1935: 80). All subsequent classifications of European races, including Günther's massively popular scheme, followed either Joseph Deniker*, who published the first detailed racial map of Europe in a series of articles and books in 1897-1904, or William Ripley's 1900 work, *The Races of Europe* (Wiercinski 1962: 2; Massin 1996: 124; Lutzhöft 1971: 92). Both exhaustively described Europe's racial organisation, synthesising the massive accumulated stock of anthropometric data into a single corpus, henceforth questioned only in detail and interpretation. Montandon said Deniker and Ripley created 'order in the mess of sparse data' on the inscrutable 'magma' of 'European populations' (Montandon 1933: 237). Houzé's 1883 scheme for instance used ethnicity to sketch broad areas lacking detailed data. Six years later, Quatrefages complained that in 'descriptive ethnology, the materials collected so far,' though 'numerous and important... are still insufficient' for 'a detailed co-ordination' (Quatrefages 1889: 488). By 1904 however, Deniker could claim 'that aside from a few rare exceptions,' he had 'anthropological documents on the height, pigmentation and cephalic index of *all* the countries of Europe' (Deniker 1904: 186). Further measurement data were slotted in without disturbing the basic pattern, though the raciology schemes of Eickstedt, Montandon and Czekanowski in 1933-34 introduced authoritative new interpretations (Żejmo-Żejmis 1935: 85). A similar crystallisation took place in the international canon of literature. Theorists generally cited from the same short list of standard authorities, topped by Deniker and Ripley. Ripley's taxonomy was partly popular because 'simple', 'lucid' and 'easily remembered', definitively stating the forty-year-old orthodoxy of a three-race Europe, and establishing 'Alpine' and 'Mediterranean' as conventional terms for the two southern races[†] (Czekanowski 1967: 45; Coon 1939: VIII: 3). He and Deniker recognised one another as chief rivals. Deniker challenged orthodoxy, agreeing with Ripley that 'nearly every standard authority in Europe' accepted the traditional three-race scheme, but accusing him of merely following tradition (Ripley 1900: 597; Deniker 1897: 127; 1904: 182-83). His bold multi-race innovation carved the three old races into six, plus four secondary or sub-races, for race elements that were 'not fully covered' (Coon 1939: VIII: 2). In a period of rapid international integration of science, exemplified by agreements in 1906 and 1912 on anthropometric standards, the Ripley and Deniker races were almost universally seen as scientifically reliable.

* Born in Russia and studying engineering in St. Petersburg, he travelled widely in eastern Europe and the Caucasus before settling in Paris in 1876, aged twenty-four, to begin his anthropological career (Coon 1939: VIII: 1).

[†] 'Nordic', Deniker's coinage, was more popular for the north European race.

If the schoolchildren and the unerudite public at large still follow Blumenbach, and the anthropologists themselves devise classification schemes based on Deniker, the large intermediate group of educated laymen rely almost entirely upon Ripley (Coon 1939: VIII: 3).

Deniker's 'cartographic method' abandoned 'ethnic or linguistic criteria' and ethnic race names for consciously neutral geographical neologisms like Nordic, Alpine and Dinaric (Coon 1939: VIII: 1). This became standard twentieth-century practice. Ripley was more of a transitional figure, accepting that his own term Teuton confused ethnicity and race more than Deniker's Nordic did, but also achieved the 'universal' replacement of what Eickstedt called the 'completely clumsy and even almost incorrect' term 'Celtic race' by the unconventional geographical term Alpine (Ripley 1900: 124 & 127-28; Eickstedt 1934: 384). Though ethnic terminology was not phased out overnight, it soon became a conspicuous oddity and the separation of race and ethnicity a scientific convention (Haddon 1924: 27; Eickstedt 1937b: 71; Klimek 1939: 29). Stołyhwo criticised even a geographic term like 'Nordic' which might 'produce the impression' that the race predominated or had its 'primitive' cradle in the north (Stołyhwo 1926b: 149). He suggested morphological descriptive names like *Homo fanotrichus glaukops dolichocephalus*, instead, but perhaps suspecting these might be impractical, offered abbreviations like *fanodolichocephalus* and the mellifluous *skotodolichocephalus** (Stołyhwo 1926b: 149).

Raciology and *völkisch* race science

From the 1860s on, in pursuit of scientific seriousness, an increasingly professional racial anthropology gradually purged itself of politics and ethnicity. British radicals like Knox were a minority after the anthropologicals and ethnologicals merged, while Nordic and Teutonicist supremacist currents were at best tolerated by the French and German anthropological establishments. Though powerless to staunch the rising post-1890s popularity of non-scientific theories like Chamberlain's hazy Germanic race, positivists offered 'abundant evidence' that Germans were 'decidedly' Europe's most racially 'heterogeneous' nation (Morant 1939: 157). By 1900, mainstream anthropologists like Rudolf Martin advocated a purely physical race concept, scrupulously distinguished from cultural people (*Volk*), abandoning the politically important ethnic link (Proctor 1988: 142). Topinard's strictly anatomical anthropology considered races a 'product of science', 'peoples and tribes being the only realities' while Luschan and Rudolf Pösch appeared to

*These were no more popular than Kollmann's 1880s attempt to make anthropology a natural science by abandoning ethnic for descriptive terms like *Chamaeprosopos dolichocephalic* (broad-faced, long-headed). Naming controversies remained something of an obsession for classifiers. The popular scheme of Nordic supremacist Hans Günther was

believe atavism merely threw up ‘approximations of the original’ pure races, by accidentally recombining some of their separately inherited original traits (Pösch 1917: 78-79; Dias 1989: 221-22). The Durkheimian ethnology of Marcel Mauss meanwhile welcomed Deniker’s conclusion that no ‘geographically isolated group, nor a race pure of any crossing’ existed and that there were always ‘transitional types’ (Mucchielli 1997: 21). Otto Ammon, Ludwig Wilser and Eugen Fischer were the ‘only leading’ German anthropologists to join the ‘convinced Pan-Germanist archaeologist’ Gustav Kossinna in associating with the Gobineau movement (Massin 1996: 130). Deniker’s amalgams of physical traits based on physical observation of current populations exemplified this self-consciously apolitical purist physical anthropology wariness towards unscientific race philosophies and race history, explicitly discarding ethnic terminology and even the race criterion of descent that permitted race history (Deniker 1904: 183; Eickstedt 1937b: 82; Scheidt 1950: 390). Ripley complained that Deniker’s races were merely ‘*existent* types’, because only race history could distinguish true racial hereditary factors, formed in deepest prehistory, from ephemeral features like stature, which was affected by quite recent immigrants, ‘material prosperity’, ‘too protracted civilization’, ‘military selection’ or malaria (Ripley 1900: 601-3). Many early twentieth-century Western physical anthropologists abandoned race classification altogether, retreating to growth and development studies, paleoanthropology and anthropometric technique. Results from complex new positivist archaeology techniques, like stratigraphy in the 1850s, the detailed chronological ‘material culture sequence of later European prehistory’ in the 1870s, and synchronisation* around 1900 meanwhile increasingly distanced the discipline from craniology (Sklenář 1983: 89 7 141-42; Díaz-Andreu & Champion 1996: 19).

As craniology got ‘ever more complicated, technical and sophisticated’, the ‘important social and political questions’ it was widely ‘expected to solve’ were ‘swallowed up in masses of detailed measurements’ and ‘endless disputes over methods and terminology’, undermining ‘the authority of anthropologists’ (Fee 1979: 427; Czekanowski 1967: 46). Race science risked falling into the void as it leapt from a crumbling position as an ideological social science to an uncertain perch as an apolitical, purely natural science specialisation like insect biology, with commensurate public interest and funding. Chamberlain and the German sociologist Ludwig Gumplowicz despaired of the ‘sorry role played by all anthropological’ craniology, with its ‘changing hypotheses’, ‘higgledy-piggledy’ ‘confusion’ of schemes, methods and data offering ‘no palpable result’ (Malik 1996: 120; Chamberlain 1938 [1899]: 313 & 317-18). They criticised the ‘unbelievable lack of judgement’ of

roundly criticised for switching around several race names coined by other theorists, sowing great confusion ‘and not just among laymen’ (Eickstedt 1934: 365-66).

scientists like Virchow and Kollmann, who believed in race equality, plus disputes on whether types were Germanic or Slavic and ‘anthropological categories’ which took ‘‘Aryans’ for ‘Semites’ and vice versa’ (Malik 1996: 120; Orsucci 1998: 3; Chamberlain 1938 [1899]: 313 & 317-18). Gumpłowicz noted that in his native region, the ‘Polish nobility, which rightly always considered itself of different stock to the farmer... the German middle class’ and Jews, were ‘quite heterogeneous races’ (Malik 1996: 121). Though Western European ‘social classes’ had...

...long ceased to represent anthropological races... they behave to each other like races and carry on a social racial struggle... In my *Racial Struggle*, the anthropological concept of race has been renounced, but the racial struggle has remained the same... it is the *struggle* that counts; it provides an explanation for all phenomena in the State, the genesis of justice and State development. (Malik 1996: 121)

Chamberlain said ‘we practical, hands-on men, involved in life’ required only ‘what lies clearly before our eyes’, rather than scientific ‘hidden origins and causes’ and sliced the Gordian knot of race definition by declaring that ‘he who belongs to a particular race, feels it daily’ (Chamberlain 1938 [1899]: 313, 317-20). ‘One of the most fatal errors of our time,’ therefore, was to overestimate ‘the so-called “results” of science’ (Chamberlain 1938 [1899]: 318). Race, the Nazi race ideologue Rosenberg agreed, was ‘a mystical synthesis’ rather than ‘logically developed philosophy’ or law-bound nature (Rosenberg 1930). His Italian counterpart Evola attacked the ‘almost scholastic pedantry’ of race scientists, whose obsession with the temporary physical state could impede ‘creative and evocative racist action’ (Evola 1941: 76-77). Divergent responses to this criticism tore the anthropological community in two. While the French and British mostly continued to evolve entirely biological and cultural anthropologies, with declining interest in race, many anthropologists further east offered their expertise to extreme right-wing nationalism. They allied with *völkisch* nationalist racists, emphasising points of accord and minimising the conceptual gulf separating anthropological raciology from Gobineau, Chamberlain and Hitler’s *Mein Kampf*. Especially in Germany, their main political asset was the blond Nordic race, which already had useful ethnic associations and superior connotations (see pp.190-94). The Central and Eastern European ethno-linguistic model of the nation as an extended family, a community of descent, in which foreign elements were pollutants, shaped and stimulated right-wing *völkisch* anthropology[†]. Western

* This ‘basic method of dating’, until radiocarbon dating fifty years later, fixed chronologies of European prehistoric cultures by imports of Mediterranean objects and styles whose dates were known from ancient texts (Sklenář 1983: 141-42).

† *This attempt to harness biology to nationalism was wracked by paradox. Race theorists saw underlying biological racial factors, from ‘prehistoric antiquity’, as the key defining features of ethnic nations, and more obvious national features like ‘language’, ‘culture’, and ‘customs’ as relatively ephemeral, superficial and subject to political

Darwinism, stimulated by colonial contacts, found little echo in the politicised ethnic focus of German, Czech and Polish archaeology, which ‘Anglo-Saxon’ archaeologists criticised for ignoring studies showing artefact styles were not necessarily ethnic (Sklenář 1983: 96-97; Kurnatowska & Kurnatowski 2002: 98). The Polish archaeologist Kostrzewski for example exploited the *völkisch* anti-democratic racial argument that ethnic essence and the spiritual bonds tying a people to its soil defined a person’s identity, regardless of their conscious political alignment.

Continuity from positivist anthropology

Neo-romantic anthropology had important continuities from the self-consciously apolitical positivists, whose less guarded comments, race descriptions and the frequent convenient correspondence between favoured races and their own people, all suggested nationalist influence. National identity was a major theme in linguistics, archaeology and history and then, from the 1850s-60s, in anthropology, which Broca enjoined to study the French and ‘determine the physical characteristics of the two great Gallic races’ (Dias 1989: 208). Positivist nationalist rivals like Morton and Quatrefages competed for scientific prestige, including in the size of their collections (Dias 1989: 224). The scientific orthodoxy of pure physical anthropology was ‘more noticeable in the breach than in the observance’, as ethnic groups were such politically useful symbolic intermediaries between nation and race and craniologists cherished their central role in the anthropology discipline complex (Leerssen 1996: 94). As late as 1885, the President of the British Anthropological Society declared that although ‘*most* reliance must be placed in discriminating races [my italics]’ on ‘anatomical’ traits,

...language, social customs, traditions, religious beliefs, and... intellectual and moral attitudes, were by no means to be neglected (Flower 1885: 378).

Majewski in 1905 said scarcely a single scientist had not sometimes confused cultural with biological terminology (Majewski 1905: 162-63). Western European races classification was increasingly based on observed physical traits, but well into the 1880s and beyond, ‘many eminent ethnologists’ like Broca, Quatrefages, Topinard, Houzé, Haeckel, Friedrich Müller, Lubbock and Beddoe (in 1905) used ethno-linguistic race names like ‘Scandinavians, Saxons, Slavonians, Celts and Pelasgians’ (Lubbock 1887: 418-20; Wiercinski 1962: 9-10; Czekanowski 1967: 44; Beddoe 1905: 234-35; Quatrefages 1889: 456; MacLean 1872: xl; Müller 1879: 552 & 555). Topinard mixed ethno-linguistic (Finns, Turanians), physical (blonds) and geographical (Mediterraneans)

manipulation (Popoviciu 1938: 3-4 & 15; Râmneanțu 1939: 325-26). Rooting the nation in primordial biology belittled the object of their extreme nationalism.

terms (Deniker 1971: 283-84). Haddon followed suit as late as the 1920s, while Pittard expected Romanian speakers in Romania and Greece to be physically similar, and chose an area for craniological study because the geographer Reclus noted its ‘extraordinary mosaic of “races”’, meaning cultural ethnic groups (Pittard 1920: 10; Haddon 1924: 27; Eickstedt 1937b: 71). English speakers appear to have been particularly slow to abandon ethnic race names, Keane biologically classing nations as ‘Siluro-Kelto-Teutonic’ or ‘Finno-Slavonic’ in 1896 (Keane 1896: 201). Coon contrasted Ripley’s ‘vehement... rejection of linguistics’ from ‘racial study’ in 1899, to his philology-based Asian Aryan theory (Coon 1939: VIII: 3). Just like Prichard in 1814, Quatrefages and Müller in 1879-89 subdivided their ‘White race’ into language families and increasingly minute linguistic and ethnic subdivisions, despite Müller understanding ethno-linguistic and biological classifications as parallel but separate dendrographic systems (Quatrefages 1889: 453-4; Eickstedt 1937b: 52; Müller 1879: 5 & 26-27). Ethnic terms were increasingly, but not always, just conventional names however. In 1883 Houzé said Hungarians ‘lost their ethnic characters’ through intermixture, but still classed them with Finns (Houzé 1883: 84 & 93). Beddoe treated historical, linguistic and anthropometric evidence interchangeably, though a somewhat elastic link let them separate temporarily or locally. For Keane, the morphological structures of languages (flexion, agglutination etc.) coincided well with the main human races (Keane 1896: 205). Haeckel suggested why, claiming speech arose independently through mental evolution in ‘different branches of primeval, speechless’ but physically similar humans, creating the major language families as races which could interbreed despite differing mental capacities (Odom 1967: 16). Cultural ethnic thinking survived still later in the practice of excluding groups with cultural barriers to miscegenation, such as the Jews and Gypsies, from anthropometric studies (Deniker 1897: 125).

Though criticising colleagues for ‘crediting race with’ characteristics of nations, theorists from Renan to Günther in the 1920s surreptitiously re-linked or blended them, Renan using the ‘tourniquet’ of ‘linguistic races’ – language families like the Aryans and Semites (Todorov 1993: 141 & 144). Some, like the racist British anthropologist Arthur Keith, tried to logically reconcile the incompatible biological and national approaches, endowing the ‘politician’s conception of race’ with ‘true biological significance’ (Keith 1928: 321). They believed the national ‘soul’ gained ‘ever greater consciousness of its distinctive character’ and ‘immediately sets out to repair the mischief’ to ‘Nature’s plan’, caused by civilisation dissolving the ‘physical cohesion’ of races through intermixture (Lahovary 1927: 10; Keith 1928: 319). Keith said that as nations formed, their members produced hormones which unified their physical characteristics, transforming nations into races (Barkan 1992: 46). This happened in groups genetically isolated by physical barriers, ‘opposition or jealousy’ to other tribes, or ‘a deep emotional attachment’, like animal territoriality,

to 'native territory', which if threatened, roused the 'potent mental reaction' of patriotism (Keith 1928: 310-12 & 315-16). Interwar nationalism was the universal 'old machinery of racial evolution', revived by 'the atmosphere of war', which used 'Nation-building' to fuse 'the old elements' into 'a new race' (Keith 1928: 319). The eugenicist Banu agreed that historical 'vicissitudes' 'intensified "native racial features"', creating the special qualities of 'the race of the Romanian people' (Săhleanu 1979: 33). Rosiński in Poland argued that 'ethnic culture, doubtlessly conditioned by the nervous system,' created the 'ethnic physiognomy', naturally religning race with ethnicity after divergence, so that racial Nordics of different nationalities differed (Rosiński 1929: 265). He added that racially homogenous ethnic groups 'consolidated more easily' than racially diverse ones, which had to compensate with stronger ethnic consciousness (Rosiński 1929: 266).

However the main mechanism for preserving national races, alongside original race purity, became the study of 'meaningful variations' in proportions and 'different degree of mixing and cross-breeding' of races within ethnic groups and nations, which Sergi, Kollmann and others pioneered in the 1880s-1890s (Kollmann 1880: 115; 1881: 38; Sergi 1900: 8). The most numerous local race, Kollmann claimed, 'gives the nation its anthropological stamp, and... particular racial character', so that Virchow's term 'Slavic brachycephaly' just meant this race was very common in Slavic nations (Kollmann 1881: 18 & 38). The Lwów school, Günther and other interwar raciologists adopted his suggestion that they use statistics to associate 'the different frequencies' of race elements in nations with particular historical immigrations, claiming the bio-racial mix of each cultural people gave it unique characteristics (Günther 1933: 11; Kollmann 1881: 37; 1880: 117; Malinowski & Wolański 1985: 50). The Romanian intellectual Lahovary thought racial influence might have become 'more indirect' and less obvious, determining cultural variations like Protestant, Catholic or Orthodox manifestations of universal Christianity, so that the nation took 'an ever more accentuated personality' from its 'anthropological group' (Lahovary 1927: 9-10). *Völkisch* anthropologists revived the politically crucial ethnic link between race and nation by claiming the originally pure Nordic race indelibly stamped Germanic culture, so even non-Nordics absorbed the superior national character. Hitler's *Mein Kampf* fully accepted ancient 'pure races' and modern mixture (Morant 1939: 153). The Italian fascist Evola similarly believed particular 'superior and creative' 'racial components' were 'central and essential for the entire ethnic and cultural complex' of a nation (Evola 1941: 34-35). Though pure-race individuals rarely or never occurred, the race purity of groups like 'the Italian race' was 'a point of reference', 'an ideal and a final goal' (Evola 1941: 35). To translate ethnic geopolitics into racial terms, and support Polish claims to Silesia, Czekanowski's school meanwhile developed the racial formation, geographical areas where a particular *mix* of types predominated, (Czekanowski 1937: 228-30).

As biologists and often eugenicists, anthropologists tended to attribute superficial and ephemeral social and cultural phenomena to fundamental biological causes, and were influenced by popular ethnic understandings of race (Popoviciu 1938: 15; Săhleanu 1979: 66). Even researchers like Majewski, who insisting that biological race was unrelated to ethnicity, assumed psychology and physical form were linked (Majewski 1905: 164-65). The leading interwar French anthropologist Vallois agreed, convinced by travels to other continents (Pogliano 2005: 494). Politicians, thinkers and the general public demanded a concept of biological race solidarity for class war, international rivalry and eugenic battles against degeneration. Encouraged by the palpable correspondence of ethnicity, physical race and social position in overseas colonies, educated Europeans up to the mid-twentieth century, and even scientific literature indiscriminately interchanged the terms 'race' and 'nation'. Assuming that biological studies conformed with the 'traditional literary view' from classical texts, philology and cultural archaeology, they viewed nations, quite literally, as distinct biological groups and used the term race for both 'sociological' 'ethnic race', and biological 'descendance groups' of physical and psychological traits (Morant 1939: 157; MacMaster 2001: 56; Manuilă 1924: 1072; Săhleanu 1979: 33; Klimek 1939: 23). The naturalist John Lubbock in 1887 said 'thousands', if told of 'four real nationalities' in the UK, would erroneously conclude that the English, Scots and Irish were 'actually separate races' (Lubbock 1887: 418). Though scientists embraced positivism, politics and the arts continued promoting romantic nationalist views and Morant also blamed confusion in anthropology for the 'confused medley' of 'the popular' race concept (Morant 1939: 157; Sklenář 1983: 97). A very simple route to a nationalist anthropology was to study the country in isolation from 'neighbouring peoples... like a biological island' as Romanian interwar anthropologists were criticised for doing (Milcu 1954: 24). As cosmopolitan elitists, many eugenicists were Nordacists, but their practical interest in improving national bloodstock diverted attention from anthropological race (MacMaster 2001: 35 & 40). Leading British, American and German eugenicists 'used the word "race" loosely', alternating between its ethnic or 'morphological' senses, considering Anglo-Saxons the superior race and assuming nations 'were all biologically different races', which 'determined behaviour' (Mosse 1978: 74; MacMaster 2001: 41; Kevles 1985: 46; Majewski 1905: 162-63). The ethnic group, a 'race mixture', was the eugenicist Banu's real preoccupation, 'constituted through a communal life, in a particular geographic space, through linguistic and cultural homogenisation' (Săhleanu 1979: 94). Eugenicists designed and advocated practical social policy for present and future genetic health, and so required

a pragmatic approach to improving ‘racial’ nations, generally targeting the mentally and physically unfit, habitual alcoholics, criminals, and other non-rationally defined groups* .

Anthropology’s partner disciplines drew it towards politics. Influenced by Romanticism, the librarian and antiquarian Gustav Klemm in 1836 advocated spreading ‘respect for’ and ‘knowledge of prehistory among the people... as the safest way to patriotism’ (Wijworra 1996: 166). Though positivist archaeology was less overtly nationalist, it linked particular artifacts with ethnic groups and migrations, from at least Kemble’s association in the 1850s of similar ancient German and English cremation urns with historical accounts of Anglo-Saxons (Mees 2000: 318; Collis 2003: 84; Sklenář 1983: 148). Archaeologists after the 1870s ‘tacitly accepted’ the anthropological idea of material culture reflecting the ‘beliefs, ideology and ways of living’ of specific peoples in particular periods (Sklenář 1983: 110; Collis 2003: 75-86). Bertrand, a professional archaeologist dedicated to Broca’s principle of autonomy of disciplines, still assumed each archaeological culture had a specific race structure. These assumptions and the methods they inspired culminated in the settlement archaeology of Gustav Kossinna, who first explicitly defined the archaeological culture in 1905 and from 1911, automatically associated culture and race groups, causing what Collis calls the decisive shift in archaeology from chronological phases to culture groups (Sklenář 1983: 148; Collis 2003: 86 & 151). Along with Rudolf Much’s folklore school in Vienna, Kossinna in Berlin reintroduced *völkisch* hypernationalism into academia in the 1890s (Mees 2000: 318; Massin 1996: 129). He described ‘a living language without a sharply delineated people’ as ‘a nonsense’, attacked the ‘fashion’, including among linguists, of ‘hypercritical doubts’ about the existence of an original Indo-Germanic people, and declared any area where a Teutonic archaeological type was found as ‘ancient Germanic territory’ (Sklenář 1983: 151; Kurnatowska & Kurnatowski 2002: 98; Kossinna 1909: 18-19). Kurnatowska & Kurnatowski argue that linguistic theories decisively influenced Central European pre-historians, and especially the culture area theory, which linked several archaeological artefacts, with a common overall style, in a single geographical and usually ethnic complex (Kurnatowska & Kurnatowski 2002: 97). Prehistory gained a more ‘vibrant patriotic resonance’ by defining the ‘national past’ territorially, documenting Teutonic and Slavic ‘settlement on the eastern borderlands’ and associating ‘specific linguistic groups and “races”... with prehistoric “cultural provinces”’ (Massin 1996: 127-28). This linking of *Blut* with *Boden* was central to ethnic nationalism. Archaeologists unearthed skulls and cultural artefacts together, encouraging them to integrate both in the same scheme, while physical anthropologists in university

*This programme was incompatible with fixist race. Eugenic public health projects to restore the nation’s biological base had to assume that environment and not just hybridisation influenced race (Sähleanu 1979: 33). The descent of fixed races focussed anthropologists meanwhile on the conjectured past rather than the eugenic future, while the de-ethnicised races of their new multi-race schemes had little more national relevance than the new sub-atomic particles.

ossaries were secluded from the cultural life of their subjects. Scarce archaeological evidence may also have encouraged prehistorical conjecture, drawing on ostensibly compatible evidence from other disciplines. Lixfeld argues that in interwar Germany, internationally isolated and stripped of colonies, most folklorists ‘probably’ had a ‘traditional and conservative’ focus on the continuity of indigenous folk culture (Lixfeld 1994: 12-13). They returned to the ‘nebulous’ romantic objective of the *Volksgeist* or folk soul, devoting themselves to ‘scientifically accurate’ study ‘of the roots of ancient Germanic spiritual life in order to elevate the contemporary “Germanic” folk custom’ (Lixfeld 1994: 13). Fully supported by the Nazi regime, they also wanted to extend research into a wide boundary strip of German ‘folk and cultural soil’ beyond the Reich’s eastern borders to support territorial claims on this Slav-occupied land (Lixfeld 1994: 20-21).

Germany’s changing political climate arrested ‘the liberal-humanitarian tradition of German anthropology at the turn of the century’*, reorienting its ‘research programs, methodology, paradigmatic postulates, and disciplinary ethics’ (Massin 1996: 80). In ‘the fervent context of the Great War’, anthropological prisoner of war studies relaxed inhibitions against discussing Europeans in the same dehumanised racial terms as colonial peoples, and eroded liberal anthropology’s insistence on the difference between physical races and cultural nations (Bunzl & Penny 2003: 20). After 1918, German anthropology turned to ‘a more narrow concern with the nation’s specific Others’, especially Jews and Slavs, thus making European race classification pre-eminent (Bunzl & Penny 2003: 15; Proctor 1988: 152). Martin’s ‘static, “morphological” conception of anthropology was replaced by a broader, synthetic vision’, combining ‘traditional physicalist’ with ‘psychological, racial’ concerns (Proctor 1988: 156). Franz Boas warned German academics in 1931 that recognising anthropology’s ‘main focus... must be’ culture rather than race, ‘will save the world, and Germany, much difficulty’, but in 1933, race became the basis not only of German anthropology but of state ideology (Proctor 1988: 138). This culminated in the concentration camp anthropological studies begun in 1942 by anatomy professor August Hirt. They measured...

...seventy-nine Jews, fifty Jewesses, two Poles, and four “Asiatics” (i.e., Russian Mongol prisoners)... (including the facial angle). They were then killed and their heads and skeletons became part of the university’s anatomical collection (Mosse 1978: 227).

*Andrew Zimmerman however claims Virchow’s neutral objective physical anthropology prepared the way for this, by dehumanised its subjects, including during the state-organised genocide in South-West Africa and in colonial institutions like hospitals and prisons (Bunzl & Penny 2003: 18-19).

Völkisch race biology

Social Darwinism was essential to the new right-wing race science. Darwin's argument that species were eliminated in mutual competition was interpreted as a stark warning by the many who saw contemporary politics as a struggle between biological classes or nations. MacMaster sees social Darwinism as 'omnipresent' in late nineteenth-century 'European higher culture', amid tense economic, colonial and military competition between nations, and acute class tensions (2001: 48). Just as liberal campaigns to abolish slavery and emancipate Jews were successfully concluded, the 1873 stock market crash, which 'inspired a strong anti-Semitic reaction,' and 'the Great Depression that lasted through to the 1890s' shook bourgeois confidence in social emancipation and free trade (MacMaster 2001: 16 & 21). The anti-Semitic wave convulsing 1880s-1890s France culminated with Lapouge and the Dreyfus affair (Mucchielli 1997: 12). By at least 1900, faith in emancipatory progress was giving way to feelings of 'disorientation... powerlessness' and 'anti-democratic cultural pessimism', exemplified by Spengler, and a powerful anti-liberal wave of nostalgia for disappearing traditional society (Bollenbeck 1999: 300-2). Militaristic nationalism, social conservatism and racism erected a tripod of mutually supporting ideas. The heyday of scientific racial classification from the 1870s to World War II, when it 'became a key ideological expression for new forms of virulent nationalism and for social groups in crisis', coincided exactly with the peak of European ethnic nationalism, geopolitical tension and the state's need for strong popular identification (MacMaster 2001: 5-6). The creative race solutions of conservative, nationalist scholarship, amplified by new mass communication techniques like public education and the press, legitimised the supreme moral value of aggressive nationalism, competitive colonialism, the unprecedented slaughter of World War I, anti-Semitism and established social hierarchies. Though culture largely defined nations, racism 'introduced a more absolute principle of closure', stamping foreignness 'indelibly... on the body', and excluding the foreign 'blood' of culturally native Jews (MacMaster 2001: 6; Lutzhöft 1971: 19). For eugenicists like Karl Pearson (1857-1936) in England, peoples and their associated states were organisms locked in Darwinian struggle, the anthropogeographer Ratzel making *Lebensraum* the object of this conflict (Köster 2002: 64; MacMaster 2001: 35 & 40). Nordicist anthropologists also saw politics as fundamentally biological. Gustaf Retzius said that 'centuries' of mostly silent and 'hardly perceptible' brachy-dolichocephal 'struggle' proved the worth of 'anthropology, and above all craniology', which alone had discovered it (Retzius, G 1909: 302). The Italian anthropologist Morselli believed 'every race aims jealously to dominate the others', leading naturally to race hierarchy (Pogliano 2005: 369-70). Lapouge was...

...convinced that in the next century people will slaughter each other by the million because of a difference of a degree or two in the cephalic index. It is by this sign, which has replaced the Biblical shibboleth and linguistic affinities, that men will be identified... and the last sentimentalists will be able to witness the most massive extermination of peoples. (Hannaford 1996: 293-94).

Eickstedt combined Ratzel's anthropogeography with Haeckel's social Darwinism, reducing 'all race history... finally... to just one formula:'

Struggle and victory of the faster development of the higher, biologically more valuable races of the north against the slower development, against the backward, less efficient races – Higher against lower, Worth against worthlessness! This struggle goes on. (Eickstedt 1934: 898)

From 1906, Haeckel's Monist League promoted his philosophy that individual worth depended on and was subordinate to race, and like Nietzsche, criticised Christianity's debilitating pacifism and individualism (MacMaster 2001: 39). The social Darwinist nemesis was 'degeneration', 'the physical and moral depravity of the lower orders, the decadence of the governing classes' and the general 'racial impoverishment of society', which a racially-oriented age attributed to race-mixing (Malik 1996: 109). The leading eugenicist Leonard Darwin warned in 1934 that without eugenic reform, white civilisation could go the way of ancient Rome (Kühl 1997: 66). Italians worried their ancient society was tired or even senile, falling behind vibrant, youthful northern Europe, while the latter feared the same about Russia or Japan* (Teti 1993: 188). Europeans feared race 'degeneration' through 'miscegenation' with colonial natives since at least the seventeenth century, but this became most acute with scientific racism (MacMaster 2001: 33). Blanckaert claims that even in the 1860s, race science 'was called upon to ward off the great fear of the degeneration of Western nations that Gobineau' and others 'spread through a wide public' (Blanckaert 1988: 49). While 'economic advance' and a strong 'positivist outlook' limited this fear to a minor current before about 1870, economic depression and the Franco-Prussian and Boer wars destroyed French and British optimism, leading to 'the elaboration and diffusion of a more radical and modern' racism throughout Europe (Malik 1996: 109-10; MacMaster 2002: 4). '[S]cientific and medical investigation' of degeneration concluded that a public social biology policy was vital, so Darwin's nephew Francis Galton in 1883 invented what he called eugenics 'to improve the human species' by controlling 'hereditary factors in mating' (Malik 1996: 109; Clark 1984: 138). Eugenics grew rapidly in influence in 1900-10, 'unquestionably stimulated' after 1900 by Mendelian genetics (its 'natural scientific basis'), and a 'climate of receptivity' that included Cesare Lombroso's

anthropological criminology, anthroposociology, and American worries about increased immigration since the late 1880s and the burden of poor, insane or criminal ‘defectives’ (Kevles 1985: 70-72). North America and Australia introduced immigration controls in the 1880s, some discriminating against southern and eastern European immigration on racial grounds. Eugenics drew on aristocratic concern for pedigree and popular familiarity with stock-breeding, campaigning to control human breeding and save pure wealthy white bloodlines from pollution (MacMaster 2001: 23 & 54-55). ‘Negative eugenicists’ like Haeckel, favoured enforced medical interventions and even euthanasia for some criminals, ‘insane and incurably feeble’ (MacMaster 2001: 42). Though later adopted in Scandinavia, several American states and Nazi Germany however, these ideas had little political influence before 1914. Galton’s positive eugenics, encouraging marriages of couples with no family history of hereditary illness, had more immediate success in Britain, France and Germany (MacMaster 2001: 42-43).

Racists and anti-racists alike see the French diplomat and extreme racial determinist Gobineau as the founder of modern political racism, with a huge influence on Nazi race ideology. In his bellicose and pessimistic philosophy of history, which ‘rigorously’ paralleled hierarchies of civilizations and races, race vitality was measured by ability to impose one’s culture on others, and was inevitably followed by miscegenation and degeneration (Todorov 1993: 134-39). Success came to Gobineau’s work in his old age, when he was befriended by the German nationalist composer Richard Wagner and Göttingen librarian Ludwig Schemann, who ‘combined ultra-conservatism, monarchism, anti-liberalism, nationalism, and Pan-Germanism’ and, influenced by Wagner and others, ‘Manichaeic anti-Semitism’ (Massin 1996: 129-30). Infatuated with Gobineau’s works, Schemann rescued them ‘from oblivion’ by translating them into German (Massin 1996: 129). Refused publication of these scientifically outdated tracts, he founded a fund-raising body in 1894, which at its 1914 peak, included several ‘royal highnesses, aristocrats, influential political figures, and university professors’ (Massin 1996: 130). In the climate of 1898-1901, Gobineau’s attribution of ‘many racial problems’ to ‘racial bastardisation’ ‘gained an increasingly sympathetic ear’, with the Pan-German League distributing his ‘newly translated works’, including ‘6,500 volumes... to German World War I soldiers ‘at the front (especially in hospitals)’ (Proctor 1988: 143). Gobineau and other mid-nineteenth-century racist philosophers of history inspired a flood of racist political works in 1890-1915, by writers like Grant and Lothrop Stoddard in America, and in Germany Ludwig Woltmann and Chamberlain[†], whose racist philosophy treatise, *Grundlagen des neunzehnten Jahrhunderts*

* Chapter VI (pp.414-15) examines how some Eastern Europeans exploited these narratives of a barbaric but youthfully dynamic east.

† Chamberlain, a British admiral’s son, had a cosmopolitan Franco-German-Swiss education, studied ‘Wagnerian philosophy and music’ in Dresden, married Wagner’s daughter and settled in Germany (Hannaford 1996: 348-49).

(1899), was hugely popular and influential (Eickstedt 1937b: 42 & 82; Hannaford 1996: 326-27 & 348-49). As biologicistic Social Darwinist thinking and international tension grew apace and 'racial ideas' 'greatly excited' the West, these writers attracted 'vast audiences', including Hitler, who said he got 'all of his ideas confirming the singular importance of race from the period' just before 1910 (Hannaford 1996: 326-27).

These theories were not scientific, though drawing selectively on anthropology, but their huge popularity built important bridges between scientific and public race discourse. Chamberlain observed that to 'be taken seriously' a race theory could not be based 'on the tale of Sem, Cham and Japhet... but only on a thorough and comprehensive knowledge of natural science', arguing from Darwin that race was real and historically determinant (Malik 1996: 84; Hannaford 1996: 349-50). Sympathetic anthropologists cited them as scientific sources, and from the 1890s, sought to prove their theories. Leading mainstream anthropologists, and of course Nordicists like Woltmann, welcomed the Nordicist anthroposociological physical anthropology of Lapouge in France and Ammon in Germany, which invariably found statistical correlations between social class and race (Woltmann 1903: 272-73 & 281). From Galton to interwar raciology and serology, such correlations became an everpresent anthropological routine. In an asylum studied by Demianowski, the Nordic criminally insane tended to suicide, Preslavics to murder, and Dinarics to arson and manslaughter (Rosiński 1929: 273). Another inspired researcher found people with blood group B 'took up to forty minutes' to defecate, while 'those with A blood took only a moment or two' (Mazumdar 1990: 201). Lapouge reintroduced Gobineau's race history of superior Nordic Aryans, his historical theories that social classes had different racial origins, and his warnings that miscegenation threatened racial vitality into anthropology, combining them with Darwinism and the modern European three-race classification (Hannaford 1996: 293; Mosse 1978: 58). Beddoe called himself 'a mute Ammonite before Ammon and De Lapouge' and Gustaf Retzius welcomed their research into 'the relative merits' of races and how state or social 'interference' could 'improve' races or 'prevent their degeneration', as a sign of recent recognition 'especially in Germany' of anthropology's political and social importance (Beddoe 1905: 220; Retzius, G 1909: 301). Field argues that interwar German Nordicism merely put the mystical and polemical ideas of pre-War writers like Penka, Wilser, Lapouge, Ammon, Woltmann, Chamberlain and Madison Grant, on 'a firm, unassailable' scientific base 'with more sophisticated "proofs" and data' (Field 1977: 524). Having welcomed racist politics and political theory as partner 'disciplines', Nordicist anthropology strove to popularise, regularly presenting research results in maps and diagrams that 'any lay person' could grasp 'at a glance' (Mazumdar 1990: 202). It developed an important 'aesthetic-erotic' aspect, for example in the language of physical race descriptions, like the 'extremely regular'

facial features of Knox's Saxon and 'solidity than of agility' of Ripley's Alpines (Lutzhöft 1971: 14; Curtis 1968: 71; Ripley 1900: 122, 124 & 129). Woltmann reduced beauty to geometry, claiming that bodies with proportions of 'the golden mean... the absolute measure of architectural beauty,' were most common 'in the white race' (Woltmann 1903: 65). As part of the 'increasingly popular' 1920s 'movement to celebrate "Nordic beauty"', Fischer and Günther judged...

...a contest sponsored by the publisher J.F. Lehmann, in which readers of Germany's popular anthropology journals (e.g. *Volk und Rasse*) were asked to submit photos of what they considered to be "the ideal Nordic head." (Proctor 1988: 151).

In the Nazi period, 'glossy photographs of contemporary Aryan blondes' replaced the 'sombrely Gothic covers' of *Volk und Rasse* (Proctor 1988: 158). This technique built on the tradition of illustrating anthropological textbooks with pictures of topless, tropical, teenage beauties, a rare opportunity in Western societies to legitimately view erotic images (Eickstedt 1934: 390; Rothenberg 1994: 155). Images were also used negatively, as when Eugen Fischer illustrated genetic mutation by juxtaposing pictures of a sheep and a Hottentot woman, both with protruding pillows of fat on their bottoms (Fischer 1936: 264).

Mendel rescues race

In large part, it was the rediscovery in 1900 by Hugo de Vries and others of the 1866 genetic theory of the Czech monk Gregor Mendel, and a 'changing relation to Darwinism', that saved German physical anthropology from vanishing by 1910 (Massin 1996: 114; Orel 1997: 652). Mendel's demonstration that 'independent, randomly combining genes' determined inherited features led 1940s biologists to discard the race concept altogether. However studies 'on the inheritance of single' "'racial" traits' like eye colour, which began in 'Anglo-Saxon countries' in 1910-11 as the 'core scientific methods' of eugenics, initially seemed to prove the 'genetic nature' of the 'fragile' types statistically reconstructed from anthropometric data, giving them new scientific solidity (Wiercinski 1962: 11; Massin 1996: 123-24; Kühl 1997: 38). Studies 'since the 1880s, which indicated that the various European races had differential physiological resistances to tropical diseases', and the discovery of heritable blood groups, helped convince individualist anthropologists that races were something real (Massin 1996: 124). Raciologists of the four main anthropological schools of 1930s Europe, led by Vallois, Czekanowski, Eickstedt and Bunak, shared a 'certainty of the existence of race', as 'an irreducible zoological unit, like the simple bodies in a chemical composition' (Pogliano 2005: 45 & 492). Eickstedt and Czekanowski, the very

influential German and Polish raciologists*, and others in Poland, the U.S. and Argentina developed the individualistic race concept, in which the Mendelian phenotype of a race, its complex of observable traits, could be inherited as a block, or as a relatively unstable genetic mix of two types (Wiercinski 1962: 13; Coon 1939: VIII: 4; Schwidetzky 1935: 154). Czekanowski's Lwów school was convinced that certain factors counteracted even 'intensive' and protracted cross-breeding to preserve race types (Czekanowski 1928: 341). Crossing initially created 'mixed forms', but 'the affinities of the racial characteristics' led the 'pure' races 'to reconstruct themselves' in the next generation, or by 'the obscure relationship between genes', form a stable hybrid (Schwidetzky 1935: 154; Malinowski & Wolański 1985: 50; Wiercinski 1962: 13; Czekanowski 1928: 341). Czekanowski adapted a 'law of type frequency' in 1928, from Bernstein's 'serological frequency law', to prove the Lwów school's European 'race elements' 'were correctly identified' and inherited through single 'Mendelian' genes, 'something like' blood groups (Czekanowski 1928: 342 & 345; Malinowski & Wolański 1985: 50; Schwidetzky 1935: 155). This rule predicted that:

$$(a+e+l+h)^2=a^2+2ae+e^2+2ah+2eh+h^2+2al+2el+2hl+l^2=1$$

where a, e, l and h were the proportions of the four primary races in a population, values like '2ah', those of the six hybrids, and the number 1, the total population (Schwidetzky 1935: 155). Czekanowski said this calculation produced results very near 1 for several European study populations.

Nordicists like Walter Scheidt and Reche 'and a growing number of other anthropologists agreed' that genetics, by proving 'that physical and mental characteristics alike' were inherited, would find the 'fixed forms behind' volatile culture (Proctor 1988: 147). They believed that since anthropometry had failed, genetics gave anthropology a second chance to fulfil Edwards's dream of subsuming culture and history within race biology (Proctor 1988: 147). They revived virtually the whole polygenist race concept, including race psychologies, the stress on race-crossing, primitive race purity and harmonisation, maintaining positivist dogmas of most Europeans being racially mixed and races neither superior nor inferior, and rarely departing from Deniker and Ripley's races, though they adapted their histories, relationships and psychology (Proctor 1988: 149-52). Eugen Fischer, Nazi Germany's leading anthropologist, made his name with a 1913 Mendelian study of Dutch-Hottentot miscegenation (*Bastardierung*) in Africa, which judged it 'very probable' that genes determined 'the different mental efficiency' of races (Proctor 1988: 144-46). By 1936, partly

*Curiously, both were forced west after 1945, as the USSR and Poland annexed Lwów (Lvov) and Breslau (Wrocław) respectively.

backed by the more moderate Eickstedt, he confidently asserted this for European races too (Fischer 1936: 283). Mendelian individualists like Czekanowski, Eickstedt, Günther and Fischer generally believed the initially pure and separate European races began extensive migrations, conquests and interbreeding in the Neolithic (Fischer 1936: 280-81; Czekanowski 1967: 54). They revived the nineteenth-century idea that ‘the main factor’ forming ‘new races in recent periods’ was very gradual race mixture ‘over a sufficiently long time,’ harmonising ‘quite different primary components’ of a group under local environmental influence, like components of an aged whiskey, into a stable ‘morphological and biological’ ‘average type’ ‘between the extremes of the’ parent types (Wiercinski 1962: 9 & 13; Beddoe 1912: 38-40; Eickstedt 1934: 13 & 366; Czekanowski 1967: 56). Nordicists used the positively-viewed *harmonisation* process to sanitise race-mixing, which Europe’s physical diversity, including local variations of Nordics or Germans made unavoidable, and polygenist tradition encouraged (Wiercinski 1962: 13). Race anthropologists and popular science writers often warned against miscegenation with true inferiors however, claiming only mixtures between groups of ‘related or of equal worth’ could be harmonious (Woltmann 1903: 262; Kühl 1997: 67).

Later nineteenth-century positivist anthropologists adapted polygenism to Darwinian evolution by arguing that lengthy ‘segregation’ through geographic isolation, and adaptation to specific local environmental conditions formed the original pure-race ethnic groups (Wolpoff & Caspari 1997: 97; Czekanowski 1948: 16-17). Virchow and apparently Beddoe believed races emerged as physiological responses to pathological changes in descent, stimulated by the local environment of each ‘ethnological province’ (Virchow 1950 [1896]: 179 & 182; Beddoe 1898: 170). Eickstedt traced an early nineteenth-century tradition linking race with the wider bio-geography of zoological ‘space-life-units [*Raum-Lebens-Einheiten*]’, but said twentieth-century classifiers like Stratz, Biasutti, Bryn, Griffith Taylor, Lebzelter and Eickstedt mostly represented this trend, stressing race creation through long isolation (Montandon 1933: 99; Eickstedt 1937b: 72 & 83). Drawing on Ratzel’s *Lebensraum* concept and Agassiz’s observation of parallels between ‘the geographical distribution of animals’ and human races, Ripley, Stratz, Bryn and Eickstedt believed the original ecological ‘nutrition and living-spaces [*Nähr- und Lebensräume*]’ of races, linked with ‘animal, vegetable and cosmic factors’, conditioned their racial psychology and preferred living environments (1937b: 40, 61, 72, 75 & 78). Race migrations were judged defensive or offensive by whether they led into favourable terrain (Eickstedt 1937b: 72). Klimek said research showed ‘anthropogeographic environments’ affected race ‘reproductivity and ability to realise maximum physical and mental benefit’ (Klimek 1939: 35). Eickstedt praised Ripley for fully and ‘consciously’ accepting these ‘spatial-economic’ influences on ‘the racial facts’, adopting his three

European races because they corresponded to ‘three climatic and geographical zones’ from north to south in ‘the greater European space’ (Eickstedt 1934: 337; Coon 1939: VIII: 4). Eickstedt, Taylor and others used ecological zones to identify ‘a dynamic system’ of migrating and overlapping ‘race layers’, strata of successively improved races from the Himalayas, which drove darker, inferior predecessors into the extremities of Africa, south India and Australia, tying ‘all expansion and movement of people... to space [*Raum*]’ (Eickstedt 1937b: 61, 73 & 75).

Just like nineteenth-century philology, right-wing neo-romantic race science was torn between pessimistic fear of degeneration and confidence in evolutionary progress. Interwar classifiers like Eugen Fischer, Fritz Lenz and Eickstedt in Germany and Georges Montandon in France, commonly applied the individualist race concept to evolutionary hierarchies of advanced and backward races (Bowler 1997: 370; Proctor 1988: 152 & 156). Most explained race origins with Hugo de Vries’s genetic theory of sudden mutations through heterochrony, the acceleration or slowing down of aspects of embryonic development, and Haeckel’s application of natural selection to entire races rather than to individuals, though Montandon stressed Daniele Rosa of Modena’s 1909 ‘ologenic’ theory (Wolpoff & Caspari 1997: 123, 130 & 134; Bowler 1997: 370; Montandon 1933: 95, 98 & 107-8; Eickstedt 1934: 16-17; Pullè 1939: 160; Coon 1939: VIII: 4; Blanckaert 1988: 51). The idea that embryonic development recapitulated conjectured evolutionary development dated from the early nineteenth century (Pullè 1939: 160; Montandon 1933: 102). All these theories assumed an inexorable internal drive from simple to complex organisms, in which more highly evolved branches repeatedly split off from a conservative trunk (Pullè 1939: 161; Wolpoff & Caspari 1997: 123 & 133; Montandon 1933: 95). Montandon’s ologenesis saw humanity as originally a complex mixture, which separated out into ever purer races, in the manner of mixed liquids of different densities (Pullè 1939: 161). Simpler races like the pygmies, Negroes and Mongoloids, incapable of further development, split away earliest from the primitive human trunk into evolutionary dead ends, while as the latest branching, progressive Europoids continued to split into still more complex descendants (Pullè 1939: 162). Wolpoff and Caspari say ‘[v]irtually all’ anthropologists until the 1930s or 1940s accepted either this orthogenecist idea of evolution by progressive internal drives, tracing it to 1860s polygenist accounts of how pre-human ancestors of different races evolved common human features, or else to neo-Lamarckianism (Wolpoff & Caspari 1997: 121-23). Though most scientists quickly accepted Darwin’s ‘principle of common descent’ and saw how ‘survival of the fittest’ could ‘get rid of inadequate or harmful variations’, they rarely understood ‘until the modern evolutionary synthesis in the 1940s unified Darwinian selection and genetic theory’, how natural selection could ‘create new ones’ (Wolpoff & Caspari 1997: 121). Revived as a rival evolutionary theory to Darwinism, neo-Lamarckianism rejected natural selection, arguing

that environmental influences on parents affected the inherited features they passed on to children. It was most popular in France* and among several older liberal German anthropologists because it represented...

...progress and hope, while neo-Darwinism implied pessimism, conservatism, or the inhuman use of biological “selection” to improve races... Neo-Lamarckianism transformed the “racial problem” into an “illusion” that could be dissolved through appropriate cultural and social integration. (Massin 1996: 125)

Raciology

Mendelian individualist anthropologists, especially in interwar Germany and Poland, developed raciology, a set of techniques to identify the entire set of races in a population and their proportions, and diagnose the racial identity of individuals (Necrasov 1941: 4; Skjerl 1936: 285). Raciologists insisted that races must be entire complexes of characteristics, criticising the older but still common habit, encouraged by competition between taxonomic criteria and popular Nordicist adulation of tall stature, blond hair or long-headedness, of judging race from ‘the geographic variations of a few isolated’ traits (Czekanowski 1948a: 27; Necrasov 1941: 4-10; Rădulescu 1941: 264; Broca 1878: 192). Though older anthropologists like Pittard warned that race should not be judged from ‘simply one’ characteristic, they were sceptical that features bundled together in races[†] (Necrasov 1941: 6-8). Raciological diagnosis began by measuring about a half dozen body parts, using the instruments, techniques, scales, indices and race taxonomies developed over a century of anthropometry. Collecting the same strictly limited set of measures for each subject, theoretically ensuring fully comparable results, was a key innovation, facilitating large scale surveys. Rădulescu considered racial diagnosis ‘impossible’ if ‘all the measures possible’ of a subject were taken, as many earlier morphological anthropologists did, lacking the restraining goal of race synthesis (Rădulescu 1941: 246 & 261). Eickstedt’s widely used raciology proposed the cephalic, face and nasal indices, stature, and hair, skin and eye colour as diagnostic criteria, based on anthropological consensus about what features were racially significant (Papilian & Velluda 1941a: 629; Necrasov 1941: 80; Făcăoaru 1936a: 9 & 22). As usual, they were largely judged by evolutionary stability and resistance to environmental influence, with certain features also seen as indications of evolutionary progressiveness, automatically incorporating a racial hierarchy of ‘valuation’ into raciology (Făcăoaru 1936a: 9-10; Eickstedt 1937b: 82-83). Measurements for each subject were then

* Scientific materialists like Letourneau, Hovelacque and Mortillet preferred it to fixism (Dias 1991: 56).

[†] Pittard concluded from the mix of long and broad skulls at one site for example, that ‘the Romanian “race” is not homogenous’ and in 1926 saw small-statured populations straddling the Carpathians as suggesting a migration (Pittard 1903: 36; Pittard & Donici 1926: 66-68).

compared with a standard range of values established in advance for ‘a limited and strictly defined quantity’ of races, and allocated to the race it best resembled (Făcăoaru 1939: 29-30; see Fig. 2.6).

A vital innovation of Deniker was the closed comprehensive system of from five to a dozen European races, which raciologists interpreted as the continent’s total set of Mendelian racial genotypes (Majewski 1905: 164-65). Inventing new races became a grave undertaking, challenging the existing order. Sponsors argued that new races, despite limited geographical or somatic niches, were isolated in sufficiently large areas and for long enough to make them stable, well-defined and adapted to local environmental conditions, while critics dismissed them as disharmonious recent crossbreeds (Necrasov 1941: 79). Classifiers resisted race schemes cluttered with local variation, dismissing proposed new races as merely ‘local mix-types’, but incentives to create new races included kudos for the researcher who bestowed posterity with the anthropological equivalent of a new planet or chemical element, the patriotic advantage of attributing national genius to a local race, and the relief of ascribing local physical peculiarities to racial purity rather than shameful bastardisation (Skjerl 1936: 285). Sponsors could claim their new race was equivalent to types identified by major theorists around Europe, and then propose an ethnogenesis backed by biological reasoning (Necrasov 1941: 84). Necrasov for example argued that her blond Dinaric ‘variant’ was a ‘well stabilised’ local form of the brunette Dinaric, probably caused by mutation rather than ‘a very ancient race mixture’, because it did not resemble existing blond races (Necrasov 1941: 85 & 133). Other theorists like Lebzelter further legitimised proposed races by giving them names.

Faced with mounting evidence against absolute fixity of any one physical feature, Deniker and the raciologists abandoned the ‘stiff schema’ of hierarchical taxonomic criteria*, deciding that none were ‘exclusively primordial’ and giving them ‘differential-diagnostic worth’ in different circumstances (Montandon 1933: 72-73; Eickstedt 1937b 55, 71 & 74; Stolyhwowa 1937: 36 & 39). One population might be divided first by pigmentation, then cephalic index and finally stature for example, and another by a different order of traits, producing very different race breakdowns. All raciologists, inspired by Mendelian mathematics, aspired to ‘more exact measurement’ in defining and diagnosing races (Skjerl 1936: 285). Positivist anthropometry regularly filled pages with numerical tables, but Carl Pearson’s turn-of-the-century biometric school in London first fed them through complex statistical formulae (Fee 1979: 430-31; see Fig. 2.7). Raciology still however split along the old rift between skilled holistic description and objective mechanical quantification. Eickstedt’s popular *Ganzheit* (totality) raciology advocated ‘a skilful combination – naturally not

* Stolyhwo’s wife, the anthropologist Eugenia Stolyhwowa, singled out British biometricians like Pearson for this criticism; a covert dig at Czekanowski, who loudly proclaimed his debt to them.

just metric – of characteristics’, including descriptive ‘morphological’ features like ‘the general aspect’ or ‘the form of the occiput, forehead, chin, nose, hair, etc.’, ‘inheritance biology and descent, form, psyche, space and number, even’ racial worth, placing ‘the living natural totality itself in the centre’ (Eickstedt 1937b: 82-83; Făcăoaru 1936a; Necrasov 1941: 4; Papilian & Velluda 1941a: 618-619). He identified precursors to his approach from the Enlightenment to Topinard (1888), Quatrefages (1878) and Deniker, who strove ‘towards natural totality’ by combining measurement with descriptive ‘morphological features’ (Eickstedt 1937b 55, 71 & 74). Rudolf Pöch in Vienna also advocated statistical analysis, but recognised the value of hands-on anthropometric experience, in which the researcher developed a feel for which traits went naturally together in a population (Pöch 1917: 79). For Montandon, this was as much art as science. He identified races by selecting the differentiating physical characteristic ‘that strikes us most violently’, such as hair colour for his blonde race (Montandon 1933: 72-73).

It is thus the feel [*doigté*], almost the feeling [*sentiment*], that must guide in the appreciation of characters, but if one has a sensitive [*fin*] feel... one manages to place a racial group better than if one uses a rigid method only (Montandon 1933: 73).

The eclecticism of race history worked better with this descriptive approach than with quantification. Raciologists like Eickstedt used race history to define Deniker’s complexes of observed traits as Mendelian races. Žejmo-Žejmis called Eickstedt ‘more anthropogeographer and ethnologist than anthropologist’, most at home with ‘dynamics of historical processes’ but weakest in statistics* (Žejmo-Žejmis 1935: 86 & 89).

The ‘authoritative anthropologists of the day’ ignored or criticised Kollmann’s innovative craniology, like Sergi’s, as ‘arbitrary’ and ‘artificial geometrical combinations’ of indices (Czekanowski 1967: 43; Beddoe 1912: 40; Deniker 1897: 126; 1904: 182; Massin 1996: 113). However ‘statistical craniological method’ was the shape of things to come, Czekanowski calling Kollmann’s ‘one of the most important achievements of nineteenth-century anthropology’ (Czekanowski 1967: 43; Massin 1996: 113). Instead of imposing *a priori* classification criteria on a population, classifiers used the new science of statistics to isolate groups of traits which bunched

* Prehistoric raciology, offering very few skulls, allowed far less rigorous statistical standards of evidence. Eickstedt’s student Necrasov demanded very large-scale surveys of the living and avoided non-anthropometric data, but largely hypothesised early race history from object archaeology (Necrasov 1941: 113). From one Romanian arrowhead, typical of a prehistoric French period ‘habitually’ linked to ‘a *Protomediterranean* race’, she inferred this race in Palaeolithic Romania, and largely from artefacts at one site, deduced that Asian brachycephalics introduced painted pottery (Necrasov 1941: 112-14). A Polish site with racially Mediterranean bones, and ceramics suggesting transition from the earlier Danubian culture to painted pottery, suggested that painted pottery people absorbed or mingled with strongly Mediterranean predecessors (Necrasov 1941: 114).

together in nature, claiming these represented Mendelian genotypes and using them in raciological diagnosis (Pöch 1917: 79; Stolyhwowa 1937: 37). Eickstedt attributed ‘atomistic’ ‘numerical-race systems’ to ‘the extraordinary boom of chemistry and physics’ riding ‘the overwhelming successes of technology’ (1937b: 86). They usually made numerical measurements of a limited number of body parts, divided the resulting indices into two or three sections, which were identified as racial factors, and then combined the groups resulting from different indices to identify racial groups. Eickstedt identified numerical-race classifications from 1801, including Retzius (1842), Kollmann (1881) and the equally ‘artificial’ Sergi (1892), but correlation studies became more common ‘after 1910’, drawn into anthropology from ‘mathematically and atomistically adapted neighbouring disciplines’ (Eickstedt 1937b: 57 & 86; Schwidetzky 1935: 169). They culminated in the baroque analyses of Czekanowski’s Lwów or Polish school, deriving its races, ‘just like chemical elements’, from precise ‘mathematical statistical’ ‘scientific analyses’, with ‘the aim of’ raising ‘physical anthropology to the level of an exact’ ‘natural science’ (Czekanowski 1967: 20 & 23; Kaszycka & Strkalj 2002: 330; Eickstedt 1937b: 77; Bielicki, Krupinski & Strzalko 1985: 9). Lwów school researchers broadly agreed on the features of their unorthodox race set, boasting that their method’s ‘mechanicality’ put it ‘outside subjective brackets, or *a priori* suggestions and impressions’ (Żejmo-Żejmis 1933: 57; Stojanowski 1924: 688-89 & 760). Strictly quantitative analysts felt Eickstedt’s descriptive features just made ‘comparison of data much more difficult’, and even a disciple used the facial index (the width to length ratio) to approximate interesting facial features like chin shape as there was ‘no means’ to record them precisely (Papilian & Velluda 1941a: 618-619; Făcăoaru 1936a: 10). Eickstedt meanwhile accepted that with enough indices, numerical races resembled nature, but like Coon, criticised Czekanowski’s analytical equations and symmetrical geometric taxonomy as ‘manifestly’ too pat, regular, stiff and mathematical, ‘to agree fully with nature’ (Coon 1939: VIII 6: 5; Eickstedt 1937b: 81 & 86). Eickstedt said the choice and relative weighting of measures and divisions of measurement scales were ‘clearly subjective’, arbitrarily slicing limited and unrepresentative segments from the continuous range of natural diversity (Eickstedt 1937b: 79 & 81). His students warned that ‘purely mechanical’ statistical studies could not distinguish ‘sufficiently defined’ types from ‘the innumerable’ mixtures and varieties (Necrasov 1941: 4). Czekanowski however proposed his statistical method as a direct route to the natural phenomena which traditional researchers ‘intuitively’ identified ‘through exact morphological observation’ (Czekanowski 1928: 353 & 356). Claiming his scheme was ultimately based on ‘the well-known types from the anthropological literature’, he said his primary races were equivalent to the ‘three to four races’ which ‘an experienced anthropologist’ could ‘without difficulty recognise’, but by distinguishing them from secondary races, he and Deniker reconciled three-race and post-Denikerian multi-race systems (Czekanowski 1928: 336-339; 1956: 18; Wiercinski 1962: 14; see

Fig. 2.8). He surmised that local morphological observation sometimes failed to pick up certain of his secondaries, because ‘deeper biological causes’ sometimes blocked or blurred their emergence, whereas his statistical method highlighted the underlying genetic movement, even if not openly brought to fruition (Czekanowski 1928: 343).

Purely mathematical pattern-finding appeared simply beyond the technology of the day. Deniker and in interwar Poland, Czekanowski and his rival Kazimierz Stołyhwo used standardised statistical methods to decide hierarchies for each race, but also sought patterns by eye in graphic representations of numerical data. Deniker and others used a cartographic racial analysis technique ‘utilized with increasing frequency by anthropologists’ since the mid-nineteenth century (Wiercinski 1962: 2; Piontek 1997: 827; Czekanowski 1920: 49). European race classifiers seized on his ‘inferential’ geography, which seemed to demonstrate objectively that groups of physical traits bunched together in their natural geographical distribution (Massin 1996: 113). He mapped ‘the spatial distribution’ of different physical traits, to find ‘the areas where their combinations are most heavily concentrated’ (Wiercinski 1962: 2; Czekanowski 1920: 49). On each distribution map, Deniker highlighted ‘regions where certain modalities’, like tall stature or brachycephaly, appeared most clearly, and by superimposing the maps, these modalities grouped ‘themselves into a small number of well localised combinations,’ indicating ‘the undoubted existence of distinct races’ (Deniker 1897: 125). These European combinations ‘were not the effect of chance’, he claimed, because if three traits were chosen for analysis, a random distribution would produce 27 separate combinations, increasing exponentially with added characteristics, whereas in his results only ‘*six combinations*’ stood ‘cleanly’ out and four more ‘less obviously’ in all Europe (Deniker 1897: 125). The strong empirical tendency of these character traits to group together suggested their combinations were racial groups. Anthropologists used two methods to decipher a region’s racial composition from measurement data: averages and graphic seriation. Deniker used the simpler method of calculating ‘averages and percentages’ for height, cephalic index and so on in each district*. He understood each geographical area as racially mixed, but unlike earlier race cartographers, used a fine grid of territorial divisions to ensure minority races were represented on his map by scattered local concentrations within the area of a majority race (Deniker 1897: 114-15 & 125; 1904: 202). The alternative technique of ‘seriation’, dating from the 1850s or earlier, plotted each measure or index from original survey data on a graph to tease out cohabiting races (Grattan 1858: 245-46). If the scale of cephalic index values was plotted on the X axis, the Y would measure

* This method, commonly used since the positivist period, was controversial (Dias 1989: 206; Giuffrida-Ruggeri 1918: 81-83 & 95; Keane 1896: 151). Citing Aristotle’s premise that scientific laws never captured ‘the individual’, Stołyhwo claimed it ‘abolishes’ anthropological differences ‘obtained by measurements and... individual indices’ (Stołyhwo 1926b: 150-51). Czekanowski however saw it as imprecise but fine ‘for a general appreciation’ (Czekanowski 1920: 49).

the number of individuals with each CI value (see Fig. 2.9). Two separate peaks in the frequency of a measured feature suggested two physically distinct populations in the district, while a single peak suggested racial homogeneity. Ripley explained peaks in his cephalic index graph for Italy as separate races, by superimposing simpler graphs for racially more homogenous provinces like Sicily and Lombardy (1900: 114-117). Deniker agreed that 'we must... seriate' skulls, but gave examples of whole national or ethnic group populations rather than his small mapping regions, which were probably impractical to seriate without computers (Deniker 1971: 58-59).

Czekanowski and Stołyhwo's statistical methods

Czekanowski's '[m]athematical segregation' of anthropometric data 'into groups of individuals resembling one another' was the *nec plus ultra* of quantitative race diagnosis, and is still valued for pioneering statistical techniques, including the very 'first method of cluster analysis' (Wiercinski 1962: 14; Bielicki, Krupinski & Strzalko 1985: 7). In 1909, the 26-year old Czekanowski proposed his first statistical procedure, the 'average distance' (*Durchschnittliche Differenz* or DD) between racial types (Bielicki, Krupinski & Strzalko 1985: 7). The first and principle use of this method was to sort skulls into anthropometrically similar groups, identified as real natural Mendelian race types because empirically derived from observing nature and objective statistical analysis that grouped skulls by 'entire sets of distinctive' mutual resemblances (Stojanowski 1924: 676 & 761; Bielicki, Krupinski & Strzalko 1985: 8-9; Wiercinski 1962: 13). It was also used to find the difference between average measures of different population groups, and therefore their racial relationships and for 'statistical investigation of ethnographic, linguistic, experimental psychological and even economic questions' (Schwidetzky 1935: 140-41). Czekanowski's student Żejmo-Żejmis used DD to group countries according to four sets of social and economic statistics (Żejmo-Żejmis 1933: 58-59). He started by working out the degree of difference between countries, according to the four characteristics. Starting with Finland, the first country on his list, he subtracted its four statistics from the equivalent figures for each of the other countries, to find the degree of inter-country difference for each characteristic. He added up, for each country pair (ie. Finland-Germany, Finland-Switzerland, etc.), the differences for all four characteristics and then divided the result by four, to get the overall average difference (the DD) between countries. Finally, he ranked Finland's relationship with the other countries by degree of statistical similarity between them. Poland had rank order 1 for instance, because most similar to Finland. This procedure was repeated for each other country as it had been carried out for Finland, producing a statistical table showing the degree of difference between each country in the study (see Fig. 2.10). To 'distinguish clusters of metrically similar' countries from this grid of statistics, the numerical table was transformed into 'the famous Czekanowski diagram' of differently shaded boxes, which became 'virtually a

trademark' of the Lwów school (Schwidetzky 1935: 141; Bielicki, Krupinski & Strzalko 1985: 7-9; see Fig. 2.11). Darker tones represented greater inter-country similarity (Żejmo-Żejmis 1933: 59). The trick was to swap around lines and columns of the grid, each representing individual skulls, countries etc., so that each was beside those which most resembled itself, creating segments of the diagram's diagonal with 'the most compact groups possible' of the dark shadings (Stojanowski 1924: 677-79). Creating this diagram 'is not always easy' admitted Żejmo-Żejmis, likening it 'to a game of chess', so Czekanowski and his students started it by choosing, for each skull (country etc.), the five or so others most similar (Żejmo-Żejmis 1933: 59-60; Stojanowski 1924: 677).

Lwów school studies used this technique to set typical ranges of anthropometric characteristics for each type, with results which despite criticisms from Eickstedt's students, Stojanowski argued were close enough to confirm one another (Stojanowski 1924: 688-89; Schwidetzky 1935: 150-52). Different Lwovians gave an average cephalic index of 80.4, 80 and 82-84 for the Dinaric type for instance, despite using slightly different statistical methods (Stojanowski 1924: 688 & 762). The statistically identified types were also found to have typical descriptive features, like prominent brow-ridges or particular forms of skull sutures (Stojanowski 1924: 762). Schwidetzky said Czekanowski was forced to improve the DD method in the late 1920s by criticisms from Stołyhwo and Stanisław Poniatowski that as some anthropometric measures were denominated in millimetres and others in centimetres, adding them together was like judging wealth differences between farmers by adding together all their farmhouses and heads of cabbage (Schwidetzky 1935: 137-38). In Żejmo-Żejmis's country comparison this arbitrary factor decided the relative weight of characteristics. When inter-country differences in death rates and international trade per head of up to 5.4‰ and \$197 respectively were simply added together, the latter became almost irrelevant (Żejmo-Żejmis 1933: 58). Czekanowski therefore switched by 1930 from measurements to anthropometric indices, or the proportions between measures (Schwidetzky 1935: 137).

Critics also noted however, that certain indices were better for distinguishing races, especially as some, like face and head shape, were believed to hang together naturally irrespective of race (Schwidetzky 1935: 138). Czekanowski therefore began from 1926 to use the 'rank order numbers' method, developed by Pearson in 1907, registering the difference, not between traits 'of two individuals, but rather the direction of its shift away from the group average' (Schwidetzky 1935: 139; Czekanowski 1928: 340). He first calculated for his racially mixed study population the averages of seven different cranial indices (cephalic index, nasal index, orbital index etc.) (Czekanowski 1928: 340). Proposing the divergence of races from these averages as a measure of their distinctiveness, he listed for each index, the degree of difference between the overall group

average and the typical values of two races being compared, the Alpine and Dinaric, which the Lwów school had established through trial and error (Czekanowski 1928: 336 & 340). Now instead of merely adding together the divergences for each index, he listed the order of how far each of the seven traits differed from the group average (Czekanowski 1928: 340). For the Dinaric, for example, the length-height index (3.9 above the group average) was number one in the order, number two was the cephalic index (2.6 above the average), and so on down to the orbital index (4.6 *below* the group average) (Czekanowski 1928: 340). The next column of Czekanowski's calculation table was vital, comparing these rank orders for the two races to assess how much their particular distinctiveness from the average matched or clashed. The Fronto-Parietal index was number seven for the Alpine race (i.e. the lowest respective to the mixed-race group average) and number four for the Dinaric, so the inter-racial difference was given as three. The cephalic index was meanwhile in second place for both races, so Czekanowski entered a zero for the difference between them. Czekanowski enhanced this rank order-difference by squaring it, added all the indices for each pair of races together to get the overall degree of difference between them, and fed this into a complex formula developed by English biometric eugenicists in 1888-94, to produce a conveniently inter-comparable 'Coefficient of Racial Likeness' (Czekanowski 1928: 340; 1967: 23-24; Schwidetzky 1935: 139; Morant 1928: 306). Czekanowski's student Klimek argued that Czekanowski's two 'individualising processes', the similarity method (*Ähnlichkeitsmethode*) and differential diagnosis method, plus Pearson's Coefficient of Racial Likeness, all produced 'practically identical results from very different expenditures of effort' (Klimek 1932: 23). Czekanowski's 'law of the anthropological arithmetic mean' (1930), a formula derived from blood group genetics to test whether Lwovian racial types were true racial subdivisions of a population sample, compared its actual average cephalic index with that produced by its hypothetical component races, achieving the 'complete, classic form' of his theory (Bielicki, Krupinski & Strzalko 1985: 9; Malinowski & Wolański 1985: 51; Wiercinski 1962: 13; Czekanowski 1967: 20; Schwidetzky 1935: 155).

In 1924 Kazimierz Stołyhwo proposed a rival statistical typology system to Czekanowski's, the *coupes de correlation* method, later developed further by his Cracow school and the Russian anthropologist Ivanovich (Stołyhwo 1926b: 151-52; Czekanowski 1948a: 28; Stołyhwowa 1937: 36-40 & 51; Schwidetzky 1935: 160-62). Like positivist classifiers, he devised hierarchies of taxonomic traits, but unlike them, he isolated those most appropriate for each specific population, by identifying its 'most striking' and common 'morphological characteristics'. Stołyhwo chose features forming isolated peaks on the seriation graph of his study population as taxonomic criteria, arguing that those strung out fairly evenly along their entire range of values indicated non-racial

individual variation. In response to Czekanowski's criticism in 1925, the Cracow school borrowed a correlation method from Tylor. They first divided the range of values of each characteristic into segments, defined by how the values clustered empirically within the study population, rather than arbitrary *a priori* divisions like brachycephaly and dolichocephaly. If most subjects were either 156-164cm or 167-174cm tall, they divided the scale into two central categories for these main clusters and two flanking categories containing the remaining exceptionally tall or short individuals. Symbols representing these categories became a graphic signature of the Cracow school. A circle represented the highest values in a scale, followed by a hexagon, square and triangle. Rows of these symbols represented the features of each individual in the study (see Fig. 2.12). This system, said Stołyhwo, allowed easy identification of 'the predominance of a certain direction' of evolutionary development in both the type and population. Each category of each taxonomic trait of the study population was correlated with the other traits, and the relationships between them recorded in a table using the geometrical symbols (Stołyhwowa 1937: 42-43). Stołyhwowa gave the example of comparing the second highest category of upper facial index (UFI), represented in her demonstration sample by eight individuals, with the cephalic index (CI). If four of this eight belonged to the lowest CI category, represented by a triangle, three to the next most long-headed (a square) and finally one subject to the most brachycephalic category (a circle), the comparison would be represented by a large triangle containing a smaller square with an even smaller circle inside. The finished UFI grid table would have a column for each UFI category, a row for each other trait (CI, stature etc.), and composite symbols like the one described in each box*. The rows were then ordered by each trait in turn, to see which other features correlated with it, so that an arrangement by cephalic index class might suggest brachycephaly correlated with a medium 'or broad face, average stature and medium... or more rarely narrow nose' in the study sample (Schwidetzky 1935: 162).

Comparing taxonomic traits divided the study sample into subgroups. Stołyhwowa's UFI versus stature comparison produced six subgroups for example, each with a different combination of stature and UFI category (Stołyhwowa 1937: 48 & 53). To test whether these groups could be races, they were compared with seriations of the remaining traits. If a group corresponded well with a limited range of every other trait, forming a population with distinct and uniform physical attributes, it could be a race. Groups of traits that correlated particularly consistently were 'principle types', whose 'reality' was 'checked again' with further correlations (Schwidetzky 1935: 162). The final vital step applied a mathematical method from genetics to work out whether these groups of

*Stołyhwowa considered it even better to create new seriation graphs for each comparison, instead of composite symbols.

category combinations were positively correlated, recording this on a grid of the categories of each pair of taxonomic traits (i.e. stature, C.I., etc.) (Stołyhwowa 1937: 41-44 & 47). Positive correlations meant the prospective racial groups tended 'to coexist'. This linkage test could also be applied before the correlation analyses, to indicate which showed most promise.

Serology

The twentieth century produced new measurable inherited characteristics, like blood-group, IQ and Nicola Pende's concept of constitutional type, which despite their complexity, were often seen as determined by simple Mendelian inheritance (Gould 1981: 162). Italians like Viola and Pende specialised in constitutional studies, judging racial filiation from 'physico-chemical, endocrinal and neuro-psychological' data (Pogliano 2005: 34-35). Karl Landsteiner of Vienna meanwhile discovered blood groups in 1901, and by 1918, their strong regional patterns of distribution and, unlike skeletal complexities, proven Mendelian inheritance made them appear ideal anthropological race markers, while it was 'easy' to test large populations (Manuilă, Al 1943: 7; Popoviciu 1938: 4-5). Pogliano reports 1,200 'titles on the geographic distribution of blood groups' in 1919-39, and interwar Romanians carried out three times as many blood group tests as anthropometric race diagnoses (Pogliano 2005: 88; Popoviciu 1935-36: 78; 1938: 5 & 7; Făcăoaru 1943: 296; Săhleanu 1979: 96; Manuilă, Al 1943: 7). The earliest and anthropologically most important blood groups came from the four-group system of Ludwig Hirschfeld (or Hirszfeld), a Polish doctor at Zurich University. In 1915, he and Emil von Dungern named the property 'most frequent in Central Europe, property A, that which is rarer, property B' (Hirschfeld & Hirschfeld 1918/19: 509). If mixed with the opposite kind of blood, these made red blood cells clump together (agglutinate), precluding transfusion. Those with O blood, named for German 'ohne' (without), lacked agglutinating agents and could safely donate to anybody, but only get blood from other O people. People with AB-type meanwhile, containing both agglutinants, could receive any blood, but only donate to fellow ABs (Boyd 1950: 220). Hirschfeld and his wife Henriette examined groups of 500-1000 individuals from 14 different ethnic groups, while he served as a doctor with the Serb military in Salonika in 1917-18 (Hirschfeld & Hirschfeld 1918/19: 518). Combining tests of enemy prisoners, military casualties of the cosmopolitan Allied army of the East, and local groups with earlier research, they concluded...

...that the distribution of A and B correspond exactly with the geographical situation. The closer one is to Central and Western Europe, the more one finds of A and the less of B. The closer one is to Africa and Asia, specially the Indies, the less one finds of A and the more of B. (Hirschfeld & Hirschfeld 1918/19: 535)

The Hirszfelds' comparative serology of populations established the new race science of sero-anthropology, which assumed extreme levels of A and B in north-west Europe and South-East Asia respectively (Manuilă, Al 1943: 7-8; see Fig. 2.13). As A was often called the European property and B the Asiatic or 'Asiatic-African property', Hirszfeld's '*biochemical* index of races', or A to B ratio, plus later mathematical indices enhancing these properties or representing the gene distribution behind them, became racial measures of Europeanness with incomparable classification potential (Popoviciu 1938: 6-7; Manuilă, Al 1943: 7-8; Hirschfeld & Hirschfeld 1918/19: 536). Type O, with a less useful geographical distribution, was widely neglected, (Râmneanțu & David 1935a: 56). Like ethnology a century before*, German and Central European serology unhesitatingly welcomed ethnicity as a bridge to nationality, focussing on race migrations, 'prehistorical and historical crossings', 'origin and relationships' in order to analyse 'the ethno-anthropological composition of present populations' (Pogliano 2005: 47; Mazumdar 1990: 193). Râmneanțu claimed for example that eastern German concentrations of group B 'proves Slav influence' (Râmneanțu 1941: 147). An international research effort united serologists and friendly raciologists like Reche and Mydlarski in continuously seeking, and usually finding, links between anthropological and serological races (Pogliano 2005: 33 & 100; Mazumdar 1990: 193). This could prove anthropological races were also inherited according to Mendelian genetic rules, or else make blood group just another independently inherited trait, and serology a competing classification system, damaging race science as a whole. Serology meanwhile gained by association with the august tradition and intricate techniques of anthropology. However the geneticist William Boyd argued that 'many anthropologists' were slow to accept race serology because their training left them 'on the whole uninfluenced by modern genetics' and unaware of its 'devastating consequences' for anthropological race (Boyd 1950 [1940]: 640-41). Race serologists were generally 'medical personnel rather than anthropologists' as they had the necessary skills and opportunities to collect material, pleading for attention from 'very often reluctant' anthropologists (Mazumdar 1990: 202; Pogliano 2005: 108-9). Sceptical anthropologists like Sera and Biasutti in Italy and Neuville in France attributed correlations to 'a great deal of imagination' and 'doctrinal points of view' (Pogliano 2005: 105-6 & 109). The Romanian raciologist Necrasov wanted to integrate serology into 'general anthropological' research, but criticised the many attempts at 'direct parallelism' and 'hereditary correlation' between the traits they studied (Necrasov 1941: 126). Though unshakeably convinced that features like stature and pigmentation correlated, she believed serology's '*A-B* dualism' opposed 'the diversity of the morphological races' (Necrasov 1941: 127).

Ultimately, both sets of data expressed ‘the same state of affairs’ and ‘typological and especially raciological’ study might reconciled them by raising ‘the low number’ of primary blood groups through combinations with secondary ones (Necrasov 1941: 132 & 136).

Boyd accused anthropologists, like ‘the man in the street’, of only welcoming serological results that ‘confirmed their’ ‘firmly established’ morphological classifications and ‘ideas of race’, and launching ‘a general reaction against’ blood groups when they did not (Boyd 1950 [1940]: 640-42). The anthropologist Morant for example judged the ‘value of blood-groups’ and other ‘physiological characters’ by whether they ‘provide reasonable results in practice’ (Boyd 1950 [1940]: 642). My statistics confirm that traditional race classifiers almost never cited serologists. Despite the early prominence of Italians in serology for instance, mainstream Italian anthropologists only took an interest in blood research in the late 1930s (Pogliano 2005: 102). Biasutti’s comprehensive 1941 raciology textbook mentioned blood-groups very briefly, denying they had any correlation with anthropometric features (Pogliano 2005: 396-97). Despite German seroanthropology’s *völkisch* orientation, Mazumdar says it remained marginal in the movement, ‘official race policy’, and even ‘German anthropology’; Günther in 1930 calling it a ‘vulgar error’ to define race by blood group alone (Mazumdar 1990: 210-11). The Nazis followed him in largely ignoring it, mostly leaving the space in SS race files for blood group blank (Pogliano 2005: 96; Mazumdar 1990: 211 & 216). Some serologists, equally standoffish, neither could nor would sort study subjects by anthropological race, recording nationality only (Pogliano 2005: 40). They claimed their discipline ‘seems more objective, more precise, more subtle... deeper and less subject to variations’ than anthropometry, which had been ‘insufficient to establish the frontiers between peoples’ (Popoviciu 1938: 4-5). Only studying ‘physiological and psychological’ race characters like blood type, could ‘fully’ make anthropology ‘a biological science’, they added (Pogliano 2005: 94).

The scientific rejection of race

British and American race anthropology ‘reached its zenith’ around 1900, when ‘race was a respectable scientific category’, despite being ‘multiple, ambiguous and at times self-contradictory’ (Barkan 1992: 2 & 4). Barkan says that by 1938, ‘only a small segment of the educated public had reformulated its attitude’ to ‘race in response to the Nazi menace’ but this was nevertheless ‘the nadir’ of physical anthropology (1992: 1). As German theorists ever more insistently promoted German racial purity and superiority, French, Italian and then British anthropologists increasingly

*Remarkably, leading serologists like the Hirszfelds and Paul Steffan also revived an assertive polygenism (Lahovary 1927: 24). The Hirszfelds argued for ‘a double point’ of human origin, with the B type emerging in India and spreading

stressed fruitful races mixture (see pp.232-36). The interwar British accepted white racial subdivisions, and often conflated race and ethnicity. Barkan and Herz however note relatively little racial prejudice there, due to political maturity or because scientific prejudices came from studying 'remote' and 'theoretical' problems of human origins and 'the peoples of the Empire' whereas American colleagues responded directly 'to racial conflicts' (Barkan 1992: 57-58; Herz 1925: 11). The fieldwork approach emerging around the 1910s from British and French overseas colonialism, in which ethnographers spent weeks living in isolated communities of subject peoples, meanwhile made far more impressive contributions to cultural and social studies than craniology ever did in biology. Fieldwork became anthropology's new defining technique, but pioneers like Bronislaw Malinowski were in a highly ambiguous position. They courted colonial establishments to fund their expensive new technique, but often came to appreciate the equal humanity of 'natives', ultimately subverting the racial paradigm and scientific intelligence gathering for colonial administration (Kuklick 1996: 250; Kuklick 1996a). Malinowski's diaries reveal his convinced racist superiority to the 'boys' or 'niggers', but he was nevertheless protective of them against imperialist exploitation and tried to see the world from their viewpoint (Kuklick 1996a: 344). A British anthropologist in 1933 confirmed that anthropology had to sympathetically 'appreciate the point of view' of 'alien races' (Pogliano 2005: 53).

The Darwinian revolution situated 'mankind... as part of the natural world', justifying Hunt and Broca's broad but biology-centred definition of anthropology, and some historians make evolutionism *the* race anthropology, because used to legitimise colonialism and the right-wing race hierarchies of anthroposociology and raciology (Stocking 1991: 255). While raciology attributed prehistoric technical advance to successive races 'of fresher energies and higher capabilities' however, most Western evolutionists, including the French materialists traced evolution within races (Grattan 1853a: 198). They ignored the positivist classification tradition of reconstructing ethnic history by comparing skull 'types', and instead divided humanity by evolutionary stages, ranged facts in series or hierarchies, extrapolating to predict unknowns and had little interest in fixed European races (Ferembach 1997: 400; Harvey 1984: 391; see pp.76-78). French positivists and materialists both 'advocated a broad definition of anthropology', but Broca and his student Topinard emphasised physical anthropology, craniology and race, while 'the Mortillet group was not primarily interested' in racial anthropology (Hammond 1980: 127-28). Mortillet shared the 'casual' racism of his time but race was not 'crucial to [his] scientific and social combat', while Hovelacque advocated 'peaceful fusion of races', by helping our 'inferior brothers' (Hammond 1980: 126 & 128). In Britain similarly, Hunt's anthropologicals were much more race-fixated and

to Southeast Asia and Africa, while A arose 'to the north or in Central Europe' (Hirschfeld & Hirschfeld 1918/19: 536).

racist than their rivals, the leading Darwinian naturalists, cultural anthropologists and prehistorians like Huxley, Lubbock, Tylor and Wallace, in the Ethnological Society (Stocking 1991: 248-49).

In France, Catholicism, 'the entrenched position' of Lamarckianism and low birth-rate, which threatened the geopolitical balance with Germany, helped marginalise orthodox eugenicists like Lapouge, and until the 1920s, German or American-style social Darwinism and negative eugenics (MacMaster 2001: 53; Köhl 1997: 35, 87 & 90). Durkheim used anthropological confusion and inconsistency about race, to refute its social role (Mucchielli 1997: 8-10, 18 & 21). Many westerners began questioning the value of race classification, abandoning it in the 1930s-1950s. Dias and Mucchielli say cultural preoccupations replaced craniology around 1900 and race classification declined to a minor role by about 1910 in French anthropology (Dias 1989: 222 & 225; Mucchielli 1997: 22). Julius Evola, the chief fascist race theorist, and other nationalists had a 'creative' and 'spiritualised' concept of the Italians as a single Roman Aryan race, stressing 'the mystery of race, the "racial soul,"', and criticising 'the biological and anthropological' obsessions of anthropology and Nordicism (Mosse 1987: 201; Poliakov 1971: 83; Evola 1941: 76-77). Mosse and Poliakov see Italians as largely non-racist, rarely taking Evola seriously, while Mussolini protected Italian Jews when possible, and Italian fascist racism, unlike Nazism, stressed antiquity over youth (Mosse 1987: 200-2; Poliakov 1971: 83). Raciology was a minority interest in Italian anthropology until 1936, when Mussolini fell under Hitler's sway and imposed new priorities (Taylor 1988: 48). Mussolini in 1934 claimed that 'thirty centuries of history allow us to contemplate with a scornful pity, transalpine doctrines supported by the descendants of men who did not know how to write, when Rome had Caesar, Virgil and Augustus' (Poliakov 1971: 84). Barkan argues that the scientific authority which turn of the century science gave racism, left it vulnerable to changing scientific opinion (Barkan 1992: 19). Anglophone science discredited racist explanations for cultural phenomenon in the 1920s, and active racial discrimination began to be frowned upon (Barkan 1992: 3). Racism was decapitated when its scientific priesthood lost their faith. As racism became increasingly controversial and politicised, scientists used their 'wide popularity' as trusted 'universal intellectuals' to transform 'scientific discourse on race', promoting anti-racist 'political propaganda' 'under the guise of science' (Barkan 1992: 8-9).

Multiplying 1930s anthropometric data and methodological disputes continued to make race taxonomies less reliable, and 'primordial ancestors' 'more illusive', while raciology remained mired in contested relationships with nationalism, ethnicity, and culture, discrediting craniology and the entire race project (Köhl 1997: 97; Barkan 1992: 3 & 19; Gould 1981: 108). Interwar anthropologists repeatedly criticised the 'lamentable lack' of 'much-needed' agreement on

standardising anthropometric technique, for example preventing American and European anthropologists from comparing results (Tildesley 1928: 351; Kühl 1997: 76; Myres 1931: xxviii). In a study of the definitions of 16 anthropometric measures by 10 anthropologists, ‘differences in verbal definition alone’ invalidated three-quarters of race comparisons (Tildesley 1928: 359). The French anthropologist Manouvrier called dolichocephaly and brachycephaly in 1899 ‘perhaps the least important’ ‘morphological varieties of the human body... for cerebral physiology’ (Banu 1939: 203-4). Franz Boas, who suffered anti-Semitism in Germany, noted changing head-forms among American immigrant children, proving ‘key racial characteristics are not fixed by heredity*’, nudging scientific opinion ‘from “nature” back to “nurture”,’ and beginning ‘a new chapter in the history of anthropology’ (Erickson 1997: 833; Banu 1939: 201-2). Biasutti agreed for example that the permanence of physical features was illusory, with skull shapes gradually changing shape since the Middle Ages (Biasutti 1941: 595). G.M. Morant in Britain said anthropologists’ confusion had blocked ‘effective protest’ against ‘wildly inaccurate theories’, but that they were now ‘more or less agreed’ on renouncing scientific contamination by the ‘earlier’ ‘literary view of race’, as research confirmed the ‘complete separateness’ of races was ‘nonsense’ (Morant 1939: 153-54). He said ‘more or less systematic’ anthropometric studies showed races merged in ‘gradual transitions’ and were only distinguished in Europe by marginal ‘differences between average values’, especially compared to the ‘considerable, and approximately equal, variation’ of individuals within them (Morant 1939: 153). Pittard of Geneva offered a brief race hypothesis and several scattered references to race diagnosis in 1903, but of over 600 pages in his 1920 Balkan anthropological synthesis, just three addressed raciological race, questioning its reality (Pittard 1920: 624-26). His 1926 Romanian synthesis apparently mentioned anthropological race just once (Pittard & Donici 1926: 113). Even in Central Europe, the Stołyhwo School recognised its races as provisional, pending confirmation by family inheritance studies (Stołyhwowa 1937: 37-38 & 48).

Archaeologists swapped the term ‘race’ for ‘people’ when they found that biological traits did not coincide with ancient cultural groups, so modern populations could not be interpreted ‘in terms of hypothetical’ ancient ‘pure races’ (Morant 1939: 153; Barkan 1992: 56). ‘Anglo-Saxon scholars’ like Boas showed that archaeological-ethnographical artefact styles could arise from inter-ethnic communication, criticising the Central European fixation with ethnicity (Kurnatowska & Kurnatowski 2002: 98). Though initially quite Nordicist, believing race was ‘synonymous’ with culture and ‘explained the progress of history’, the leading British archaeologist Gordon Childe promoted the culture concept, furthering his discipline’s move from race by the late 1920s, and as a communist, was strongly against linking ‘Nordics with imperialism and anti-Semitism’ (Barkan

*Ironically, the Nazi Eugen Fischer confirmed this (Banu 1939: 201-2).

1992: 53-57). He said no 'serious' 1920s anatomist had found or would suggest a scientific correlation between 'cranial contours and intellectual characters', while anthroposociological Aryans 'fantasies' were 'quite worthless' or even 'positively mischievous' (Childe 1926: 163-64). Like every previous ally, genetics also turned against race classification. Not only did genetically inherited blood groups not match raciological types, but populationist 'evolutionary synthesis in the 1940s' which 'unified Darwinian selection' and Mendelian genetics was sceptical about core classification assumptions, and saw fixed anthropological races as mere 'phenotypic statistical abstractions' (Pogliano 2005: 116; Wiercinski 1962: 12; Wolpoff & Caspari 1997: 121; Barkan 1992: 19). It modelled independently and randomly inherited genes as separate geographical 'clines', and attributed most traditional racial traits to complex interactions of several genes, destroying racial associations of physical with psychological traits. Populationism became the main interpretation of Mendel, adopted by 'many' leading American anthropologists and geneticists from Boas (1938) and Coon (1939) onwards and informing the 1952 UNESCO statement on race, which was meant to draw a line under fascist racism (Wiercinski 1962: 10; Marks 1997: 420). Having discredited fixed anthropological races, some early populationists like Ashley Montagu first used the term 'race' for national or ethnic study groups, but this made 'race' a redundant synonym, and Montagu, fearing its 'racist implications', ultimately proposed the term, and any biological division of humanity into discrete bounded units, be abandoned (Wiercinski 1962: 11).

However Western* scientists and non-scientists did not just reject race for scientific reasons. While some scientists attribute this change to the 1940s-1950s 'triumph' of populationism, demonstrating that race classification was scientifically groundless, many others trace it to the association of race with 'widespread condemnation' of Nazi anti-Semitism, genocide and brutality, reinforced by Hitler's defeat, decolonisation and the civil rights movement (Todorov 1993: 157; Proctor 1988: 175; Wolpoff & Caspari 1997: 121; Barkan 1992: 19). The heel-dragging and backsliding over the abandonment of the politically useful but scientifically discredited ethnic race concept, suggest political factors has a significant impact on theory. Many interwar anthropologists accepted the end of the old order with reluctance and denial. Five months into World War II, Morant criticised his divided profession for not clearly condemning misuse of race, saying 'some anthropologists' still imagined races 'as distinct as our breeds of domestic dogs' in 'early mediaeval' Europe (Morant 1939: 151-52 & 160). Morant's own arguments that European bodies revealed little of their origins, race divisions were 'necessarily' somewhat arbitrary, only 'small differences between average

*Central Europeans took longer. As late as 1962, the Polish anthropologist Wiercinski argued that assuming features were inherited randomly, rather than in racial combinations, was 'pure a priori speculation requiring genetic proof' (Wiercinski 1962: 12). He claimed 'the much more extreme racism' of the Nazi ideologue Alfred Rosenberg was based on the same 'pure populationist concepts' as anti-racist postwar anthropology (Wiercinski 1962: 9).

values' distinguished populations, and 'race' traits had entirely different geographical patterns, all made race useless for studying European physical diversity (Morant 1939: 155-56 & 159-60). However he said 'all' anthropologists accepted that to decide the 'straightforward question' of whether Moroccan and Polish Jews 'belong to the same race... records for certain body characters' had 'to be collected for suitably chosen samples' (Morant 1939: 155). He added that a method was needed to reconcile and combine 'evidence of a number of physical characteristics which [separately] suggest different conclusions' (Morant 1939: 159). Morant pleaded that race science could inhibit war in Europe by demonstrating that states were fighting their 'close racial relatives' (Morant 1939: 159). Biological races were more real than 'entirely artificial' linguistic boundaries, established by 'historical accidents', which anthropologists had a 'duty' to help break down (Morant 1939: 162). This self-deceiving inconsistency was sharpest in the 'bitterly contested' field of race psychology, which almost everyone believed existed, but not even interwar German anthropologists believed could be effectively studied (Lutzhöft 1971: 94; Fleure 1937: 224; Schwidetzky 1935: 297). As late as 1963, Eickstedt nominated Günther, who was alone in differentiating races by total mental ability, and the main Nordacist race psychologist, L.F. Clauß, who believed 'racial mind' determined bodily form and proposed 'an impassable "frontier of comprehension"' between races, as the 'most careful and systematic' race psychologists (Lutzhöft 1971: 94-97 & 99).

Childe separated culture and biology, and redefined Aryan in purely linguistic terms in response to 1930s Nazism (Barkan 1992: 54-57). Even as craniology 'collapsed under its own weight, the impulse' for racial hierarchies and 'a differential psychology remained', moving from anthropology to academic areas like I.Q. testing (Fee 1979: 432). If Nazi crimes were blamed on physical race science rather than cultural anthropology or nationalism meanwhile, perhaps it was because the Western countries which defeated Germany now favoured cultural rather than biological understandings of human diversity, and were not prepared to renounce nationalism. Childe attributed the 'peculiar genius' and 'higher material culture' of the conquering Aryan civilisation to its 'more excellent language and the mentality it generated' (Childe 1926: 211-12). This belief that culture determines the typical behaviour of a group is historically a race concept however, a section of the old composite biological-cultural race idea. Mapping the human genome may be the next white racist hope, but culturalism and development economics offer scarcely less permanent and deterministic hierarchies of human groups and unlike physical anthropology, have little problem in adopting classes and nations as operative units.

Conclusion

Comparative philology, the ethnology of Edwards and Prichard, Retzius's craniology, Broca's anthropology, Kollmann and Sergi's reform proposals, Deniker's multi-race system, Mendelian raciology, Polish statistical raciology and serology were all revolutionary and mostly very successful innovations. Race concepts and diagnosis methods underwent these repeated radical changes, and genetics ultimately abandoned biological race, because it proved insubstantial under sustained scientific investigation by any method. Some techniques, like classical text analysis, etymology and even craniology were abandoned when it became apparent that they could not grasp race. Though positivism was the apogee of biological classification, placing it at the centre of a large, internationally united discipline complex, its concern with constantly refining scientific techniques was equally hard on the classification project. Philologists, archaeologists and finally physical and cultural anthropologists developed their own methods and more rewarding research topics, and lost interest in eclectic race classification. The positivist natural science insistence on quantification was also hard to apply to this human science. Despite all this turbulence, the race classification community was tenaciously conservative, legitimising even innovation by claiming continuity with established authorities. Plaiting strands of ethnic romanticism, Enlightenment comparative anatomy, the scientific fruits of world exploration and philology, ethnologists like William Edwards established the standard model of a physical, and especially cranial type with associated psychological features, fixed in descent, linked with cultural ethnicity and studied in its historical development. Over a century later, Eickstedt and Czekanowski's races had essentially the same features. Retzius and Broca brought this tradition to its classic form, standardised craniological technique by securing the central role of the breadth-length ratio and, along with positivist anthropology more generally, replacing philology with archaeology as a preferred source on cultural history. Race anthropology survived its great turn-of-the-century crisis diminished, transformed by new Mendelian and statistical scientific underpinings and with political links to the extreme right instead of progressive liberalism. It lost much of its authority west of the Rhine, where the nominalist and pure physical anthropology of Boas, Topinard, Deniker, Martin and others prevailed, and purely cultural anthropology turned to fieldwork and colonial 'primitive' societies. This loss of universality and the turn to nationalist chauvinism in the east encouraged a profusion of semi-compatible rival methodologies, like those of Sergi, Kollmann, British biometricians, serologists and interwar raciologists in German, Cracow, Lwów and Moscow. Nevertheless, as postwar Polish resistance to change shows, it needed associations with Nazi shame to finally nail raciology's coffin shut.

The issues of genetic inheritance and the origin of racial diversity, though tangential to the main business of classification, played a key role in both its survival and its demise. Both monogenists and evolutionists initially accepted primordial fixed races which functioned, for the purposes of classification, just like polygenist races. However the big problem for the classification project was that many evolutionists just did not care about it, instead stressing evolution of the species as a whole. Twentieth-century right-wing anthropology solved this problem and revived the fortunes of classification by combining Haeckelian evolution with individualist Mendelian genetics, which made races the objects of evolutionary competition and descent respectively. Evolution and Mendel were both slow acting poisons however. They ultimately demolished the scientific basis of race by recombining in a form which stressed evolution of species and inheritance of individual genes. Ultimately, race anthropology's most valuable asset was the useful explanation of the biology of ethnicity and society that it offered an era of triumphant nationalism and positivist natural science. This is demonstrated by how faithfully classification reflected broader nationalist ambivalence over evolution and degeneration, and still more by how successfully the politically necessary essence of the standard fixed race model weathered the turbulence of major scientific change and the collapse of important sources of evidence. Not only did it assimilate evolution, but it shifted conceptually from racially homogeneous ethnic groups, to races that had to be statistically abstracted from thoroughly hybridised populations. Racial taxonomies were intimately linked to the narration of political 'myths' meanwhile, and similarly, their continuity from Edwards to Retzius to Broca and Deniker, despite supposedly revolutionary new diagnostic methods and race concepts, is remarkable. Though theorists like Czekanowski significantly disrupted this continuity, equally innovative diagnostic methods, like that of Sergi, bizarrely reproduced exactly the same races as older methods. These durable taxonomies are the subject of the next chapter.

European Race Classifications: Anthropology, Ethnicity and Politics

‘It is indeed of importance that all lovers of true science should do all they can to resist this thirst of the great public for sensational stories, which bring true science into discredit. The great public, as well as the scientists, ought to be conscious of the great difficulties connected with anthropological science and should not draw hasty conclusions.’ (Retzius, G. 1909: 312)

‘The North European race branch cannot properly adapt itself to the demands made upon it by industrialism... It requires high wages for a moderate amount of work and short hours, that it may have time to indulge in pleasure and enjoyment.

The brachycephalic individual of Middle Europe, on the other hand, seems to be far better suited for the demands of industrial life; he is satisfied with a little, is possessed of patience and endurance even when things are dull and dreary, and his work tiring and little remunerative; he is not so much addicted to expensive forms of recreation, but lays by money for his family and for old age’ (Retzius, G. 1909: 300).

The Swedish anthropologist Gustaf Retzius.

This chapter examines the continuous competition by almost all race classifiers to demonstrate the racial superiority of their own group. Races were initially ethno-linguistic groups like Celts, Teutons and Slavs, which romanticism made central to national political identity, and even when positivist scientists rejected this link, replacing ethnic labels for geographical races names like Alpine or Nordic, they maintained the renamed groups as ‘national races’. A rich palette of often contradictory strategies, including nativeness, conquest, nobility, evolution, civilisation, and membership of prestige categories like European and Aryan, plus the weak scientific anchoring of race psychology, offered considerable imaginative freedom to politically instrumentalise classification. The dual meaning of ‘primitive’ as both ‘backward’ and ‘authentic’ for example expressed the contrasting values of civilising influx and autochthony. As superiority required inferior others, the quest for racial esteem was a bruising melee. The internationally hegemonic narratives established by powerful ethnic and social groups often insulted neighbouring groups, who responded with counter-narratives. The most significant opposition was between the Germanic

north, its confidence pumped by colonies, industry and 1870, and the rest of Europe. Tall, blond northerners were first associated with the original Aryan or Indo-European race and then in addition with dolichocephaly. Conservatives outside Germany, Britain and the United States distinguished Nordic elites from brunette masses in their own countries, while anti-Nordic counter-narratives almost always internalised and reinterpreted insulting Germanicist discourses against them rather than developing entirely novel ones, which could contradict lived experience and be ignored internationally. Scientific universalism and the transnational geography of race categories like Celt, Teuton and Nordic also imposed a strict internationalism. The ‘same metaphorical structures’ therefore created both ‘fond and sympathetic characterisations, and insulting belittlements’ (Arnold 1962 [1867]: 359; Chapman 1992: 278). This discursive *t'ai chi* made chaotic peoples spontaneous, the meek, prudent and the backward, spiritual. By integrating adversaries in a single system, it also forestalled a fatal rupture of the international scientific consensus on which race anthropology’s legitimacy rested, despite sharpening rivalries due to the Franco-Prussian and First World Wars and the rise of Hitler. After a historical sketch of Nordic-Germanicism and the main counter-narratives to it, this chapter interprets the often contradictory interplay within and between them of narrative dichotomies like aristocracy-democracy, romanticism-positivism, rural-urban, conquest-productivity and emotion-rationality, as strategies for coming to terms with modernity. I then trace the later development of these narratives in the Aryan controversy, the rise of *völkisch* Nordicism and the post 1890 fragmentation of race classification.

Romantic Germanic superiority narratives initially responded to the powerful old narrative of *ex oriente lux*, encouraged by classical education, in which superior European civilisation came from the Fertile Crescent via Greece, Rome and the Latin countries. France and Germany were the main anthropological adversaries, often supported by Francophone Belgians and Germanic Scandinavians respectively (Day 1997: 110). In international race anthropology, only the positivist French Gallic school narrative of hyper-civilised brachycephalic ‘Celtic’ Aryans, in the 1860s-90s, significantly challenged the hegemonic assumption of Nordic superiority. Even liberal Germans accepted Celtic Aryans, though right-wing German nationalists increasingly responded with extreme ‘Germanicist’ Nordic supremacism. The pendulum swung from imported civilisation towards romantic autochthony over the course of the nineteenth century. This influenced the many anti-Nordic counter-narratives which arose from the 1890s on, as the core expanded to include previously maligned Mediterraneanans, and then Slavs and Finns. Italians championed the small, dark, southern dolichocephalic Mediterraneanans, who along with the Nordics and ‘Celtic’ brachycephals, formed an established European three-race system by 1900. The practice of extending schemes

based on local research to Europe as a whole* reinforced core dominance, turning Eastern European brachycephals into racial ‘Celts’ or ‘Celto-Slavs’, but Deniker’s new races allowed genuinely local race narratives in the east.

The political holy grail of classification was universally to defend the honour of the national race*, which ideally distinguished the nation from neighbours but was always based on observed ‘racial’ features of the population. Scientific data was therefore an essential part of narrating race. Classifiers tried to associate their own ethnicity with prestigious markers. Racial descent linked a matrix of disparate markers, like skull shape, pigmentation, blood and personality type, language family, grammatical structure, social class, religion, political orientation, ancient tribe, archaeological culture or technology, and nation, all studied in very different ways. Late nineteenth-century ethnic archaeology for example identified particular styles of artefact with specific ethnic groups. Given racially pure prehistoric ethnic groups, the form of skulls from prehistoric burial site could equally be interpreted as an ethnic style characteristic. Mid-nineteenth-century anthropologists for example believed that blond, dolichocephalic Aryan Celtic ancestors of the French brought bronze-working into Europe. Certain markers were inherently prestigious, like high social class, advanced technology and conquest, or because, like dolichocephaly, blond hair or flexive grammar, they were linked to the former. Prestige categories like White, Caucasian, White, European and Aryan meanwhile flagged success but also confirmed a chosen identity.

This chapter assesses core-periphery status by how ambitiously theorists dared to reorder classification. The flexibility of stereotype reinterpretation made it one of the most popular defences against unflattering race narratives. Though often effective domestically however, it cut little ice abroad and was a mere prelude to the structural reordering of classification that only core classifiers could attempt. Race history manipulation, often annexing the original Aryan or civilisation to a favoured race, required more serious tinkering across a range of race classification disciplines. Fundamentally refashioning the race system required compelling new evidence, sustained detailed argumentation and as chapter one demonstrated, an internationally powerful scientific establishment, capable of simultaneously arguing on intersecting anthropological, linguistic, archaeological and other fronts. When research showed that the French had the wrong head-shape, Broca reordered the hierarchy of value to make that head-shape prestigious instead. Changing the defining characteristic of a race meanwhile, as Broca and Czekanowski did, could herd populations

*For example Retzius, William Wilde, Broca and Thurnam extrapolated local Swedish, Irish, French or English race sequences to much of Europe, while the French school made Slavs racially Celtic (Wilde 1849: 238; Thurnam 1864: 402; Deniker 1904: 181).

into required groups and confuse opponents. Questioning a rival's chosen race identity was another favourite tactic, while Retzius, Deniker, Günther and Czekanowski introduced new races or redivided old ones.

The first superior race: blond Germanic Aryans

The Teutonic blonds

Since 1654 at least Europeans had noted and measured the biological distinction that northerners tended to be taller, blonder and paler than southerners (Bernabeo 1989: 172). From the early nineteenth century on, anthropologists like 'Edwards in France, Retzius in Sweden and von Baer in Russia,' following Linnaeus, whose *Europaeus* was a tall, blue-eyed, north-west European blond, signalled the 'physical and even moral' difference between northern and southern Europe (Deniker 1897: 126; Brace 1997: 862). The blonds were variously called the Kymric, Xanthochroic, Teutonic, Cannstadt, Reihengräber or Germanic race, while Lapouge and Ammon adopted Linnaeus's term *Homo Europaeus*, the only truly European race (Deniker 1904: 201-2; Sergi 1900: 210). In 1897, because it was concentrated 'almost exclusively in the north of Europe', Deniker entitled it the Nordic, which became the standard twentieth-century term (Deniker 1904: 201-2). It was generally assumed that the ancient Teutons* and possibly also the Celts were pale, blue-eyed blonds, because 'classical authors' like Tacitus 'universally described' them as such (Prichard 1973 [1813]: 20-21 & 505; Virchow 1950 [1896]: 184; Wijworra 1996: 169). Leading ethnologists and the historian Mommsen saw blondness and blue eyes as 'especially applicable to the Germans' and 'in countries which received their stock of people from Germany', but also 'to the men of the north generally' (Rawlinson 1877: 153; Prichard 1973 [1813]: 20-21 & 505; Broc 1836: 32). While Celtic, Slavic and Aryan links, reinforced by Retzius's category of dolichocephaly, helped make the tall northern blond Europe's most important and prestigious race from the early nineteenth century on, its most intimate and universal association was with the historical Teutons or speakers of modern Germanic languages. Nationalist narratives of Teutonic descent led Scandinavian, British and German anthropologists to adopt the northern blond as their national race. The Saxons of Knox in Scotland for example were tall, blue-eyed blonds with the fairest of all complexions (Knox 1850: 49-50). From Teutons being blond to blonds being Teutons was a small step. In 1826 Demoullins distinguished Celts, Iberians, and Pelasgians, who were darkened by climatic influences, from blond, blue-eyed Danes, 'pure-bred Germans' and Anglo-Saxons, who resisted this change

*Classifiers also insulted European women and social classes, but women were so rarely defended that they did not become the object of debate, while lower classes were only defended as part of an ethnic strategy.

(Blanckaert 1988: 31). Up to about 1910, anthropologists like Houzé, Woltmann, Gustaf Retzius and Ripley still used Germanic or Teutonic as technical terms for the northern dolichocephalic blond (Houzé 1883: 90). Many late nineteenth-century theorists in Scandinavia, England and North America enthusiastically assumed Germanic-Nordic superiority.

Germanic-speaking nations, including Britain, narcissistically believed blonds superior, but the power and prestige of their early industrialisation convinced many even in darker-haired countries (see Fig. 3.1). Early nineteenth-century ethnology merged two mutually complementary and reinforcing superiority narratives: romantic ethnic historiographical accounts of blond Teutonic superiority and the white superiority assumptions in global race classifications by Enlightenment anthropologists. Conquering Teutons had spread south from Scandinavia and north Germany, where the world's lightest pigmented people lived, and were economically and militarily superior to darker southern Europeans, just as pale Europeans more broadly poured south to dominate still duskier overseas races. Pale perfection justified colonialism and slavery, but also explained the Mediterranean inability to industrialise, and the darker features of European subject peoples like the Irish, Welsh, Central European Slavs and Lapps. German theorists like Meiners in 1793, followed by Klemm, Carus, Menzel, Oken and Hegel, proposed manichaeic distinctions between beautiful, active, diurnal, virile or human Germanics, incarnating spirit, and an ugly, passive, nocturnal, effeminate, simian or natural race, exemplified by the African (Poliakov 1971: 119; Bieder 1909: 13-14; Mosse 1978: 28; Woltmann 1903: 228-29 & 287). Carl Gustav Carus, who heavily influenced Gobineau, pioneered the tall, blond, blue-eyed European epitome of beauty in 1849, while later theorists argued that this race was exceptionally evolved and mentally superior (Mosse 1978: 28; Eickstedt 1937b: 42). German nationalists concluded that Teutons, as the whitest of the white, topped the biological worth scale (Poliakov 1971: 119). Woltmann claimed that 'intellectual capabilities' and paleness increased in parallel from 'the Negro' to the 'American Indian, Mongol, Mediterranean, [and] North European,' and that the palest Caucasians races were 'also most able and noble' (Woltmann 1903: 251). Herz said that like other Germanic peoples, English 'resistance to mixing with coloureds' was 'particularly strong' (Herz 1925: 12). In the 1920s, the British archaeologist Childe 'praised the progressiveness' of prehistoric northern Europeans (Barkan 1992: 55).

Hawkish romantic period nationalists mixed tales of Germans as God's chosen people, with racial arguments from Enlightenment 'materialist anthropology' (Poliakov 1971: 117). Blumenbach's five

*French, German, Italian, Polish and Romanian all use words like *germain* or *Germane* for ancient Germanic peoples and very different terms for modern Germans. To preserve this clear linguistic distinction, I generally translate the

racess were racial synonyms for the global levels of technological culture classified by Enlightenment figures like Montesquieu, Turgot and Adam Smith. Red and black-skinned peoples were primitive savages, browns and yellows were despotic or barbarous, and the white race had a monopoly of civilisation. Todorov says Buffon also implicitly linked skin colour with this hierarchy of civilisation (Todorov 1993: 102-3). Prichard explained dark pigmentation by a skin secretion which civilised living curtailed, linking it directly to a more 'robust' constitution (Prichard 1973 [1813]: 168). The 'darker races' were 'hardy children of nature', 'best adapted' physically to a 'rude and uncivilized' condition, while the more beautiful, 'symmetrical', lighter-pigmented types among both humans and animals, were 'finer, and more delicate' than 'the ruder stock from which they sprang', so Europeans were 'best fitted for the habits of improved life' (Prichard 1973 [1813]: 172-73 & 235). Haeckel in 1876 saw only Caucasians as truly civilised, with 'the Indo-Germanic race' making the greatest evolutionary progress among them (Odom 1967: 16)

At the late sixteenth-century peak of their power, the 'rich and independent' Netherlands became 'the main centre of the cult of the German language', resisting Spanish Latin power (Poliakov 1971: 106). Spain's Gothic origin myth nevertheless 'retained some adepts' up to modern times, even convincing some foreigners* (Poliakov 1971: 24-25). Poliakov sees German resentment at Napoleonic conquest and assumptions of Latin and French cultural superiority, in repeated Reformation and Romantic period attempts to promote a simpler and more spiritual nationalist German culture, drawing on rediscovered ancient Teutonic gods and epics (Poliakov 1971: 99-100 & 112-13). The successful seventeenth century campaign to purify German of foreign words was for him a precursor to later race purity concepts (Poliakov 1971: 107). A complex of ideas including the purity of German blood and language; manly, noble military glory; and the soil of the eternal national territory were bonded together, as the triumphs of the *Völkerwanderung* and German Renaissance were celebrated together (Poliakov 1971: 97). Ancient Teutons really superseded classical civilisation in popularity in Germany after the 1813-14 War of Liberation, as romantic period Central European and Scandinavian archaeology turned from classical to national prehistoric archaeology (Dias 1991: 144; Sklenář 1983: 64-65; Wijworra 1996: 167-68). German antiquaries, historians and philologists began placing the Teutonic homeland in Scandinavia, studying northern antiquities and assuming German 'anthropological homogeneity' (Poliakov 1971: 119; Sklenář 1983: 94). They 'progressively rejected' any ancient 'foreign' influence, whether from the Caucasus or classical Mediterranean, while anthropological archaeology linked the 'German race

former as Teuton.

*Some conservative early twentieth-century Spanish archaeologists idealised the Visigoth 'Germanization of Spain' and worked with German researchers, while French-influenced colleagues emphasised 'Roman and Mediterranean' connections (Díaz-Andreu 1996: 79). Canary Islanders still disparage mainlanders as 'Godos' or Goths.

with prehistoric cultures' (Díaz-Andreu & Champion 1996: 16; Sklenář 1983: 94). Poliakov detects continued grudging nineteenth-century French admiration of Germanic vigour, especially as until the 1860s, Germany often meant the politically 'unworldly, but scholarly' and cultured Rheinland and South Germany (Bollenbeck 1999: 297; Poliakov 1971: 44-48). Early modern narratives of aristocratic Teutonic Franks maintained a robust popularity among conservatives. Gobineau called Teutons 'the noblest race', but avoided potential unpatriotism by concentrating on Aryans and not considering the modern Germans very Teutonic (Herz 1925: 9; Luthhöft 1971: 83).

The eighteenth-century vogue for the Germanic roots of English culture reached its peak in the mid-nineteenth century. Drawing on popular resistance to 'the Norman yoke' after 1066 and a continental upsurge of Teutonism stimulated by the Reformation, Anglo-Saxonism crystallised into perceptions of racial distinction by the revolutionary 1600s, after which the Glorious Revolution of 1688 definitively instated the 'Germanic or Gothic liberties' of the Anglo-Saxon commoners (Poliakov 1971: 59-62; Horsman 1976: 387-89). In the 1760s-70s, Anglophone political ascendancy and romantic fascination with 'primitive European peoples' began shifting the emphasis 'from the continuity of free institutions' to the uniquely Anglo-Saxon, innate racial 'skills and talents' 'which supposedly explained' the superior 'English civilization' of Britain, America and the colonies (Horsman 1976: 390; Curtis 1968: 8). Simultaneously, historians, comparative mythologists and philologists increasingly stressed the Teutonic identity of the Anglo-Saxons (Horsman 1976: 391). Leerssen distinguishes the 'exclusively Anglo-Saxon' approach of 'eighteenth-century antiquarians' like John Pinkerton and Whittaker from the work of Thomas Carlyle, 'the great apostle of German learning and culture in post-Romantic England', who stressed the 'linguistic and racial kinship' and common 'rugged individualism' of all 'Teutons and Saxons', heavily influencing a generation of 'great mid-Victorian historians' (Leerssen 1996: 96). In 1897, Borlase emphasised common Teutonism by claiming 'Scando-Germanic' peoples were in Britain 'ages before' the Anglo-Saxons (Borlase 1897: 954). Anglo-Saxonism was 'un-systematic, illogical, unhistorical' and sometimes 'downright incoherent', but 'had a powerful emotional appeal', explaining British stability and prosperity, and justifying imperial conquest (Curtis 1968: 12). Horsman sees the 1840s as 'a watershed in the surging growth of Anglo-Saxonism', combining early modern ideas about Anglo-Saxon freedom with 'concepts of Caucasian superiority', 'Teutonic greatness and destiny', from comparative philology, ethnology and German nationalism, under the influence of international Anglophone power (Horsman 1976: 399). Carlyle, a lowland Scot, attributed Norse origins to his own nation and, influenced by German romantics, saw Teutons as the world's greatest race, and with Charles Kingsley and many Anglo-Saxonists, ascribed England the 'special' task of conquering "half or more" of the planet (Horsman 1976: 399-400 & 410). Aside from such

extremists, the ‘overwhelming atmosphere of mid-Victorian... exclusive emphasis on the Teutonic roots of England’ was ‘highly pervasive in a diluted, non-explicit way’, cutting ‘right across conventional party boundaries and social classes’ (Curtis 1968: 13; Leerssen 1996: 95). Anglo-Saxonists emphasised linguistic links ‘between English and its Germanic and Indo-European ancestors’, replacing Latinate words like ‘preface’ with Saxon synonyms like ‘foreword’ (Ballantyne 2002: 6 & 41; Leerssen 1996: 95). American Anglo-Saxonism paralleled the British, but stressed immigration more (Curtis 1968: 28). The American ethnologist Samuel Morton lauded the exceptional ‘imperial achievements’, ‘intellectual endowments... indomitable courage and unbounded enterprise’ of the largely Teutonic, ‘extraordinary’ Anglo-Saxons (Morton 1839: 17).

The Aryans

The single most important classification controversy in race anthropology concerned the history and original home of the Indo-Europeans or Aryans. The charmed term ‘Aryan’ came from the ancient Indian epic the *Rig Veda*, in which the *Arya* were an invading tribe of pastoralists, and in India, the word still connotes nobility (Ballantyne 2002: 5). In 1784, the English colonial judge Sir William Jones showed that Sanskrit, the language of the epic and the *Arya*, was related to Greek and Latin. Comparative philology produced ‘a general acceptance, by the early 1820s’ that Greek, Latin, Sanskrit and Germanic languages formed a single Indo-European or Aryan language family, which excluded Hebrew* (Leerssen 1996: 90). From then on, this language family sheltered Europe’s ethnic groups under a single racial umbrella (Blanckaert 1989: 172). Interest in Aryanism and India spread rapidly among mid-nineteenth century Scottish, German and French scholars, partly because of its relation to the Celtic question, though English speakers, distracted by the colour racism of imperialism and slavery, ‘were comparatively lukewarm’ (Ballantyne 2002: 38-39; Day 1997: 110). Max Müller’s 1849-74 translations of the Vedas brought them to a large European audience, and ‘helped encourage a cult of Aryanism’ in England, ‘that flourished from the late 1860s until the 1890s’, justifying British rule of Aryan India and pruning Judaic elements from Christianity (Ballantyne 2002: 6 & 41; Day 1997: 110). Müller ‘cemented the centrality or prominence of ‘Aryan’’ in ‘European ethnology and imperial culture’ and ‘in the new genealogies being fashioned for’ European nation states (Ballantyne 2002: 44 & 6). Early nineteenth-century philological debates therefore had crucial implications for national identity, as Aryan civilisation became a synonym for confident and globally hegemonic Western Europe and its ancient Greek and Indian roots. Exclusion from this category was tantamount to banishment from European civilisation and race (Day 1997: 109). The Aryan question greatly promoted the association of languages with races.

Up to 1850, philologists assumed that modern Indo-European linguistic kinship proved ‘shared kinship of descent’ from ‘a tightly-knit racial group’, spreading from its original homeland to much of India and Europe (Horsman 1976: 392; Day 1997: 109). Pictet regretted that some philologists left the ‘poor Celtic languages’ out of the ‘vast and beautiful’ Indo-European language family, which produced ‘the masterpieces which most honoured the intellectual and poetic genius of humanity (Pictet 1836: 264). ‘Political considerations’, suggests Tristram, ‘played a role in’ admitting languages of major powers like France, Britain, Austria and Germany to the Indo-European ‘family’, well in advance of Celtic or Slavic (Tristram 1996: 59). Prichard complained in 1831 that while other Indo-European languages had been compared philologically, Celtic was ‘a new and almost unexplored field’, blighted by ‘remarkably unsuccessful’ efforts and a ‘deficiency of materials’ (Prichard 2000 [1831]: 139-40). An important and generally accepted proof of Indo-European superiority was its higher civilisation. Many archaeologists were convinced that ‘the first Indo-European invasion’ began metal usage in Europe, while Pruner-Bey ascribed the ‘reform’ of Latin which eliminated its synthetic structure to the ‘masculine potency’ of the ‘Aryan genius’ (Broca 1864b: 410-11; Pruner-Bey 1864b: 665).

If even those like Broca, who opposed the automatic reception of philological ideas into ethnology, took the superiority of Indo-European civilisation for granted, the assumption that Indo-Europeans were tall, blond, blue-eyed dolichocephals was equally uncontroversial (Bonté 1864d: 280; Broca 1871: 365-69). It was backed by narratives of Aryan conquest, references in Indian epics to the Aryas as white, and evidence that ancient Greeks saw long-headed blonds as ideals of beauty (Ripley 1900: 454). Prichard linked the Greeks to other Indo-Europeans by their figure ‘of the finest European form’, adding that their writings suggested the blond ‘sanguine temperament... prevailed’ among them (Prichard 1973 [1813]: 526). Poesche declared in 1878 that ‘blond peoples’ speaking Aryan languages were ‘*real Aryans*’ while non-Aryan speaking blonds or brunette Aryan speakers ‘are just *false Aryans* or *mixed peoples*’ (Mantegazza 1893: 366). In the 1820s-30s, monogenist philologists argued that Aryans from India to Europe were a single race, originating in Asia, whose physical diversity stemmed from climatic influence (Day 1997: 109; Prichard 2000 [1831]: 4 & 17-18). Prichard stated that as Aryan languages were ‘branches of the same original stock’, their ‘nations’ must have ‘emigrated from the same quarter’ (Prichard 2000 [1831]: 22). From the 1810s until ‘far into the nineteenth century’, the Asian origin of Europeans was ‘an article of faith’, supported by *ex oriente lux* reverence for ‘the antiquity of Near Eastern civilizations’, and origin myths tracing Gauls and Teutons to the Garden of Eden, tower of Babel, or Noah’s anchorage at

*The British Prime Minister Disraeli, who was of Jewish origin and saw race as the key to all ‘the vicissitudes of history’, stressed the Caucasian race, a classificatory category which included both Jews and Anglo-Saxons (Horsman

Mount Ararat* (Périer 1864: 615-16; Pruner-Bey 1864c: 224; Childe 1926: 94; Day 1997: 109; Wijworra 1996: 166-67). The leading 1820s-1940s philologists and ‘German researchers’ uncritically accepted the ‘widely popularised’ linguistic theory of Indo-Europeans from India or “‘somewhere’” in Asia’ migrating ‘by slow stages’ to Europe, and (Blanckaert 1989: 182; Deniker 1971: 317; Ripley 1900: 477; Talko-Hryniewicz 1914: 187). From 1820 to 1850, they increasingly traced Aryans to the Central Asian plateau (Horsman 1976: 393).

The mid-nineteenth-century transferred the core meaning of Aryan from a language to the race that developed it. Medically-trained racial anthropologists criticised Prichard’s linguistic definition of Aryans, arguing that physical features were more durable (Bonté 1864d: 280). Max Müller ‘indiscriminately applied’ the term ‘Aryan race’, which he coined in 1861, to the language’s original racial carrier, and after 1870, most researchers were convinced it was originally a distinct physical race type with a single language and culture (Orsucci 1998: 1; Ripley 1900: 477). Broca’s struggle to oust philology from its commanding position in ethnology partly explains the heat of his 1860s dispute with Pruner-Bey, who as one of the few linguists in the Paris Anthropological Society, supported the parallel philological and craniological taxonomies of Retzius’s theory (Blanckaert 1989: 184). Into the 1860s, Pruner-Bey offered linguistic, archaeological and historical evidence for Aryan migration from Asia, noting pockets of blond peoples left behind in the Middle East and Caucasus and Indo-European legends that often mentioned meeting aborigines (Pruner-Bey 1864c: 223-24 & 235). Racial blondness erected an increasingly well-travelled bridge between the accumulated prestige of the Aryan and the northern European Teuton, exemplified by Klaproth’s ‘nationalistically tinged term ‘Indo-Germanic’’ and reinforced by the craniological pillar of dolichocephaly (Sklenář 1983: 91). The Belgian anthropologist Vanderkindere declared for example that a ‘tall, blond and dolichocephalic race’ brought Aryan speech into Europe, and was preserved in a purer form in ‘less inhabited parts’ like Scandinavia and Scotland (Vanderkindere 1883: 94). Anglo-Saxonism meanwhile extended the philological idea of Central Asian origin into a ‘continuous chain’ through Germany’s forests to England and across America in an ‘irresistible march following the sun’ (Horsman 1976: 393). This period of consensus established a popular consciousness of the blond, dolichocephalic Aryan race, later exploited by the turn-of-the-century German nationalists who so influenced Hitler.

1976: 403-4).

*This led Blumenbach to derive all humanity, including his Caucasian race, from the Caucasus

Blond dolichocephalic Teutonic Aryans

Retzius principally established the craniology of the Aryans, and quickly accepted, like other Scandinavian craniologists, the insight of ‘northern archaeologists’ like Thomsen and Worsaae in Copenhagen that Scandinavian prehistoric monuments divided ‘very clearly’ into those of a Stone Age civilisation, and the Bronze Age ‘primitive *Aryan* civilisation’, which destroyed it* (Retzius, A. 1864: 11; Broca 1878: 193; Bertrand 1864b: 379-80; Collis 2003: 59). Blanckaert argues that until Retzius, anthropology generally assumed ‘the unity of the white, civilised, European type’ (Blanckaert 1989: 172). He divided skulls according to two characteristics, adopting Blumenbach’s *norma verticalis*, the skull shape seen from above, and Camper and Prichard’s degree of protrusion of the lower face (Blanckaert 1989: 169). However, all Europeans peoples supposedly had straight, or orthognath profiles, so Retzius in practice only classified them by dolichocephaly or brachycephaly (Retzius, A. 1864: 3). Combining evidence from classical accounts and ancient crania, Scandinavian ‘antiquarians’ like Daniel Eschricht, Sven Nilsson and Retzius generalised their local sequence of craniological strata to the rest of Europe, creating a race history of dark Stone-Age Lappish, Turanian and Iberian native brachycephals, conquered by blond, Bronze Age, dolichocephalic Celtic and Germanic Aryan invaders (Ripley 1900: 462; Blanckaert 1989: 188; Broca 1864: 463). Most Central Europeans had previously preferred to make ‘Celts, Germans or Slavs’ the original inhabitants, according to their own nationality, with only Finns like A.J. Europaeus proposing Finno-Ugrian pre-Indo-European Stone-Age Europeans in the romantic period† (Sklenář 1983: 92-93). The Scandinavian sequence was backed by comparison between modern Swedes and Lapps, some ‘dark brown hair still’ adhering to ‘globular’ Stone Age skulls, whose craniological features ‘imply’ dark colouring, and Edwards’s 1829 succession of round-headed, brunette Gauls and long-headed blond Kymri in France (Spencer 1997e: 358; Wilde 1849: 227). Edwards derived this race sequence from the historian Amédée Thierry, who in 1828 described the French nation as a mix of autochthonous Gauls with Germanic Kymri in the north, including Caesar’s tall, blond Belgae (Spencer 1997e: 357-58). Edwards confirmed Thierry’s theory by physiological observation of the living in and around France.

Retzius said the immediate inspiration for his influential scheme was Nilsson’s 1938 distinction of ‘Gothic’ and Lapp prehistoric skull types in Scandinavia (Retzius, A. 1864: 28). Nilsson and Eschricht discovered supposedly Aryan Celtic dolichocephals in Bronze Age tombs, and solely brachycephalic skulls in Stone Age megalithic long-barrows, which Retzius ‘hypothetically allied

* The clarity of archaeological periods in northern European material favoured the emergence there of the three ages scheme, which Thomsen publicised from about 1820 and published in 1836-37 (Sklenář 1983: 68 & 87-88).

† Europaeus willingly owned the ‘primitive’ status of Finns, despite its negative connotations abroad, illustrating local willingness to accept scientific ‘facts’ about national distinctiveness.

to' Finnish or Lapp pre-Aryans (Thurnam 1864: 401-2; Broca 1864: 463; Blanckaert 1989: 183; Wilde 1849: 227-28). Citing Thierry's theory that the Celtic 'Cimbrii' conquered England from 'savage hunters', Nilsson argued in 1838-43 that 'in the greyest antiquity', ancestors of the Lapps inhabited Britain, Ireland, Scandinavia, northern Germany and 'part of France' (Retzius, A. 1864: 64 & 103). Retzius, Nilsson, Arndt, Rasmus Rask and Rudolf Keyser all argued meanwhile, for an 'ethnic affinity' between Lapps or Finns in the north and the Iberian or Basque 'aborigines' of the south and west (Wilde 1849: 220; Retzius, A. 1864: 64 & 103). The British anthropologist Boyd Dawkins argued that historians had proved a non-Aryan 'Basque or Iberian' race in much 'of south-western Europe', probably speaking a language 'allied to' Basque (Boyd Dawkins 1876: 20; see pp.337-42). Rask found linguistic similarities between Basques and 'Finnish, Lapland, and Danish tribes', and Keyser linked all these 'oldest inhabitants of all Europe' with Turanians (Wilde 1849: 220; Retzius, A. 1864: 64 & 103-4; Collis 2003: 59). Aryan invaders perpetuated older vestige theory which swept widely scattered remnants into a single tidy race-historical dustbin. Already in the 1690s, a Swedish antiquary thought Basque and Gaelic might be related to Georgian, while Périer, Bertillon and Lagneau connected Iberian Basques, Georgians and ancient Ligurians (Périer, Bertillon & Lagneau 1861: 340-41; McKendry 1999: 186; see Fig. 3.2). Wilhelm von Humboldt in 1821 saw the Celtic and Basque languages of the 'finisterrés' as the key to the first Europeans (Zapatero 1993: 37). As an anatomy professor, Retzius used his much larger selection of crania to confirm Nilsson's results and popularise them internationally, first sharing his scheme with colleagues in 1840 and publishing it in 1842 (Retzius, A. 1864: 28). He interpreted Prichard's ultra-brachycephalic northern English skulls 'of round form', as pre-Aryan aboriginals* (Retzius, A. 1864: 102).

As the skull type of blond Teutonic Aryans, dolichocephaly itself became a superior marker. The Scandinavians implied it was the better race. Steenstrup saw ancient Danish brachycephalic skulls as inferior, because unearthed from deeper, and so older and more primitive strata (Blanckaert 1989: 182). 'The comparative barbarism' of Lapps confirmed Retzius's conclusion that the original 'Mongoloid or Asiatic' brachycephals only survived in Western Europe as pockets of non-Indo-European speaking Basques, Finns and Lapps (Gould 1981: 99, Ripley 1900: 462; Smith & Spencer 1997: 300). Although accused of 'partiality in favour of the dolichocephals', who he considered representative of his own Swedish nation, he did not come out clearly for them in his work (Blanckaert 1989: 181). He was very careful about asserting dolichocephalic superiority, as he

*Prichard linked these with Blumenbach's 'somewhat globular' autochthonous Caucasian skull, though Blumenbach's Caucasian was meant to be the modern European population rather a pre-Aryan vestige (Spencer 1997e: 358; Prichard 1973 [1813]: 56-57). The descendents of Blumenbach's Caucasian perfect whites are now ironically called 'blacks' in Russian slang.

defined Slavs as brachycephals and was in scientific contact with several Slav scholars. His son said he was aware ‘that many brachycephalic peoples, e.g. many Slavic stocks, stood on the same... moral, intellectual, [and] industrial’ level as ‘the most cultured [gebildetsten], and incomparably higher than most dolichocephals’ (Retzius, G. 1864: 30). Retzius was criticised for arguing that the posterior lobe of the brain was more developed among dolichocephals, but his son dismissed this accusation, because brachycephalic brains often achieved a similar overall lobe size through width rather than length (Retzius, G. 1864: 30-31). However Broca (himself brachycephalic) and Quatrefages denounced Retzius for treating only the dolichocephalic Neolithic Aryan conquerors as ‘truly whites’, and purposely or not, inspiring a widespread assumption of dolichocephalic superiority, due to ‘a natural tendency of the men most free of prejudice,’ to assume their race was best (Quatrefages 1887: 114-17; 1889: 301; Blanckaert 1989: 181). Broca noted that cephalic index was first studied in countries where dolichocephaly ‘very manifestly predominates’, ‘most of all in Sweden’, ‘then in England, the United States, Germany’ (Blanckaert 1989: 181). Retzius observed that dolichocephaly predominated in ‘more densely populated’ and ‘higher culture’ Western Europe, while the emptier wide spaces of Eastern Europe, had ‘a lower cultural level’ (Retzius, A. 1864: 33). Brachycephals were also a far less purely ‘European’ and Western category in his original 1840 scheme, including Slavs, Finno-Ugrians, Afghans, Persians, Turks, Lapps and Yakuts (Retzius, A. 1864: 3). Retzius supposed without apparent evidence that the lands of Iberian, Italian and Greek classical civilisation must be dolichocephalic, refusing to believe that a broad Greek skull was of ‘true Greek type’ (Retzius, A. 1864: 33- 34).

Retzius’s narrative of blond Germanic dolichocephals was considerably strengthened by Alexander Ecker’s early 1860s discovery that fifth to seventh century German graverow, or *Reihengräber* burial sites contained long skulls (Lissauer 1872: 123). Ludwig Lindenschmidt used French research on Frankish graves to identify ‘a purely German population’ of Franks and Allemanni in ‘a large number’ of Rhine valley burials of long skulls (Virchow 1950 [1896]: 189). Ecker synthesised this data, ‘establishing scientifically’ the tall, blond, blue eyed ‘Germanic type’, characterised by dolichocephaly, so that late nineteenth-century scholars and ‘popular anthropological publications’ into the 1930s ‘commonly’ associated the *Reihengräber* type, including from a supposedly Visigoth grave in Spain, exclusively with Germans (Talko-Hryniewicz 1914: 188; Buschan 1890: 3-4 & 36; Beddoe 1912: 101; Czekanowski 1937: 231; Haddon 1898: 582-83). Despite the identification of typical *Reihengräber* grave artefacts, skull-shape remained the most important indicator of Teutonic graves (Buschan 1890: 3). Retzius’s theory reduced European race complexities ‘to a charming simplicity and clearness, and never had hypothesis such a general and rapid success’, remaining unchallenged for ‘nearly twenty years’ (Broca 1878: 193). Up to the early 1860s, all the main

Western European anthropologists, archaeologists and linguists, including Edwards, Quatrefages, Broca and Pruner-Bey, 'subscribed to one version or another' of his European race succession of invading Asian dolichocephals replacing or mixing with brachycephalic autochthones (Smith & Spencer 1997: 298; Broca 1873: 578; Thurnam 1864: 397 & 404; Day 1997: 110; Ripley 1900: 462; Quatrefages 1889: 301; Blanckaert 1989: 183). Up until 1863, all ancient brachycephalic crania, and even sufficiently old jawbones, were attributed to pre-Aryans, using Cuvier's theory of correlations to hypothetically reconstruct the rest of the head (Blanckaert 1989: 188).

Teutonmania was not homogeneous and Anglo-Saxonism was particularly particular. British anthropologists like Prichard (1813), Huxley (1870) and Flower (1885) neglected craniology in favour of pigmentation. After a 'disappointed' 1860s effort to create a craniological global scheme, Huxley relegated skull-shape to a secondary taxonomic position after pigmentation in 1870 (Keith 1928: 309). Beddoe primarily focussed on blond rather than dolichocephalic superiority and Huxley's north European race ranged from extreme long to extreme broad-heads (Huxley 1870: 406). Beddoe, who described himself as having a 'fair complexion, with rather bright brown, wavy hair, a yellow beard, and blue eyes; a head rather large and lofty and of medium breadth', equated character with colouring (Allen 1971: xiv).

Thus in insane asylums one sees the victim of mania usually with sanguine traits, the melancholic and the insane epileptic most often with straight dark hair. Persons of highly nervous temperament, thought-readers, seers, prophets, are mostly either very black or extremely fair. Note too the preponderance among criminals of dark hair, and yet more clearly of the brown eye (the criminal eye as some have called it) most marked, according to my own statistics, in crimes of violence. (Beddoe 1905: 237)

Prichard mentioned that brunettes had 'stronger corporeal fabric and greater fortitude of mind', 'more strength and vigour' than the 'relaxed and delicate fibre' and 'fine texture' of the blond, and also stronger inclination to anger and insanity (Prichard 1973 [1813]: 169-72). While continental classifiers tended to focus on European ethnic history and craniological evidence, the British often extended a colour-based global world-view to Europe, distinguishing blonds from dark-eyed Mediterranean brunettes (Prichard 1973 [1813]: 21-22). They were also sometimes vaguer than continentals about European race geography, insisting that races 'intimately blended' through 'endless varieties of intermixture' (Huxley 1870: 407 & 409; Flower 1885: 391-92). Recognising ambient prejudice against dark colouring, Huxley insisted that his southern European dark whites may, in 'physical beauty and intellectual energy, be the equal of the best of' the the tall northern European Xanthochroi, 'or fair whites' (Huxley 1870: 408). However he explicitly theorised

European race distinctions as equivalent to global divisions, widely understood to have different racial worth. Dismissing the orthodox, ‘absurd denomination of “Caucasian”’, Huxley, largely backed by Flower and the Scot Hector MacLean, insisted that ‘Xanthochroi were an ‘extremely well-defined type of mankind’, and ‘a great contrast’ to the shorter, lighter-framed Melanochroi ‘or dark whites’ (Huxley 1870: 406 & 408-9; Deniker 1971: 283; Deniker 1971: 283; Wiercinski 1962: 10; Flower 1885: 391-92; MacLean 1872: xl). Though defined somewhat differently, Huxley and Flower’s blonds were both much more purely European than the Melanochroi, who stretched into Asia and Africa (Flower 1885: 392; Huxley 1870: 406; Müller 1879: 17).

The second superior race: dark brachycephalic Celts

The brachycephals of Europe’s upland interior, called Gaels, Celts or *Gallokelten*, then Celto-Slavs, and finally Alpines in the twentieth century, were the unidentical twins of the Nordic and the most serious challenge to blond superiority. The two races were opposed in the French Revolutionary ‘quarrel of two races’, and in Britain, where Anglo-Saxonists like David Hume and later Dr. Arnold of Rugby declared Saxon English superiority over ‘degenerate’ and ‘abject’ rebellious Insular Celts (Ballantyne 2002: 6 & 41; Poliakov 1971: 62-64). Some German ethnologists initially tried to associate a prestigious Celtic marker with their identity, but by 1870, purely Teutonic Germans were firmly opposed to Celtic French and later to Celtic Slavs too. From Edwards and Retzius on, the tall, blond long-headed ‘Teuton’ and shorter, dark-haired ‘Celtic’ brachycephal were the only really important physical types in nineteenth-century French, German, Polish and Russian ethnological disputes, ensuring their enduring centrality in European race classification. From Broca in France to Zograf in Russia, anthropologists found tallness associated with long heads and fair hair and the opposite traits bunching together in a second type, interpreting them as ‘two different peoples’, and dismissing the intermediate majority as hybrids (Beddoe 1912: 19-20; Zograf 1893: 4-5; Deniker 1897: 126). They rarely combined stature, pigmentation and skull shape in any other way. Almost any exaltation of the blond was accompanied by denegation of its perennial broad-headed foil. Woltmann claimed that like Retzius, Lapouge and Collignon, he saw ‘the whole of cultural history’ as ‘a struggle between short and long-heads’ (Woltmann 1903: 297). The Celt-Saxon debate meanwhile captivated mid-nineteenth-century British scholars, with ethnologies by Arnold, Knox and *Dublin University Magazine* focussed almost exclusively on comparing these races, who were ‘generally... in antagonism’ throughout Europe (DUM 1855: 723 & 731; Day 1997: 110).

The rival Germanic and Celtic, Gallic or Gallo-Roman narratives of French origin were both formulated in the sixteenth century (Hankins 1926: 142; McKendry 1999: 182). In most early modern French race theories, Frankish nobles and Gallic ancestors of the common people stood together for liberty against barbarian invasion or especially in Protestant accounts, Roman tyranny (Hankins 1926: 142; Chapman 1992: 204). However the next three centuries saw a dizzying kaleidoscope of triangular relationships between ‘Roman oppressors’ or civilisers, barbaric or ‘oppressed Celtic Gauls,’ and ‘Germanic liberators’ or tyrants, depending on the current interests of crown, nobility or third estate (Poliakov 1971: 40-41; Hankins 1926: 142-43; Dietler 1994: 587-88). The ‘nobility and royalty’ ‘jealously monopolized’ Frankish identity as conquerors to claim exclusive title to political rights, and oppose social change, ‘influential’ historians like Boulainvilliers (1727) giving these claims ‘a strongly racial character’ (Dietler 1994: 587; Hankins 1926: 142; Chapman 1992: 204; Theisse 2001: 51; Poliakov 1971: 60). In response, the Revolution took a Gallic ‘Celtic identity’, the Abbé Sieyès inciting the third estate in 1798 to send ‘back into the forests of Germania all these families who maintain the insane claim to have issued from the race of conquerors’ (Theisse 2001: 51; Dietler 1994: 587). An exclusive Gallic descent ‘categorically’ excluding Germans and the ‘foreign’ Romans then became ‘a unifying theme’ in a post-Revolutionary France badly needing ethnic origin myths ‘to forge a sense of national identity for an invented community’ with few solid binding elements (Theisse 2001: 51; Dietler 1994: 587; Chapman 1992: 203; Poliakov 1971: 42-43). The July Revolution of 1830 marked the triumph of ‘our ancestors the Gauls’ in French national mythology, just as 1688 had enthroned the common people in England*, though conservatives like Gobineau and Lapouge still disdained the broad-headed Celtic lower class and petit-bourgeoisie (Poliakov 1971: 44-48 & 62; Mosse 1978: 48-49). In this period of growing race consciousness, however, liberals like the Thierry brothers still also saw conservative Frankish aristocrats and progressive third estate Gauls as separate ancient races cohabiting in France (Poliakov 1971: 42-43). A ‘forceful counterattack by Celtophile Romantic historians’ such as Guizot, Thierry and Henri Martin around the Revolution of 1830, cut short a ‘brief resurgence of Frankish national ancestry during the Bourbon restoration’, popularising ‘an essentialist racial vision’ which ‘permanently established the Celts as a primary ethnic foundation’ of the modern French (Dietler 1994: 588 & 592). From then on, French ethnologists like Bory, and foreigners like Morton took it as proven that the French were largely Celtic ‘by blood’ (Morton

*Just as British nationalists exploited Celtic symbols of antiquity like the Ossianic and Arthurian legends and druidism, French nationalists from the 1790s on appropriated the Bretons and in particular their megalithic prehistoric monuments, to prove the ancient Gauls were the pre-eminent Celtic people of Europe (Theisse 2001: 54 & 125). The Bretons were securely established as the purest descendants of France’s Gallic ancestors, a narrative latterly reinforced in no small measure by Asterix and Obelix, and were the main focus for Renan’s Celtic romanticism. French nationalist anthropologists therefore bridled at the theory that they were medieval British colonists (Lagneau 1866: 504). Broca accepted this ‘opinion, ardently supported today,’ only for the tall blonds of the coast, asserting that the smaller ‘true Bretons’ inland were natives (Broca 1866: 503-4).

1839: 17; Bonté 1864c: 198). Pruner-Bey argued from etymology that French, next to other neo-Latin languages, was ‘eminently and first and foremost Celtic and Gallic’ (Pruner-Bey 1864b: 666).

Up to 1870 however, many French and German ethnologists continued linking Teutons and Celts. Many of the French admired the ‘pure race’ Teutons, with their ‘ferocious eyes’, impetuosity, and ‘an extraordinary courage in combat’, who ‘doubtless’ had a significant anthropological impact in post-Roman Gaul (Périer, Bertillon & Lagneau 1861: 363, 369 & 373). D’Omalius d’Halloy overtly used the ethnic prestige argument in 1864 to identify French Celts with the ‘eighty million souls’ speaking ‘Teutonic languages’, rather than with the Insular Celtic fringe (Omalius 1864b: 268). German Celtomaniacs like Holzmann and Moke agreed that a ‘blood relationship’ between ancient Celts, who ‘always’ had ‘a high level of culture,’ and the ‘completely barbaric’, savage, cannibal Britons, was ‘completely impossible’ (Holzmann 1855: 62). Omalius argued that a Germanic identity explained easy Celtic conquests among ‘the Teutonic peoples’, by making them little more than ‘changes of dynasty’, while the rapid Gallic adoption of Latin could have been facilitated by ‘conflict between’ the languages ‘of the conquerors’ and their black-haired subjects (Omalius 1864b: 268). To object that the ancient Celts and Teutons differed was no more valid, he said, than to deny the Franks were Teutons, because modern French and Germans differed (Omalius 1864b: 268). The blond northern French Belgae or Kymri (the Welsh-Breton, as opposed to Gaelic branch of Celtic languages) were the key Teutonic link. Desmoulins in 1826 and many other ethnologists classed them in the tall, blond, blue-eyed and oval-faced ‘*Indo-Germanic*’ or Germanic race, and all knew Tacitus’s statement that the ‘reddish hair and large limbs of the Caledonians proclaim a German origin’ (Broca 1873: 586; Tacitus 1962 [97-98]: 61; Hölder 1876: 18; Betham 2000: 399; Holzmann 1855: 58; Omalius 1869: 16; Périer 1864: 602). From as early as Liebnitz in 1698, some authors saw the Kymric languages as Gaelic-German or even Germanic-Gaelic mixtures, or considered the ancient Celtic and Teutonic languages ‘very close’ (Périer, Bertillon & Lagneau 1861: 362; Beddoe 1971 [1885]: 20; Lagneau 1864b: 246; McKendry 1999: 187). Omalius thought Caesar’s distinction between Celts and Belgae might have reflected different degrees of ‘the Germanic element’ (Omalius 1864b: 268-69).

International Celtomania

Like the Teutons, Celts were claimed as ancestors in much of Europe (see Fig. 3.3 and pp.285-88), but while for the French, Insular Celts and Galicians this was a fundamental identity, for Germans and others it was a decorative optional identity symbol.

When things were going well in warfare and political strife, the pan-European category 'keltoi' was a useful ancestry. When thrown back upon your own borders, however, it made more sense to stress your own uniqueness, to emphasise that nobody else had any business in your country. (Chapman 1992: 203).

In two major clashes with German interpretations of the Celt therefore, the French view prevailed. Much of the wide appeal of the Celts stemmed from their supposed universality. Because the Celts 'were the most famous' pre-Roman people and classical texts made northern Europe their original 'seat' before Teutons expelled them, most early ethnologists 'included all the prehistoric periods' in 'the Celtic epoch,' and made the Celts the 'first inhabitants' of all Western Europe (Broca 1864: 461; Wilde 1849: 217; Prichard 1973 [1813]: 500-1 & 527-34; Collis 2003: 63). The Greeks and Romans had them on the upper Danube, while similar stone circles were found in Scandinavia and supposedly pure Celtic parts of Britain (Prichard 1973 [1813]: 528). 'Historians, archaeologists and ethnologists' throughout the 1840s, at least in France, Ireland and England, attributed pre-Roman monuments and artefacts throughout Western Europe to them, both of metal and stone (Broca 1864: 461; Retzius, A. 1864: 102; Wilde 1874: 246). Philology, Retzius and the 'remarkable and rapid' progress of archaeology then convinced most mid-nineteenth-century experts that the Celts were the first Aryan invaders from Central Asia, 'the seat of primeval civilisation', reaching Europe 'well before' Teutons, Pelasgians and Slavs, and either displacing or mixing with and imposing their language on Western Europe's aborigines (Broca 1864: 462; Spencer 1997e: 358; Périer 1864: 615-16; Lagneau 1864b: 247; Holzmann 1855: 159; DUM 1855: 721-23; Rialle 1864: 551; Rawlinson 1877: 152-53; Campbell 1872: lx). The universality of the aboriginal Celts, including in Central and Northern Europe, was carried over into the new narrative (Rawlinson 1877: 152-53). Keyser, Nilsson and Retzius argued from the 'appearance, clothes, religious rite, the name of the Cimbrii*', place names, archaeology, 'stature of skeletons' and 'cranial type', that Bronze-Age Celts were the first Aryans in Scandinavia (Pruner-Bey 1864b: 672; Retzius, A. 1864: 33; Wilde 1849: 228). Pruner-Bey said Worsaae was the only Scandinavian to dissent, extending Gothic occupation back to the Bronze Age (Pruner-Bey 1864b: 672). Pruner-Bey and others claimed Celtic was Europe's linguistically oldest form of Indo-European, using passages from Tacitus and ethnological evidence to argue for ancient Baltic and north German Celts (Pruner-Bey 1864b: 672; Hölder 1876: 19). Philology and Thomsen's identification of Stone, Bronze and Iron ages in Denmark in 1832 convinced archaeologists that 'more civilised' Celts from Asia had 'introduced bronze' or even iron-working Europe, causing 'an immense step towards civilisation' (Broca 1864: 462; Gosse 1860: 519). Up to around 1900, archaeologists often judged finds as Aryan Celtic on the sole

evidence of bronze, assuming the pre-Aryan ‘purity of the Stone Age’ (Broca 1864b: 410-11; 1871: 368; Sklenář 1983: 122). Pruner-Bey even argued that the megalithic tombs and stone implements found everywhere with Indo-Europeans were proof that ‘the Arian’ encountered ‘more ancient inhabitants’ (Pruner-Bey 1864c: 233-35). He claimed archaeologists had shown copper, bronze, domestic animals and cereals all appeared in France with the tall dolichocephal, while Rialle argued that the Gaelic names of four metals ‘clearly go back to the primitive Aryac, following’ Celtic ‘laws’ of language change (Pruner-Bey 1864c: 235-36; Rialle 1864: 552).

In ‘Germanic’ countries especially, Celtic ancestry narratives often took the form of ‘Celtomania’, or equating Teutons, Gauls and often several other ancient peoples (Sklenář 1983: 93). Some scholars from the fifteenth century on, and many Germans in particular from at least the seventeenth until ‘well into the eighteenth’ century, including Barth and Liebnitz, were Celtomaniacs (Holzmann 1855: 2-3; Brandes 1857: vi; Chapman 1992: 203; Tristram 1990: 12-13). For Cluver (1616), Keysler (1720) and Pelloutier (1750) Celts encompassed ‘Gauls, Germans, Britons, Saxons, Hyperborians and Scythians’, while some Germans added Romans and Greeks (Piggott 1966: 9; Omalius 1864b: 267-68; 1869: 16-17; Périer 1864: 604-5). Several sixteenth and seventeenth century Dutch-Flemish writers, including Goropius, traced their language back to Babel or even Eden, increasingly interposing a Scytho-Celtic linguistic ancestor for Gothic or German (McKendry 1999: 182-83). In Britain, pro-Germanic antiquarians like Richard Verstegan in 1605 tried to attach the Scots, Picts and Gauls to a Teutonic family tree, legitimising the Anglo-Saxons as just the latest Germanic invaders of Britain, while Pezron linked Germans and Celts to laud the Bretons (Piggott 1966: 11-12). Celtomaniac polemic peaked in the mid-eighteenth-century clash between the historians Schoepflin and Pelloutier and again, provoked by Adolf Holzmann and others, in the middle of the next century. Late eighteenth-century proto-Romantic enthusiasm for non-classical European cultural origins revived the notion that tall, blonde ‘ancient Scandinavians, Teutons or Celts’ were common ‘great ancestors’, who had manfully invaded and resisted Rome, and that the ‘Nordic heaven’ hosted ‘a common pantheon of European modernity’ (Thiesse 2001: 50; Bieder 1909: 13; Ripley 1900: 124). Celtic prestige derived from resisting Caesar, supposed autochthonous status in Europe and romanticisation in *Fingal*, the Scottish Celtic epic of the bard Ossian, which Macpherson supposedly discovered in 1761 (Thiesse 2001: 25 & 54). The German plunge into the pan-European Ossianic craze, with which Teutonic mythology offered nothing comparable, might have reflected insecurity faced with international French cultural prestige. Thomas Carlyle said in 1827 that the English attributed ‘a radically bad taste’ to Germans, ‘a rather coarse and uncultivated

*The Kymri (the Welsh and Bretons) were often linked to the ancient Cimbri of Jutland and Kimmerians of Crimea. See pp.342-43.

state of mind... delighting in coarse excitements, such as flaring contrasts, vulgar horrors, and all sorts of showy exaggeration' (Chapman 1992: 131). Holzmann meanwhile coveted the greater Celtic antiquity, reclaiming for Germans 'a whole millennium of fame-filled history,' 'a real antiquity... equal to that of the Greek and Roman, instead of us contenting ourselves with the Middle Ages' (Holzmann 1855: 2).

The Celtomaniac dispute was so confused that the leading Irish ethnologist William Wilde said in 1844 the Celts and their relationship with Teutons were almost entirely unknown, with some even believing the early Irish 'a Gothic race' (Wilde 1849: 217). Pelloutier and Schoepflin drew contradictory conclusions from the same scrupulously compiled corpus of classical references, supported by pre-scientific etymologies of 'surviving old-Celtic words', and later polemicists used the same techniques (Périer 1864: 594 & 600; Broca 1864: 459; Holzmann 1855: 7; Brandes 1857: vi). Unlike neo-Latin French, Germanic languages might conceivably have been descended from Gaulish, about which 'virtually nothing was known' (Chapman 1992: 204; Betham 2000: 4). Hölder said mid-nineteenth-century Celtomaniacs reconstructed a 'hypothetical' ancient Celtic language from 'mostly old-German words and names' in classical texts (Hölder 1876: 19). Classical vagueness and ambiguity about the location of the 'Greek *keltoi*, and the Latin *celtae* and *galli*, provided ample scope for disagreement' (Chapman 1992: 203; Lagneau 1864b: 247; Broca 1864: 458-59; Périer 1864: 593; McKendry 1999: 182). Celtomaniacs drew on the Greek and occasional Roman habit of calling all north-west Europeans Celts, while opponents like Schoepflin objected that the Greeks knew nothing of the area, but Caesar's first-hand account distinguished Celts from Teutons (Holzmann 1855: 4 & 157; Périer 1864: 601-2; Bieder 1909: 16-17). Holzmann argued that the new theory of Martin Bouquet in Paris (1738) and Schoepflin, that Teutons were not Celts, spread rapidly, without 'entirely' expelling the old one until the nationalistic passions of the Napoleonic wars required that neither 'a community of language' nor blood should connect Celtic French and Teutonic Germans (Holzmann 1855: 4-5). While the French contrasted their 'refined' ancestors with Tacitus's 'rude Nordic barbarians', Germans revelled in his descriptions of Teutonic valour, and highlighted classical references to Gallic 'inconsistency, carelessness and vices' (Holzmann 1855: 4-5). In Britain, Anglo-Saxonist antiquarians like Percy (1770) and Pinkerton (1787) argued in sometimes precociously racial terms that Celts were separate or inferior to Teutons, lacked their instinct for liberty or were 'driven out of much of Europe by the Goths' (Horsman 1976: 391). Pelloutier, a preacher to the French congregation in Berlin, launched Celtomaniac opposition to Schoepflin's theory, arguing that Celts originally 'occupied all of Europe' from Greece to Britain and included the Teutons, Dacians and Scythians (Holzmann 1855: 6; Périer 1864: 600; Lagneau 1864b: 247; Broca 1864: 459). German authorities from Meiners in

1793, to a 'well-known Latin dictionary' in 1838 and 1861, defined Teutons as a category of Celt or linked both in 'one stem' (Bieder 1909: 13-14 & 28-31). A Central European Celtomania favouring 'the Celtic element' over 'the Germanic', for instance by allocating bronze to Celts and more primitive stone archaeological artefacts to Teutons, rose in the early nineteenth century in parallel with the idea of a 'Germanic Europe', and in mid-century 'especially, held experts in excitement' (Bieder 1909: 13 & 31; Sklenář 1983: 93). By 1857 however, Brandes and Glück had decisively disproved the theory that Germans and Celts were one people in 1857 (Tristram 1990: 12-13).

The Broca challenge

Retzius's original scheme treated all Western Europeans as superior dolichocephals, and 'largely confined' inferior brachycephaly to Lapps and Slavs (Retzius, G. 1909: 288-89). The subsequent spread of brachycephaly divested the French of this comforting superiority. Successive versions of Retzius's scheme in 1842-60 progressively established 'the essential elements' of the European north-south three-race scheme by extending tongues of brachycephaly across the Alps into a wide Pyrenean zone, centred on the Basques, and other broad-skulled protrusions into inland Greece and Spain (Retzius, A. 1864: 165; Retzius, G. 1909: 288-89; see Fig. 3.4). In 1844, Retzius introduced Basque and French brachycephalic enclaves in the west, in 1847 he said dolichocephalic Aryan Celts had dominated and merged with broad-headed Iberians in France and Spain, in the 1850s, he attributed brachycephaly among eastern and northern Germans and most modern Greeks to 'Slavonic extraction', and after an 1857 journey to the region, declared southern Germans and then northern Italians broad-headed too (Retzius, A. 1864: 33-34, 56, 64, 123 & 139; Retzius, G. 1909: 287). He suspected that British 'traces of a brachycephal, brunette race' were 'probably the real Britons' and of 'Finnish or Basque origin' (Retzius, A. 1864: 123). Other 1860s anthropometric studies confirmed brachycephals in South Germany, the 'whole basin of the Po', southern France, and among the Czechs and South Slavs, leading Virchow to accept 'a continuous anthropological region' of brachycephaly, including 'Slavs, Germanics, and Celts', while Welcker in 1866 identified dolichocephals on Europe's north and south coasts, separated by a brachycephal band from France to Russia (Ripley 1900: 463-64; Virchow 1950 [1896]: 190; Borlase 1897: 923). Broca's anthropometric research from 1859 on convinced him and most other French and British anthropologists that the French were mostly short, dark brachycephals, descended from prehistoric natives (Périer, Bertillon & Lagneau 1861: 417; Broca 1871: 300; 1871: 284-85; Lagneau 1860a: 519; Thurnam 1864: 399). Gould and Spencer suggest this helped turn Broca and French scholars against Retzius's race-succession, which made the dark brachycephals 'essentially a subjugated group' of inferior savages, steamrolled beneath dolichocephalic Aryan progress and surviving only in sorry backwaters (Gould 1981: 99; Spencer 1997e: 358). Broca made these aborigines the French

national race, calling them ‘true Celts’, and rehabilitating their reputation became ‘a cause célèbre’ of national identity politics for 1860s and 1870s ethnologists (Spencer 1997e: 358). They believed two new discoveries disproved Retzius. The descendants of the historical Celts were not Nordic, and the first Europeans were actually long-headed. Long battles about Basques, Celts and ‘fossil races’ defined French ethnology after 1862, with Broca attacking Retzius’s hegemonic ‘Aryan orthodoxy’, and Franz Pruner-Bey (1808-82), ‘the second man of the Anthropological Society’, defending it (Blanckaert 1989: 184). Fortunately for French national pride, Broca’s new evidence was persuasive. ‘In a few years’, says Blanckaert, his arguments totally overthrew the Retzius theory (Blanckaert 1989: 183).

In a period of French wars against both Austria and Prussia, Blanckaert accepts that Pruner-Bey might have had some German nationalist motives for his position, while Stephen J. Gould suggests that Broca, himself brachycephalic, condemned Retzius’ theory as a Nordic-Germanic plot (Blanckaert 1989: 187; Gould 1981: 99). Pruner-Bey was born Franz Brunner in Bavaria and studied medicine in Munich and Paris (Blanckaert 1989: 184). During two decades in Egypt as professor of anatomy and physiology and later private doctor to Viceroy Abbas Pacha, who gave him the title of Bey, he carried out medical and ethnographic research, before retiring to Bavaria in 1852 (Blanckaert 1989: 184). In 1860, he moved to Paris, but his leading role in the Anthropological Society ‘ceased brutally’ with the Franco-Prussian War (Blanckaert 1989: 184). He retired to Pisa and died in 1882, without even an obituary in the Society’s journal (Blanckaert 1989: 184). Already desperate to prove his Francophilia in 1864, he called the Gauls ‘sons of the sword and the word’, whose linguistic adaptation proved their ‘ability to seize ideas’ and aptitude for progress, while the modern French were ‘the royal people’, ‘impossible to tyrannise’, and their language ‘the universal’ ‘emblem of education and civility’ (Pruner-Bey 1864b: 665). Pruner-Bey also accepted the survival of ‘little brown’ aboriginal brachycephals in Western Europe and France in particular, and desperately tried to allay suspicions that he thought them too inferior. The names of most Spanish ‘heroes of the conquest and the apostles of the faith’ in Latin America, showed they had inherited ‘the adventurous and persevering spirit of the Semite’ and ‘Basque agility’ from ‘Iberian and Semitic stocks’ (Pruner-Bey 1864b: 664). Pruner-Bey’s position was in line with widespread German reluctance to abandon the Retzius race succession of tall ‘blond blue-eyed’ ‘true Celts’ subjugating the ‘non-Celtic’ Gauls and teaching them to speak Celtic (Hölder 1876: 18; Spencer 1997e: 358). Though Celtomania never took much hold in craniology, French and German anthropologists struggled to appropriate the Celts to rival race narratives even after antiquarian Celtomania had subsided. Celts were Western Aryans and making them broad-headed brunettes undermined the blond Teuton’s Aryan pretensions. Von Baer, His and Rüttimeyer, Ecker, Hölder

and Welcker insisted that the small, dark Alpine and southern German brachycephals must be Ligurians, Sarmatians, Slavs, Basques or Finns, despite mounting place-name, classical and craniological evidence that they were Celts* (Ripley 1900: 125; Dareste 1860: 82; Spencer 1997e: 358; Bonté 1864: 626). Baer and Ecker for example were 'surprised to find' Swiss and Swabian brachycephals, but Baer stuck to Retzius's argument that these were pre-Aryan 'remnants' like the Basques (Dareste 1860: 81-82; Beddoe 1912: 101-5). Pruner-Bey meanwhile disputed the Roman belief that Teutons were taller and fairer than Celts, and the modern argument that Celts only appeared tall and fair to the small dark Romans (Pruner-Bey 1864b: 671).

Pruner-Bey's theory was even less flattering to brachycephals than Retzius's. Using Retzius and Prichard's concept of non-Indo-European 'allophyle' races, he made the first Europeans a broad-faced, brachycephalic 'Mongoloid type', related to Lapps, Finns and Kalmuks, and surviving in the Alps, Pyrenees and Ligurian coast (Quatrefages 1889: 301; Ripley 1900: 462; Woltmann 1903: 291-92; Blanckaert 1989: 185). In 1866, he linked this 'ancient palaeontological race', by its skeletal and hair characteristics, customs, life-style and 'ideology' (demonstrated by language 'vestiges') to the peoples 'of Siberia and the American prairies', who spoke a hunter's language 'par excellence', and probably 'never founded any kind of civilisation' (Blanckaert 1989: 189). Blanckaert says Quatrefages adopted this 'Mongoloid theory', which supported monogenist 'migrationist theses', in 1867, Ernest-Théodore Hamy, Paul Gervais and the archaeologist Edouard Dupont supported it and even Broca initially used it to explain dolichocephalic finds (Blanckaert 1989: 189-90). Quatrefages argued that because Aryan Celts and Slavs bred with allophyle Finns, Caesar's Armoricans resembled modern Poles, '*almost dwarfish women*' appeared in Brittany and Paris, several sources reported Baltic '*giants and dwarves*' and 'numerous traces of Finnish' appeared in Baltic languages (Quatrefages 1871: 44-46 & 49-50). His Lapponoid original Europeans survived in Finland, Lapland and Russia, and as pockets, mixtures and grammatical traces further west (Quatrefages 1889: 313 & 455-57).

The question of whether physical type was mutable, linked to the monogenesis-polygenesis and linguistics-craniology disputes, intensified and embittered the 1860s debates (Blanckaert 1989: 193; Broca 1864d: 304-5). Polygenists like Broca attributed European type differences to cross-breeding between pre-Aryan natives and 'Asian conquerors', while Pruner-Bey and the linguists stressed 'the incontestable influence of environment' (Broca 1864d: 305-7; Bertillon 1864: 301; Lagneau 1864c:

*Ironically, even Retzius identified Celts in southern Germany, probably from classical sources. He divided modern Germans into 'real Germans (Teutons), blond dolichocephals' and 'Celtic Germans, brunette dolichocephals' and in 1856, located the descendants of the Celtic Gauls 'in France, in Switzerland, Germany and elsewhere' (Retzius, A. 1864: 122 & 137).

264; Pruner-Bey 1864b: 671; 1864d: 261; see pp.101-5). This conviction, doubted by the more anatomically minded Retzius, made Pruner-Bey fiercely defend race succession (Blanckaert 1989: 194). Neither the Broca nor Pruner-Bey camps doubted that a carrier race rather than cultural contact imported Aryan culture from Asia* but disputed the proportions of descendants of Asiatic invaders versus natives in modern Europe (Bertrand 1864: 303; 1873: 634-35, 639 & 641). Retzius and Pruner-Bey stressed ‘the essentially Celtic and Aryan character of the great mass of the French’ and other Western Europeans, who drove the Stone Age natives to seek ‘refuge at the confines of the Arctic’ or ‘the inaccessible mountains of the centre of Europe’ (Blanckaert 1989: 183; Pruner-Bey 1864b: 670; 1864c: 241-42). Broca, backed by Piette, offered modern European racial diversity as evidence that ‘a few thousand Asiatics’ introduced Indo-European languages, laws and mores into Europe, but dissolved with little trace in the much larger native population (Broca 1864c: 194-96; Blanckaert 1989: 183; Piette 1876: 266). His ally Bertrand insisted on not confusing race with civilisation, which small groups of newcomers could profoundly influence (Bertrand 1864: 303; 1873: 634-35, 639 & 641). Broca’s camp insisted that far from Aryan hordes sweeping ‘from the high plateaux of Asia to the extremities of the West’ and ethnically cleansing whole regions, very few racially pure Aryan Celts reached Europe, and these had reinforced themselves *en route* by mixing with ‘brown races’ like the Anatolian Semites or steppe Mongols (Bertrand 1873: 238; Broca 1864d: 309-10; Bonté 1864: 632-33; 1864d: 282). Bonté noted that even Retzius made Slavs racially different to Scandinavians (Bonté 1864: 633).

Building on the national nativism of Celtic French and Saxon British, Broca made Europeans natives, but this was also a big step towards Eurocentrism, anticipating the Nordicism theory that Nordics and Aryans also originated in Europe (Blanckaert 1989: 193-94; Broca 1871: 366-67). While monogenists like Pruner-Bey and Prichard, in part from Christian solidarity with Asian Aryans, tried to show they were of the same stock as non-Europeans, Broca, a polygenist, saw Europeans as distinct and separate (Blanckaert 1989: 183 & 193-94; Broca 1871: 366-67). Convinced that even primitive Europeans were racially superior, Broca accepted Basque and Finnish pre-Indo-Europeans as the main racial components of the modern French. Périer called the Pyrenees ‘the cradle’ of the Celts, ‘this European people’ (Périer 1864: 621-22 & 624). However French anthropologists recognised the widespread anti-aborigine prejudice, encouraged by

*Broca’s ally Bertrand said ‘anatomical anthropology’ confirmed that ‘oriental civilisation’ was ‘principally’ brought to Europe ‘by the migration of tribes, numerous enough to have left along their route, traces’ which ‘philologists, mythologists and archaeologists’ could interpret, rather than merely by trade or isolated colonies (Bertrand 1864: 303; 1864b: 369). He argued that different ethnic groups, mainly of Aryan race, ‘successively introduced’ ‘various elements of civilisation, languages, arts, industry’ into Gaul (Bertrand 1864b: 370; 1873: 641). These propositions, Bertrand argued, were ‘accepted today... by all the scholarly corps of Europe’, including all the major philologists and ‘to attack’ them, was ‘to attack science itself’ (Bertrand 1864b: 370).

evolutionism, colonialism and Retzius, that primitive meant inherently backward, and the stigma of a race losing its 'own' language under the irresistible cultural influence of superior conquerors, often with permanent relegation to a lower social strata. One British ethnologist traced Europeans to perfect Caucasian fathers and 'some primitive races of cockle-eaters... who (through our great-great-grandmothers) shortened our noses, detracted from our beauty, and rendered us' 'mixed and varied' (Campbell 1870: 411). Broca therefore insisted that his European pre-Aryans were eminently Caucasian in race and only slightly different from the Asian Aryans (Broca 1871: 365). This was not the 'complete inequality,' making 'any fusion impossible', that separated Europeans from Tasmanian aborigines and other blacks (Broca 1871: 366-67). Pointing out that Egyptian civilisation preceded the Greek, Broca added that 'anteriority of civilisation does not prove the absolute superiority of intelligence and aptitudes' (Broca 1871: 366). Bertrand said that despite their relatively 'primitive mores', the main pre-Celtic element in his French synthesis was 'an already skilled race' and only disappeared when faced with Aryans (Bertrand 1864b: 382-83; 1873: 631). Only 'superior and civilisable races' of native farmers were permanently integrated into the Gallic population, 'the others being destined to disappear sooner or later' (Bertrand 1873: 241).

By overturning the older model of each race wiping out its predecessor, Broca argued successfully that Europe's broad *and* long-skulled aborigines adopted Aryan languages from Asia (Blanckaert 1989: 195; Broca 1864d: 309; 1871: 365). Citing historical examples, Pruner-Bey's ally Girard de Rialle and others claimed that as 'no trace of an unknown language was found' in modern European languages, the invaders must have been more numerous and civilised, and 'clearly massacred' the native European Stone Age 'savages' or let them 'die out', 'just as the Anglo-Saxons made the Redskins of America and the blacks of Australia disappear', dominating 'pure and without mixture' (Rialle 1864: 552-53 & 568; Broca 1864a: 560-61; Boyd Dawkins 1876: 22). Broca's camp countered that pre-modern conquerors were almost inevitably a minority elite, while pre-Celtic words could exist unrecognised in Insular Celtic toponymy (Broca 1864a: 560-61; 1864d: 308 & 310; Bonté 1864: 627; Allen 1971: xii; Quatrefages 1871: 48 & 78). These arguments protected Broca's aboriginal national French race and separated biological majority from the cultural power of the conqueror, naturalising modern France's Latin culture and its Gallicisation of colonial subjects. Broca's camp said the Celtic invasion 'did not sensibly modify' skull types in Gallic or British tombs, which was 'decisive proof' that Rialle's total ethnic genocide was '*without example*' or evidence (Broca 1864a: 562 & 569; 1873: 597; Bonté 1864: 627). Edwards traced the irregular English pronunciation to a Gaulish racial substratum, dismissing as 'the exaggeration of historians', 'the opinion generally spread' in Britain of Anglo-Saxons wiping out the ancient Britons (Edwards 1841: 25, 58 & 85).

The battles for Basques and Celts

The Basque question was Broca's devastating first broadside to the Retzius race succession (Houzé 1883: 93). Pruner-Bey believed Basque could be the utterly ancient language of all the great pre-Aryan Mongoloid race (Blanckaert 1989: 185). Retzius's claim that Basques were broad-headed, apparently on the evidence of one or two supposedly Basque skulls in Stockholm museum, was firmly believed in the 1850s (Blanckaert 1989: 185; Dareste 1860: 82; Thurnam 1864: 402; Périer, Bertillon & Lagneau 1861: 342). French anthropologists believed modern Basques had a 'rounded skull', 'average stature' and 'black' hair and eyes and were the purest descendants of an 'Iberian race', related to Georgians and ancient Ligures, which occupied Iberia and southern France from 'very distant times' (Périer, Bertillon & Lagneau 1861: 340-41; Edwards 1841: 94). Broca claimed serious doubts about the provenance of Retzius's two Basque skulls, but accepted their veracity until 1862, when a Spanish colleague showed him a dolichocephalic Basque skull (Broca 1864b: 418-19; Blanckaert 1989: 185). Broca therefore 'defiled the graves of the cemetery' of the Basque town of Zaraus, finding that most of the sixty skulls he took back to Paris were dolichocephalic, which raised 'great reservations' about the Retzius scheme (Blanckaert 1989: 185-86; Broca 1864b: 411). Using 'the method of exclusion,' Pruner-Bey dismissed all 'the known' dolichocephals types as various Celts whom history placed in the Basque area, and argued that 'the unknown' brachycephalic leftover skull must be the 'pure Iberian type' (Pruner-Bey 1864a: 413-14; 1864b: 669). Broca responded that their provenance 'guaranteed' an authentic Basque origin, and that Celts would have kept their language unless in a minority, in which case their cranial characteristics would presumably have been modified (Broca 1864b: 411; Blanckaert 1989: 186). He showed that far from the superior 'frontal dolichocephaly' which Retzius attributed to Celts, they had enlarged posterior lobes, an inferior feature 'considered typical' of Africans (Blanckaert 1989: 186). Blanckaert says the Basque dispute resurfaced periodically during the 1860s, with both sides holding stubbornly to their positions, and unearthing new broad or 'posterior' long skulls to support their arguments, while Pruner-Bey measured a series of mostly brachycephalic live Basques (Blanckaert 1989: 186-87). Both sides presumed Basques were racially primitive, but disputed the racial value of broad or long skulls. Pruner-Bey's position finally crumbled in 1869, when the British anthropologist Busk discovered a prehistoric posterior dolichocephalic skull in a Gibraltar cave resembling those of Zaraus, but Blanckaert says Broca's quibbles had already gravely weakened the race succession paradigm, whose greatest selling points were 'logical coherence and simplicity' (Blanckaert 1989: 187).

British archaeologists and anthropologists were crucial to undermining the Retzius system, though clearly inspired by his concept of race succession. In 1844, Sir William Wilde, father of the famous Oscar, 'quickly adopted' the Scandinavian race succession, agreeing 'in almost every particular' with Eschricht and Retzius on Ireland, and comparing their Stone Age skulls with an ancient Irish 'globular headed race' (Wilde 1849: 225-26; Collis 2003: 59). The 'current' 'widely-spread doctrine', said Latham in 1852, was that larger-skulled, metal-using Celtic immigrants 'annihilated and superseded' 'Stone Period' aborigines with differently-shaped skulls '*of unusually small capacity*', who resembled 'Laplanders and Finns' craniologically (Latham 1852: 26 & 59). However Wilde, whom Pruner-Bey called 'the founder of anthropology in Ireland, eminent expert', believed the Scandinavian craniological race sequence was 'reversed' in Ireland (Wilde 1849: 238; Pruner-Bey 1864a: 407). He said Irish tombs with Danish-style Stone-Age implements contained a long-skulled and probably brown or black-haired Irish native race, suggesting that these 'original' dolichocephals entered Scandinavia late, after learning metalwork, 'perhaps, from their Celtic conquerors' (Wilde 1849: 229 & 238; Thurnam 1864: 398). He meanwhile associated Irish Celts with a 'much better proportioned, higher, more globular' skull which approached 'more to the highest forms of the Indo-European' and even 'the finest Grecian models', and was found with metal implements (Wilde 1849: 231). British excavations confirmed Wilde's succession. Bonté said in 1864 that 'in England, that land of positivism and cold reflection,' Retzius's Aryan theory was '*badly shaken*,' rejected by Bateman, Wilson, Wilde and Thurnam (Bonté 1864: 633; Thurnam 1864: 398). Beddoe said the Western European succession of John Thurnham and Barnard Davis, the leading British craniological archaeologists, in which short, dark, pre-Aryan, Stone Age long-barrow Iberians 'strongly suspected of cannibalism', preceded the Celtic 'real British type' of Bronze Age round-barrows, with a 'tall and vigorous' skeleton, 'crude and bony features' and a big broad head, was 'analagous to that of Retzius, yet widely different', because the Iberians were very long-headed rather than brachycephalic (Beddoe 1876: 24; Collis 2003: 59; Wake 1873: 715). Thurnam said Thomas Bateman proposed the same long-barrow-long-skull, round-barrow-round-skull succession in 1852 and 1861, and that the tombs of Wilde's blond, brachycephalic conquerors resembled British round barrows (Thurnam 1864: 397-98). Pruner-Bey had to admit that 'almost all' British anthropologists believed the Scandinavian succession of brachycephalic Stone Age with no domestic animals and dolichocephalic Bronze Age was reversed in Britain (Blanckaert 1989: 191; Pruner-Bey 1864a: 405-6).

Thurnam was a key figure in undermining the Retzius succession (Blanckaert 1989: 190-91). A medical doctor of Quaker background, he wrote copiously on heart disease, madness, anthropology and archaeology, and ultimately ran a mental asylum (Dureau 1873: 757). Thurnam distinguished

Bronze Age round-barrows (the French tumuli) from several types of British Stone-Age tomb, which he called 'long-barrows', and said were contemporary with Scandinavian brachycephal tombs (Blanckaert 1989: 190-91; Thurnam 1864: 396). He directly contradicted Retzius in 1864, claiming British long-barrows only ever contained a short, 'very dolichocephalic race', and that the less homogeneous, taller, broad-headed Belgic invaders, found in round barrows, introduced bronze and Celtic 'language and mores' (Blanckaert 1989: 190-91; Broca 1864: 463-64; 1873: 597; Thurnam 1864: 396 & 399; Collis 2003: 59). Broca publicised Thurnam's arguments and Lagneau and Beddoe gave support to them, but Pruner-Bey bitterly criticised his reopening of 'questions which we had a right to consider resolved' (Blanckaert 1989: 191; Lagneau 1864: 405; Wake 1873: 715; Pruner-Bey 1864a: 405). Thurnam and Broca contrasted purely dolichocephalic Stone-Age Britain with the mixed long and broad-heads of French 'pre-Celtic' Stone Age long-barrows and throughout the 'Celtic era' (Thurnam 1864: 400-1; Broca 1864a: 561-62). Thurnam claimed Broca's Zaraus Basques had similar dolichocephaly to British long-barrow crania (Thurnam 1864: 402). Pruner-Bey admitted that Scandinavian prehistoric ages and craniological races were much more sharply delineated than in Gaul, but insisted that a level of Stone-Age civilisation common to both, mostly went with brachycephalic remains (Pruner-Bey 1864a: 405-6). Thurnam's British race succession was a local 'entirely exceptional fact' irrelevant to Western Europe's 'general and well established order of succession' (Pruner-Bey 1864a: 408-9). Pruner-Bey attacked Thurnam's interpretation of Wilson and Wilde, and though accepting that British and Irish evidence for pre-existence of the brachycephal was scarce, he claimed its presentation by British archaeologists 'very often' suggested 'opinions decided in advance' (Pruner-Bey 1864a: 407). Pruner-Bey said Wilde 'hesitated to accord the pre-existence to the brachycephals in Ireland', because of their well developed foreheads while one Scottish Stone Age brachycephalic tomb was of 'high antiquity', and key Stone Age Irish tombs contained no skeletons (Pruner-Bey 1864a: 407-8; Blanckaert 1989: 191).

Broca used Retzius's association of races with stone and metal ages against Pruner-Bey's prioritisation of cranial evidence* (Pruner-Bey 1864c: 233-36). Broca objected that so many dolichocephal tombs had similar artefacts, that the absence of metal must be significant, and that as Indo-Europeans imported metallurgy, Stone-Age dolichocephals could not be Celts (Broca 1864b: 410-11). Though French anthropologists mostly backed Broca on the Celts, Pruner-Bey played on doubts about the metal-race link, arguing that Insular Celts and others used stone weapons alongside metal until very recently (Pruner-Bey 1864a: 407 & 412-13; Dureau 1864: 419; Leguay

*This was ironic, given Broca's insistence on the centrality of physical anthropology against Pruner-Bey's more eclectic ethnology.

1864: 415-17). Wilde saw Irish Celtic metal artefacts as modelled on earlier stone ones, and Leguay thought Celts came to Gaul well before bronze (Pruner-Bey 1864a: 407 & 413). Pruner-Bey rejected Broca's accusation that he identified all broad skulls as pre-Celtic and long skulls as Celtic, regardless of provenance or artefact evidence, and claimed to 'entirely' accept archaeological opinion, but stressed that craniology should 'pronounce the last word', and criticised Thurnam for dating tombs by artefacts alone (Broca 1864b: 411; Pruner-Bey 1864a: 412 & 415; Leguay 1864: 415-17). Pruner-Bey insisted that ethnic races like the Celts each had a 'clear-cut' skull type, which was as or more 'determinant' than artefacts, and until Thurnam and Broca could demonstrate craniologically how Stone Age and later Celtic dolichocephals differed, he would rely 'on history', which said Western Europe was originally inhabited by Iberians and Celts (Pruner-Bey 1864a: 412-15). Broca answered that Pruner-Bey's race diagnoses were based entirely on a theory and 'it is this theory itself that is in question' (Broca 1864b: 412).

The end of the duel

A rain of heavy blows pummelled the race succession theory in 1864-68, leading to a new consensus against it (Blanckaert 1989: 191-92). Ever more ancient dolichocephalic skulls were discovered, including the famous low-browed Neanderthal, which Pruner-Bey tried to dismiss as an 'idiot' Celt, with 'all' Celtic characteristics, including tall stature, but with 'enormous development of the frontal sinuses' (Blanckaert 1989: 190; Pruner-Bey 1864e: 332-33). It was especially Celtic internally, he added, with casts corresponding best out of sixty others to a modern Irish 'superb specimen of the Celtic type' (Pruner-Bey 1864e: 333). Pruner-Bey added that prognathism did not prove it a new, ultra-ancient race, because this still existed 'here and there' in modern populations (Pruner-Bey 1864d: 260-61). However leading anthropologists in Switzerland and Sweden, including Retzius's son and the successor to his Stockholm Anatomy chair, unearthed other Stone-Age dolichocephals (Blanckaert 1989: 191). Even Gustaf Retzius recognised that his father had been 'evidently mistaken' on 'the so-called' Celtic skull (Retzius, G 1909: 288). Students of modern populations like John Beddoe in England and Hermann Welcker in Germany discovered that Swedes were less dolichocephalic than supposed and that Estonians, speaking a 'Mongoloid' language, were 'the nec-plus-ultra' of dolichocephaly (Blanckaert 1989: 191). Davis and Thurnam in 1865, plus Beddoe and Broca concluded that British linguistic Celts, and 'particularly the Welsh' and many of the French and southern Germans were 'short brown-haired' broad-headed racial Celts rather than Finns (Ripley 1900: 125; Spencer 1997e: 358). Crucially, Broca found, while researching French physical characteristics in the 1860s, that linguistically Celtic Bretons were small and dark, and included too few dolichocephals for dolichocephalic Celts to have conquered a previous brachycephalic population (Ripley 1900: 125; Eickstedt 1934: 384; Hölder 1876: 18).

Beddoe and anti-Celtomaniac German craniologists like H. von Hölder accepted the new evidence immediately (Ripley 1900: 126). Citing Broca and Davis and Thurnam, Hölder claimed Ireland, Wales and Brittany were mostly brachycephalic, with little Germanic intermixture, especially in the least Anglicised part of Ireland (Hölder 1876: 18).

The *coup de grace* for Pruner-Bey's position however, was Louis Lartet's discovery in 1868 of ancient, evolutionarily modern, long skulls at Crô-Magnon in Périgord, helping to classify other ancient Western European skulls which were initially considered 'negroid' (Broca 1878: 196; Blanckaert 1989: 192). Pruner-Bey stubbornly tried to link them with 'Mongoloids' via Estonians or claim their dolichocephaly was a deformation, but Broca 'indisputably' demonstrated their dolichocephaly in 1869 and 1875, winning Quatrefages's backing (Smith & Spencer 1997: 300). Quatrefages and Nicolucci had at first rallied to Pruner-Bey's race succession (Orsucci 1998: 6). Discoveries 'of abundant prehistoric remains all over Europe' 'routed' Retzius's theory of brachycephalic 'autochthones, overcome and dispossessed by stronger and more civilized races', by showing that almost all 'the most ancient' European skulls resembled dolichocephalic Africans more than brachycephalic Lapps (Ripley 1900: 462-63; Broca 1873: 578; 1878: 193). The 'river-bed stratification of the Seine' gave compelling evidence of a Neanderthal-Crô-Magnon-brachycephal succession (Borlase 1897: 995). Hamy and Quatrefages accepted that their ancient brachycephalic 'Lapponoid Type' shared Palaeolithic Europe with dolichocephalic Crô-Magnons (Quatrefages 1887: 113-17; Blanckaert 1989: 197). As the Celtic question, which 'occupied anthropologists' attention for much of the nineteenth century', was 'incontestably an integral part of the Aryan problem', Retzius and Pruner-Bey's mutually supporting blond Celt and Aryan theories collapsed together (Spencer 1997e: 358; Pruner-Bey 1864b: 664). The issue came 'to a head' in 1873-74 and Ripley says that by 1900, 'all' leading French physical anthropologists (except the Nordacist Lapouge), 'the Germans, Virchow, Kollmann, and Ranke... the English' and 'the most competent Italians', were in 'complete unanimity' that Celts were small and dark (Ripley 1900: 126; Buschan 1890: 41).

Enemies of the Teutonic blond

The distinction between a Nordic-Germanic-Aryan core and a peripheral 'rest of Europe' was a key factor structuring European race narratives. Chapman says the similar 'ethnic characterisation' in early twentieth-century German race science 'of all the immediate neighbours – Celts, Latins and Slavs' perpetuated a long tradition in 'Anglo-Germanic' anthropology, 'still vividly alive in many vernacular forms' (Chapman 1992: 278). Beddoe found the combination of light eyes and dark hair

‘decidedly uncommon’ among ‘true Germans’, but common among both the Insular Celts and in eastern Germany, ‘with the increasing prevalence of the Slavonic element’ (Beddoe 1898: 164). An Irish ethnologist grouped Celts, Iberians, Greeks and Phoenicians in a ‘primary, or indigenous population’, conquered by Romans and Teutons (DUM 1855: 721-22). Keith (1915) and Chepurkovsky tentatively linked a Baltic blond type with prehistoric British brachycephals (Tschepourkovsky 1923: 134). Some philologists linked the Celtic and Slavic language families, and Hölder saw the Gaelic skull form as ‘principally Sarmatic’ (Hölder 1876: 19). Huxley placed the ‘best form’ of his dark white race both on the Mediterranean and among Insular Celts (Huxley 1870: 408-9; Deniker 1971: 283). Fischer linked Mediterraneans closely to Russia’s Oriental race, in physique if not psychologically (Fischer 1936: 276 & 283). The common Catholicism of peripheries provoked the Protestant and later neo-pagan prejudices associated with Germanicism. Classifiers claimed brachycephals were instinctively Catholic and that countries ‘threw off the dead hand of Roman practices’, as Chamberlain described the Reformation, ‘almost directly in proportion to their Teutonic blood’, while Celts and Slavs remained true to their older churches (MacLoughlin 1896: 87; Hannaford 1996: 353-54 & 356; Retzius, G. 1909: 299 & 313). Elizabethan narratives of ‘England as a latter-day Israel’ helped convince early modern British Protestants of their superiority, especially over Catholics (Davies 1999: 833). ‘Outer Europeans’ also sometimes played up their common opposition to the Germanic centre, including through the Celto-Slav theory. One Irish ethnologist ‘radically distinguished’ blond dolichocephalic Teutons from Insular Celts and ‘identical’ fair-haired brachycephalic ‘Slaves, Lithuanians,’ plus probably ‘the Latins and Homeric Greeks’ (MacLoughlin 1896: 83-84 & 86). He reproduced Russian legends and humour to demonstrate how Celtic and un-Teutonic they were (MacLoughlin 1896: 86-87). Power generally lay with the Germanic bloc, so that English stereotypes of the Irish, for example were much more ‘rigid and elaborate’ than vice-versa (Curtis 1968: 110). Non-Germanics were decidedly inferior. Klaatsch placed Basques and Celts on the lower evolutionary steps of his white race (Stratz den Haag 1903: 198; Spencer 1997i: 474). Omalius’s strong north-south prejudices distinguished superior northern French Teutons, presumably including his native Belgium, from the brachycephalic Erso-Kymric interior of France (Omalius 1869: 22). Childe contrasted the Greek and Nordic (including the Germans and British) ‘creative races’ with ‘passive’ French and Iberians (Barkan 1992: 55).

Germanics questioned the European identity of their neighbours to the south, and especially the east. Anders Retzius’s theory of Slav brachycephaly supported a Western tradition of making Slavs and especially Russians ‘a liminar case of European identity’, contaminated by ‘close ties’ with Muslim neighbours (Neumann 1999: 67-68; Buschan 1890: 3-4 & 36; Talko-Hryniewicz 1914:

188). Iver Neumann says the early-modern shift from religion to education in defining the European reinforced this religious ‘master theme’ with references to Russia’s despotic government and sexually depraved, blasphemous, quarrelsome and ignorant people (Neumann 1999: 68-72). However growing Russian power and the switch of barbarity from north to east in the European imagination, which Hegel emphasised, while minimising Slavic contributions to history, all encouraged the dominant nineteenth-century narrative of a menacing ‘barbarian at the gate’ (Neumann 1999: 76-80; Barford 2001: 272; Hegel 1900: 102 & 350). Unlike France, Britain or Germany, Russia was seen as attempting hegemony from outside rather than within Europe (Neumann 1999: 89). Hegel called the ‘*agricultural*’, feudal Slavs a ‘connection with Asia’, only ‘to some extent... within the sphere of Occidental reason’ and too culturally immature to benefit from ‘dawning freedom’ (Hegel 1900: 102, 350 & 420). ‘Mongol’ was one of race anthropology’s bitterest terms of abuse. Kollmann and Virchow, who discovered brachycephals in prehistoric Europe and accepted them in the German national mix, strenuously insisted that brachycephaly and ‘brunette complexion’ were ‘legitimate appurtenances of white men’, and denying this ‘would incorporate’ most Europeans ‘into the yellow’ ‘alien race’ (Virchow 1950 [1896]: 190; Kollmann 1881: 35 & 37). For Piette in France, ancient French skeletons were incontestably blond ‘true Gauls’, ‘extremely different’ from black-haired ‘yellow’ Mongols with ‘protruding cheekbones’ (Piette 1876: 263).

Anthropology was replete with images of savage Asiatic Slavs however. Early nineteenth-century French, American and British ethnologists saw the brown-eyed, brunette Slavs as tough, hospitable, ‘brave and enterprising with a ‘masculine air’, but generally rude and uncultivated’ cousins of ‘Scythians’, Sarmatians, ‘Huns’ or Tartars from Asia, physically resembling them and marked by ‘laziness, ignorance, slyness and falsity’, ‘ferocious’ and ‘piercing’ regard, ‘strong and uncouth voice’ and scant respect for women (Broc 1836: 33; Morton 1839: 15; Prichard 1973 [1813]: 475-84; Knox 1850: 5, 60, 321 & 363-66). Western anthropologists presumed that Asiatic ‘features and mores’ from repeated eastern invasions of Hungarians, Tartars and Genghis Khan’s Mongols were ‘still strongly imprinted in the Russian ‘physical character and social institutions’, and left traces in Poland, Hungary and Bohemia (Campbell 1870: 411; Broc 1836: 33; Morton 1839: 15). Knox was terrified of the ‘savage Asiatic despotism’ and ‘brute-force, represented by the East, by’ ‘[s]winish’, racially ‘abject’ Russia, adding that only the hated French could save Europe, as they had from medieval Huns and Arabs (Knox 1850: 5, 60, 321 & 363-64). Russians, though musical, were stubborn but cowardly, with corresponding ‘physical degradation’, made Turks seem ‘highly civilized’ in comparison and ‘should be driven’ into Asia (Knox 1850: 365-66). ‘No fair race, perhaps, were ever sunk so low in the scale of humanity’ (Knox 1850: 366). O’Grady in Ireland

called Russia ‘the vast nest’ of vandalous blonds (O’Grady 1878: 12). Quatrefages warned that Prussian Pangermanism and Russian Panslavism could invoke ‘the *affinities of... the Slavo-Finnish races*’ to rule both Teutons and Latins (Quatrefages 1871: 105). German Slavophobia was particularly acute, amid geopolitical rivalry and minority problems. ‘With a declining birth rate, the new industrial Germany felt threatened by its Slavic neighbours and minorities’, importing ‘about two million immigrant workers in 1906’, including ‘Eastern European Jews fleeing discrimination and pogroms’ and sharpening ‘fear of “national disintegration”’ (Massin 1996: 102). Fichte separated Slavs completely from Germanicised Western Europe and in 1785, the anthropologist Christian Meiners expelled inferior Slavs from the white race (Mosse 1978: 15; Poliakov 1971: 116). One Hegelian in 1834 placed Slavs and Germans in polar opposition (Bieder 1909: 28). Various leading early nineteenth-century German craniologists and later the Austrian ethnologist Friedrich Müller identified ‘drops of Mongolian blood’ in Russian and perhaps other Slav veins (Retzius, A. 1864: 11; Müller 1879: 61 & 544). Felix von Luschan, after Virchow the premier German anthropologist, and the Nordacist Woltmann warned that immigration of the ‘coarser and less refined’, ‘least desirable’ ‘exotic inferior populations’ of Eastern Europe and Asia, including ‘the constant migration of Eastern Slavs’, which even the least narrow-minded ‘consider regrettable’, threatened ‘civilised nations’ (Luschan 1911: 26; see Fig. 3.5).

Chinese and Japanese emigration, the rise of Japan, and especially its 1904 defeat of Russia, panicked Europeans into fearing the ‘yellow peril’ as a deadly threat to white world domination (Malik 1996: 118-19; Figes 2002: 413-14). Fear of Asia and anti-Semitism intensified after 1918. In France, René Martial characterised Jewish refugees from Germany, despite very mixed blood groups as ‘an immense Asiatic reservoir’, while Montandon ascribed Russians a ‘strongly Asiaticised’ blood index, much more so than Lapps (Pogliano 2005: 111; Montandon 1933: 242). Tappeiner, Sergi, Ripley, Fischer and Günther all ultimately distinguished Europe’s brachycephals racially from Mongoloids, but many German Nordacists exploited similarities like head shape and a small nose, and the precedents of Pruner-Bey and Quatrefages’s Mongoloid theories, to identify a Mongol link (Fischer 1936: 283; Günther 1933: 19; Woltmann 1903: 292; Orsucci 1998: 7). Hölder classified south-German brachycephals as Turanians (ie. Turks) and Rhaeto-Sarmatians (Hölder 1876: 18). The extreme Nordacist Ludwig Woltmann claimed ‘most anthropologists,’ apart from ‘Virchow’s followers and students’, ‘today recognised’ a brachycephal Mongoloid origin, because the skull was the most fixed feature in inheritance (Woltmann 1903: 292). Nordacist raciologists saw ‘races with pure European features’ as ‘more gifted’ than those ‘most detached from the classic European races’, such as brachycephalic Orientalids, associated with the Middle East and Jews, and Russia’s Easteuropoids, which had ‘Asiatic features’ or traits implying mixture ‘with races of

Asiatic origin' (Făcăoaru 1943: 292; Landra 1942: 43). The slightly less inferior Alpine was given more distant Asiatic roots.

Linneus and Blumenbach excluded the non-Indo-European-speaking Lapps and Finns from otherwise inclusive European or Caucasian categories, while for Huxley, Topinard and Houzé, they teetered on the brink of Europeanness, with various groups in the 'veritable ethnic alluvium of' 'yellow peoples of Asia', or 'a mixture of Mongols and blond races' (Eickstedt 1934: 136; Huxley 1870: 407; Deniker 1971: 283; Houzé 1883: 83-84). Retzius and Quatrefages meanwhile made them vestiges of Europe's primitive aborigines 'expelled or absorbed' by Aryans, so they 'forgot their old languages; as good as everywhere', while for Gobineau, they were ancestors of the modern northern European lower classes (Quatrefages 1889: 313; Malik 1996: 83). French enthusiasts for brachycephalic Celts stressed these were racially distinct from inferior broad-headed Lapps (Quatrefages 1889: 313; Piette 1876: 265-66). The pastoral Lapps were seen as semi-savage, disparaged by Bernier in the very first modern race classification (1672) and for Virchow a 'pathological race' (Wijworra 1996: 170). Gustaf Retzius argued that his father only discriminated against them but not other European brachycephals, and especially not the civilised Slavs. Anders Retzius showed that key parts of Lapp brains were 'in absolute terms less developed, have suffered a reduction... not compensated by' broadening or heightening (Retzius, G. 1864: 31). Alexander Humboldt said Lapp 'uncleanliness' was 'proverbial', so to test skin colour he had to wash off the 'indescribable dirty colour' of 'impregnated' layers of 'a mixture of grease, dust, sweat, &c' (Humboldt 1877: 318). Houzé was unusual in counting Semites and 'Mongolian, Asiatic' Uralo-Altaians as full, but rather insignificant members of his European classification (Houzé 1883: 83 & 89-90).

Mediterraneans meanwhile were damned by dark colouring. Classifiers often linked them to non-Aryans further south and east. For Huxley they were probably 'an intermixture' of Xanthochroi and 'Australoids', whose 'best form' could be found among 'high-caste Brahmins', though he distinguished the southern European from the Asian branch (Deniker 1971: 283; Huxley 1870: 408-9). Topinard, Houzé and Jackson's southern European categories included Semites or 'a strong proportion' of their 'blood', while Montandon and Fischer linked Mediterraneans to Polynesians (Deniker 1971: 283-84; Houzé 1883: 89-90; Jackson 1873: 399-400; Montandon 1933: 258; Fischer 1936: 276 & 283). From nose shape, Ripley inferred a 'distinct, though distant, affinity of the Mediterranean stock with the Negro', which Eickstedt strengthened to 'the strongest foreign impact' (Ripley 1900: 123; Eickstedt 1934: 401). Some nineteenth-century ethnologists devised Hegelian variants on the direct evolutionary ascent from dark savagery, to reconcile modern

northern superiority with the *ex oriente lux* tradition. Haeckel said ‘Graeco-Italo-Keltic groups’ dominated the past but the future ‘new period of higher’ mental evolution ‘was with the Germanic’ (Odom 1967: 16-17). In Britain J.W. Jackson explained ‘the gradual transference of empire’ from the Mediterranean and modern proletarian ‘dark-haired and brown-skinned’ ‘man of the past’, to the blond ‘man of the future’, through episodes like ‘the conquest of the dark Roman by the fair Goth’, the Reformation and Napoleon’s defeat by ‘the red-bearded Russian’ and ‘light-haired German’ (Jackson 1873: 400). Europe’s dark Caucasians ‘doubtless preceded’ the blonds in ‘the sequences of organic development’, emerging ‘under less advanced telluric conditions’ (Jackson 1873: 400).

Their constitution implies that there was more carbon and less oxygen in the atmosphere at the period of their ethnic emergence, and hence it is that they abound in southern countries, and tend to remain prevalent in the large cities, even of the north. (Jackson 1873: 400).

D’Omalius in Belgium argued that the expanding European race became darker by mixing with dark-haired Aramean natives in ‘the south of Europe’, like the Basques or Iberians of southern France, who were once civilised, but ‘now in the state of barbarity’, lacking the European ‘faculty of development’ and ‘aptitude for domination’ (Omalius 1869: 16-17, 22 & 34). Germany saw itself in 1914 as young and rising in comparison to declining old France (Bollenbeck 1999: 291). Hegel’s scheme was less comforting for Germanics however if the *Zeitgeist* moved elsewhere in the future however. Enlightened reforms by Peter and Catherine suggested a civilisable Russia could be a ‘land of the future’, leap-frogging the West with radical reforms, and successive periods alternated between this narrative and Asiatic racialisation (Neumann 1999: 74-79 & 100).

Germanic race psychology narratives

The abused neighbours of the Germanics transformed each insult to their race into a badge of honour, exploiting the massive inconsistencies of the Germanic value system. The most serious of these was their double explanation for modern success through rational, positivist democracy and wild, noble conquest. While the rediscovery of Tacitus’s *Germania* in 1450-1550 confirmed for Italian scholars ‘the inveterate Germanic barbarism’, Germans and Anglo-Saxonists admired their ancestors’ ‘simple virtues and invincibility’ and took pride in being a pure and native race, ‘powerful, athletic’, mightily strong, ‘broad-shouldered, most martial,’ loyal, brave, daring, ‘eminently fighters’ and an ‘adventurer by temperament’, but also ‘musical... carousing’, jovial *bon-vivants* who ‘understands better how to gain riches than to keep them’ (Poliakov 1971: 95; Schama 2004: 77-87; MacLoughlin 1896: 27; Knox 1850: 49-50; Broc 1836: 32; Retzius, G. 1909: 299; Horsman 1976: 389). These chivalrous gallants also treated women better than any other race

(Broc 1836: 32). French anthropologists drew a similar standard race mentality from the tall, blond, wild, 'active', 'adventurous and warlike' 'restless population' of ancient Gauls, 'Kymris (or Cimbri), Belgae or Teutons', with 'vagabond humour', 'turbulence' and 'crazy bravery', 'serious character, courage, momentary fieryness, ferocious air, hoarse voice, etc.', who battled Greece and Rome (Broca 1871: 292; Périer 1864: 611; Edwards 1841: 61; Périer, Bertillon & Lagneau 1861: 359-60; Zaborowski 1890: 245; Topinard 1877: 474). This 'soulful, individual, communitarian, national,' idealistic and spiritual uninhibited romantic amateurism was important in opposing German *Kultur* to 'soulless, mechanistic, levelling, international, social,' technical, materialist and utilitarian Western or French *civilisation* (Bollenbeck 1999: 291). This counter-Enlightenment dichotomy was entrenched by the German education system and accepted to some extent in both French and German national stereotypes (Bollenbeck 1999: 289 & 294-95). Germans rediscovered with pride that their ancestors ruled Western Europe and Russia. In Spain, France, Britain, Scandinavia and Germany, a robust tradition linked Germanic descent with nobility and royalty, expressed in family trees showing descent from Gothic, Frankish or Saxon kings. As one ethnologist put it, the 'Odinic nations' or Teutons 'overthrew the Roman empire', and henceforth gave Europe its monarchs and nobles (DUM 1855: 721-22). This image attracted the 'established and arrived' late nineteenth-century 'upper middle class or 'haute bourgeoisie', who modelled themselves culturally on the 'aristocratic ruling class', to distinguish themselves from 'first-generation climbers' (Hobsbawm 2005: 292). Edwards and Thierry's blond Kymri was 'an excessively unquiet people, always making distant and perilous expeditions' (Edwards 1841: 61). Linking modern colonialism with Teutonic migration, several authors meanwhile attributed 'the most wanderlust' to 'the most nobly organised human races', citing research that Europeans in America and Algeria were longer-headed than those at home (Woltmann 1903: 296-97). Beddoe claimed 'tall, vigorous blond long-headed men, lineal descendants' of Vikings or 'Aethlings... still furnish a large contingent to our travellers and emigrants' (Beddoe 1912: 33). Blond migrations explained how Caesar could consider Germans braver than Gauls; but say Gauls were once braver and had invaded Germania (MacLean 1872: xlvi). The Scottish ethnologist MacLean explained that intermixture with Gallic conquerors had imparted 'vigour and activity... to a stolid, imperturbable Teutonic population' while many Gallic blonds '– a race always fond of travelling and novelty –' left to invade neighbouring countries, making Gaul less blond (MacLean 1872: xlvi). The same then happened to Germany, as mixed Teuton-blond peoples like the Anglo-Saxons left to invade other parts of Europe (MacLean 1872: liv).

Germanic conquest sat rather awkwardly with the old and persistent claim that Teutons loved liberty (Broc 1836: 32). Francis Hotman, who Hankins says formulated the Germanic theory of

French origin in 1574, argued that French political institutions were founded in, and ‘endured eleven centuries’ in ‘pristine liberty’ (Hankins 1926: 142). Anglo-Saxonists, beginning with Protestant reformers, the late sixteenth-century parliamentarian faction or seventeenth-century proto-socialist Levellers, ‘invoked the myth of’ alien Normans suppressing England’s ‘crude Saxon or Gothic democracy’, and attributed ‘free institutions’ exclusively to the Anglo-Saxon and ultimately Germanic heritage (Curtis 1968: 4-5 & 12-13; Horsman 1976: 387-91). Many eighteenth-century American revolutionaries ‘saw themselves as regaining the freedom of their Anglo-Saxon ancestors’ (Horsman 1976: 389). Arnold’s Anglo-Saxon was ‘disciplinable and steadily obedient within certain limits, but retaining an inalienable part of freedom and self-dependence’ (Arnold 1962 [1867]: 347). Knox’s Saxons brought ‘their laws, manners, institutions... with them from the woods of Germany’, hated ‘dynasties and governments’, and were ‘democrats by their nature, the only democrats on the earth, the only race which truly comprehends the meaning of liberty’ (Knox 1850: 46 & 59). The positivist Anglo-Saxon democrats of mid-nineteenth-century Britain stretched the Teutons furthest from Tacitus’s noble savages. Knox spoke for the stolid, boorish but democratic Saxon bourgeoisie against Britain’s ‘always cowardly’, racially Norman, monarchist ‘holders of *property*’, arguing that real Saxon liberty ‘can only be seen in the free States of America, which I have not visited’ (Knox 1850: 54 & 60). The Saxon of Knox and Mackintosh, another Scottish Anglo-Saxonist, extreme racial narcissist, was ‘[t]houghtful, plodding, industrious’, ‘mechanical,’ ‘simple, truthful, straightforward, and honest... self-reliant yet humble, peaceable... unexcitable, unambitious,’ loving profitable work, ‘moderation in all things’, order, ‘punctuality in business’, ‘neatness and cleanliness’ and above all, respectability, wealth and comfort (Knox 1850: 53-54; Curtis 1968: 71). While the Germanic spirit was blessed with ‘freedom from whim, flightiness, perverseness; patient fidelity to Nature, - in a word, *science*’, said Matthew Arnold, its curse was ‘the humdrum, the plain and ugly, the ignoble’ (Arnold 1962 [1867]: 341).

Innate democracy became an excuse for conquest. Because the Anglo-Saxon race ‘had a peculiar genius for governing itself – and others’, by combining exceptional ‘efficiency with liberty and justice’, they deserved to rule poor and politically unstable parts of the world (Curtis 1968: 6-7). Carlyle, Kingsley and the anthropologist Avery gave Anglo-Saxons ‘the constitutional task of sharing’ their civilisation, to institute a ‘reign of world peace, order, and morality’, and save colonial natives like the Irish from self-destruction, if necessary over ‘the bodies of inferior races’* (Horsman 1976: 400 & 410; Avery 1869: ccxxv). Knox was more honest about Saxon liberty. He said ‘no race perhaps exceeds them in an abstract sense of justice, and a love of fair play; *but only*

to Saxons', so German Saxons failed to overthrow despotism in 1848, because they would not liberate and ally with the Czechs and Poles (Knox 1850: 57 & 60). Stiffened by social Darwinism and Nietzsche, later elitists believed that natural evolutionary destiny required them to rule and perhaps supersede inferior races. Love of freedom could also explain adventurous conquest. Woltmann claimed that in Turkey, Russia or the Spain of the Inquisition, ruled by autocratic passive races, racial instinct drove the 'best classes' to struggle for freedom, and either emigrate or be destroyed through 'negative selection' (Woltmann 1903: 269). France lost 'its best forces' when Louis XIV expelled the Huguenots and the nobles fled the Revolution, while emigration to America racially impoverished Europe (Woltmann 1903: 269). Knox argued that thirst for liberty drove Teutons to invade the Roman Empire and colonise America and South Africa, and that the Saxon 'race still hopes ultimately to be masters of the world' (Knox 1850: 46 & 49). While the Irishman hated emigrating, the Englishman does so 'cheerfully, lovingly, hopefully,' said Avery, in line with the imperatives of 'human advancement' and 'his Creator's command' to 'replenish the earth' (Avery 1869: ccxxix). Klemm distinguished racially Caucasian or Germanic 'Persians, Arabs, Greeks, Romans and Teutons', who migrated, sailed the seas, founded empires and loved freedom and progress; from passive Mongolians and blacks, sunk in theocracy and tyranny (Woltmann 1903: 228-29 & 287).

Even before the common brachycephaly of Slavs and France's Celtic *peuple* was asserted, the Tacitus Teuton, represented by Germans or aristocratic French Franks, gave these 'others' a similar historical role, symbolic associations and psychology in diametrical contrast to itself. For the Nordicist Günther, the typical Alpine brachycephal was the petty bourgeois who dominated France, so that French state policy largely served 'the petty thrift' of Alpine pensioners (Günther 1933: 66). The race was 'tranquil, acquisitive and petty', 'sullen and mistrustful' towards strangers, 'patient, often shy, "practical"', adoring the cosy and conventional and rarely looking further than their tight-knit family or local area in politics (Günther 1933: 64-66). Penka (1883), Ripley (1900) and Gustaf Retzius (1909) saw brachycephals as patient and conservative, lacking Aryan enterprise, force of will, lofty aims or 'real talent', while Ripley and Eickstedt linked this 'rather negative character' to biological and perhaps socio-cultural adaptation to wooded uplands (Retzius, G. 1909: 299 & 313; Orsucci 1998: 7; Ripley 1900: 529-31 & 549-50; Eickstedt 1934: 376; Coon 1939: VIII: 4). Condemning their pedestrian banality and lack of 'warlike propensities', Retzius said they were 'fond of farming' and his piece of inherited land, and as Lapouge argued, with the 'one aspiration'

*A rationalisation not wholly extinct in Washington and London.

in politics ‘to secure state support’* (Retzius, G. 1909: 299 & 313; Hannaford 1996: 293). These Celtic stereotypes were ubiquitous†, even in France. Topinard, Broca, Obédénare and many others accepted a gendered dichotomy of ‘humble, soft and submissive’ Celtic ‘producers’ and ‘ferocious and absolute’ Kymric ‘dominators’ (Obédénare 1877: 254). Their ‘medium or small’-statured brown Celts were ‘essentially sedentary’ and ‘peaceful, devoted to agriculture’ and ‘pastoral life’, ‘building towns, attached to the ground’, migrating, living and surviving in purest form along mountain ranges, and doggedly resisting conquest but never conquering or pillaging their neighbours (Broca 1871: 292; Topinard 1878: 508; 1885: 400-1; Haddon 1924: 15 & 26 & 152; Ripley 1900: 470 & 473; Coon 1939: VIII: 4; Obédénare 1877: 253). They...

...have great talent for arts, crafts and industry... in the end they were subjugated by other races; by the Kymris, Romans, Germans, Normans, Albanians, Huns etc. Once subdued, they gave themselves over to their favourite occupations, *they produced*. (Obédénare 1877: 253)

However British positivists largely reversed the continental dichotomy, abandoning most of Tacitus’s supposedly Teutonic features, including military flash, to the Celts. They bundled Britain’s assorted nationalist opponents into a Celtic ideal enemy, a terrifying axis of evil sharply contrasting with Saxon British identity. Knox argued that whether ‘Frenchman, Irishman, Scottish Highlander, Welshman; under every circumstance’ the Celtic race was ‘precisely the same’ (Knox 1850: 318; Curtis 1968: 22). In a period of Irish and French rebellion and France’s re-election of a Bonaparte, he made war their central attribute, and the sword, gripped in broad hands and square-tipped fingers, their ‘natural weapon’ (Knox 1850: 319-20). Though smaller and lighter than the Saxon and ‘not more courageous than other races’, his ‘gallant and brave’ Celt surpassed ‘all other European races’ in strength, bellicosity, ‘muscular energy and rapidity of action’, had ‘extreme’ self respect and were ‘still the dominant race of the earth’, a high estimation of French power (Knox 1850: 319-21). Belligerence was opposed to industry and democracy, reversing the continental Teuton-Celt dichotomy. The ‘bright and brilliant’ side of his Celts, particularly their ‘glorious deeds’ of war, were accompanied by ‘[f]urious fanaticism; a love of war and disorder;... no accumulative habits; restless, treacherous, uncertain: look at Ireland’ (Knox 1850: 26). Knox’s Celt understood ‘a military camp... a faction-fight; a fortified camp’ but not ‘what we Saxons mean by

* Retzius nevertheless regretted that ‘nations and their governments do not yet understand the high ideals and social importance’ of anthropological research, his own profession, and pleaded for their ‘sympathetic and material support’ (Retzius, G. 1909: 313).

† Once Anglo-Saxonism merged with continental Teutonism, it too abandoned its reliable, peaceful, industrious but boring middle-class values to the brachycephal brunette. The Franco-Prussian War and racial uncoupling of Ireland and France deflated its warlike Celt, but Anglo-Saxonist ‘propaganda and mythology’ was anyway in decline, according to Curtis, after its 1860s to early 1890s ‘peak or high plateau’ during ‘the apogee of British power and influence’ (Curtis 1968: 27 & 31).

independence' (Knox 1850: 19). In 'the ordinary affairs of life,' they held 'order, economy, cleanliness', forethought, 'regular labour – unremitting, steady, uniform, productive labour... in absolute horror and contempt' (Knox 1850: 320). The Scottish phrenologist George Coombe argued that Tacitus's distinction between 'gay, volatile' Gauls, 'precipitate to rush to action' but lacking endurance, and 'cool, considerate, and sedate' but brainy Britons still characterised the French and English (Coombe 1839: 273). Coombe's Irish were 'free and generous withal, but precipitate and unreflecting', while his Scot was 'habitually attentive to his own interest; cautious, thoughtful, and honest' (Coombe 1839: 274). Anglo-Irish Protestants contrasted the abstract 'upward' Celtic philosophy with the '*lateral*' thought of Teutonic '*practical*' thinkers, recording their thoughts, not in books,... but in living acts and durable monuments' (DUM 1855: 725). Arnold judged the 'characteristics which mark the English spirit, the English genius' as '*energy with honesty*', with the energy 'in part' derived from Celts and Romans and grafted onto the 'Germanic genius' of '*steadiness with honesty*' (Arnold 1962 [1867]: 341). In Germany too, Leupold described German psychology as 'the opposite' of Celtic 'fast and strong hot-tempered impetuosity with little... perseverance'...

...for which reason the Celts are generally and durably subjugated by foreign force and have even lost their language except for scanty (Gaelic) vestiges (Leupoldt 1834, quoted in Bieder 1909: 28-29).

The stress on war allowed Knox to combine 'the two extremes of... civilized man', Paris and 'Ireland, at Skibbereen and Derrynane^{*}, where 'Civilized man cannot sink lower' (Knox 1850: 324-25). He admitted that London's 'gin-shops,' slums, 'single gay street, and splash of a short season, cannot be compared to Paris', and that Saxons were not 'well made or proportioned', invented nothing, and had dreadful taste (Knox 1850: 50, 53 & 325). His Celt in contrast, had 'excellent' taste, admired beauty and was...

...a liberal patron of the fine arts. Inventive, imaginative, he leads the fashions all over the civilized world. Most new inventions and discoveries in the arts may be traced to him; they are then appropriated by the Saxon race, who apply them to useful purposes. (Knox 1850: 320).

Amid the high imperialism and cosmopolitan anthropology of the late nineteenth century, the self-disciplined British Saxon and wild Teutonic barbarian clichés fused into a new international Nordic psychology standard of the stiff-lipped blond imperialist or industrialist, modern but aristocratic, combining British stress on efficient industry with the adventurous martial courage of Tacitus's

^{*}The home of Daniel O'Connell, the leading Irish political leader of the day and not far from where this author grew up!

Teuton. Hobsbawm says late nineteenth-century ruling classes throughout Europe made ‘a conscious, though not usually official, effort to form a ruling élite on the British model, supplanting, competing with or seeking to replace the older aristocratic-military continental models’ (Hobsbawm 2005: 300). The 1914-18 War then led Hitler, Rosenberg, ‘the “conservative revolutionaries” and natural-scientific-technical intelligentsia’ to accept unromantic but militarily essential elements of ‘technology and planning’ into the interwar German *Kultur* concept (Bollenbeck 1999: 302). The early twentieth-century consensus was international, with American Nordacists like psychologist C.C. Brigham and German fascists like Hans Günther deploying almost identical descriptions (Gould 1987: 221; Günther 1933: 59-61). Brigham’s Nordics were ‘a race of soldiers, sailors, adventurers, and explorers, but above all, of rulers, organizers, and aristocrats’, while most European ‘feudalism, class distinctions, and race pride’ came from ‘the North’. Nordics were ‘domineering, individualistic, self-reliant’, required intellectual freedom and were therefore ‘usually Protestants’ (Gould 1981: 227; Mazumdar 1990: 194). Günther’s Nordics were ‘typical’ upper class types, ‘restrained in expressing their feelings,’ and often ‘cool’, or even appearing ‘cold and stiff’, with a ‘prophetic [*vordenklich*] strength of will, decisive powers of judgement’ and cool realism, duty making them sometimes ‘hard, even ruthless’ but always with a ‘certain chivalrousness’ and justice, even in lower classes, and in all classes, an exceptional sense of personal hygiene (Günther 1933: 59-61). These features sometimes led to heroism, ‘far-sighted state leadership’ or intellectual creativity, though more in technology and natural science than humanities (Günther 1933: 59-60). Race popularisers and interwar German anthropologists copied Günther’s characterisation, or offered toned down versions (Eickstedt 1934: 356; Weinart 1939: 124; Drexel 1936: 29; Lenz 1936: 726; Kraitschek 1923: 53; Lutzhöft 1971: 92). Despite reservations about race psychology, Eickstedt noted the ‘approaches’ of the Nordacists Günther, Clauß and Lenz, and praised the ‘very remarkable’ Nordic psychological characteristics (Eickstedt 1934: 354).

The peripheries respond

The Teutonic blond progressively replaced narratives of *ex oriente lux* in linguistically Germanic lands because as political participation broadened and prior ethnic occupation was used to justify territorial claims, nations sought ethnic authenticity in their own narratives of the past (Lutzhöft 1971: 139). For precisely these reasons however, noble Germanic ancestors were increasingly rejected elsewhere. If imperialist propaganda and eighteenth-century acceptance of ‘the ethnic construction of class’ encouraged traditional myths of noble founders from abroad (Trojans in Rome, Normans in England, Franks in France), these were displaced over the nineteenth century by ancient ancestors of the masses (Anglo-Saxons in England, Gauls in France) (Boia 2002: 32; Dietler

1994: 587). Defences against Germanic narratives took four main forms^{*}. Insular Celts, Slavs and, to an extent, Mediterraneans compensated for failings in positivist efficiency by claiming a romantic, unpredictable, emotional, poetic impulsiveness, often tinged with spirituality (see chapter IV, pp.288-99). Brachycephalic Slavs and French Celts predicted their peaceful industry and reproductivity would ultimately triumph in modernity (see chapter V, pp.367-71). Latins contrasted their higher civilisation with the purely destructive advantages of the Nordic. Finally, some eastern European nations played on Western fears of resurgent Asian might, promoting steppe ancestors as savage conquering horse-warriors to rival Teutons (see chapter VI, pp.414-21). The brachycephalic French neither could nor wanted to pretend to be steppe warriors, and instead responded to Mongolising slurs in kind, calling the Germans ‘Huns’ or echoing very widespread criticism of migrating Vandal hordes of ‘fair-haired races’ that ‘jettied forth... to desolate... nobler nations’ (O’Grady 1878: 12). Like the Celto-Slav producer and Tacitus Teuton, all these narratives were accepted both by the Teutonic, industrialised or Western core and the peripheral classifiers. Their key structuring factor was a dichotomy between romantic, elitist pessimism about the degeneration of rural ethnic purity and positivist, democratic optimism that urban civilisation evolved through modern mixture[†]. Modernity entails progressive change and opening of societies to outside influence, and while optimists relish the ensuing profits and exotic stimulations and envision a splendid future, others fear destruction of all that is familiar. Germanic-Nordic supremacism was strongly linked with political anti-modernism, and non-Germanic race narratives often stressed positivism in contrast, but modernity was a complex challenge for all, and both sides combined the narratives above in diverse and often inconsistent ways. Emotionality and the steppe warrior were romantic anti-modern strategies, willingly embracing accusations of belonged in the past, rejecting the industrial Western future. Prichard said Celts were ‘more tenacious’ of linguistic ‘peculiarities’ and many ‘customs and manners’ than other Europeans, and a conservative Irish journal claimed the Germanic monarchies revived ‘the decaying power’ of Celtic, Mediterranean and Eastern European ‘elder nations’ (Prichard 2000 [1831]: 92-93 & 121; DUM 1855: 725-27). The civilisation narrative was a route to modernity meanwhile, while the peaceful underling could be a very neo-romantic adulation of the changeless peasant, who rooted the national race in its territory, or a step to civilisation.

The periphery and sympathetic romantics in the industrialised core collaborated on the emotional romanticisation of peripheries. Until the eighteenth century, European powers ‘were largely self-absorbed’ with ‘establishing their own’ ‘political, linguistic, religious and intellectual’ ‘order and

^{*} I address the narrative of superior civilisation in detail below and the other three narratives in the case study chapters.

[†] On pp.135-37 & 232-36 I examine some elements of this dichotomy.

centrality... like the classical civilisations whose mantle they' claimed (Chapman 1992: 124). The romantic 'celebration of *disorder*, and of *anti-classicism*' only appeared when order was 'sufficiently secure' (Chapman 1992: 124-25). As Europeans moved to industrial towns, they began to 'sense that the natural world' could be destroyed and to re-evaluate nature and the supposedly 'natural' people who lived in it (Chapman 1992: 129). Identifying with a minority 'on the verge of extinction' was a way of 'achieving distinction' (Chapman 1992: 139). Early industrial Britain was the first to romanticise its Celtic 'internal ethnic difference', Ossian helping to make Celts into pan-European romantic icons (Chapman 1992: 128; see p.290). For Insular 'Celtic' and Slavic subject nations, spiritual auto-exoticism was an attractive alternative to triumphalist Germanic nationalism. Polish romantics for example contrasted Slavic spirituality with egoistic and superficial Western materialism (Tornquist-Plewa 2002: 223). MacLoughlin's stereotypical Irish Celtic peasant, 'Pat', 'whose affected simplicity' almost always cloaked 'unfathomable shrewdness', meanwhile shared the 'keen' Slavic sense of humour and 'daring imagination' (MacLoughlin 1896: 86). This romanticisation extended the nationalist and anthropological assumption that isolated backward peasants preserved ethno-racial purity to whole 'peasant' nations (see pp.110-11 & 123-24).

Despite, or rather due to industrialisation, Germanic nationalists were prominent *völkisch* rural romanticisers. Gustaf Retzius in Sweden and British writers like Beddoe pessimistically contrasted the inferior 'urban working class' and migrants to towns with a rural aristocratic and peasant ideal (Malik 1996: 96). Robert Knox, who despised both race mixture and Celts, said Celts bred with Saxons 'in great abundance in the great manufacturing towns' (Knox 1850: 349-50). Jackson meanwhile saw the 'debased sediment' of 'all great cities' as 'a return to, or a remnant of the savage root-form of the race' through 'racial retrocession' or 'collective atavism', Aryans degrading into 'a semi-Turanian type' and Semites to 'a semi-Negroid' (Jackson 1873: 401). Beddoe, Retzius and many others bemoaned the 'depressing' but undeniable prospect that the Nordic, whose children withered 'in the fatal atmosphere of' towns, 'seems ill-fitted to cope successfully' in the 'industrialised world', and was giving way to a small, brachycephalic, 'darker and more mobile type, largely the offspring of the proletariat' 'more adapted to the atmosphere of the great cities' and 'the demands of industrial life' (Retzius, G. 1909: 300-1; Beddoe 1905: 237; Barkan 1992: 26). Retzius's Nordic desired 'a freer, less constrained life', and lacked the patience and endurance for 'uniform' labour, while brachycephals were 'satisfied with a little', patient 'even when things are dull and dreary' and less 'addicted to expensive' recreations* (Retzius, G. 1909: 300). As late as

*Retzius's research showed Swedes were the purest 'remaining' Nordics, and unsurprisingly said the Nordic race psychology matched 'the Scandinavian peoples excellently' (Retzius, G. 1909: 301 & 306). He anticipated the later Swedish social model by defining Nordic requirements as 'high wages for a moderate amount of work and short hours,'

1937, Fleure in Wales believed industrialisation could ‘alter the physical’ and ‘psychological composition of a nation’ (Fleure 1937: 221). He said ‘pioneering elements may emigrate to newly opened-up distant lands,’ but at home ‘find recently-developed industrial crowding unbearable or even fatal’, while ‘people with other endowments may find their opportunity in industrialism’ (Fleure 1937: 221). In 1929, the Polish aristocrat Rosiński claimed that unlike Ammon’s Germans, who loved town living, Polish Nordics stayed on the land, because Poles idealised country life (Stojanowski 1930: 9; see p.386). Even triumphalist urban Nordicists like Woltmann glumly concluded that racial elites rapidly degenerated in industrial cities due to weaker restrictions on interbreeding with rising brachycephalic inferiors and the strains and high mortality rate of urban life (Woltmann 1903: 272-73; Mosse 1978: 79). The Nazi Nordicists Günther, Himmler and Darré had backgrounds in the *Artamanen* meanwhile, an anti-Semitic *völkisch* movement combining Nordicism with ‘peasant settlement schemes’, ‘agrarian romanticism’, and calls for eastern *Lebensraum* and ‘a peasant-warrior elite’ (Field 1977: 529-30). Richard Walther Darré, the Nazi Agriculture Minister and race ideologue, specifically promoted peasant aspects of *völkisch* thought, using early nineteenth-century romantic slogans like *Blut und Boden* (Mazumdar 1990: 194-95).

If the French appreciated brachycephalic limitations therefore, Nordicists feared their strengths. To prevent complacency and because profoundly pessimistic Nordicism racialised modern class anxiety, brachycephals had to be redoubtable rivals. Those of Gustaf Retzius and Günther were good defensive soldiers, ‘not short of courage’ or ‘cleverness’, achieving narrowly limited goals like middle-class standing and success as an ‘acquisitive petty capitalist or small trader’, through ‘quiet and persistent’ patience, temperance, ‘hard work, acquisitiveness, economy and moderation’ rather than boldness, and could even reach the upper classes, especially in France where they formed the largest group (Günther 1933: 64-66; Retzius, G. 1909: 299 & 313). Lapouge and Penka compensated their mediocrity with a ‘special ability to unite in heavy and immobile collectives’ (Orsucci 1998: 7). Lapouge argued that the French Revolution boosted Jewish influence and diluted ‘higher-class dolichocephalic Frankish elements’ through race-crossing and ‘replacement by the increasing brachycephalic lower-class’ and advocated eugenic policies to stop these outbreeding and dominating Nordics (MacMaster 2001: 44; Hannaford 1996: 292-93). Classical accounts and Woltmann convinced Beddoe that Mediterranean peoples had become progressively darker since Rome’s heyday, while his own research suggested ‘a similar change going on among ourselves’ (Beddoe 1905: 237). The racial Teutons who expanded at the fall of the Roman Empire were a disappearing minority meanwhile, in lands where the Latin languages reasserted themselves

allowing time for ‘pleasure and enjoyment’, though he might have been surprised that this was achieved through the typically brachycephalic strategy of ‘State support’ (Retzius, G. 1909: 300).

(Beddoe 1912: 55-57). Beddoe, a popular British authority on race, who published ‘the first general study on the races of Europe’ in 1893, regretted ‘the diminution of the old blond lympho-sanguine stock,’ which had ‘served England well... but is apparently doomed to give way to’ darker proletarians (Beddoe 1905: 237; Deniker 1904: 181). While he demanded whether ‘the coming race’ could ‘hold what these men have died to win’, Gustaf Retzius worried for the future ‘progress of higher civilisation... art and science’ and German interwar Nordicists were convinced that only halting the Nordic decline could save Western civilisation (Lutzhöft 1971: 17; Beddoe 1905: 237; Retzius, G. 1909: 301). This fear had already excited Anglo-Saxonists almost a century before. Knox claimed ‘the noblest’ Ancient Greeks were racial Saxons, while Saxons were ‘gradually becoming extinct in France and Spain’ (Knox 1850: 47). Latham agreed that Britain was being Celticised (Latham 1852: 259-60). Eastern countries with less impressive track records in modernisation were quick to exploit fears of their future demographic or industrial potential, as chapter V discusses in detail.

Archaeologists and anthropologists provided ample evidence of brachycephalic demographic inundation. Starting in the 1850s, a host of researchers noted that skulls broadened ‘in the course of the centuries’ in England, France, and Germany since at least the early medieval Graverow skulls, among ‘portrait busts in the Italian museums’, and then as far east as central Russia and Greece* (Deniker 1904: 189; Woltmann 1903: 295-96; Godycki 1956: 26; Bunak 1932: 494-95; Kopernicki 1877: 615-18; 1883: 3; Potkański 1902: 256; Krzywicki 1969 [1897]: 415-417; Stojanowski 1948: 1; Kollmann 1880: 116). Bogdanov added that extreme ‘dolichocephals’ once inhabited all Central and South Asia (Retzius, G. 1909: 299). Researchers proposed numerous explanations for this ‘extraordinary change’, Ranke, Virchow and Biasutti favouring environmental factors like mountain life, and denying any major immigration (Massin 1996: 124; Beddoe 1912: 174-76; Biasutti 1941: 595; Kollmann 1880: 116; Woltmann 1903: 29). However Hölder, Kollmann, Beddoe and Woltmann combined gradual brachycephalic influx with interbreeding between Nordic nobles and brachycephalic serfs (Kollmann 1880: 116; Woltmann 1903: 296). Citing historical evidence and the example of foreign serfs becoming the majority in the West Indies, Beddoe backed Hölder’s theory that medieval southern Germans used ‘fugitive or converted foreigners’, including Slav, Avar and Magyar prisoners, for the farm work ‘despised’ in the German warrior ethic (Beddoe 1912: 176). He supposed that even Christian dolichocephalic lords might

* Ancient Slavic long-heads, proven by artefact archaeology, and the disappearance of this dolichocephalic population were also a severe headache for German Nordicists however (Mazumdar 1990: 197).

have excluded serfs from their Graverow burial sites* (Beddoe 1912: 176). Interwar writers like Czekanowski increasingly attributed broadening skulls to race-crossing and brachycephalic immigration, despite critics like Bunak (Czekanowski 1928: 355; Bunak 1932: 495).

Purity vs. civilisation and synthesis

Anthropological debate on race-crossing faithfully echoed wider polemics on whether ethnic and class mixing created fruitful synthesis or destroyed civilisation by corrupting precious purity. MacLean identified 'finely formed' Atlanteans 'where the race predominates', but linked race-crossing with 'coarse features' and 'ill-formed hands and feet' (MacLean 1872: xlviiii-xlvix). The purity fetish was mostly linked to the blond aristocratic ethos however, which was perhaps related to the stress on ethnic and Nordic racial purity in German national identity, as Banti says Prussian citizenship law took its concept of nation by descent and common subjection to the sovereign from pre-modern social estates (Banti 1995: 153). Gobineau pioneered the anthropological argument that race purity was an absolute good, proposing a cyclical philosophy of history in which vital races subjugated inferiors, but inevitably degenerated physically and culturally by assimilating and mixing with them (Todorov 1993: 134-39). Nordicists saw spatial expansion and protection of racial purity, especially from mongrelisation with Jews, as the keys to victory in the mortal Darwinist conflict between racially defined nations. Vanderkindere (1883), Woltmann (1903) Kossinna (1912) and many other classifiers believed that blond 'ruling classes' of ancient civilisations from India to Greece and Rome had fallen because 'mixture with darker natives' adulterated their 'Indo-European blood' (Woltmann 1903: 289; Massin 1996: 129; Vanderkindere 1883: 94 & 97). Woltmann predicted doom for elites that imposed insufficiently strict social segregation, when economic change brought new classes to the top, or if 'females [Weiber] exert an irresistible sexual force of attraction over' upper-class men (Woltmann 1903: 260). Interwar German anthropologists like Eickstedt saw race mixtures as 'still disharmonic young bastard-populations', in which traits 'of the parent races still more or less clearly appear' (Eickstedt 1934: 13).

While Germanicists saw superiority as a pure civilising essence, damaged by mixture, French republican national identity made civilisation a product of exchange. Knox and Günther insisted Nordic Teutons must remain apart from their domestic or foreign subjects, but the French cast themselves as just the spearhead of universal human progress and global solidarity, and Germans as barbarians for rejecting this civilisation (Bollenbeck 1999: 292). Paris led positivist international

*A 'collateral problem' was 'the supposed increasing prevalence of dark hair in Europe, particularly in' formerly blond areas (Beddoe 1912: 174). Beddoe's answer was that past blondness was greatly exaggerated, due to its enormous and

anthropology by accepting everyone as potential Parisians, but few non-Germans or non-Nordics volunteered to accept permanent inferiority in German-led raciology. French writers after 1870 contrasted France's fruitful racial diversity to German obsession with ethnic and race purity. Ernest Renan's famous 1882 lecture, *Qu'est ce que une nation?*, rejected the ethnicity-nation link that Germany used to claim Alsace-Lorraine, stressing that France and other nations were racially mixed (Hannaford 1996: 288). French ethnic origin narratives had stressed syntheses of Celts, Romans or Franks for centuries, if sometimes in discursive civil war. Though the Celts were entrenched as the national French race from 1830, Michelet and others celebrated France's mixed heritage (Poliakov 1971: 44-48 & 62). Anthropologists from 1836 to 1933, including Broca, variously termed Paris 'a vast melting pot' and identified a blend of up to seven ethnic or racial components in the French 'complex nation', with its Germanic name, Latin 'civilisation' and Gallic 'chief glory' (Broca 1836: 31; Bonté 1864: 628; Broca 1878: 200; Pogliano 2005: 48). Broca therefore opposed Knox, Gobineau and Nott, who saw hybrids as aberrations with damaged 'fecundity, vigour and intelligence', Broca claiming he studied the ethnology of France, whose 'material and intellectual prosperity' grew continuously despite being very racially mixed, to refute this theoretical proposition* (Broca 1859: 7-8; 1871: 282). Quatrefages similarly rejected the theory of 'some excellent minds' that 'radical antagonism' blocked 'Aryan and Finnish' race mixture (Quatrefages 1871: 44). He linked the French-promoted 'Celtic' brachycephal to the 'advanced arts' and 'superior civilisation' of France, which could absorb even colonial natives (Quatrefages 1889: 313).

German national purity and French synthesis promoted an accent on race and society respectively. Purity narratives gave German ethnologists greater means and motive for a cult of Nordic perfection, but made the non-Nordic proletariat a potential fifth column of foreign subjects. French-style synthesis naturalised class hierarchies by making the brachycephalic 'national race' just one stolid, imperfect part of a harmonious society, leavened by Aryan blond yeast. Like everybody, the French admired blonds. In 1826, Desmoulins praised them for best resisting environmental influences and in 1864, Périer conjectured 'successive creations' from 'Negro' 'through all the degrees' of perfection, to 'White' and then 'blond races', the 'least imperfect' (Blanckaert 1988: 31; Périer 1864: 624). Piette said grave goods found with small Gaulish brachycephals appeared 'lower class', though he argued that the tall blonds with them probably owed their social elevation to height rather than psychological racial superiority (Piette 1876: 265-66). The French and British Celts of Thierry, Edwards and Broca therefore merged dark, brachycephalic, Gaelic speaking Celts or Gauls with a second wave from the east of tall, long-headed Gallic-speaking

almost universally high estimation.

*The implications for French race geography were no doubt also on his mind.

Cimmerians/Cimbri/Kymri in the north, linked with the Belgae, whom ancient writers said were blond (Collis 2003: 63; Deniker 1897: 126). Broca and 'everyone' else agreed that these were thoroughly fused into 'a crossed race' that 'constitutes the capital ethnic element of the French nation' (Broca 1859: 10; 1871: 284; 1860: 9; 1871: 294-95; Ranse 1866: 479). Celts and Kymris first 'mixed their blood' between the Loire and Seine, Broca said, later interbreeding intensively in the Roman and modern periods, to create a 'general' mixture (Broca 1871: 286 & 291-93; 1864d: 308-9; 1873: 620). In a racially roughly evenly balanced country like France however, the different races traits maintained their individuality because atavism pulled equally in 'two opposing directions', causing 'continuous variability' over generations even within families (Broca 1860: 9; 1871: 294-95). The archaeologist Alexandre Bertrand compared the clear race succession in ancient Scandinavian tombs with blurred Gallic technological stages, suggesting that slow racial and cultural fusion between Aryan Celts and pre-Aryan peoples had created a common Gallic culture and 'definitive Celt or Gaul type' (Bertrand 1864b: 379-81; 1873: 631-41). He said archaeology and anthropology suggested that iron-using eastern Gauls from the Alps violently conquered 'the interior of Gaul' and fused with its people, so that by the Roman period, common new tomb types had almost entirely replaced their initially separate forms (Bertrand 1873: 434-35 & 638; Lagneau 1876: 140). The Pre-Celts adopted cremation burial, 'which must have been associated with a new religious rite' (Bertrand 1864b: 381). Piette agreed that ancient Gaulish burial sites demonstrated 'a nation formed of numerous races of different origins' (Piette 1876: 266-67). Topinard in 1877 said 'the new historic' Celtic race type mixed Neolithic eastern brachycephals with dolichocephalic natives, who in turn included dolmen-building invaders, while northern Gauls were different again (Topinard 1877: 456 & 473-74).

Graham says that while late nineteenth-century German social Darwinism became increasingly pessimistic, the optimistic version which saw an analogue with capitalist competition was 'particularly popular in England and the United States', (Graham 1977: 1134). 'Teutonomania was just one competing strand in the complex interplay' of English identity narratives, along with Israelite origins or a stress on racial hybridisation (Ballantyne 2002: 41). The revival of Scots and Welsh Celticism and death of 'older, more blatant Anglo-Saxonists' by the 1890s promoted a British national ideology which existed as a minor thread since the Middle Ages and was 'as multi-racial as the French, if not more so' and 'reluctant to attribute national success to racial or cultural purity, as did many Germans' (Poliakov 1971: 64-65 & 105; Curtis 1968: 27; Barkan 1992: 23). The establishment of united Germany as 'the principal inheritor and guardian of the Germanic patrimony' and of Teutonomania as 'a purely German affair' also 'politically compromised' Germanicism elsewhere (Poliakov 1971: 64-65 & 105). One British ethnologist even described

Neolithic Teutons as *'the repulsive savage of the kitchen-middens,'* 'a mere nomad hunter' with a 'narrow brow... retreating forehead,' 'low skull' and 'animal propensities', who made 'no regular use of sepulchres' and largely borrowed 'culture-words... *from the contiguous Sclavo-Latin and Celtic languages*' (MacLoughlin 1896: 84). Several British anthropologists dismissed portrayals of 'dark-eyed' aborigines as the 'specially dangerous and disorderly' 'social *débris* of London and Paris', objecting that they were 'universally allowed' to be Europe's most sober people, while statistics 'conclusively prove them... the most chaste' (Lewis 1872: 264; Jackson 1873: 401). J.W. Jackson in 1873 put his vigorous Aryan blond, furnishing 'physical and intellectual vigour,' in symbiosis with the older, 'more matured', civilised dark Atlantean type of 'very many' modern European 'authors, artists and military commanders', which offered 'the delicacy, refinement and susceptibility requisite for the highest culture' (Jackson 1873: 399-402). They jointly created 'the highest, noblest, and the most richly gifted type of our immediate future', just as the ancient Aryan-Semite mixture produced Jews, Phoenicians, 'and perhaps' Greeks and Romans (Jackson 1873: 401-2). Many, like Arnold, detected a Celtic strain in England (see pp.308-9). He offered in evidence the 'exceedingly' dissimilar linguistic structures of German and English, the vast superiority of English rhetoric, and French stereotypes of the English in which quick Celtic 'perception' mixed and clashed with 'a Germanic instinct for going steadily along close to the ground' (Arnold 1962 [1867]: 351-53 & 359-60). While the Welsh conversion from Catholicism to Calvinism merely supplanted 'one superstition' with another, he argued, the 'English hold a middle place between this and the 'controversial, rationalistic, intellectual' German Protestantism (Arnold 1962 [1867]: 355).

Italian national identity set equal store by civilisation and diversity, drawing, like France, on a 'native' tradition of *ex oriente lux*. Leading anthropologists like Sergi and Biasutti accepted 'the customary image' of Italy as a 'multicoloured' profusion of cohabiting ethnic groups, because 'historically exposed to the most varied' race mixtures (Pogliano 2005: 102, 379-80 & 402). Far from advocating purity, Sergi, a Sicilian, demanded government support for north-south migration to reinvigorate dormant and suppressed southern Italian talents with an injection of northern blood (Sergi 1993: 182-83). The interwar biologist Mario Canella considered Italy a purely 'spiritual fusion', whose 'racial superiority' stemmed from successful mixture of stocks (Pogliano 2005: 379). Interwar right-wingers nevertheless combined Italian synthesis with distaste for modern miscegenation. Frassetto said the 'ever increasing' tendency of the 'most progressive nations' to avoid racial 'miscegenation' and maintain 'that homogeneity which is the guarantee of normal development', was 'completely justified' (Pogliano 2005: 374). Biasutti described ancient race crosses neutrally, but zealously condemned 'more recent cross-breeding' (Pogliano 2005: 400).

Even the fascist ideologue Evola traced the Mediterranean race to a mixture, though this was 'destructive' of superior elements, and recorded in ancient myths of angels falling, sodomy and bestiality (Evola 1941: 70 & 74).

Anthropology embittered: the Franco-Prussian War

A 'confused and bitter' debate about race, ethnicity and civilisation 'flared up' suddenly throughout Europe after the Franco-Prussian War, a turning point in relations between the two leading race classifying nations, using anthropological 'hierarchies and relations of filiation' to legitimise 'hegemonic ambitions and national arrogance' (Orsucci 1998: 1). Following previous anthropological squabbles about Celts and Aryans, and minor spats like an 1861 dispute over which nation had on average larger brains, it injected short-term bitterness and lasting touchiness into classification disputes, which the 1914-18 War later dramatically magnified (Gould 1981: 89). In 1900, Ripley criticised 'the rival French and German schools of anthropology' which had both 'obtained widespread popular currency', for confusing racial and cultural groups (Ripley 1900: 454). German and Italian unification in 1870-71 meant 'the essentialist conception of the nation definitively triumphed', intensifying 'the search for and justification of the ethnic or racist and linguistic roots of the nation' (Díaz-Andreu & Champion 1996: 10). The French-style option of German *Kultur* as an influential 'core of humanity', which had tempered the isolationist concept of Germany, began to fade (Bollenbeck 1999: 296-98). Bismark 'justified the war in ethnological terms', frequently boasting of Teutonic superiority over 'feminine, passive, unproductive' Celts and Slavs and claiming the 'failed democratic revolution in France' showed the 'exhausted' Romance race 'would go under' (Herz 1925: 13; Hannaford 1996: 288). The political 'initiative and energy once shown by the Latin peoples... now reposed in the peoples of the North', he claimed, and the 'future belonged to the Aryans' (Hannaford 1996: 288). In response, Quatrefages's *The Prussian Race* (1871) accused Prussia, 'in the name of *pangermanism*' of exploiting 'racial antagonism... with Machiavellian skill', declaring it wanted 'to reign over the *Latin races*' (Quatrefages 1871: 3 & 6). Quatrefages posed as a scientific debunker of Bismark's race propaganda, claiming to have 'always stood up against the political application of anthropology' (Quatrefages 1871: 3). Hannaford accepts his claim, 'partially supported' by Topinard, that he wanted to show nations were race mixtures, to prove the 'absurdity' of German attempts to base the state on race (Hannaford 1996: 288). However Bismark was no anthropologist, and used a popular unscientific meaning of race, while Quatrefages's book systematically depreciated Prussian racial identity. Coon accuses him of being the first to use race classification for nationalist propaganda, calling Germans 'Huns' in 1870 (Coon 1939: VIII: 1). In the context of German unification in 1871, his

distinction of French and south German Aryans from ‘a ‘Prussian race’, corrupted by mixture with dark ‘Mongoloid’ Finns and Slavs, was clearly a political ploy (MacMaster 2001: 40). Quatrefages argued that the other Germans who ‘espoused the hates and served the instincts’ of ‘Slavo-Finnish’ Prussian rule were ‘carried away by an *anthropological error*’ (Quatrefages 1871: 104). Broca also questioned German ethnic unity, arguing that the ‘Germanic race’ of linguists was ‘far from being homogeneous’, and it was ‘very doubtful, in particular,’ that Franks and Normans were, anthropologically... of the same race’ (Broca 1873: 603).

Quatrefages believed the ‘really Prussian provinces’ of the north-east, with their Finnish pre-Aryan and mostly Slavic Aryan elements, were racially ‘completely different’ from ‘the really German populations of the south’ and west, where archaeology also indicated some Celts and tall, long-headed pre-Aryans (Quatrefages 1871: 8, 78-80 & 101-3). Prussia’s native Slavs and Balts, biologically adapted to the local milieu, had largely absorbed later Swabian and French Huguenot colonists, who therefore ‘dominated only in the upper classes’ and some ‘bourgeoisie’ (Quatrefages 1871: 78-80 & 101). The wild, impoverished land where the Prussian races clashed was a hard ‘school’, in which ‘intelligence broadened, wills strengthened, courage, like body, was tempered; but also hearts hardened, ambition developed, and religion itself took on too often a savage character’ (Quatrefages 1871: 80). Quatrefages contrasted the ‘pitiless’ Teutonic conquest, Christianisation and Germanicisation by ‘iron and blood’ with the ‘incontestably superior civilisation, arts, industry’ and ‘peaceful progress’ which followed French imperialism* (Quatrefages 1871: 57 & 75). The ‘hates and violence’ of the Prussian incomplete fusion, ‘still in its middle age’, seethed beneath a ‘varnish of civilisation borrowed mostly from France’, erupting in the philistine barbarity of the 1870-71 war which his book detailed, including a fold-out map showing artillery bombardment of the *Muséum* (Quatrefages 1871: 80-82). In 1872 Broca added his own masterpiece of nationalist political sniping, disguised as a technical treatise about ‘Research on the Nasal Index’. Anthropologists believed nose shape was ‘transmitted very tenaciously by heredity’, with ‘almost all’ white people being leptorhinian or long-nosed, all ‘yellow populations’ ‘exclusively... mesorhinians, and Negroes and Bushmen’ having wider noses still (Deniker 1971: 63; Broca 1872: 17). Broca argued that non-Indo-European Lapps, Finns, Estonians and Spanish Basques who ‘one could call the Mongolian races’, had atypically short noses for Europeans (Broca 1872: 22). He then declared that Merovingian Frankish skulls, ‘excavated under my eyes’ in France, also had quite short noses, so that Franks were ‘not leptorhinian, like the peoples of Western Europe, but mesorhinian, like the Mongolian peoples’, and had ‘increased the nasal index’ in

*He admitted however that this contrast was largely due to the ‘difference of time and circumstances’, and that French crusaders ‘would scarcely have conducted themselves differently to the Teutonic Knights’ (Quatrefages 1871: 75-76).

‘northern France to a notable degree’, adding helpfully that they ‘were however of Germanic race’ (Broca 1872: 31 & 34). Some Dutch and Francophone Belgian anthropologists accepted Broca’s claims, but German writers angrily dismissed the ‘high grade of self-deception’ of Parisian anthropologists who ‘so approvingly took up’ Quatrefages’s argument, and inveighed against Broca’s ‘arbitrary’ French ‘nose theory’, that Teutons had made the long Gallic nose ‘short and snubbed’ (Houzé 1883: 84; Kollmann 1880: 113; 1881: 14 & 33). Julian Kollmann of Basel challenged Broca to examine the long-nosed Teutonic *Reihengräber* skulls, though admitting that some belonged to a second race with a ‘somewhat flattened [*eingedrückt*] nose’ (Kollmann 1881: 14).

However German anthropology in this liberal age was reluctant to politicise race science and often deferred to Gallic school doctrine on brachycephals and synthesis. Hölder commented that after all, France and Germany were craniologically ‘not so very’ different (Hölder 1876: 4). Schaaffhausen, Virchow and Taylor all attributed ‘mental superiority’ to brachycephals, because European culture advanced as they replaced the dolichocephals, and even Nordicists like Beddoe were open to this argument, believing civilisation even darkened hair (Woltmann 1903: 293; Beddoe 1971 [1885]: 2). With apparent equanimity, German liberals like Virchow and Kollmann accepted brachycephals and descendants of Celts, Slavs or Finnish pre-Aryans in the German national mix, rehabilitating the latter two as blond Europeans (Orsucci 1998: 3; Wijworra 1996: 170). Virchow answered Quatrefages’s ‘notorious pamphlet’ by refusing to racialise German nationality and by making ‘special trips to Finland and Livonia to test his statements’, discovering exceptionally fair-pigmented populations there (Virchow 1950 [1896]: 184; Massin 1996: 80 & 100). Kollmann combined Virchow and Gustaf Retzius’s testimony on blond Finns with his finding that grey eyes were common among the Slavic Wends (or Sorbs) of Saxony, to attack Quatrefages’s thesis that northern Germans ‘are not real Germans’ (Kollmann 1880: 108-10). Kollmann attributed much of ‘the notable increase of the blond population in the north’ to Slavs, finding evidence that they generally accompanied ancient Germanic migrations, and even cited testimony by French anthropologists of Slavs in Caesar’s Gaul (Kollmann 1880: 110-12 & 114). Virchow’s mid-1870s schoolchild survey then demonstrated to the ‘surprise’ of his colleagues that only 31.8% of mostly northern Germans were of the ‘blond type’, while the ‘brown type’ predominated in the south, and in ‘environments of the greatest social dynamism’, by major rivers and in big cities (Orsucci 1998: 3; Mosse 1978: 92; Kollmann 1880: 106-7). Ecker, Hölder, Ranke and Kollmann meanwhile found ‘short broad squarish’ south German skulls, especially in highlands (Beddoe 1912: 101-5; Kollmann 1880: 107 & 116). Virchow added that the geographical blond-brunette split was a common ‘Central European question’, also affecting ‘Slavs and Celts’ and declared that taking

dolichocephaly, 'light colour' and tall stature as 'criteria of the "Germanic type"', 'excluded' much of 'southern and western Germany' (Virchow 1950 [1896]: 185). Kollmann argued that national or ethnic races, or hierarchies of superiority among European races no longer made any sense, insisting 'it is false' to describe European races as primitive, link snub noses to intelligence or treat prognathism, which was 'partly also an inheritance of the European races' as inferior (Orsucci 1998: 3; Kollmann 1881: 37).

Despite liberal efforts, the War and anthropological controversies drove apart the German and French national race narratives. The French fought hard to associate themselves with Europe's upland brachycephalics and Celts, the original Aryan civilisers (see pp.317-21 and Fig. 3.6). Though anthropologists warned that the nation was 'far from being all of pure Celtic race', the brunette was decidedly the dominant partner, with custody of the term Celt and all it implied for French national identity (Bonté 1864c: 198). All leading French anthropologists from the 1860s on believed the French were largely of the 'gifted' Alpine, or Celtic physical race, a view still 'almost universally accepted' in 1926 (Hankins 1926: 154; Lagneau 1860a: 519; Bonté 1864c: 198; Piette 1876: 265-67). Deniker named his western brachycephalics after the Cévennes in France, where 'its best characterised type' was found, while Montandon in 1933 said it was the 'most characteristic racial element of France', if not the majority (Deniker 1904: 203; Montandon 1933: 253). Lapouge and a few others concentrated on social rather than national race questions, proclaiming the superiority of France's Nordic Aryan elites, as pre-Revolutionary aristocrats and Gobineau had done (see p.247). However most, like the novelist and nationalist politician Maurice Barrès and the historian de Coulanges celebrated 'the noble blood of the Celtic ancestors' and tried 'to reduce the significance' of 'Germanic (Frankish)' influence by speaking of blended 'Celtic and Teutonic stocks of genius' or even denying any 'racial degradation' through 'blood mixture with Germans' (Hannaford 1996: 288). Republicans stressed 'nos ancêtres les Gaulois' as one of the few pre-1789 historical symbols not tainted with monarchical associations (Hobsbawm 2005: 272). By the 1880s, positivist French physical anthropologists had begun to subsume the Kymri, who were understood to have entered northern French France from the north-east and have similar physical traits and adventurous, warlike qualities to the Teutons, into a common Nordic blond dolichocephal (Lagneau 1876: 140; Broca 1871: 285; Collignon 1883: 504 & 525). Although Broca was 'certain' 'Kymris were a foreign race' from blond northern Germany however, he separated them racially from Teutons and gave them the very special national role of introducing Celtic speech to Gaul, while Lagneau by 1876 had moved to a much earlier and indisputably non-Teutonic Kymric derivation from tall, Neolithic dolichocephals (Broca 1873: 591 & 595; Broca 1860: 10; Lagneau 1876: 140-41). The rise of nationalist Germanic, Nordic and Aryan narratives meanwhile left Germans in

diminishing need of Celts after mid-century, and in the 1860s, they and other Central Europeans largely lost interest in this supposedly French tribe, especially as the archaeological three ages system ‘took root’, linking bronze with an epoch rather than an ethnic group (Sklenář 1983: 93). Proposed compromise theories of Celto-Germanic culture failed, Broca and Périer declaring in 1864 that ‘the ethnic differences between Teutons and Celts are no longer questioned’ (Broca 1864: 459; Périer 1864: 602; Sklenář 1983: 94). Bieder saw an 1872 work on German ethnology as Celtomania’s last gasp (Bieder 1909: 31). Ethnology’s Celtic question was thus laid to rest, but at the cost of associating the French and Germans with different historical ethnic groups and racial types. Germany widely proclaimed the First World War as a race war, pitting Celts and Slavs against Teutons (Herz 1925: 15; Caillaud 1915: 136).

Brachycephalic Asian Aryans

The cosmopolitan brachycephalic ideology encouraged narratives of external, imported civilisation. Determination to oppose German claims that Aryans came from northern Europe, the accumulated weight of biblical, philological and archaeological tradition and perhaps a more genuinely universal rather than purely European national outlook all helped maintain the belief of almost all French anthropologists that the ‘qualitatively superior’ Indo-Europeans originated in the Central Asian ‘*officina gentium*’, introducing bronze, agriculture and higher culture to the European natives (Hankins 1926: 155-56; Broca 1864a: 557; 1864c: 194; 1864d: 303 & 307; Pruner-Bey 1864c: 223-24; Hölder 1876: 19; Liétard 1864: 272; Bertrand 1864: 303). Broca’s flirtation with French biological autochtonism was therefore brief. His satisfying new early 1860s racial narrative had confirmed the French as Celts, deprived ‘Germanic’ blonds of the Celtic franchise and bestowed Celtic dignity on the brunettes, while confirming them as natives (see pp.323-27). It even transformed the French blond minority into a junior breed of Celt, sheltered from insinuations of being racial Germans. However Broca’s narrative was a sleight of hand. He annexed just the *term* Celt for the brown natives and accepted their survival, but never denied that blond Aryan conquerors from Asia had imposed their language and superior ‘Celtic’ bronze culture (Broca 1871: 365). In 1864 he said this idea was possible, though unproven, accepting that blond Gauls invaded Italy, but arguing that the small Aryan contingent mixed thoroughly with other races on its way from Asia, so their original appearance was unknowable (Broca 1864a: 559; 1864d: 309-10; 1871: 369-70; 1873: 598). By 1871 however, he accepted blond Celts as the westernmost wave of Indo-Europeans, spreading from the Black Sea to Scandinavia, Gibraltar and throughout the British Isles (Broca 1871: 365-69). His close ally Bonté freely admitted that dark-pigmented ‘French, ancient Romans and’ linguistic ‘modern Aryans’ differed racially from the Aryan ‘*race with blue eyes and blond hair,*’ and ‘white skin’ (Bonté 1864: 628; 1864d: 277). Pruner-Bey’s camp only considered

the former Aryans, he argued, because they were supposedly blond originally and due to ‘considerations of *pure linguistics*’ (Bonté 1864d: 278). Thurnam similarly portrayed Bronze-Age brachycephalic invaders of Britain as linguistic but not racial Indo-Europeans (Thurnam 1864: 404).

Early 1870s French anthropology however converted rapidly and discretely to the proposition that France’s darker brachycephalic natives, the national race, *were* the real first Aryans from Asia, rather than just conquered primitives with a borrowed Celtic language. The broad-headed eastern Aryan narrative emerged step by step from that of the brachycephalic French Celt, gradually solidifying into a brachycephalic arc stretching via the Slavs to Central Asia. Broca traced the dark brachycephals of Central Gaul and Bronze-Age British round-barrows to extreme brachycephals dominating late Palaeolithic France (Broca 1873: 596-97; 1878: 193-94). As tall blonds occupied the Rhine frontier and small, dark, dolichocephalic Iberians inhabited the Pyrenees, Broca reasoned that these ‘brown-haired Celts’ probably came from the Alps, falling on the Neolithic Iberians from the north and east and broadening skulls in central Gaul (Broca 1871: 292; 1873: 597-98). He identified them with Ligurians, whose north Italian descendants the Italian anthropologist Nicolucci had shown to be very brachycephalic (Broca 1873: 598). As the Ligurian race was found neither in peninsular Italy nor Iberia, Broca agreed with Nicolucci that it probably came to Italy from Tyrol, an argument later reinforced by finds of mid-Palaeolithic brachycephals in Hungary (Broca 1873: 598-99; 1878: 193-94; Périer 1864: 621-22). The Alpine, northern Italian, southern German and Slavic brachycephals, which Retzius and others since the 1840s had seen as linguistically Aryans, were successfully rebranded by the 1860s and 1870s Gallic school as Celts (Blanckaert 1989: 188; Thurnam 1864: 404; Smith & Spencer 1997: 300; Retzius, G. 1909: 298; Daresté 1860: 82).

Bertrand and Gustave Lagneau, a specialist in ethnologically interpreting classical texts, established the Alps as the immigration route of ancient Gauls, strongly facilitating brachycephalic eastern origin (Bertrand 1876: 145; Lagneau 1876: 133-38 & 145). In previous accounts, eastern invaders generally crossed Europe’s northern plains, where modern blond dolichocephals were concentrated. Both authors concentrated on blond Alpine Gauls, possibly related to Teutons, though Lagneau suggested that brachycephalic predecessors perhaps used the same route in misty antiquity (Bertrand 1873: 435). He said classical texts traced Celts to the now largely brunette and brachycephalic upper Danube and Rhine valleys, suggesting an eastern origin (Lagneau 1876: 131-33). In the 1870s, the Celtic question was revolutionised by association with Alpine archaeological sites (Evans 1999: 15; Collis 2003: 63-64). The contrasting styles of artefacts from Halstatt near Salzburg, systematically excavated in the 1840s, and the late Iron Age site of La Tène in

Switzerland, discovered in 1857, was immediately marked, but up to 1874 scholars considered the differences regional rather than chronological (Collis 2003: 72-75). From 1871, Bertrand, Henri d'Arbois de Jubainville (1827-1910), Emile Désor and Gabriel de Mortillet linked Halstatt, La Tène and sites in Italy and northern France with classical references to Celts, including on the upper Danube (Evans 1999: 15; Collis 2003: 63-64 & 85; Sklenář 1983: 122-23). Bertrand identified the Gauls with the eastern Gallic tumuli later associated with La Tène and Halstatt. Their architecture and contents had, he said, 'a completely different character', more recent and 'much more advanced', than in western Gaul (Bertrand 1873: 631-32 & 638). This 'current', marked by mostly iron implements, common artefact style and absence of flint, was concentrated on the upper Rhine, Danube, Jura and Alps as far east as Halstatt, but 'directed itself by the Danube Valley towards the Caucasus' (Bertrand 1873: 631 & 633-34). Topinard backed the decisive shift of brachycephalic Celtic homeland from central Gaul to the Alps by 1877 and it was soon widely accepted (Topinard 1877: 456).

By around 1880, 'the rapprochement' of Celts, Slavs and probably also Virchow's 'brachycephal Germans', convinced most leading French anthropologists (Topinard 1878: 508; Houzé 1883: 88). Russian and Polish colleagues like Bogdanov, Kopernicki and Majer, deferring to the prestigious 'French school', were also unreservedly eager to accept Topinard's single 'a vast sheet' of upland brachycephals from France to Russia and Turkey 'in which the average indexes vary no more than a few points' (Czekanowski 1948: 19; Topinard 1885: 403-5). While Broca, Houzé and Quatrefages referred to 'the Celts of east and west' as terms 'accepted by science', Topinard and many Eastern Europeans renamed them Celto-Slavs (Houzé 1883: 88 & 96). In an 1877 article on 'the Celts of Eastern Europe', the Paris-based Romanian Alexandre Obédénare (Alexandru Obedenariu) argued that brachycephalic Croatian crania, 'very much resembling' French Celtic skulls and certain southern German brachycephals, formed a race with an 'ensemble of common characteristics', including various 'Roman idioms' (Obédénare 1877: 253). He and Quatrefages said that in about the fifth century BC, racially Celtic peoples stretched 'from Lower Brittany to the Black Sea', but other races ultimately invaded and imposed their languages on it (Obédénare 1877: 253-54; Quatrefages 1889: 490). Transplanting Broca's French synthesis, Obédénare claimed mountain Celts and lowland Kymris had always 'lived side by side' in the eastern Balkans (Obédénare 1877: 253-54). He identified the blond Kymris with ancient tribes that classical writers said were entirely ignorant of agriculture, and must therefore, he reasoned, have lived off 'a subject race... of *producers*' (Obédénare 1877: 254). The new narrative appropriated existing philological, historical and archaeological evidence for eastern Indo-Europeans, like the association of Celts with Asian bronze finds, the 'supposed high antiquity of Sanskrit' and the lack of geographical obstacles to

Asian migration into Europe (Broca 1864: 462-63; Childe 1926: 94; Pruner-Bey 1864c: 225-27; Ripley 1900: 470 & 473). Traditional linguistic, cultural and classical studies ethnology already often identified Celts from Britain and Iberia to Danubian Central Europe, and noted that Irish, Scots and British legends all claimed an eastern origin (Pruner-Bey 1864b: 660; 1864c: 229-30). Gallic and Celtic vocabularies supposedly repeated 'by steps' to 'the centre of Asia', and proved Celts lived in the prehistoric Caucasus, while similarities with Finnish and Scythian artefacts, tombs and customs meanwhile suggested that Celts once lived near them (Pruner-Bey 1864c: 230 & 239-40; 1864e: 332).

The Asian origin of Europe's brachycephalics, driving 'like a wedge' between the dolichocephalic Nordics and Mediterraneans, equally useful for the Gallic and Nordicist schools, was universally and enduringly accepted (Childe 1926: 97; see Fig. 3.7). Ripley's brachycephals clustered most densely around the Alps, where 'the broad-headed type is the most primitive' and unchanged and there was no archaeological evidence for Mediterranean types (Ripley 1900: 455 & 471). Mortillet, Topinard, Drumond, Sergi, Canon Taylor, Keane, Dixon and, as late as 1939, Eickstedt all accepted that dark brachycephalic Celts from the east had pushed 'outward from the Danubian highlands' since prehistory, settling 'a great part of Central Europe' and Gaul (Hankins 1926: 155; Coon 1939: VIII: 4; Keane 1896: 136). Topinard and Ripley said they crept west from the Afghan mountains, leaving behind a 'long chain of peoples of a similar physical type' along Iranian and Turkish highlands (Ripley 1900: 470 & 473; Topinard 1878: 508; 1885: 400). Haddon, a leading English anthropologist, said in 1898 that Broca's dark brachycephalic Celts were from Eastern Europe and perhaps even Asia, and possibly related to 'Lapps and Finns', but a quarter century later confidently and fully endorsed Ripley's theory of westward migration from 'plateaux from the Hindu Kush westward' (Haddon 1898: 584; 1924: 15 & 26 & 152). Most leading Italian and almost all French anthropologists from the late 1870s to 1900, and many colleagues elsewhere, accepted the Gallic school argument that Central Asian brachycephals introduced Indo-European speech, bronze and a more 'elevated' Indo-European society, politics and religion, and formed the upland 'dorsal spine of the Indo-European ethnic complex' (Orsucci 1998: 6 & 8-9; Ripley 1900: 456; Houzé 1883: 86-87; Quatrefages 1889: 489; Borlase 1897: 966 & 995; MacLoughlin 1896: 84). Topinard and Russian scholars studied brachycephals in the Caucasus and Pamirs, but the Hungarian-French orientalist Carl von Ujfalvy, who discovered Indo-European-speaking, broad-headed Tadjiks while exploring Central Asia in 1876-82, was especially important (Ujfalvy 1903: 26; Quatrefages 1889: 489; Houzé 1883: 87). Houzé claimed these brachycephals, with typically Celtic colouration and stature, far outnumbered Ujfalvy's 'sporadic' pockets of Central Asian blonds, which were therefore vestiges of European colonists, rather than of westward-migrating Aryans (Houzé 1883: 96). The

Aryan link confirmed superior brachycephalic intelligence. Matiegka in Prague saw brachycephals as mentally superior, while Bogdanov believed 'intellectual work' after 'the coming of civilisation' broadened Russian brains and skulls (Krzywicki 1969 [1897]: 419; Woltmann 1903: 293). By the 1920s it was commonly claimed that brachycephalic bronze-bearing 'proto-Aryans' were once a 'racial aristocracy', although not conquerors, from the Caspian to Spain (Hankins 1926: 155-56).

Most late nineteenth-century anthropologists believed the technologically advanced Asian Aryans invaded Europe relatively late, 'with the introduction of metals' and no later than the Neolithic (Houzé 1883: 88 & 90; Broca 1873: 598; Thurnam 1864: 401; Lagneau 1876: 139-40; Houzé 1883: 83; Sergi 1900: 213). Though Topinard called the proto-Celtic Neolithic brachycephals the 'the last invaders' coming west in sufficient numbers to make their type 'predominant in some areas', Broca's nativist stance potentially contradicted this however (Topinard 1877: 473-74). He dated Western Europe's first brachycephals from the late Palaeolithic rather than 'the almost recent era of the Asiatic invasions,' as Retzius suggested, or the Neolithic (Broca 1878: 193-95). Childe argued that Palaeolithic brachycephals lacked the 'civilisation' that philology ascribed to Aryans however (Childe 1926: 97). The solution was a complex series of pre-Aryan brachycephal immigrations (Thurnam 1864: 397). Broca postulated two, probably related, broad-headed, late Paleolithic immigrations into Gaul, a short, 'very backward' mixed group with 'narrow, low and retreating' foreheads and the first true extreme brachycephals, who 'penetrated into' eastern France from the Danube valley, after earlier appearing at a Hungarian site (Broca 1878: 198-200; Houzé 1883: 82-83). Sergi, Houzé and Mortillet agreed that the civilised Bronze-Age Aryan brachycephals were of the same race as the earlier brachycephalic 'scattered colonists' (Childe 1926: 98; Sergi 1900: 213-14; Houzé 1883: 82-83 & 87). Others, like Bonté, more decisively distinguished separate waves of European brachycephals (Bonté 1864: 625; 1864d: 282). Jubainville argued for separate Ligurian and then Celtic Indo-European invasions from the east (Collis 2003: 64). Quatrefages, Piette and Bosch Gimpera believed aboriginal Lappanoid proto-Finns, or even North African brachycephals preceded the racially or culturally superior broad-headed Aryans (Quatrefages 1889: 313; Childe 1926: 97-98; Piette 1876: 265-66).

The Nordic strikes back

German-speaking physical anthropology remained under the sway of liberals like Virchow and Kollmann until after 1900, but a nationalist counter-current emerged, claiming ancestry from inherently superior Nordic Teutonic Aryans (see pp.83-85). Virchow 'denounced the new 'Nordic mythology' and the danger to science of 'patriotism' and 'impetuous enthusiasm', but in the more

politicised early twentieth-century scientific racism, this became the most potent political instrument ever produced by race anthropology (Orsucci 1998: 3). It offered a symbol of resistance to bewildering social change and lent scientific credibility to ethnic and class hierarchies. The tall northern blond was the sole race common to both Deniker and Ripley's systems, and had the political advantage in purely physical post-ethnic race anthropology of being recognisable even to non-specialists. Nordicists claimed a plethora of proofs for Nordic superiority, including evolutionary progressiveness, association with high prestige categories, beauty, race psychology, social role and glorious history. Weisbach noted that 'all the oldest civilised peoples... (Chinese, Indians, Egyptians, Phoenicians, Etruscans, Greeks and Romans)' were dolichocephalic while apes were very broad-headed (Weisbach 1876: 8). Ripley believed Nordic blondness was probably an exceptional evolution from darker undifferentiated, Mediterranean-looking, prehistoric dolichocephals (Ripley 1900: 466). Putting this in Mendelian terms, Fischer and Eickstedt attributed European 'general efficiency' and 'highest mental development' to a 'high number of cumulative' early Neolithic mutations, finding evidence in the 'progressive to a high grade' Nordic features like its 'energetic, prominent and not rarely angular' chin, that its particular creativity and intelligence came from being one of humanity's 'strongest specialisations' (Fischer 1936: 265, 280-82 & 284; Eickstedt 1934: 350-51). The chin's 'size, form and position', explained Făcăoaru, 'correlated with the spirituality and the level of evolution of a race' (Făcăoaru 1936a: 10). Eickstedt mostly illustrated 'progressive Europoid' Nordics and Dinarics with photographs of middle-aged men*, and 'infantile-primitive types' with adolescent Asian girls, placed next to a baby's face for emphasis (Eickstedt 1934: 15-17 & 352). The Blond was Montandon's only 'accentuated' or exceptionally evolved Europoid race (Montandon 1933: 99; 1933: 272). Fischer meanwhile clearly distinguished Nordics from the Alpine-Mediterranean race complex elsewhere in Europe (Fischer 1936: 283). Beddoe, Ripley and Eickstedt hitched beauty to evolution through sexual or 'artificial' selection. Nordic top men, with the pick of the most beautiful women, chose Nordic mates (thus perpetuating the race even as a minority) because tall, thin blonds were universally associated with nobility and so seen as sexy 'bodily ideals', and 'most admired', 'especially by the poets' (Ripley 1900: 469-70; Eickstedt 1934: 352-53; Beddoe 1912: 177-78). Beddoe and Eickstedt claimed blonde hair was 'decolorised by art, like those of some contemporary damsels' in Venetian paintings or even since Roman times (Beddoe 1912: 177-78; Eickstedt 1934: 353).

The 'vocation' of Woltmann's Germanic race was world rulership, exploiting 'nature and the workforce' and attaching 'the passive races as a limb to serve' it (Woltmann 1903: 298). Woltmann, Günther, Brigham and Lapouge were 'unshakeably convinced' of Nordic 'superiority' over such

*As transvestites well know, men are quicker to develop features of ageing like hair growth and wrinkles.

servant races as the ‘relatively gifted’ Mediterranean and ‘hard-working and steady’ Alpine, ‘the perfect slave, the ideal serf, the model subject’, ‘quiet, accommodating’ and ‘submissive to authority... being usually Roman Catholics’ (Woltmann 1903: 285-86 & 298; Günther 1933: 66; Gould 1981: 227). The SS, largely following Günther, set ‘pure Nordic’ as its highest category, followed by ‘principally Nordic or Phalic’, ‘harmonious mixtures with “light Alpine, Dinaric or Mediterranean elements”’, predominantly East-Baltic or Alpine mixtures, and finally ‘mixtures of non-European origin’ (Ackermann 1970: 115-16; Mazumdar 1990: 214-15). Lapouge’s choice of *Homo Alpinus* to replace the term Celtic race, taken up by most anthropologists by 1922, was ‘not very flattering’, as Linnaeus had used it in 1735 as a ‘small, busy, timid’ compendium category for inbreds and other pathological subheadings of his *Homo monstrosus* (Eickstedt 1937a: 220; Lenz 1936: 726). Gustaf Retzius believed Lapouge misread Linnaeus, who was ‘probably’ referring to Lapps, but Lapouge’s extreme anti-brachycephalism suggests deliberate slander (Retzius 1909: 280). Even right-wing German anthropologists accused Günther and Clauß, the leading interwar Nordicists, of exalting Nordics by demonising other races, especially with ‘largely false’ denigration of supposedly unpatriotic Alpines, and reminded Günther of largely Alpine south German courage in 1914-18 (Lutzhöft 1971: 109-110). German nationalist Nordicists like Much and Hentschel despised the dark Asiatic brachycephal (Orsucci 1998: 7).

Nordicism was an international elitist class war movement appealing to eugenicists and the extreme right and resisting gains by liberals, Jews, socialists and suffragettes during the 43-year peace of 1871-1914. They considered untrammelled rule by Nordic elites the best guarantee of their nation’s interests. Nordicists like Günther, Lapouge, Grant and Rosenberg linked Alpines with the ‘democratic doctrine of equality’, which for Günther meant ‘carping and envy’ and ‘revulsion, even hate’ for ‘all human excellence’ (Günther 1933: 65 & 93; Lutzhöft 1971: 109). Günther opposed feminism, and like Lenz blamed ‘inferior racial elements’ for left-wing politics and the insurrections of 1918* (Field 1977: 526 & 530; Lutzhöft 1971: 109). The Nordic was the *völkisch* movement’s most elitist and international identity symbol because unlike linguistic or cultural categories like Germanic, it established racial hierarchies within ethnic nations. Though these could

*As conservatives, Nordicists generally saw personal character as the decisive factor in history, and gave supposedly Nordic ‘great men’ a critical role. Wilser (1899) and Woltmann (1905) claimed several famous ‘French and Italian artists were pure Teutons’ and attributed the Italian Renaissance to Nordic Lombards (Woltmann 1903: 255; Poliakov 1971: 68). Echoed by Woltmann, Chamberlain argued from Biblical scholarship that it was almost ‘a certainty’ that Jesus, ‘the God of the young vigorous Indo-Europeans’ of Europe, was not racially Jewish (Hannaford 1996: 349-50 & 353). Noting that Galilee had many Greek settlers, Woltmann listed several blond Jesus theories, without specifying from which parent Jesus inherited his blondness (Woltmann 1903: 289). Galton’s *Hereditary Genius* (1869) sought to explain the accomplishments of historical figures through their genealogies. Lenz, Eickstedt and Günther all discussed the race type of German heroes like Hindenberg, Bismarck and Luther and as late as 1958 a leading Italian anthropologist declared Dante and the Medicis to be of Mediterranean race (Günther 1933: 69; Eickstedt 1934: 356-7; Pogliano 2005: 418).

be made to coincide with ethnic categories, as in American immigration controls which excluded migrants from racially inferior southern and eastern Europe, they usually superimposed on social class. Unlike newer or more cultural fields like serology or archaeology meanwhile, its roots in an established positivist laboratory science insulated Nordicism from populist political realities. Of the various strands of Nazi race theory, Nordicism was the contribution of physical anthropology, which also provided its academic leaders (Mazumdar 1990: 194).

Class and race had been associated since nobles claimed separate ethnic descent. For some Victorian 'upper class Englishmen', like the anthropologist Beddoe, the 'artizan class' was 'almost a race apart, having darker skin and hair than their social superiors', and was even called 'negroes' (Curtis 1968: 24; Beddoe 1971 [1885]: 298; Malik 1996: 98). Prichard correlated higher social class with 'nobility' of features, and 'whiteness of skin' in 1813 (Blanckaert 1988: 36; Woltmann 1903: 281). Klemm (1843) and then Gobineau suggested Europe's 'bassa gente' 'who live in servitude or... a very depressed position' were 'vestiges' of 'passive (Mongol-like)' aborigines or 'a lower race' formed 'through miscegenation' with negroes or Finns (Woltmann 1903: 281; Malik 1996: 83). Gobineau updated 'the feudal theory' of Franks and Gauls in France by inviting bourgeois frightened by the 1848 revolution to identify with the racial elite (Herz 1925: 9). The 1890s anthroposociologists, led by Lapouge and Ammon, transformed class racism by scientifically comparing anthropological race and sociological class statistics. While popular Nordicism emphasised blondness, the scientist Lapouge gave 'dolichocephaly a preponderant importance, as a distinctive trait of intelligence' and general superiority, providing 'optimal conditions for the brain to flourish' (Banu 1939: 202). Lapouge's 'blond, Aryan and long-skulled *Homo Europaeus*, robust, energetic, of high intelligence, and a natural conqueror', was bred for propelling human progress, while the 'more primitive' upland brachycephal, '*Homo Alpinus*, were their slaves (MacMaster 2001: 44; Banu 1939: 201). Ammon, a 'close follower of Haeckel', 'amplified' Lapouge's theory in 1896, offering racism as a sociological alternative to Marxism, and saw eugenics as the answer to the 'denordicization (*Entnordung*)' of Germany by Jews and Jesuits (Hannaford 1996: 328; Banu 1939: 202). He saw social class as a useful barrier to racial intermarriage, allowing superior people to improve the race by breeding together and offering the lower classes a model to emulate, ultimately benefitting the entire society (Hannaford 1996: 328). Nordicist anthropologists welcomed anthroposociological results. Woltmann cited German, French, British and Swiss statistical studies in which higher social classes were either more 'more Germanic', Nordic, longer and bigger-headed, taller, or more fit for military service (Woltmann 1903: 282-86). Beddoe based his class racism on 'instinct' but also on a study of Cambridge students correlating academic performance with fair colouring (Curtis 1968: 72; Barkan 1992: 22). Eickstedt believed Europe's

‘highest social strata’ since early history though slightly waning more recently, were ‘significantly’ more Nordic than other classes (Eickstedt 1934: 352). Günther agreed that many of the ‘important and outstanding’ people of ‘all Western nations’, and almost all of Europe’s greatest statesmen, were predominantly Nordic (Günther 1933: 59-60). In ‘almost every people, or tribe’, ruling classes were racially distinct, he said, with ‘on average more Nordic, Phalic and Dinaric blood among the upper classes’ in all Western countries, and more Alpine and East-Baltic ‘in the lower classes’ (Günther 1933: 93).

Nordicist race history

Nordicists maintained a fairly consistent race historical doctrine from the late nineteenth century to the 1940s, though adherence varied greatly according to ideological zeal. It was a structuring, explaining and simplifying philosophy of history, in which Nordics always ruled and conquered. A plausible narrative emphasised ‘splendid’ Teutonic ‘military and political expansion’ throughout Europe, from early prehistory and *Völkerwanderung* tribes to Carolingians, Vikings, Varangians, Ottonians, Normans, crusaders, Hapsburgs and Prussians, and the industrial and political achievements of the Germans, British and Americans (Ripley 1900: 469-70; Borlase 1897: 936). It noted the long historical record of ‘young peoples... pouring down from the cold lands to conquer and rejuvenate’ southerly cultures (Childe 1926: 167). Turn-of-the-century Italian race scientists like Niceforo and Sergi, and even the anti-racist liberal Colajanni, accepted the ‘present superiority’ of ‘Aryans’, ‘Anglo-Saxons’, ‘Celts’, and northern Europeans and Italians, who had ‘the most evolved and refined civilisation’, ‘most adapted to’ modernity (Teti 1993: 187; Colajanni 1993: 98). The historical account of German ex-socialist Ludwig Woltmann, who published Lapouge when he was discredited in France, made Nordics an almost universal ruling class, drawing on evidence from art and classical literature studies, to include among them pre-Germanic Aryan migrants from the north like the ancient Greeks and Romans (Woltmann 1903: 290 & 295; Clark 1984: 151). Woltmann’s Nordic was ‘the born bearer of world civilisation’, raising other races ‘to a higher psychological level’ by conquering and mixing with them (Woltmann 1903: 287). Discontented Nordic fractions generally led even revolts against Nordic elites, like the French Revolution (Woltmann 1903: 294). His Mediterranean was ‘culturally creative’ but ‘only some’ Mongols ‘reached the bottom steps of civilisation’, while Negroes never transcended ‘savagery and barbarism’ (Woltmann 1903: 287).

Nordicists like Woltmann, Kossinna and Günther proposed ever earlier and wider migrations of civilising Nordic elites. In several articles in 1900-10, Kossinna’s said the Indo-Germans made ‘rapid’ artistic progress, conquered ‘in all directions’, and even influenced Sumerian culture, while

his 'main rival, the classical prehistorian Carl Schuchhardt' and other Germanicist archaeologists went still further (Childe 1926: 168-71; Günther 1933: 103; Massin 1996: 129). Following 'major linguists' like Hermann Hirt, Günther said the late Stone-Age, central German corded-ware culture spread the 'Indo-Germanic' languages in Europe by conquest, giving 'every Indo-Germanic speaking people' a 'mostly Nordic ruling class' (Günther 1933: 102-3). Reche drew on early 1900s German artefact archaeology to give Corded ware a northern and Nordic origin (Reche 1909: 230). He also reckoned from south German and Hungarian Nordic skulls found by Virchow, that Nordics developed Band-ceramic culture and that an associated broader-headed people with African-looking and sometimes 'lower race' craniological features, which 'did not fit at all within the European form-group', had only 'an auxiliary, subordinate,' and non-'culture-creating role' (Reche 1909: 227-231). Band-ceramic diffused from the south-east, but Schlitz and Reche argued that Nordics migrated down the Danube, developed it and exported it back upstream, while broader-headed Band-ceramic skulls could belong to slaves transported north with them (Reche 1909: 231). Woltmann believed 'the entire European civilisation, including in the Slavic and Romance countries, is an achievement of the Germanic race', attributing the Papacy, Renaissance, French Revolution and 'global Napoleonic Empire' to descendants of Teutonic invaders of Rome, and even Greek independence to 'immigrant blond Albanians' (Woltmann 1903: 293-94). He and Klemm made the 'Arii of Tahiti' the southernmost 'conquering Nordic horde', while Indians brought white rulers to the East Indies and Hamites and Semites to Africa (Woltmann 1903: 287). The Incas meanwhile, 'were without doubt a foreign race,' with 'Caucasian' 'morphological features' (Woltmann 1903: 287). Schuchhardt 'ascribed the Egyptian and Chinese civilizations to European prehistorical influences', but though Woltmann ruled out such 'bold hypotheses', he cited Ujfalvy to argue that most ancient Persians were Nordics, the Chinese learned irrigation from blonds, and Aryan India was East Asia's cultural equivalent of ancient Greece (Woltmann 1903: 288-90; Massin 1996: 129). Gauls, Slavs, Indians, Persians, Greeks and Romans were 'originally true sons of the blond pale race' and the important middle Asian and southern European cultures were 'out and out ' their work (Woltmann 1903: 289-90).

The defining post-1870 race-historical polemic opposed a new German claim that Aryans were blond Nordics from Scandinavia, to the Gallic school argument that the upland brachycephals, 'a predominant element in the French nation' were 'the only and original Aryans', bringing Oriental, Indo-European culture to Europe (Ripley 1900: 456; Huxley & Haddon 1935: 152). The Eurocentric German claim compensated for losing the Celt to France. Deniker said 'recognised authorities' like Latham (1855), Broca (1864) and the Belgian scholar J.J. d'Omalius d'Halloy raised early objections to an Asian origin, but Omalius was almost unique in 1860s Francophone

ethnology in arguing, as Linnaeus implied, that the Indo-European '*officina gentium*' was in Germania and that 'superior' flexive languages may have spread from Europe to Asia (Deniker 1971: 318; Liétard 1864: 272; Broca 1871: 360; Lagneau 1876: 131; Deniker 1971: 318). One 'eminent' expert described Latham's proposed European origin 'as lunacy', while German classical archaeologists and historians were transfixed by *ex oriente lux* theories tracing northern civilisation from the south and east (Keane 1920: 503; Wijworra 1996: 167-68). Germanicists could at least use the Celto-Slav and brachycephalic Asian Aryan theories to associate French brachycephals with despised Mongoloids and exclude them from the prestigious European category. In 1933, Günther said 'most researchers' saw the Alpine brachycephals as a branch of the Mongoloid Inner-Asiatic race, though significantly altered by contact with European races (Günther 1933: 109). Montandon saw Alpines as closer to Mongoloids in form than dolichocephals were (Montandon 1933: 268). Günther and Pösch's term *ostisch* (Eastern) for the Alpines, emphasising their Asian origin, was such a term of approbrium by 1929, that the Nordicist Clauß rejected it (Eickstedt 1934: 384; Lutzhöft 1971: 109-10). While Gallicists equated peacefulness with civilisation meanwhile, Nordicists used the Aryan narrative to exploit the old dichotomy of dolichocephalic conquest and peaceful broad-head migration, plus general esteem for martial valour, boldness and triumph. The philologists, Broca, Sergi, Ripley, Fleure and Coon all invoked a 'peaceful', 'slow and progressive' 'infiltration' of technologically advanced Aryan brachycephalic 'peasantry' 'plodding across Europe from their simple home in the Hindu Kush', spreading due to climatic change and 'often merely [settling] unoccupied territory' (Broca 1871: 292; 1873: 591-92; 1878: 193-94; Sergi 1900:213; Ripley 1900: 470 & 473-75; Coon 1939: VIII: 3; Fleure 1937: 220).

However the Gallic school deprived the 'Teutonic' Nordic race of the honour of bringing Aryan speech and civilisation from Asia. Conservative German 'enthusiastic adherents' of the dolichocephalic Teuton theory therefore 'often' went a Eurocentric step further by proposing the 'Germanicist' theory that this type was 'the true and typical Aryan', originating in northern Europe and conquering and civilising the rest of the world through successive migrations (Virchow 1950 [1896]: 189). Nationalist resistance to *ex oriente lux* began in the early nineteenth century, but became much more 'aggressive' from the 1880s (Wijworra 1996: 167-68). Gobineau's *Essai sur l'inégalité des races humaines* (1853-5) may be 'the first comprehensive statement' of the theory that Europeans were racially superior Nordic Aryans, and though upper-class Germanicists like Gobineau and Lapouge 'remained marginal' in France, their theory rapidly became 'almost a matter of faith' in Germany, especially after 1918 (MacMaster 2001: 33 & 80; Keane 1920: 504; MacMaster 2001: 53; Day 1997: 109; Houzé 1883: 86-87). Aryan theories emphasised language, the mark of German identity, and placed Germanic migrations on a historical par with ancient

Greek and Roman expansion (Day 1997: 109). Poliakov sees cultural precursors to theories that Aryan culture emerged in northern Europe, and that racial Nordics were responsible for all the world's cultural achievements, in Medieval and Reformation legends claiming German as the language of the Garden of Eden, German direct descent from Adam or Noah, and Germans from Asia as Europe's first inhabitants before the fall of Babel (Poliakov 1971: 91, 99, 105, 109 & 118). Vanderkindere in Belgium insisted in 1883 that Aryans were tall, blond, dolichocephals, probably from Asia, but Nordic Aryans were apparently even more popular in Britain and long remained so (Vanderkindere 1883: 94). Thurnam in 1864, MacLean, Campbell and Jackson in 1872-73, Keane in 1896 and Fleure in 1937 all assumed dolichocephalic, and often blond Indo-Europeans (Thurnam 1864: 404; Campbell 1872: lx; Jackson 1873: 397; MacLean 1872: xlv-xlv; Keane 1896: 136). In 1897, Borlase called Scandinavia 'the officina gentium' since prehistory (Borlase 1897: 945-48). Fleure and Keane specified that dolichocephals Aryanised brachycephals, and Jackson traced the Aryans to Europe, though MacLean and Fleure placed them on the steppes. MacLean said that fair-haired dolichocephals and a 'conquered' 'aboriginal race' together created 'the ancient Aryan language' (MacLean 1872: xlv-xlv).

Most Nordicists, from Wilser in 1885 to Fischer and Montandon in the interwar period, were convinced that Nordic character and paleness evolved in brutally testing 'cold climes' (Orsucci 1998: 3; Fischer 1936: 280-82). Ammon's 'purely Aryan' Nordic race was 'gifted with special qualities of intelligence and will' because the Ice Age had imposed 'an extremely rigorous process of [Darwinian] selection' (Banu 1939: 202). Ripley, Wilser and Penka believed cold climates selected for blondness, brachycephalic Slavs remaining brunette because they migrated north later (Ripley 1900: 468-69; Wijworra 1996: 172). The balmy Mediterranean climate was blamed for the disappearance of supposedly Nordic ancient Greeks and Romans, though Woltmann claimed most noble families in temperate North Italy were still Nordic (Vanderkindere 1883: 94 & 97; Woltmann 1903: 268). Günther, Montandon, Sergi and Haddon told similar tales of Nordics evolving in 'ice-free areas of early Stone Age *Mitteleuropa*' before spreading north in the wake of retreating glaciers, sometimes along with their Phalic cousins (Günther 1933: 101-1 & 105; Haddon 1924: 151; Montandon 1933: 111). The Frenchman Lapouge was unusual among Nordic supremacists in linking the Nordics' 'singular mixture of audacity and fragility' to Baltic dampness instead (Orsucci 1998: 7).

Orsucci says linguists and students of mythology rather than anthropologists laid the groundwork for a European Aryan origin in the 1860s-70s, ascribing 'advanced social and political institutions and remarkably elevated religious beliefs and moral instincts' to the ancient Teutons (Orsucci 1998:

9). He adds that the Asian Aryan origin, an ‘indispensable point of reference for generations of scholars... fell at a stroke into disrepute’ around 1870, as Benfey’s new linguistic palaeontology or comparative reconstruction methods appeared to prove that proto-Indo-European emerged in a European land of bears, wolves, oaks, beech and fir, without tigers or palms (Orsucci 1998: 2; Ripley 1900: 482; see pp.138-39). Contemporaries like Deniker, Keane and Ripley offered more cautious chronologies, detecting a hesitant ‘shifting of the “Urheimat” further and further west’ from Latham on, with philologists undermining the Asian origin ‘only about 1880’, and many 1880s-1890s theorists arguing that Aryan speech developed somewhere on the great Russian plains (Deniker 1971: 318-20; Keane 1920: 503-4; Ripley 1900: 482-3; Childe 1926: 165). Linguistic palaeontology also reconstructed linguistic relationships. Brinton, Canon Taylor and Keane argued in 1888-90 that language evolution showed Indo-European was related to Berber, Basque or Finnish, all in the European neighbourhood (Ripley 1900: 478-9). V. Gordon Childe in Edinburgh, a leading self-declared ‘Germanicist’ prehistorian, backed by the philologists Whitney, Spiegel and Latham, argued that ‘many European languages’ were structurally more archaic than Sanskrit and so closer to the original Aryan (Deniker 1971: 318; Ripley 1900: 477-78; Childe 1926: 94-95 & 166). Benfey and later Saussure and Sayce added that Sanskrit and Zend only appeared closer to original Indo-European, because earlier texts survived in India (Deniker 1971: 318).

Geographical logic was also used. Latham in 1851 and Childe in 1926 argued that linguistically more heterogeneous Europe was a more likely Indo-European homeland (Ripley 1900: 478; Childe 1926: 95). Germanicist linguists were accused of exploiting the scientific ‘legitimacy and rigour’ of craniology by claiming the original Aryans were native European Nordics, which became increasingly feasible as the Aryan homeland approached the Baltic (Orsucci 1998: 5). Numerous writers from the 1860s on offered the continuous Nordic occupation of Scandinavia, where the ‘Indo-Germanic type has remained purest and most unmixed’ as evidence for Indo-European origin there or in Germany (Woltmann 1903: 289-90; Childe 1926: 166; Massin 1996: 127; Puschner 2001: 95). Evidence from Tacitus, plus the greater concentration of tall, blond, ‘warlike and conquering peoples’ in Europe, against a few isolated groups in Asia who might anyway be of European origin, led Omalius to conclude that they had been in Europe ‘*since the last geological revolution*’ (Omalius 1864: 201-2; 1864b: 269). Imperialist Eurocentrism buoyed up the new theory. An English ethnologist in 1873 severely doubted the fair-haired Aryans could be from Asia, because their ‘most vigorous individualities... mentally or physically’ and ‘brains of Jovian weight and force’ only flourished ‘in perennial vigour in Western Europe’ (Jackson 1873: 397-98). Omalius argued that Indo-European linguistic remnants in Bactria, given as evidence of eastern origin, could not be more perfect than European languages, because the blonds speaking European

'languages of flexion' were racially superior to dark-haired Arabs, Berbers, Basques, Indians and Persians, (Omalius 1864: 193; 1869: 16-17 & 34). The polygenist Theodor Poesche (1878), who traced blond dolichocephalic Aryans to Lithuania, and Karl Penka (1886) offered seminal anthropological theories of 'Germanicist' world history (Deniker 1971: 318; Childe 1926: 166). Like Huxley, Poesche dismissed the Caucasian concept and any racial relationship with Asians or Turanians (Orsucci 1998: 2). Penka, appealing 'to history, philology and anthropology in support of his then heretical views', moved the blond Aryan homeland to Scandinavia in 1883, arguing that in southward conquests, Aryan purity was diluted by long-headed Semites and 'Mongoloid' brachycephals from Asia (Orsucci 1998: 2; Childe 1926: 166). Wilser in Germany, Sigismund-Moindron Zaborowski and Lapouge in France, plus the philologists Sayce, Rhys and Rendall also supported the Nordic Aryan thesis, while earlier anthropologists like Schaffhausen, Ecker, Hölder, Huxley and Keane 'were certainly tainted with the notion' (Ripley 1900: 455; Orsucci 1998: 3). Woltmann, Penka and Wilser converted even Ujfalvy, whose broad-headed Tadjiks had supported the Gallic school theory, but who reported the Nordic type among them (Ujfalvy 1903: 28).

Orsucci says the new European origin paradigm was scarcely challenged despite the 'great clamour' raised by its 'violent overturning of opinion' (Orsucci 1998: 2; Massin 1996: 127; Puschner 2001: 95). Deniker said in 1900 that 'no one at the present time seeks any longer in Asia' (Deniker 1971: 318). However Germanicism was by no means the consensus in liberal-dominated positivist German anthropology, influenced by the internationally hegemonic discourse of brachycephalic superiority, nor even in its cradle of German linguistics and the humanities (Orsucci 1998: 9). Reinach in France, Mantegazza in 1880s Italy and leading German anthropologists and philologists like Virchow, Kollmann, Schrader, Kretschmer and 'Max Müller all rejected Nordic Aryans, condemning attempts to 'locate a linguistic centre' through physical anthropology (Ripley 1900: 455; Orsucci 1998: 4-5 & 9). Müller, 'making heroic reparation for the errors of his youth', repudiated his own concept of Aryan race in 1888, calling it as nonsensical as 'a dolichocephalic dictionary or a brachycephalic grammar' (Ripley 1900: 455). Leading 1890s German linguists argued that palaeolinguistic reconstructions had collapsed (Orsucci 1998: 4-5). Childe admitted that Germanicism was weakest on linguistic grounds, dismissing Penka's claim that Teutonic languages best preserved the proto-Aryan phonetic system (Childe 1926: 167). As conjectured early Aryan vocabulary suggested a plains environment, rather than 'essentially... maritime' Scandinavia, 'Kossinna, Schliz and Schuchhardt' instead used archaeology to trace 'all the Aryan races of history' back to a Baltic centre, largely ignoring 'linguistic palaeontology' (Childe 1926: 166-68). Kossinna claimed 'the oldest historical sources and monuments', ancient human remains and modern race geography all placed the 'original home of the ancient Indo-Germans' and their Nordic

type, in north and Central Europe (Kossinna 1909: 19). However Germanicist archaeologists were also criticised. They argued that advanced architectural designs in Stone Age northern Europe and Bronze Age Greece must have come from the north, but Sophus Müller objected that the Bronze Age began much earlier in Greece, exporting its architecture to the still Neolithic north (Orsucci 1998: 8). Kretschmer added that Török's results also created 'scepticism and incertitude' among craniologists about the value of the cephalic index, a 'revealed truth' for Penka and his followers (Orsucci 1998: 5).

Deniker and Ripley penned premature obituaries of Germanicism in 1900, claiming 'the Aryan question to-day has no longer the importance... formerly given to it' and that '[I]atterly, with clearer light on the subject, few authorities... hesitate to condemn' hypotheses like Penka's Scandinavian Aryans (Ripley 1900: 455; Deniker 1971: 320). However a first triumph of turn-of-the-century Nordicism was reopening the Aryan origin controversy. Woltmann, Wilser, the philologist Herman Hirt, and the archaeologists Matthaeus Much and especially Kossinna reinvigorated Germanicism, and it thrived amid early twentieth-century German *völkisch* and Pan-Germanist enthusiasm (Mees 2000; Puschner 2001; Orsucci 1998: 4). Hirt switched his Aryan homeland from Lithuania to eastern Germany in 1905-7, and Kossinna proposed a German origin in 1911 (Childe 1926: 165-66; Keane 1920: 503-4; Deniker 1971: 320). As Germany's first archaeology professor, Kossinna repopularised Penka and Wilser's northern Aryan homeland and Nordic supremacists used his theories as scientific proof of Nordic superiority, making him a Nazi German hero and disliked in Britain (Puschner 2001: 93; Barkan 1992: 55). British Nordacist archaeologists like Childe nevertheless argued that that the European Bronze Age was more advanced than the Asian, and that most Bronze Age skulls were dolichocephalic (Childe 1926: 98). Coon said philology, Kossinna's archaeology and Paudler's Crô-Magnon theory created the interwar Germanicist prehistoric synthesis, in which 'the Germanic peoples, as descendants of Crô-Magnon' were 'the racial and linguistic nucleus of the Indo-Europeans', and Nordic 'Corded people' spread 'Neolithic European civilization and Indo-European speech' from the 'northwestern European glacial centre' in 'northern Germany and Scandinavia' (Coon 1939: VIII: 3-4).

Despite initially tracing modern Europeans to the continent's earliest inhabitants, Broca and the Gallic school came to believe that in the warmer Neolithic climate, Crô-Magnons were largely or entirely supplanted by 'new races', though perhaps 'sometimes' reappearing through atavism (Broca 1878: 197-98; Childe 1926: 97). However many Eurocentrist Nordacists adopted the hyper-native Crô-Magnon Europeans as ancestors. They had a good reputation, considered taller, 'more finely moulded' and 'more powerful and more capable of improvement' than the 'decidedly very

savage' Canstadt or Neanderthal race, which had 'possible *Simian* affinities', and whose 'marks of inferiority truly surprising', recalled 'Australians and Esquimos' (Broca 1878: 194-196; Ripley 1900: 462; Borlase 1897: 938). Broca's Crô-Magnon 'discovered drawing, carving, and painting', and had a 'straight and high' forehead, voluminous skull, and the leptorhinian nose of 'all Caucasian races' (Broca 1878: 196-97). Crô-Magnon finds centred in south-west France, near the supposedly Iberian Basques, extended to southern Italy and probably Britain, and from 1880, French researchers recognised cranial similarities with the Guanche people of the Canary Islands (Broca 1878: 197; Coon 1939: VIII: 3; Haddon 1898: 581). This suggested to many that Crô-Magnons were ancestors of the long-headed Mediterraneans, if any modern race (Houzé 1883: 90; Deniker 1897: 126). Quatrefages believed Crô-Magnons fled from Aryan invaders to the Canaries and North Africa, while Penka and Vanderkindere linked them to 'Semites' or other dark dolichocephalic south Europeans (Quatrefages 1889: 315 & 447; Orsucci 1998: 2; Vanderkindere 1883: 94 & 97). Houzé meanwhile traced Nordics to Neanderthals in 1883, perhaps reflecting Gallic school prejudice, but anthropologists increasingly accepted the palaeontologist Gustav Schwalbe's turn-of-the-century theory that Neanderthal was an extinct evolutionary dead end* (Houzé 1883: 90; Deniker 1897: 126; Hrdlička 1927: 250). Autochtony-fixated Germanicists like Paudler began to insistently link Crô-Magnons to at least some northern dolichocephals, though Czekanowski interpreted this as proof the ancient Germans had a strong 'Mediterranean... component', and Haddon still associated Crô-Magnons with south Europeans in the 1920s (Vanderkindere 1883: 94 & 97; Haddon 1924: 142; Coon 1939: VIII: 3; Czekanowski 1928: 355). By backing the theory that pre-Ice Age fossil races survived in the Canaries, Luschan and Meyer in 1898 'prepared the way' for the theory, which Childe in 1926 said 'has long been established' that they 'formed a considerable element' 'in the modern peopling of Europe' and that Crô-Magnons 'retreated northward with the glacier, and had survived in Scandinavia' (Coon 1939: VIII: 3; Childe 1926: 97). Quatrefages already accepted this in 1889, citing Crô-Magnon-type skulls from Swedish Dalecarlia (Quatrefages 1889: 444). Kollmann argued that one Crô-Magnon skull belonged to 'a European of the best sort,' like modern 'northern men' and had 'absolutely nothing primitive about it' (Kollmann 1881: 11). Kossinna hesitated between a German or Scandinavian Aryan homeland, but according to Childe, finally concluded that Crô-Magnons settled on the Baltic in about 10,000 B.C (Childe 1926: 168 & 179). The theory gained ground as French pre-1914 dominance of Palaeolithic studies faded (Sklenář 1983: 139). Nordicists like Günther, Reche, Eickstedt and Eugen Fischer believed the Nordic or at least its closely associated Phalic race, and sometimes even all

*Though most experts now class Neanderthals as separate to *Homo sapiens*, it is still disputed whether they interbred with us.

blonds, had Crô-Magnon ancestors (Günther 1933: 68, 101 & 105; Eickstedt 1934: 356-7; Fischer 1936: 276; Reche 1909: 228-29).

The Gallic school argued that the brachycephalic wedge forced proto-Nordic native Europeans into the north and west, but had to accept that Iron-Age waves of Kymric, Teutonic and Slavic blonds then drove the brachycephals back south into highland refuges, except for isolated broad-headed enclaves (Woltmann 1903: 292; Houzé 1883: 82 & 87; Ripley 1900: 472; Coon 1939: VIII: 4). Ripley supposed that Nordics burst southward like a spring released, possibly in a 'military' thrust, when their population density soared in the marginal territory where the brachycephals had coralled them (Ripley 1900: 470 & 473-75). Interwar anthropologists like Haddon and Eickstedt avoided even this very early proto-Nordic defeat by the invading brachycephals. They revived the Retzius (1840) and Pruner-Bey (1864) theories (which some British ethnologists and Vanderkindere in Belgium never abandoned) of blond invaders 'from Asia' pushing primitive 'proto-Alpine', proto-Basque-speaking, Lapponoid or 'Turanian' broad-heads into the north (Haddon 1924: 23; Eickstedt 1934: 384 & 391; Jackson 1873: 401; Vanderkindere 1883: 94). Arbo in Norway gave weight to this theory of an ancient Europe-wide race by demonstrating 'a Lapp substratum' far beyond their present territory, while Ripley identified Lapponoid types in France and Eickstedt among Basques, as well as a 'particularly primitive' Alpine strain in Saxony and Poland, proving 'race-historical connections between north and south' (Ripley 1900: 462; Eickstedt 1934: 388-89). Eickstedt welcomed 1920s research on a Polish 'Lapponoid' 'special form' of Alpines (Eickstedt 1934: 384). Eugen Fischer also traced Europe's brachycephals from 'late and post-Ice Age' Europe rather than from Asians (Fischer 1936: 283). Some twentieth-century Germans and Anglophones proposed a Central Asian origin for all human races, resuscitating Steffens (1806) and Quatrefages's 'great ethnic centre of the white type' there, which gave 'birth successively to' Finns, proto-Semites, and finally Aryans (Quatrefages 1889: 315). The uncomfortable Asian link was compensated by a north-south hierarchy, clearly separating Nordics from Mediterraneans. In the 1904-34 race evolution theories of Eickstedt, Stratz, W.D. Matthew and Griffith Taylor, progressively superior races, culminating in the Nordics, emerged from Central Asian plateaux, driving darker, inferior predecessors into the extremities of Africa, south India and Australia (Eickstedt 1934: 384; 1937b: 61; Fleure 1937: 206). Haddon believed the 'great mountain axis of Asia,' from the Himalayas westward, fundamentally divided races developing in the tropical south, including the 'Eurafrican' Crô-Magnons, Mediterraneans, Africans and south Asians, from temperate northern races like Nordics, Alpines, native Americans and east Asians (Haddon 1924: 142 & 151-54). Eickstedt said Mediterraneans, Alpines and Dinarics entered post-glacial Europe in succession, followed by the Nordic migration across the steppes to Scandinavia, whose blond racial 'traces' several writers had

found scattered across ‘northern and central Asia’ (Coon 1939: VIII: 4; Huxley 1870: 407; Montandon 1933: 249-50; Eickstedt 1934: 357).

Blond Internationalism

Just before World War I, a peace mission of American eugenicists called on the white ‘Western European races’ which were genetically ‘most capable of civilisation (*kulturfähigsten*)’, to unite against the ‘Asiatics’, who would soon be ‘able to conquer the world militarily’ (Kühl 1997: 43). Eugenicists rapidly renewed international contacts after the War with an international congress in 1921 in New York. Interwar American, German and Scandinavian internationalist eugenicists co-operated closely on a ‘World concept’ which equated the destinies of the Nordic race, Europe, the Europoid or white race, the civilised peoples (*Kulturvölker*), and Western civilisation (Kühl 1997: 66). This allowed the Germans to resume their leading position in world eugenics, alongside the Americans (Kühl 1997: 74). Backed by eugenics leaders like Alfred Mjöen in Norway, Madison Grant in America and Lapouge in France, the Munich race hygiene (*Rassenhygiene*) professor Fritz Lenz called in 1924 for an American-led ‘Blonde International’ for the ‘common interests of the Nordic race’ (Kühl 1997: 68). No such body was organised and Field says Lenz’s call, echoed even in Hitler’s early declarations*, represented post-defeat Germany’s need for ‘emotional security’ (Field 1977: 533-34; Lutzhöft 1971: 18-19). However Günther had ‘really close’ relations with foreign race theorists, lived for years in Sweden and married a Swedish wife, and envisaged in the 1920s ‘a future “unification” or at least “fellowship” [Befreundung] of the mostly Nordic peoples’ (Lutzhöft 1971: 15; Field 1977: 534).

Due to its fateful alliance with extreme German nationalism, the internationalism of Nordicism is often forgotten. Like Stalinism, it was an inherently internationalist, purportedly scientific ideology of class solidarity, professed by ultra-nationalists. Nordicist scientists resolved this contradiction through a concentric hierarchy of Teutonic, Nordic and finally European supremacy, ultimately embracing every people which Woltmann and Kossinna claimed had ever been conquered by Aryans or whites. Prehistoric whites migrated around the world, propagating civilisation, super-white Nordic Aryans achieved most white accomplishments and medieval Teutons, though racially identical to the originally Nordic Slavs and Gauls, had an especially glorious role, establishing most modern European racial elites. Kossinna argued that Baltic Crô-Magnons split into successively more superior brachycephalic proto-Finns, the dolichocephalic proto-Aryan *satem* ancestors of Slavs, Balts and Asian Aryans, who dispersed their cultural advances widely, and the superior

*Lenz wrote with pride that Hitler studied his work while in prison, borrowing ideas and even phrases for *Mein Kampf* (Mazumdar 1990: 194).

centum North Indo-Germans who overran them (Childe 1926: 168-70 & 179). Lenz meanwhile defined white as merely a high proportion of Nordic as opposed to Negro blood and his blond international included ‘all peoples of European culture’ with a ‘certain proportion of Nordic race’, even in southern and eastern Europe (Kühl 1997: 68-70). In France, George Montandon, who later lent his “scientific” authority to the anti-Semitic legislation of the Vichy régime* had a similar model of progressiveness fading gradually with distance† from an ideal Scandinavian blonde centre, allowing all whites at least a share in glorious racial superiority (Blanckaert 1988: 51). His Europoids were the most evolutionarily advanced ‘grand race’, and the Blonds their only ‘accentuated race’, carrying white traits to an extreme, while the other, ‘undifferentiated’ Europoids stayed closer to the evolutionarily conservative basic form of *Homo sapiens* (Montandon 1933: 113 & 272). Nordics were the most advanced Blonds, a ‘late type which developed at the centre of a vast area where... blond complexion’ emerged less intensely (Montandon 1933: 247-48). French Nordicists like Montandon, leading Russian anthropologists like Bunak and Poland’s Lwów school exploited this Nordic corona to bring Nordics or at least blonds into north-eastern Europe, ‘France as far as the Loire’ and in relative majority to the south ‘of the Polish and German plain,’ playing ‘a very important role’ among Eastern Slavs (Bunak 1932: 468; Montandon 1933: 247-49; Klimek 1932: 18-19; Stojanowski 1924: 713). Most surprising was the vitality of Bolshevik Nordicism. Bunak claimed ‘most anthropologists’ believed the Nordic and original Slav East-European race were ‘closely related’ branches of ‘a single’ ‘elementary species’ called the ‘European great race’‡, and like many Russians, was terrified of the yellow peril (Bunak 1932: 468 & 492-93; Figs 2002: 413-14; see pp.415-16).

Often unthinking Nordicist assumptions, inherited from native Teutonist and elitist traditions or imbibed through professional links with Germany, were rife in Anglophone, Scandinavian and eastern European anthropology, shared by major late nineteenth-century scholars. Race hierarchies topped by the Nordic were seen as ‘factual, free of prejudice and generally pertinent to social and political analysis’ in turn of the century Britain and America, where the ‘socially insecure ‘middle and upper middle classes’ ‘often’ used the terms ‘Nordic or Anglo-Saxon “race”’ ‘interchangeably’

* Montandon, as a young Swiss Protestant doctor, worked in a neutral Swiss hospital train, treating the wounded of Russia’s civil war (Pogliano 2005: 481). After marrying a Bolshevik nurse, he was accused of handing white Russian patients over to the communists and was thrown out of both the train and Switzerland (Pogliano 2005: 482). He made an anthropological career in France, later working closely with the Petain regime and the Nazis, but was assassinated by the resistance along with his wife (Pogliano 2005: 482).

† As perfection in Blumenbach’s scheme faded from the Caucasus.

‡ This term echoed the *Homo Europaeus* of Lapouge, whose anthroposociological creed was the antithesis of communism, but like many Russian eugenicists, who were heavily influenced by German science and fretted about ‘dysgenic’ upper-class emigration after 1917, this may have reflected Bunak’s political naïvety (Graham 1977: 1145-47). From 1925, Bolshevik intellectuals attacked the aristocratic Nordicism of eugenics and its stress on biological rather than Marxist socio-economic determinism, and it was suppressed by 1930 (Graham 1977: 1150 & 1156-57).

(Barkan 1992: 2; Kevles 1985: 73). Hölder in Württemberg, Lapouge in France, Beddoe in England and Gustaf Retzius in Sweden accepted the 'differing psychological qualities' of provincial, conservative Inland European brachycephalics and 'Teutonic' Nordic dolichocephals, who they associated with 'physical superiority', 'progress and civilisation' and considered 'more prevalent among noblemen and burghers than among artisans and labourers' (Beddoe 1912: 102; Retzius, G. 1909: 299; Hannaford 1996: 293; Curtis 1968: 72; Barkan 1992: 22). The Franco-Hungarian ethnologist Ujfalvy praised Gobineau, Ammon and Chamberlain and criticised the suppression of Lapouge's influence in France (Ujfalvy 1903: 27-28). Even declared anti-Nordicists like Ripley and in interwar Britain, Childe and Fleure carried Nordicist prejudices. The archaeologist Childe challenged Nordicist claims that Nordics were 'ever-conquering and never conquered' and 'spiritually and physically aristocratic', and that modern Germans were directly descended from prehistoric Nordics (Barkan 1992: 55; Childe 1926: 163). Fleure meanwhile criticised the Nordicist 'warped interpretation of archaeological data', dismissing racial superiority as 'largely a pseudo-scientific disguise for prejudices' (Fleure 1937: 224-26). However Childe, influenced by Kossinna, 'accepted much of' the 'Aryan superiority' of north Europe Nordics, who developed civilisation, always promoted 'true progress and' whose 'expansion' led European prehistory 'to diverge from that of' other continents (Barkan 1992: 54-57; Childe 1926: 166 & 211). Fleure accepted that Aryans were 'very long-headed' conquering Central Asian herders, 'with sharp profiles and rather light colouring', who Aryanised brachycephals, stayed racially separate from peasant subjects 'by marriage restrictions and other tabus' and perhaps even conquered China (Fleure 1937: 218-20).

Posing as a neutral disinterested scientist whose American birthright was the 'serene impartiality of a mongrel', Ripley voiced anti-racist criticisms like Fleure's, stressed cultural factors 'where others perceive phenomena of ethnic inheritance', dismissed 'most of the current mouthings about Aryans' and accepted that Europeans might be 'secondary or derived' races 'intermediate between' primary Asiatics and Negroes (Ripley 1900: 104, 456-57, 531 & 549; Orsucci 1998: 8). Though Ripley derived Alpine shortcomings from their backward and isolated rural habitat rather than biology however, they were forced there by biologically more assertive Nordics (Ripley 1900: 529-31 & 549). He accepted all anthroposociological arguments about Nordic and Alpine social roles, and many historical ones. He found 'abundant evidence to prove' the French, German, Austrian and British upper classes were 'distinctly lighter in hair and eyes than the peasantry', citing studies by Hölder, Beddoe and others (Ripley 1900: 469). The anthroposociologist Ammon was a friend, Beddoe an associate and he praised and borrowed from Lapouge's Nordicist race nomenclature (Ripley 1900: viii-ix, 121, 124 & 128). Coon says Ripley reinforced racist nationalist 'speculative

psychology’, giving ‘laymen a racial classification which they could understand,’ and convert ‘into catchwords’, as lyrically satirised by Hilaire Belloc (Ripley 1900: 471-74; Coon 1939: VIII: 3).

Behold my child the Nordic man,
And be as like him as you can:
His legs are long – his mind is slow
His hair is lank and made of tow.

And here we have the Alpine race.
Oh! What a broad and dirty face.
His skin is of a dirty yellow
He is a most unpleasant fellow.

The most degraded of them all
Mediterranean we call.
His hair is crisp and even curls
And he is saucy with the girls. (quoted in Coon 1939 VIII: 3)

Americans were anything but serenely impartial on the subject of race. Their racially graded social hierarchy ran from a fair north European elite to dark helots, just as anthropologists hoped to discover in Europe. Apart from the culturally formative relations between European and African Americans, early 1900s America focussed intensely on racial distinctions between mostly British or Germanic ‘natives’ and ‘darker’ immigrants from eastern and southern Europe, whom Malik says ‘Ammon and Ripley wanted to show’ ‘were of inferior stock’ (Malik 1996: 96). Gould says intelligence quotient (IQ), presented as a measure of innate intelligence governed by Mendelian heredity, and with a scientific lexicon including ‘moron’, ‘idiot’ and ‘imbecile’, replaced craniology as the main race-ranking criterion in early twentieth-century America (Gould 1981: 159, 162 & 232). It made a vital contribution to the Immigration Restriction Act of 1924, ‘one of the greatest victories of scientific racism in American history’, which set national immigration quotas for nationalities according to their 1880 proportions, allowing continued northern European immigration, but staunching the later surge of southern and eastern Europeans (Gould 1981: 232). Citing congressional debates, Gould argues that this act ‘might never have been... even considered, without... eugenicist propaganda’ and a 1917 IQ survey of immigrants and 1.75 million US Army recruits, which found average Americans had a mental age of thirteen, but Jews, Slavs and ‘darker peoples of southern Europe’ were mostly morons, and ‘less intelligent’ than ‘fair’ western and northern Europeans (Gould 1981: 165, 197 & 232). IQ experts lobbying for the immigration law

invoked Lapouge and ‘the leading theorist of racism in his day, the American Madison Grant’ and were determined to ‘segregate, and curtail breeding to prevent further deterioration of an endangered American stock, threatened by’ immigration and ‘prolific reproduction of its feeble-minded’ (Kevles 1985: 75; Gould 1981: 159 & 227).

Understandably, Nordicism was weakest among right-wingers from Latin and darker-skinned countries like the French anthropologist Martial, who in 1934 associated the superior ‘European’ blood group A with the Alpine race (Pogliano 2005: 111). Guiart in France still connected the East European and ‘Celtic’ or Alpine races in the late 1920s, saying the Slavs were ‘in a way nothing but blond Celts’ (Guiart 1928: 204). Pogliano said ‘dolicho-blond’ superiority, while ‘congenial’ to ‘the Anglo-Saxon and Germanic world’ was vehemently contested in Italy because Nordicists denigrated the Mediterranean race (Pogliano 2005: 395-96). The fascist race ideologue Evola called the ‘Nordicist myth’ ‘a fragmentary or deformed echo’, arbitrarily taking tall blond ‘Germanic subraces as... exclusive representatives’ of the Arctic Hyperborean ‘super-race’*, just because they best preserved Hyperborean race purity and ‘some corporal characteristics’ (Evola 1941: 65-66 & 71). Mediterraneans instead maintained the Hyperborean ‘internal race’ and ‘traditions’, while African dolichocephaly proved that physical features alone were an insufficient sign of race (Evola 1941: 68, 71, 75 & 88). The long Nordic sojourn in a ‘particularly bitter and disfavoured’ climate caused ‘a certain materialisation’, building courage, ‘toughness, steadfastness and inventiveness’ but atrophying the ‘truly spiritual side’, as their medieval barbarity proved (Evola 1941: 71-72).

Fissured Nordicism

The equation of Nordic race with German nation and ethno-linguistic Germanic ethnicity was a keystone of German *völkisch* nationalism, promoted by a literature full of portrait photos and Lehmann’s competition for ‘the best Nordic heads’ suggest (Mazumdar 1990: 210). Günther’s Nordicism ‘without a doubt exerted a particular influence’ on Nazi racism and was ‘virtually... a revelation to Himmler’, who enthusiastically read and gave away his books and ‘tried to realise’ his theories in the SS (Ackermann 1970: 110-11). Animal husbandry inspired Himmler and Darré, both ex-students of agricultural science, to breed humans for the ‘higher development of the Nordic race’, and make the SS a new pure Nordic nobility† (Ackermann 1970: 112; Luthhöft 1971: 22). Stature indicated ‘Nordic blood’, so SS candidates had to be tall and ideally blue-eyed blonds, with

* Ancient myths convinced Evola that before the Arctic froze over, it was a ‘land of the sun’, a ‘sacred’ continent of ‘splendour’, home of the Hyperborean ‘Olympic race, reflecting in its extreme purity the very race of the spirit’ (Evola 1941: 66).

† From Chamberlain and German race psychology, Himmler believed disposition to loyalty was inherited with Nordic physical traits. Families of SS men executed for disloyalty were punished to eradicate the treacherous race trait (Ackermann 1970: 149-52).

perfect posture and good proportions, while over-prominent cheekbones suggested an unwelcome ‘Mongol or Slavic’ appearance (Ackermann 1970: 115). The ‘race commission of the *Rasse- und Siedlungshauptamt* [RSha - Central Office for Race and Settlement], made up of SS leaders, raciologists [*Rassenkundler*] and doctors’, was the key instrument for applying anthropological science to SS policy, racially grading applicants according to the system of Dr. Bruno K. Schulz (Ackermann 1970: 115-16). Leading anthropologists like Otto Reche and Schulz were also SS officers, and ‘worked closely’ with the RSha on important Nazi policies in ‘the occupied east’, like resettling isolated German enclaves and regermanising Polish Nordics, ‘especially children,’ carrying out ‘race examinations’ in transit camps that processed up to 1.2 million people a year (Proctor 1988: 161; Mazumdar 1990: 211-13). Field says Hitler still planned to revitalise the Nordic race after 1941, through ‘new peasant-warrior communities in eastern Europe’ and moved rhetorically closer to Himmler’s plans for a racially sifted ‘Nordic ruled Europe’ (Field 1977: 535-36). The RSha and Interior Ministry assessments of citizenship candidates largely used Günther’s racial framework and Günther also trained RSha staff (Mazumdar 1990: 214-15). Educational material for young SS men stressed the importance of finding a wife with Nordic skull form, pigmentation and especially stature, while slender build ‘should constantly be stressed’*, and Himmler decreed in 1931 that to improve the race, the RSha had to vet all intended SS wives (Ackermann 1970: 116-18). He worried that racially inferior women were ‘sexually more attractive and submissive’ and like Günther, believed they ‘always matured earlier’ (Ackermann 1970: 117; Günther 1933: 60). To build up the ‘ideal image of the Nordic woman’, Himmler planned a series of special schools to physically and mentally educate selected girls as noble ‘high women’, to make ‘a national socialist model marriage’ with ‘a suitably high worth partner’ (Ackermann 1970: 119).

Many historians argue that ‘racial mythology’ ‘played a significant’ or ‘central’ role’ in Nazi state ideology, well beyond ‘political expediency’, and some even claim it became so central after Barbarossa, that it undermined the war effort (Mazumdar 1990: 196-97; Luthhöft 1971: 19; Klimek 1939: 29-31; Field 1977: 534-35). However an important historiographical tradition insists Nazi practice diverged radically from ideology, in Nordicism as in other areas, subordinating racial considerations to strategic ones in Scandinavia, and appointing no Nordicists to positions there (Field 1977: 532-33). The Nazis developed ‘close and warm’ ties with Nordicists by at least 1930, basing their race ideology on Günther’s views, but some claim that in power, they ‘quietly ignored’ it as ‘politically imprudent’ and liable to cause a catastrophic and ‘total break up... of collective life’ (Klimek 1939: 29-31; Field 1977: 525; Luthhöft 1971: 19). The Germanicist, Nordicist and anti-Semitic facets of Nazi race ideology were too diverse and contradictory to apply in full. They

* Plus ça change! Nordicist influence on current industry standards of beauty might repay investigation.

ranged from Nordicist scientific internationalism and relative disinterest in Jews to its ‘antithesis [Gegenbild]’, the obsessive anti-Semitism of Hitler*, ‘who presumably never read “raciology” thoroughly’, and uncritically assumed Germans were Nordics with Aryan Teuton biological ancestors (Lutzhöft 1971: 23-24 & 87-88). Nordicism was riven with internal tensions between scientific optimist and conservative pessimist tendencies, and external clashes between its universalist scientific elitism and the xenophobic, populist, romantic nationalism of its Germanicist political allies.

Lutzhöft says interwar *völkisch* race-theorists of the ‘conservative revolution’, like Günther and Evola, differed from ‘speculative culture-philosophic’ Nordicists like Gobineau and Chamberlain in their scientific grounding, and paradoxically in their belief that hated modernity could be overthrown and an idealised past restored† (Lutzhöft 1971: 18-19). Nordicist opinion therefore divided on the race role of modernity, and cities especially. While Gustaf Retzius, Beddoe and Woltmann’s rural Nordic aristocrats withered in cities, Ammon’s survey of ‘thousands of conscripts’ in 1890s Baden and other German and French class-race research by Lapouge, Collignon and Wilser countered Virchow’s schoolchild survey by finding Nordics and dolichocephals were ‘more widespread’ in the upper class and intelligentsia, but also in urban populations, ‘the social bearers of higher political and intellectual culture’ (Woltmann 1903: 272-73, 281 & 285-86; Hannaford 1996: 328; Banu 1939: 203). Even Beddoe accepted that ‘cleverer people of all ranks’ migrated to ‘the centre of progress and the goal of ambition’ (Beddoe 1912: 175). For Ammon, an optimistic social Darwinist, who opposed eugenic interference, social selection explained urban concentrations of Germanic blond purity (Orsucci 1998: 3; Graham 1977: 1135). Early Nordic hunters migrated into the peaceful farmland of the brachycephals, but finding agriculture tedious, ‘concentrated in towns... where they engendered the dominant classes’, while brachycephals ‘remained ruralised, tied to the earth, incapable of ascent or of progress’ (Banu 1939: 203). The lack of a ‘clear Nazi position’ meanwhile led moral conservative Nordicists to clash with those ‘who encouraged higher birth rates by any available means’ (Field 1977: 530). Günther’s warning that Nordics satisfied their ‘leadership urge’ (*Führerdrang*) ‘at the price of’ having small families, thus threatening ‘the gradual extinction of the Nordic race’, chimed with the SS leader’s anxieties (Günther 1933: 60). Nordicists advocated ‘eugenic measures and special reproductive institutions’ to make Germany more Nordic (Wiercinski 1962: 11-12). Himmler called for at least four children from SS men, raising his demand in 1942 to four sons and exhorting officers ‘very

* Nordicists were generally anti-Semitic but the Nazi fixation with Jews threatened to distract from other race issues dear to Nordicists (Field 1977: 536-38).

† Chapters V and VI examine how Poles and Romanians exploited or had problems with this same tension (Wiercinski 1962: 11).

urgently' to allow SS men with wives of childbearing age enough home-leave to 'really have a child a year' (Ackermann 1970: 126). In 1936, the SS established the *Lebensborn* network of maternity homes for unmarried mothers who met RSHA 'racial and race-hygiene requirements' (Ackermann 1970: 129). SS men had to make regular financial contributions, with those with fewer children paying more (Ackermann 1970: 130). In 1943, Himmler considered extending *Lebensborn* to Norway and Denmark, and inspired by Darré, the *Mittgart-Bund*, and the wartime shortage of males, proposed temporary *Lebensborn* marriages (Ackermann 1970: 129-34). However Nordicist scientists like Günther and a shocked Fritz Lenz and even some SS figures condemned this 'blatant "chicken farm" mentality', seeing racial regeneration as 'a strengthening rather than a relaxation of family ties' and referring to racially 'absolute evil' or 'below par' bastards (Ackermann 1970: 130 & 133; Field 1977: 529-31). The Nazis even suppressed Günther's 1942 book on the subject (Field 1977: 531).

Germanic nation vs. Nordic race

Nordicists like Günther and Lenz were 'scientists and racists first and nationalists second', believing nations consisted of races of unequal value and valuing foreign Nordics over 'their own fellow citizens to the south' and east (Field 1977: 525; Graham 1977: 1159). The populist potency of nationalism made Germanicism much more marketable. Many therefore argue that Hitler's government moved from 'a geneticist's' towards 'a genealogist's' race concept and Rosenberg's more 'sociological' and nationalist 'new metamorphosis of racism' or from romantic Nordicist anti-modernism towards obsessional anti-Semitism (Mazumdar 1990: 196-97; Klimek 1939: 29-31; Lutzhöft 1971: 24-25; Field 1977: 534-35). The universalist scientific pretensions of Nordicist anthropology clashed with xenophobic nationalist enthusiasm for Darwinian nationalist antagonism, including between the most 'Nordic' great powers, Germany, Britain and America. Felix von Luschan, though less nationalistic than many younger German anthropologists, declared in 1911 that...

...humanity would become like a herd of sheep if we were to lose our national ambitions and cease to regard with pride and with joy, not just our industries and our sciences, but also our magnificent soldiers and our superb battleships (von Luschan 1911: 27).

In the 1930s, 'war-mongers and racists' exploited the leading British archaeologist Arthur Keith's theory that automatic 'intense' xenophobia and the 'deep instinctive feelings of race-prejudice' felt by all animals were natural evolutionary safeguards of race purity and war a vital motor for 'racial evolution' (Keith 1928: 316 & 319; Barkan 1992: 47). The English eugenicist Karl Pearson (1857-

1936) declared war a positive mechanism for maintaining race quality (MacMaster 2001: 35 & 40). Hitler unsurprisingly agreed that struggle made species healthy and tough and caused 'higher development' (Hitler 1936: 313). Woltmann saw conflicts between Nordic elites like the medieval Empire and Papacy, 'both Germanic creations' and especially north-south wars in Europe, as 'fruitful for cultural development' (Woltmann 1903: 297-98). The ex-socialist declared it 'a biological law of nature', that talent was also most equitably distributed and competition sharpest in the most gifted races (Woltmann 1903: 298). This logic was already old. The 'inordinate self-esteem' and independence of Knox's Saxons made 'them dislike the proximity of a neighbour' and drove them to expand territorially and divide into 'different groupings, as English, Dutch, German, United States man, cordially hating each other' (Knox 1850: 46 & 49). For Woltmann, the pan-Germanic alliance proposed by 'sentimental politicians' was 'a childish endeavour to smash natural laws with daydreams' (Woltmann 1903: 298). He demanded...

...in astonishment, against whom [pan-Germanism] should be directed. Because the Teuton is the Teuton's greatest and most dangerous enemy. Eliminating this enmity from the world means abolishing the fundamental conditions of cultural development (Woltmann 1903: 298).

European, Aryan and white supremacism allowed Nordicists to simulate scientific universality however, by working with the Gentile, white European majority of anthropologists, while maintaining Jewish, black or Mongoloid hate-targets. This was a ubiquitous integrating thread of international eugenics, which even barred inferior 'non-whites' from the movement (Kühl 1997: 73). Ripley excused the audacious Nordic claim to Europe implied by Lapouge's term *Homo Europaeus*, on the basis that Nordics were the only race in their scheme confined entirely to Europe, while Gustaf Retzius claimed that Linnaeus, despite trying to classify the whole of nature, described his *Europaeus* as blond and blue eyed because 'he was only familiar' with northern Europeans (Retzius, G. 1909: 279; Ripley 1900: 121). Lapouge's term failed to catch on even among other Nordicists however. Poliakov detects an early and enduring Eurocentrism in German identity narratives as Europe's heart or eastern bulwark, creating yet more common ground between Nordicists and German nationalists. Germans had to use foreign historical sources for their early history, while the *Völkerwanderung* gave most European nations some kind of Germanic past (Poliakov 1971: 85-87; see Fig. 3.1). Penny and Bunzl ascribe the particular dedication 'to international scientific ideals' of nineteenth-century German anthropologists and ethnologists to Germany's late unification (Bunzl & Penny 2003: 15). They were key 'theorists and institution builders' of 'international anthropology' and then eugenics, playing 'formidable roles in creating' Euro-American scientific 'networks of collection and exchange' (Bunzl & Penny 2003: 2 & 5; Kühl

1997: 19). Alfred Ploetz established a Germanophone eugenics society in 1905, and an international society in 1907, which included leading Scandinavian and French eugenicists (Kühl 1997: 24). Earlier German racists like Carus focussed on whites or Aryans, with Chamberlain in 1899 the first to put the Teutons 'on top', dominating European culture, and even these incorporated Slavs and Celts (Eickstedt 1937b: 42; Lutzhöft 1971: 83-84; Hannaford 1996: 353-54 & 356). When Germany invaded Bolshevik Russia in 1941, Nazi propoganda stressed the 'New Europe' over the Greater-German Reich, claiming an overwhelming 'feeling of common Western destiny broke out' to battle Asiatic communism (Ackermann 1970: 184-85). The abandonment of careful racial selection for the SS in favour of boosting numbers of self-proclaimed 'Germanics', plus Goebbels's rhetoric of roots, blood and ancient tribes, suggested an inclusive ethnic Europe, in which all nationals (apart obviously from targets of persecution) were automatically superior (Ackermann 1970: 184). The SS argued that its broader, post-Barbarossa interpretation of 'Nordic' did not betray the order's principles, but that everywhere east of Russia, the heat of battle revealed 'the common roots' of 'a blood-related' 'European family of peoples', founded by Germanic migrations and settlement (Ackermann 1970: 184-85). Poliakov also identifies the European theme in pacifist nineteenth-century Romanticism however, perhaps perpetuated by German enthusiasm for post-War European integration (Poliakov 1971: 114-15). While British eugenicists were mostly concerned with the lower classes and national biological fitness for geopolitical struggle, the guiding principle of German eugenics was international cooperation among whites and Nordics (MacMaster 2001: 35 & 40; Kühl 1997: 21-22 & 25; see p.93).

Nordic Teutonism was however the most important Nazis internationalism. The Scandinavian and Dutch inner core was linguistically Germanic and so impeccably Nordic that Darré proposed encouraging Germans to marry Norwegian women (Ackermann 1970: 121-22). Himmler, responsible for relations with these areas, believed the 'strongest magnet' would draw them in on a higher 'blood conditioned' level to join the 'Germanic Reich', the 'home [*Heimat*] of Nordic blood' (Ackermann 1970: 183). Just as 1871 created Germans and the 1938 *Anschluss* with Austria transformed *Kleindeutschland*, he believed this northern expansion meant 'the German [*Deutsche*] must become a Teuton [*Germane*]' (Ackermann 1970: 183). Justified by the anthropological theory that all foreign tall blonds were descended from originally pure-race Germanic invaders and settlers, Himmler interchangeably called them 'Germanic' or 'Nordic' (Ackermann 1970: 207). The defection of Cossack regiments to the Germans was interpreted as a sign of 'Germanic blood', from ancient Teutonic Chattii (Ackermann 1970: 185). Fully supported by Hitler and other top Nazis, Himmler aimed to win back 'lost German blood', from 1935 on welcoming 'definitely Nordic' foreign SS men 'of Germanic extraction' and 'Germanic blood' (Ackermann 1970: 110 & 207-9).

The Nazis attributed unexpectedly hard Polish military resistance to culturally Polonised descendants of Nordic Teutons, ordering the re-Germanisation of as many of the best fighters as possible and extermination of those who resisted (Ackermann 1970: 206-7 & 209). Without its racially Nordic leadership, the docile Slavic mass* was expected to submit to expulsion, slave labour or sterilisation (Ackermann 1970: 209 & 215-19).

The German nationalist Günther found the ‘overwhelming majority’ of Germans racially ‘mixed’, just 6-8% ‘pure Nordic’ and the East European race, which he despised, common in the east and north due to medieval Germanisation of Slavs (Proctor 1988: 151; Günther 1933: 57 & 112). However the complex intangibility of craniological race mystified nationalist non-scientists, who blurred together incompatible racial and ethnic elements and eugenic goals with a generous smear of *völkisch* mysticism. Unlike scientific anthroposociological elitism, mystical, cultural Germanicism made almost all Germans into superior Aryans, even if ‘as blond as Hitler, as dolichocephalic as Rosenberg, as tall as Goebbels, as slender as Goering, and as manly as Streicher’, as an anti-Nazi joke put it (Huxley & Haddon 1935: 26). While Lenz criticised the ‘mythical, irrational’ ‘excesses’ of Nazi race propaganda, and Günther declared the ‘Nordic movement will always ruthlessly reject Germanicist enthusiasm’, his Nordicist rival Clauß advocated a less biological and more culturally defined northern supremacism, while Kaup led a more populist campaign for an inclusive German national race (Wiercinski 1962: 12; Lutzhöft 1971: 17 & 22-23; Graham 1977: 1159). Field says Nordicists also mitigated their elitism, tailoring their ideology ‘to the practice of the regime’ after the early 1920s, but Günther seemed to intensify it (Field 1977: 525 & 534). He initially advocated breeding a Germany as Nordic as Sweden, as ‘non-Nordic blood’ among the ‘Nordic-conditioned’ German people was ‘less desirable’[†], but by the late 1920s, instead advocated strict racio-social stratification during the ‘centuries’ of Nordicisation (Lutzhöft 1971: 137 & 140-42). Nordicist anthropology therefore strained to reconcile ethnicity and race. Eickstedt believed races harmonised biologically into a single type within prehistoric ethnic groups, and Saller and the British Nordicist Keith extended this to modern nations (Lutzhöft 1971: 87; see pp.144-45). Günther preferred to keep the Nordic intact, but make it the ‘irreplacable’ nucleus of Germanic cultures, which therefore

* Nazi war propaganda developed a new race categorisation of Slavs as *Untermenschen*, which Ackermann traces to the 1922 book *The Revolt against Civilization: The Menace of Underman* by the American Lothrop Stoddard, translated into German in 1924 (1970: 110). A 1933 work by Hermann Gauch, a Nazi official, which situated non-Nordic *Untermenschen* between fully human Nordics (*Herrenmensch*) and animals, established the concept in Nazi thought (Ackermann 1970: 110). Though supported by some scientists, the concept was crude even compared to Günther’s anthropology, and was used principally as extreme propaganda to justify Nazi brutality in the east, for instance in a 1942 SS booklet which ran to almost four million copies in fifteen languages and on which Himmler worked closely (Ackermann 1970: 210-13).

[†] Lutzhöft says Nordicisation embodied the same concern for national unity that blamed German failures on discord among ethnic German states and Weimar parties, which would disappear in a state with a common blood-conditioned mentality (Lutzhöft 1971: 139-41).

‘could be “mentally Nordicised”’ (Lutzhöft 1971: 96 & 98). To show he was a scientist rather than an ‘unrestrained race fanatic’, he did not insist the Nordic was suitable for other cultures (Lutzhöft 1971: 98). Nationalist and scientific-elitist impulses similarly competed in serology. *Völkisch* German serologists said superior type A blood was ‘dominant’ in Germany except among darker-haired and ‘less socially valuable’ people like criminals, imbeciles, syphilitics, those with Polish or Lithuanian surnames and, on almost no scientific evidence, Jews, while Steffan placed the limit between his Atlantic and Gondwanic blood-races on the country’s eastern frontier (Pogliano 2005: 91-93; Mazumdar 1990: 200-1). However despite very close ideological and institutional links between Nazis and serologists, serological tests were scarcely used in RSHA racial diagnosis and did not influence official reGermanisation policy (Pogliano 2005: 95). She attributes this to Günther’s disinterest, but partly too to Steffan’s finding of a precipitous drop in levels of A-type blood from the Elbe eastward, undermining Nazi claims that eastern Germany was merely culturally Slavicised (Pogliano 2005: 96; Mazumdar 1990: 217-18). Nazis preferred Mydlarski’s discovery of more group A in western than in eastern Poland, to the research of Steffan, an SS officer (Mazumdar 1990: 218).

Virchow’s discovery of south and east German ‘dark round-heads’ caused ‘particularly bitter’ polemics among nationalist anthropologists, sharpening as the discipline drifted right-ward (Woltmann 1903: 295; Orsucci 1998: 3). A ‘prominent’ German anthropologist was accused of explaining away the numerous ‘inconvenient’ non-Nordic Germans by attributing head-shape to infants’ pillows (Huxley & Haddon 1935: 40). To absorb south Germans into an expanded Nordic race, Fritz Lenz questioned the validity of the Alpine race, arguing that ‘really representative Alpine individuals’ were rare ‘in their core landscape’ and very racially mixed (Eickstedt 1934: 388; Lenz 1936: 726). Mostly Nordic or Phalic zones almost covered Günther’s racial map of Germany, though he classed only 55% of Germans in these categories (Günther 2001a; 2001b). Anthropologists stressed the subtlety of race diagnosis to manipulate it. Reche passed off unwelcome cranial traits as mechanical consequences of chewing tough food, while inheritance theories allowed Woltmann to claim the ‘blue eyes and head shape’ of short geniuses like Napoleon, Voltaire, Kant and Wagner proved their ‘hidden’ ‘Germanic descent’ (Eickstedt 1934: 366; Reche 1909: 228-29; Woltmann 1903: 285). To explain broad-headed Strasbourg noble families and leading historical figures, plus the larger brachycephalic skull circumference, Woltmann borrowed Collignon’s 1895 theory of ‘false brachycephaly’. Interbreeding *added* the length of the Nordic head to the brachycephalic breadth to make a big round head housing a powerful brain (Woltmann 1903: 67-68, 256 & 284). Exploiting Mendelian theory, Fischer and others argued that even in dark-

haired south-west Germany, 'Nordic genealogies' were 'still in a strong majority', because blondness there was 'a recessive factor' (Fischer 1936: 297-98; Eickstedt 1934: 366).

German Nordicists exploited the multi-race system to define non-Nordic races in Germany as superior, if not quite as wonderful as Nordics. The principal beneficiary was the unfortunately titled Phalic* or Dalic race, named for German and Swedish provinces, theorised by the German Nordicists Paudler (1924) and Kern (1927) and then adopted and popularised by Günther (Eickstedt 1934: 354-56; Lutzhöft 1971: 91 & 110). Deniker, Montandon and most Germans classed it as a stockier variety of, or at least mentally and physically similar to the Nordics it generally lived among (Günther 1933: 19-20; Eickstedt 1934: 354-55; Fischer 1936: 283; Papilian & Velluda 1941a: 620; Făcăoaru 1936a: 16; Lutzhöft 1971: 91-92). Günther's Phalics had 'great mental powers, defiant strength or honest reliability', 'massive steadfastness, imperturbable execution of calmly taken decisions, the urge to conscientiousness and fairness, and even a certain need to prove themselves true' (Günther 1933: 68). Surly, disobliging grumbling concealed 'warm-heartedness and inwardness' (Günther 1933: 69). Lenz, Eickstedt and Günther believed that Hindenberg and Bismarck mixed Nordic 'dryness and boldness' with 'Phalic force', 'quietness and dignity', while Luther also had a Phalic element (Günther 1933: 69; Eickstedt 1934: 356-7). The Phalic was nevertheless 'truly uncomfortable' for Günther and German Nordics, because it upset and revealed errors in their race theories, 'racially divided' Germans and invited 'speculation about their relative worth' (Field 1977: 524; Lutzhöft 1971: 91). Lutzhöft says it had the 'great advantage' however of providing 'a new problem,' to 'be endlessly argued about', 'just at the moment when all the important questions were considered solved,' and 'monotony and boredom' threatened (Lutzhöft 1971: 91). The Phalic created a 'sensation' and was the only post-Deniker race to receive significant international recognition; Günther's 1928 speculation about a Sudetic race, based on a 1908 proposal by Reche, was taken less seriously (Lutzhöft 1971: 90-91).

As honorary Nordics, Phalics were unique, but the tall, dark Dinaric race, though brachycephalic and associated with Balkan Slavs, also got red carpet treatment for disassociating south German brachycephals from despised Alpines. It was first identified by Deniker in the Western Balkans, northern Italy, eastern France and among southern Germans (Günther 1933: 93; Deniker 1971: 345). Despite accepting that the term Dinaric was 'today generally used', Biasutti preferred the term Adriatic for this prestigious race, bringing it closer to his native Italy (Biasutti 1941: 576-77). Eickstedt said the 'average type' in much of south Germany, some French highland areas and parts of 'central eastern Europe' was a Dinaric-Alpine mixture (Eickstedt 1934: 389). However despite

‘extensive toning down [*Abschwächung*]’ of the ‘explicitly Dinaric type’, Eickstedt reassured his readers that in this ‘extensively harmonised mixture, the typical’ Alpine appearance played ‘a relatively limited role’ (1934: 389). Perhaps understandably using German rather than Serbo-Croat sources, he mostly used Austrian and Bavarian examples of this Balkan-centred race (Eickstedt 1934: 379-80). Eickstedt’s Dinarics, prone to ‘almost pathological’ ‘accented development of racial ‘special characteristics’ (like a beaky nose), lacked the Nordic or Mediterranean bodily ‘harmony’ however (Eickstedt 1934: 379). Günther drew heavily on highland stereotypes to portray Dinarics as boisterous, plucky, tough mountaineers, chosen by painters to represent ‘bold’, ‘stalwart’ and ‘powerful’ Alpine hunters and mountain leaders, French or Italian soldiers, ‘the Tyrolean freedom-fighter against Napoleon or the heroic Montenegrin or Albanian warrior’ (Günther 1933: 62). Unlike the goal-oriented Nordic conquerors they were bold defenders and natural musicians, living for the day in loud and rowdy company (Günther 1933: 63). Interwar German anthropologists refuted the previously uncontroversial close relationship between broad-headed Dinarics and Alpines, Eugen Fischer insisting they were ‘completely independent mutations’ (Fischer 1936: 284). Their ancestors were closely related he admitted, but in his dendographic diagram, Alpines branched sharply away from the main current of Europoid racial development, implying stalled evolution (Fischer 1936: 276). Eickstedt and Fleure in Britain agreed that Dinarics were Europe’s most evolutionarily ‘specialised’ and progressive brachycephals, Eickstedt noting ‘countless’ ‘extreme’ differences between them and Alpines (Eickstedt 1934: 376-78; Fleure 1937: 220). Both inhabited wooded uplands, but for Dinarics, this was a biologically appropriate ecological zone (*Nährraum*), and for Alpines a refuge (Eickstedt 1934: 387-88). Though ‘almost all’ anthropologists recognised the Dinaric as ‘a variety’ of a larger Anatolian or Armenoid race stretching into Asia, the many Germanicists among them also avoided associating this German race too closely with Middle Easterners (Montandon 1933: 253-54; Haddon 1924: 28; Eickstedt 1934: 378; Fischer 1936: 276 & 283-84; Luthhöft 1971: 89). Fischer was ‘convinced’ their ‘spiritual-mental abilities’ were ‘very strongly differentiated’ (Fischer 1936: 276 & 283-84). From his own biodynamic theory, Eickstedt argued that the ‘divided’ history and living spaces of the two races, ‘wooded mountains here, dry steppe there’, showed they were separate (Eickstedt 1934: 378). Though accepting a Near Eastern origin, Günther claimed ‘closer investigation’ discredited theories of Dinarics as Nordicised Anatolians (Günther 1933: 19 & 109).

The Nazis never fully clarified their racial doctrine, and Günther’s work was ‘never canonised’ or entirely accepted even by the SS, which switching freely between race definitions (Luthhöft 1971: 21-22). Himmler defined certain Polish mountain groups as lost German tribes and French military

*German *fälisch*, from Westfalen; in English Westphalia

officers with German surnames as ripe for regermanisation (Ackermann 1970: 207-8 & 226). His order to regermanise only blond, blue-eyed Polish highland children, and his 1941 survey of Czech schoolchildren, which incorporated a ‘camouflaged questionnaire’ on ‘race-biological’ traits like height and colouring into innocuous medical examinations, meanwhile approached scientific anthropological race testing (Ackermann 1970: 207-8). Though Mazumdar says anthropological race ‘took precedence over’ health, ‘eugenic soundness’, ‘skills, education and assets’ in RSha regermanisation tests, making the difference between settler status, forced labour, concentration camp or sterilisation, German-speaking ethnic Germans automatically became settlers (Mazumdar 1990: 213 & 215-16). In territorial expansion too, Nazis jumbled ethnic and racial definitions of a Germanic, Nordic or German Reich (Ackermann 1970: 173). To justify annexing weakly-Nordic Belgium and eastern France, Himmler equated former inclusion in the Holy Roman Empire with possession of ‘the same blood’ as Germans (Ackermann 1970: 110). Jews were identified on purely ethnic criteria as a group of mixed physical type, barely distinguishable racially from European gentiles (Wiercinski 1962: 12; Michalski 1962: 290). Nazis strained to be Nordicists, but within limits:

Himmler, watching Jews going to the gas chamber, picked out a blond, blue-eyed boy and asked him if he were a Jew and if both his parents were Jews. When the boy answered in the affirmative, Himmler replied: “What a pity, then I cannot save you”. (Mosse 1978: 221).

Ackermann claims the more extreme SS men began to take Nordic supremacy to its logical conclusion that non-Nordic Germans were inferior, and that ‘five to ten percent of the population, its best selection’ would ultimately rule the rest (1970: 174). Would Nazi Germany eventually have instituted a truly anthropological race discrimination system, like South Africa or the southern United States? The fate of Germany’s brown-haired brachycephals might ultimately have depended on Heinrich Himmler’s aptitude for factional manouvering within the Nazi party.

Expansion and diversity: The Mediterranean and Deniker’s races

Deniker’s new multi-race system became anthropological convention by the 1920, enormously facilitating rebellion against internationally dominant narratives by newly independent Central and Eastern European countries now entering the core of the anthropological classification community. It was a pressure valve, making more races available to develop race narratives that flattered national pride. However it was within the old three-race system, into which racial synonyms* had

*The practice of incessant comparison between types identified by different classifiers (see pp.148-49).

helped herd the diverse ethnic races, that 1890s Italian anthropologists created the first alternative to the Germanic Nordic and French brachycephalic race narratives. They adopted as the national race, the ‘short, dark, and sallow’, dolichocephalic third element of the three-race system, found on the Mediterranean and Atlantic coasts, which was already an anthropological orthodoxy in 1883, when Emile Houzé of Brussels dubbed it the Mediterranean race (Deniker 1897: 126; 1904: 182; Kollmann 1883: 1; Orsucci 1998: 7; Czekanowski 1967: 44). Houzé said invading Asian brachycephals split blond northern Neanderthals from dark southern native European Crô-Magnons, both long-headed (Houzé 1883: 81). Earlier classifiers, including Retzius and then Broca in 1860, implicitly acknowledged the Mediterraneans, who were often termed Iberians, building on classical accounts of a common ‘Pelagian’ ancestor of Greeks and Romans, ancient Iberians and Ligurians, and Caesar’s distinction of Aquitani from Celts in Gaul (Broca 1936: 11; Périer 1864: 596-97; Czekanowski 1967: 44-45; Müller 1879: 17; MacLoughlin 1896: 83). Nilsson and Retzius distinguished blond northern Teutons from a vast southern and western subcategory of even longer-skulled ‘true Celtic’ brunettes, initially including Insular Celts and most French, and adding Latins, Greeks and possibly Arabs in the 1850s (Retzius, A. 1864: 33-34, 64, 122-23 & 137; Wilde 1849: 228). Bonté said even ‘the philologists’ distinguished orthocephalic Indian, Greek, Persian and Roman Aryans from dolichocephalic north-westerners and brachycephalic south Germans and Slavs; all with distinctive faces and pigmentation (Bonté 1864: 629 & 631). The three-race system increasingly became a classification orthodoxy, especially when explicitly propounded by Sergi, Lapouge and Ripley. ‘Beddoe, Broca, Collignon, Livi, Topinard, and a host of others’ accepted it, as it was fairly faithful to the racial composition of Western and Central Europe (Ripley 1900: 597; Gould 1981: 227; Czekanowski 1967: 45).

Anthropological surveys from the 1870s on and the Gallic school doctrine of brachycephalic superiority influenced northern Italians like Cesare Lombroso (1835-1909), a world-famous race criminologist, to see dolichocephaly, prevalent in southern Italy and the islands, as ‘racially inferior’ to the brachycephalic ‘Celts’ of the economically more dynamic north (Giuffrida-Ruggeri 1918: 80 & 93; Poggio 1999: 91). The Sicilian Napoleone Colajanni criticised the racialised northern ‘regional arrogance’ of Lombroso and the geographer Pullè (Orsucci 1998: 9). Poggio places Lombroso in a tradition dating from Napoleon of racialising poor and politically restive south Italians as bestial black Africans, to justify French and later Piedmontese suppression of revolt (Poggio 1999: 87-94). Theories of Bronze-Age invaders from the Alps founding Latin civilisation dominated Italian archaeology in post-unification decades, helping to legitimise Piedmont’s conquest of the peninsula (Guidi 1996: 111-12). Giuseppe Sergi (1841-1936), Italy’s leading race anthropologist, and the race psychologist Alfredo Niceforo accepted the French account of

brachycephalic Asian Aryans, and Italian studies by Sergi and others significantly reinforced the theory that they conquered the Crô-Magnon Mediterraneans and pushed them south (Teti 1993: 154; Niceforo 1993: 191; Ripley 1900: 463-64). Houzé's Celts 'very probably' 'brachycephalised' the Mediterranean Aquitains and Iberians and 'lowered their height' (Houzé 1883: 89). Niceforo's take on the standard Franco-German brachycephalic race psychology was especially positive, making a virtue of their stolid conservative social solidarity (Niceforo 1993: 190-92). They were 'persevering and very patient' with 'a great strength to resist distraction'; lacking 'trivial emotions, impulsivity and excess of imagination' (Niceforo 1993: 192). His brachycephalic Aryans had 'a more docile and less excitable *ego*' and...

...a sense of social organisation much more developed than among the brown Mediterraneans, who, having an excitable and very fickle ego, have developed further the individualistic sense and rebel against every natural collective and social organisation (Niceforo 1993: 193).

Southern Italians had a 'rapid and agile' intelligence, but their indiscipline and extreme individualism hindered development (Niceforo 1993: 193). They had to be disciplined by the more reliable, organised northerners, whom a 1920s Italian serologist said had more 'superior' type A blood (Pogliano 2005: 102).

Italian anthropologists were largely uninfected by Aryan fever, preferring traditional *ex oriente lux* narratives of Middle Eastern civilisation, relayed to Europe via Greece and Rome (Poliakov 1971: 82). Lombroso in 1892 had the Aryans descend from Negroes while Enrico di Michelis saw the Aryan story as an invention (Poliakov 1971: 82). The twentieth century Italian geographer and anthropologist Renato Biasutti rejected the idea of a single homogenous 'Aryan race' (Pogliano 2005: 394). The Aryan theory popularised by Sergi in 1895 and 1898 and by 'several French anthropologists', further troubled the already bitterly contested Aryan debate by accepting that the Indo-Europeans were brachycephals, but that they were marauding 'illiterate primitives', civilised by the oriental culture carried into Europe by long-headed Mediterraneans (Orsucci 1998: 6-7; Haddon 1898: 582-83; Taylor 1988: 57; Poliakov 1971: 82). Sergi, an 'intense' Italian nationalist and a Jew, thus assigned a 'central and even mystical role' to Italians and the Middle East 'in the development of civilisation' (Taylor 1988: 57; Poliakov 1971: 82). He considered the violent Celtic and Slavic Aryan horde 'a great catastrophe' for the flourishing Mediterranean, 'in some regions replacing the original *Eurafrican* inhabitants,' changing their 'customs internally, destroying... or obscuring the Neolithic civilisation' (Sergi 1900: 213-14; Orsucci 1998: 6). Just as British Aryanism supported imperialism in India, the Mediterranean race 'may have helped justify' Italian

imperialism, portraying conquests in east Africa^{*}, Albania, Greece and Libya as racial re-unification (Taylor 1988: 57). Borlase said Huxley and Thurnam in Britain, supported by such leading Scandinavian, French and German anthropologists as Retzius, Virchow (1873-76), Broca and Quatrefages, noted 'close' Nordic-Mediterranean 'affinities', but it was Sergi in the 1890s who popularised the pan-European dolichocephalic link (Ripley 1900: 467; Borlase 1897: 961-62). He identified two '*human species*' in Europe with 'different' origins, the brachycephalic Eurasiatic and dolichocephalic Eurafrican from Africa, which divided into the African, Mediterranean and Nordic races, each developing in the areas of their main modern concentrations (Sergi 1900: 169 & 209-10). Eurafricans 'spread through Europe since very ancient times', but the Eurasiatic wedge from Asia then split them in two, leaving Mediterraneans around the Mediterranean shores, the Sahara and nearer Asia (Sergi 1900: 169 & 210). As skull-shape permanence became widely accepted in the 1890s, variations on Sergi's scheme, and sometimes his nomenclature, 'attained widespread acceptance among the very best authorities' like Ripley, Haddon and Coon (Ripley 1900: 462 & 467; Coon 1939: VIII: 2-3). Ripley claimed all archaeologists in 1900 saw Palaeolithic Europeans as extremely long-headed, resembling modern Mediterraneans and particularly Berbers, who shaded off 'into the Negro race' (Ripley 1900: 462 & 466).

Taylor identifies a Nordacist element in Sergi's scheme, as it narrowed 'the anthropological distance' between the might and civilisation of the British and Roman Empires, both founded by Nordic or Mediterranean Eurafricans (Taylor 1988: 57). Sergi even noted 'Mongoloid' or 'Turanian' features among Western European brachycephals (Sergi 1900:214-15). The Italian Fascist race ideologue Julius Evola adopted the Nordacist belief that racism had to protect 'ethno-cultural communities' from 'degrading alteration and mixture', though he 'had to invent' his 'pure Italian race' by transposing 'qualities of the German Aryan to a mythical "Mediterranean Aryan race"' (Evola 1941: 34-35; Mosse 1987: 200-2). An Italian air-force doctor in 1940 ascribed half the airmen he tested to this psychologically superior 'stock' (Pogliano 2005: 380). German Nordic supremacists like Matthaeus Much, Woltmann and Günther also accepted a Nordic-Mediterranean link from either Sergi or Ripley, finding distant Mediterraneans far less objectionable, despite their African connections, than immediate brachycephalic enemies (Orsucci 1998: 7; Woltmann 1903: 292; Günther 1933: 99-100). Mediterraneans were long-headed, unconnected with the German working class but associated with classical civilisation and, crucially, with beauty (Orsucci 1998: 7). Ripley and Günther's Mediterranean was elegant, eloquent, 'light, slender, and rather agile', and

^{*}Many, like Quatrefages, classed some African groups 'among the white races' due to skeletal affinities (Sergi 1900: 6 & 168). Sergi insisted that the African race of East Africa, which often spoke languages related to Semitic, differed racially from Negroids (Sergi 1900:209). Other anthropologists like Montandon however considered Ethiopians, 'in a word, too Negro', to associate with Whites (Montandon 1933: 257-59).

Sergi's was 'the ideal of aesthetic body structure' (Ripley 1900: 122, 124 & 129; Woltmann 1903: 65; Günther 1933: 61). Following a eulogistic passage on its slenderness and harmonic features, Eickstedt claimed, as Woltmann also had, that it 'disputes with the Nordic' among 'Europoid race aesthetes, for the palm of being the world's most beautiful race', though he added that beauty 'is a very relative term' (Eickstedt 1934: 396; Woltmann 1903: 65). Describing the race's 'warm, lively and bright' eyes and 'well proportioned, long and slim limbs', a Romanian Nordacist said 'Nordics themselves acknowledge' the 'intoxicating beauty' of 'Mediterranean women'* (Făcăoaru 1936a: 13). Anthropological fraternity paralleled geopolitical comradeship. Italy joined the Triple Alliance with the German powers in 1882, which was faced from 1892 with the alliance of 'brachycephalic' France and Russia.

Mediterraneans remained relatively inferior in Nordicism however. In Europe, they were a spent and dissipated race, while American Nordacists like the 'Park Avenue socialite and eugenicist' Madison Grant, influenced by Anglophone colour racism and immigration debates, ranked them the dregs of Europe, after Alpines (Kevles 1985: 75). Grant at least approved of their ancient Greek and Roman glory, but Brigham despised them for IQ scores 'lower even' than Alpines (Gould 1981: 227). Lapouge's Mediterranean, despite its dolichocephaly, was mentally mediocre and Montandon's, evolutionarily conservative and racially adulterated (Banu 1939: 201; Montandon 1933: 272). Günther's was passionate, mercurial, with a warm, but 'nosy interest in people', was calculating, chaotic, lazy, sadistic, cruel to animals† and prurient (Günther 1933: 61). Eickstedt's Mediterranean meanwhile was 'forced into retreat and excessive foreign influence [*Zürückdrängung und Überfremdung*]', restricted in Russia and the British Isles to marginal refuge areas or the lower classes, under Nordic elites, while Attaturk's expulsion of Anatolia's Greeks in 1924 was 'just the latest stage of an old race replacement process' by Armenoids (Eickstedt 1934: 400-2). Only in Belgium did a Mediterranean elite survive, ruling Alpines (Eickstedt 1934: 401). He stressed that Nordics were much more evolved and 'for a long time genetically and geographically' separate (Eickstedt 1934: 375). Leading interwar Italian anthropologists like Giuseppe Genna, Canella, Biasutti and the fascist anthropology leader Cipriani therefore criticised Nordacist disparagement of the Alpine 'and sometimes also the Mediterranean' (Biasutti 1941: 569; Taylor 1988: 53; Pogliano 2005: 382 & 396). Though mixture with the 'animalistic', 'brown-yellow' 'Finnico-Mongoloid race' 'of nature' in Atlantis* made his Mediterraneans small and brown, Evola argued that serology proved Italians had kept more 'primordial Nordic blood' than

* This somewhat feminised, tourist's appreciation of a race recalled the romanticisation of the Celt (see pp.288-94).

† Probably a reference to bull-fighting.

‘the Germanic peoples’ and the same quantity as the English, and that races of the body, soul and spirit could contradict one another (Evola 1941: 66-67, 75, 80 & 88).

After Deniker

Deniker’s was the first major classification ‘for all of Europe’, east and west, and after a little initial hesitation most anthropologists accepted his ‘accurate descriptive analyses’ of European types, making him the greatest single influence on twentieth-century European race classification (Czekanowski 1967: 46; Coon 1939: VIII: 1 & 6; Biasutti 1941: 568; Wiercinski 1962: 2; Fischer 1936: 279-80). Even his rival Ripley acknowledged his accurate ‘living picture’ of Europe’s population ‘*as it stands*’ (Ripley 1900: 600). Lutzhöft says Günther in the 1920s was the first to ‘really’ popularise Deniker’s races in Germany, but into the 1930s, he remained ‘the most important classifier’ throughout Europe, providing a firm base for the new European raciology, including names of races (Coon 1939: VIII: 1 & 6; Fischer 1936: 279-80; Biasutti 1941: 568; Wiercinski 1962: 2; Lutzhöft 1971: 84). Most leading race anthropologists proposed multi-race schemes, usually referring to his authority, and after about 1905, few schemes outside of the English-speaking world relied just on Ripley three races, which seemed inadequate to the complex regional variation in new detailed data (Coon 1939: VIII: 1, 4 & 6; Biasutti 1941: 537-82; Pittard 1924: 60; Czekanowski 1967: 60; Pullè 1939: 154; Woltmann 1903: 64; Eickstedt 1934: 336-37 & 376; Gould 1981: 227; see Fig. 3.8). Multi-race theories encouraged fruitful controversy about subdivision, race canons and cartography (Montandon 1933: 237 & 239). Most colleagues rejected Deniker’s subdivision of the Mediterraneans as ‘too abstract’ and ‘of doubtful validity’, but all his other five principle races, and some of his more tentative secondary ones, were widely accepted as naturally occurring clusters of inherited traits (Deniker 1904: 202; Eickstedt 1934: 398; Ripley 1900: 603; Haddon 1924: 25; Guiart 1928: 202). Classifiers rearranged these standard building blocks to their diverse tastes, relabelling them and giving them new evolutionary, social or ethnic meanings. The Deniker and Ripley schemes, based essentially on the same source data and authorities, were often ‘combined and modified in various ways’ (Massin 1996: 124; Deniker 1904: 183; Eickstedt 1934: 336-37). Eickstedt, Montandon, Buysens and Haddon all recognised Ripley’s three racial zones but used Deniker for sub-races or hybrids (Coon 1939: VIII: 4; Eickstedt 1934: 376; Huxley & Haddon 1935: 172-79; Buysens 1936: 57-58; Montandon 1933: 237 & 239). German Nordacists like Kern and the RSha chief Schultz reinserted Western and Eastern European

*His ‘Ario-Atlantic’, ‘Nordic-Atlantic’, ‘Atlantic-Occidental’ or ‘Romanic’ Mediterranean race was an early Hyperborean colonial drive from the Arctic to Atlantis, and then east across the Mediterranean when Atlantis sunk (Evola 1941: 69 & 87).

short brachycephals, the Celto-Slavs of old, into a common inferior Eastern (*ostisch* or *ostid*^{*}) ‘great south-Eurasian primitive strata from the Palaeomongoloids to the Alpines’ (Schwidetzky 1935a: 93-94). The three-race scheme essentially extended Western European or even French racial variation to Central and Eastern Europe. As ‘the French key, despite its universalism, did not fit’ in Poland and Russia, most of the new types identified by Deniker, a Russian in Paris, were in the east (Czekanowski 1948: 19; 1967: 45). His Dinaric and Easteuropean, both eastern subsets of the upland brachycephalic wedge, were generally accepted and exploited politically (see Fig. 3.9). The Dinaric of ‘the Serbo-Croats’ and Austria was taller than the ‘Alpine’ brachycephals and had an aquiline nose, while the Easteuropean was fairer-haired (Deniker 1971: 345). Hildén and Stołyhwo theorised the Easteuropean race of the Finns and Slavs respectively, Czekanowski attempted to ‘steal’ the Nordics from the Germans, Bunak and other Russians imported a variety of the Mediterranean, and Yugoslavs laid hands on the Dinaric.

Deniker’s broad-headed blond ‘*race orientale*’ (‘Eastern Race’) in Poland and Russia was one of his most successful (Deniker 1971: 329). Between 1908 and 1933, such Central and East European researchers as Czekanowski and Stołyhwo in Poland, Rudolf and Hella Pösch in Vienna, Chepurkovski and Bunak in Russia and even Sergi included it in their schemes (Eickstedt 1934: 365). It was a conspiracy between the German anthropologists who looked down on it, and the Finnish, Russian and Polish anthropologists who promoted it as an emblematic national race. Though fairly securely entrenched in international interwar classification schemes by researchers mutually recognising one another’s version of the type, these very different national viewpoints helped make it one of the least stable of the main European races (Hildén 1928: 221; Stołyhwo 1928: 224). Anthropologists disputed and equivocated on its physical and psychological attributes (tall Finnish and short Slavic versions competed) and race history, and argued whether to call it Eastern (*race orientale*, *Ostrasse*, *ostische Rasse*), East-Baltic, Eastbaltic, Easteuropid (*Osteuropid*) or Easteuropean (Eickstedt 1934: 365; Skjerl 1936: 290; Schwidetzky 1935a: 94; Bunak 1932: 464; Deniker 1898: 128; 1971: 329). German Nordacists like Günther, who made blondness a defining feature of the superior, solely Germanic Nordic, were ‘embarrassed’ by anthropometric studies showing numerous blonds to the east ‘and especially in Russia’ (Kemilainen 1994: 403). A second fair race, distinguished from Nordics by stockyness, broad face, brachycephaly, a ‘turned up’ nose, and possibly grey eyes^{*} and ash-blond rather than ‘yellow’ hair, allowed Germans and Eastern Europeans to disassociate from one another (Deniker 1898: 128; 1971: 329; Schwidetzky 1935a: 93; Kemilainen 1994: 402; Hildén 1928: 222-23; see pp.392-99 on German and Slavic narratives).

^{*}Eickstedt used –id endings for large complexes of related races, and –oid endings for the races within a complex which had developed its features in their most typical form.

The Frenchman Guiart linked East Europeans with Alpines, but also taunted Germans by identifying them among Prussians, who were therefore called ‘square-heads’ (Guiart 1928: 204).

Virchow and Gustaf Retzius first identified this type as an important race in Finland in the 1870s[†], dispelling previously widespread assumptions that Finns were a “‘Mongoloid” or “Yellow” race”[‡] (Eickstedt 1934: 365; Hildén 1928: 220). Isaac Taylor in England (1887) and the Pole Benedykt Dybowski (1898), devised European schemes with all four combinations of dark and fair colouring and long and short skulls, in which blond brachycephals were the real Celto-Slavs, possibly including ‘the Latins and Homeric Greeks’, while dark brachycephals were Ligurians (MacLoughlin 1896: 83-84; Czekanowski 1967: 44). Deniker proposed his *race orientale* in 1898 and by 1904, German, Finnish and ‘several Russian experts’ acknowledged it (Deniker 1904: 186 & 205). Schwidetzky insisted the East European was ‘no German and no political invention’, but rather ‘a large, independent, differentiated somatic form group with clear correlation of characteristics’, initially identified by ‘Slavic anthropologists’ ‘and in Germany generally recognised relatively late’ (Schwidetzky 1935: 153-54). German classifiers including Fischer, Lenz and Günther, with little practical experience of the race, repeatedly omitted it from classifications, until Günther adopted the East-Baltic of the Finnish-born Swedish anthropologist Rolf Nordenstreng in 1924 (Eickstedt 1934: 365; Schwidetzky 1935a: 93; Luthhöft 1971: 90). He adopted his term because he had already transferred the term *Ostrasse* to the Alpines, to emphasise their Mongoloid origins, but this name change did not catch on (Schwidetzky 1935a: 93).

Swedish anthropologists like Nordenstreng adopted the East-Baltic, along with the Nordic, as ‘the real races’ of Sweden and Finland, the former especially concentrated ‘in the Finnish-Baltic area’ (Kemilainen 1994: 402; Hildén 1928: 220-21). Nordenstreng and a Finnish colleague identified a ratio of 31%:9% of ‘pure’ Nordics to East-Baltics in Sweden and 11.2%:15.2% in Finland, while Lundborg and Linders’ in 1926 said 36% of Swedes were East-Baltic (Kemilainen 1994: 402-3). Finns ‘willingly accepted’ the race, the anthropologist Kaarlo Hildén heavily promoting it from the 1920s on (Kemilainen 1994: 403). Dismissing the few researchers who saw it as a Nordic cross

* Grey eyes were also used to differentiate specifically Celtic British blonds from Nordics (see p.348).

† Eickstedt believed the Fennoones (Finns) that Linneus distinguished from ‘Gothi’ and ‘Lappones’ in Sweden in 1746 were also East Europeans, but they did not enter classification canons at that time (Eickstedt 1937a: 221-22).

‡ As the late nineteenth century downgraded linguistic race criteria, non-Indo-European speakers could be racial Europeans. Though Ripley ‘tried to defend’ Finns against their bad anthropological reputation however, denying ‘anything ignoble’ in their origin, Eickstedt and Fischer still linked Lapps, Finns, Basques and Mongoloids between the wars (Fischer 1936: 277; Kemilainen 1994: 402-3). Drawing on the ‘perfectly European’ serology of Lapps, or at worst ‘intermediate’ with Asians, Montandon argued that the few ‘clearly Mongoloid’ features of Lapps and Finns were probably ‘special and primitive’ traits of an evolutionary backward European branch (Montandon 1933: 240-42; Pullè 1939: 162). Montandon and Eickstedt complained that ‘linguistic speculation’ led ‘most authors’ to see Lapps as ‘Mongoloids’ despite ‘expressing doubts’ (Montandon 1933: 239; Eickstedt 1934: 384).

with Alpines, or especially according to Germans, with Mongols, he said Nordics were probably too rare in the vast Eastbaltic area to play this role, especially as blondness was recessive in hybrids (Hildén 1928: 222; Evola 1941: 73). Hildén and Nordenstreng stressed its ‘extraordinarily wide distribution area’, identified from the Netherlands and Switzerland to Scandinavia, the Baltic lands and Ukraine, with ‘traces’ throughout most of Western Europe (Hildén 1928: 221; Stołyhwo 1928: 224). They added that the light Eastbaltic colouring, quite mild brachycephaly, taller stature, lack of characteristic Mongol eye fold and blue pigment flecks, and ‘general impression’ ‘decisively’ distinguished them from Mongols (Hildén 1928: 220-21 & 223; Kemilainen 1994: 402). Swedes had some ambiguity about the Easteuropean however. Nordenstreng gave it a ‘rather favourable’ ‘creative and artistic, but reserved and dreamy’ race psychology, a typical core romanticisation of peripheries (see pp.288-94), and ‘negative features’ like collectivism, drawing on Swedish views of the Finnish civil war, while ‘Nordics were individualistic’ (Kemilainen 1994: 402-3). Günther’s unflattering Easteuropean manwhile drew heavily on Gustaf Retzius and Nordenstreng’s Finns (Lutzhöft 1971: 108-9). Russian anthropologists identified Easteuropeans very early, but gave them a fairly modest national role (Skjerl 1936: 290). Chepourkovsky and Bunak either made Easteuropeans important in the Russian race synthesis but not the original Slavs, or vice versa (Tschepourkovsky 1923: 133-34; Bunak 1932: 464, 474, 491 & 493). Bunak suggested a central Russian variant of the Mediterranean (as Sergi had postulated at the turn of the century) with relatives in Poland and the Carpathians and links to Central European ‘Neolithic Corded Ceramic’, as the main Russian type (Bunak 1932: 466, 471-73 & 492; Czekanowski 1928: 339).

Conclusion

Most race narratives had two characteristics, they doggedly pursued national distinction and worked with what science identified as the locally available racial raw material. My research therefore corroborates the presumption of Blanckaert and Actor-Network Theory that scientific data influences even politically sensitive scientific outcomes, along with ideological, national and disciplinary factors and scientific controversies. When measurements identified characteristic types on the national territories of France, Italy, Finland and various Slav countries, their classifiers adopted them as national races, though foreigners very often saw these types as inferior. Though race psychologies were scientifically flimsy, with little need for or possibility of empirical anchoring, classifiers also generally accepted their nation’s allotted warrior, civilised, peasant-authentic or mystical-romantic roles within a common international system of pseudo-scientific race narratives, limiting themselves to interpreting these negatively or positively. Interacting scientific, artistic, political and popular discourses reinforced stereotypes, while scientific universalism and

the common modern European experience bound them together internationally. Races played nations in race narratives, but also personified actors like the bourgeois, peasant or conqueror, and values like civilisation, enterprise or tradition in a mummery of modernisation, helping to orientate disorientated citizens about their nation's role in that bewildering process. The French brachycephal and Italian Mediterranean offered a peaceful bourgeois democratic alternative, culturally dominant at the apogee of liberal positivism, to the militaristic modernity of the Germanic Nordic, whose stock rose with neo-romantic nationalism. The Slavic brachycephal especially played on elitist Nordic fears of degeneration through democratic levelling, stressing the peaceful industry, dynamic reproductivity and gleaming future of peasants or workers. Most other narratives were hostile to modernity, idolising the pre-modern classes of daring Germanic or steppe nobles and peasants whose roots in the national soil produced spiritually superior sentiment. Combining modern might with pessimistic conservatism, and populist nationalism with socially divisive elitism, Nordic-Germanicist race narratives were particularly tortuous and self-contradicting. Just about all classifiers manipulated the race psychology system, but changing the race historical and especially the taxonomic fabric of classification required and bestowed great power within the classification community, which could be used to give the national race a positive role in keeping with the scientific evidence. Because the international scientific community aimed for a single positive universal truth, interpreting unorthodox race classifications as either temporary aberrations or potential new universal paradigms like Broca's model, full legitimacy for a nationalist race narrative only came from imposing it throughout the international community. Philology, ethnology and anthropology all had a positivist vocation to create a coherent, unified system of European races, and simplified the continent's many modern nations and ancient tribes into Indo-Europeans, broad and long-heads or, in the positivist heyday of the 1860s-1900s, the three-race system.

Just as in the classification community's institutions and techniques therefore, core-periphery power relations were central to the international structure of narration*. The largely German, French and Scandinavian theorists who invented the brachy-dolichocephalic and Indo-European categories, made the Aryans broad-headed or introduced a multi-race Europe, transformed classification practice for everybody while privileging their own nations. Philology hesitated to open the initially Latin-Germanic European Aryan category to Celts and Slavs. Retzius's 1840s-50s skull theory re-excluded the east, but became a problem for the French once surveys showed it locked them out too. In response, they mobilised the Slavic brachycephalic east against the Protestant Germanic dolichocephalic north, in race classification as in military alliance. Though this French narrative

achieved international hegemony, Germans launched a Nordic resistance, absorbing the older local Teutonist tradition of British Anglo-Saxonism. German industrialisation and 1870 decisively proved that power and population were now concentrated in the north, dooming *ex oriente lux* narratives. From about 1890, as Italy, Russia and then Central Europe joined an increasing unwieldy international core, it splintered still further on nationalist lines, aided by Deniker's races and pressured by neo-romantic localism, geopolitical stress and the physical diversity revealed by surveying. A nineteenth-century Finn had just a modicum of influence over his own Celto-Slavic race, a vital element of the international system, stretching from Moscow to the Atlantic. But while an interwar Finn had, by contrast, considerable sway over his local East-European race, its fate was fairly irrelevant to Paris or London. In this decentralised post-1890 competition of paradigms, the Scandinavian or barbaric Aryans of the Germanicists and Sergi, serological race and the raciologies of Kollmann, Czekanowski and probably Bunak, though innovations of a similar order to Retzius and Broca's, were far less hegemonic. With the exception of the Gallic-school brachycephalic wedge, palaeolithic novelties like the Scandinavian Crô-Magnons and Himalayan *officina gentium* were too chronologically distant to profoundly affect the narration of modern races.

The tight, Paris-centred, Western European positivist nucleus, to which peripheral correspondents adhered, gave way to a polycentric common European community of discourse, with progressively sharper frontiers. Earlier classifiers saw 'whites' or 'Caucasians' as the cream of humanity, but these usually stretched as far east as India, or even embraced 'Red Indians', Australians or Polynesians (Huxley 1870: 407; Deniker 1971: 282-84; Quatrefages 1889: 456 & 301; Montandon 1933: 257-59). As the three-race scheme became more explicit, it established a much more exclusively Eurocentric category, distinguishing 'European populations properly called', including occasional extra-European groups like the Anatolian Armenoids, from various Semitic, Gypsy 'and "Mongolic or Asiatic" (Turco-Finnish)' races 'on our continent' (Houzé 1883: 90; Deniker 1897: 125-26; Drexel 1936: 4). The native European Celts and then Aryans of Broca and the Germanicists confirmed this Eurocentric trend. Interwar raciologists were still more insistently Eurocentric. Czekanowski, Eugen Fischer and other Nordacists portrayed Europeans as a relatively cohesive group of quite evenly-matched races, seldom breeding with and clearly separated from other humans (Fischer 1936: 279 & 284). This was hugely significant because many scholars assumed that diffusion of 'ideas, works and institutions', like race crossing, worked better between 'closely related races' (Woltmann 1903: 158). Czekanowski believed mathematical genetic formulae proved his ten European types were in 'genetic equilibrium' in a closed, holistic European race unity

* Other geographic patterns, like the distinct traditions of the big three language communities, also repeated. The British for example stood out for their global view, interest in pigmentation, and conservative fidelity to the outmoded blond

(Czekanowski 1928: 341-442 & 345; Malinowski & Wolański 1985: 50). They were ‘primarily’ hybrids of primary races which shared ‘a comparatively small territory’ for millennia and were found in ‘all’ European populations, with ‘alien elements... at the extreme eastern or southern borderlands’ only, ‘or among immigrant intruders,’ isolated by ‘cultural or religious differences’ (Czekanowski 1937: 227).

Germanic Nordicism was the most internationally powerful interwar race narrative, but alienated other countries by its increasingly exclusive intimacy with extreme German nationalism. This helped shift Western anthropology from race to civilisation narratives, which became globally dominant after 1945. The raceless concept of civilisation drew on narratives of civilised races like the French brachycephal or Italian Mediterranean, and of the race synthesis concept that ‘without interbreeding, no cultural development’, which emphasised fruitful free exchange (Ujfalvy 1903: 27). The *ex oriente lux* tradition promoted it in the Latin lands, but also among the ethnologically conservative British, who even foreigners saw as ‘the true inheritors’ of the Roman Empire (Jenkyns 1992: 31). This perhaps encouraged the close Anglo-Italian anthropological links of around 1900 (see p.22). Leading English classifiers agreed with Sergi in linking ‘the origins of our complex civilization’, perhaps as early as the late Neolithic, with ‘the Mediterranean’ race or region (Coon 1939: VIII: 2; Ripley 1900: 129; Huxley & Haddon 1935: 153 & 172-79; Haddon 1924: 23; Fleure 1937: 225). Though imperial triumph and domestic prosperity and stability confirmed Britain’s triumphalist Anglo-Saxonism, it was effectively opposed in the 1880s and 1890s by more optimistic environmentalist countercurrents, which ignored race and proposed political and economic remedies for Ireland (Curtis 1968: 14 & 31). Davies says late nineteenth-century British patriotism was thus directed towards the crown and its institutions, rather than the national body as in Germany or Italy (Davies 1999: 813-14). Already in 1869, most contributors to a London Anthropological Society debate criticised attempts to attribute Irish poverty and violence to race alone (Bendir; Pike; Gibb; Duncan; Bedford Pimm; Macdonald; all 1869: ccxxxi-ccxxxvii). Childe, though a Germanicist, believed the Aryans adapted Middle-Eastern cultural models and that just ‘the bare fact’ of Nordic ‘physical strength’ let them conquer and ‘impose their language’ on ‘even more advanced peoples’ (Barkan 1992: 55; Childe 1926: 211-12). Fleure in 1937 stressed the importance of foreign borrowings for cultural development, stressing that all nations were race mixtures and that neither Celtic, Teutonic, nor Romance ‘cultural contributions’ in Britain had ‘complete dominance’ (Fleure 1937: 225). Combining his scientific, national and political ideologies, he contrasted the diversity that fostered comparison and objectivity to ‘anti-scientific’ Nazi authoritarianism, dubbing freedom of conscience ‘the life breath of science’ (Fleure 1937:

226-27). In France, the strength of neoclassicism relative to romantic identification with Gauls and the later development of archaeology than in Germany and Scandinavia illustrate a stronger nationalist focus on the state than on ethnicity and race (Díaz-Andreu & Champion 1996: 13; Mosse 1987: 57). Napoleon III reintroduced some Roman-Celtic tension, personalised in the cults of Caesar and Vercingetorix, to subtly rationalise French overseas imperialism (Dietler 1994: 588-90). Millet's statue of Vercingetorix, but with Napoleon's features, placed at the site where Caesar defeated the Gaulish chief, emphasised the 'heroic self-sacrifice of the Gauls in defence of their nation' but also 'the ultimately beneficial, if temporarily painful, victory of Roman "civilization" over "barbarism"' (Dietler 1994: 589). Dispensing with race and returning to Enlightenment glorification of French civilisation was an especially attractive option after 1870, when French nationalism could boast cultural superiority more credibly than military might, opposing peaceful, civilising Aryans to bellicose blond barbarity. The slaughter of 1914-18 then made militarism even less attractive (Bollenbeck 1999: 300).

The Celts: Science and Nationalism in Nineteenth Century Ireland

There are few subjects of history which have excited such tedious, lengthened, and bitter controversy as the history of the Celts. The disputants often waxed so warm, that they lost sight of their subject in the indulgence of their animosity. Many elaborate and learned books have been written, but the subject is at this moment as open for discussion and unsettled, as if it had never been agitated. There is scarcely a people in Western Europe, who have not, upon slight grounds, been declared Celtic...

An Irish antiquary and author of 'The Gael and Cimbri' (Betham 1834: 1-2).

The Celts were one of the most important objects of eighteenth and still more, nineteenth-century Western European ethnological debate. Their obscurity but apparently wide distribution in ancient times and the multiple claims on their ancestry made them a vehicle for exceptionally diverse identity narratives. Political ideologues, journalists, fictional writers, folklorists, historians, antiquaries, archaeologists, philologists, ethnologists and anthropologists passed evidence from one to another, producing Celtic narratives which influenced general public understandings. This chapter examines how the Celtic ethnology and identity politics of the British territory of Ireland were shaped by Ireland's provincial dependency on British discourse, especially in biological ethnology. Irish ethnology therefore instead stressed Gaelic philology and ancient literature, where Irish scholars had greater international standing and autonomy. The nationalism of the Catholic majority ultimately rejected the self-serving British-style synthesis narratives of the Protestant Anglo-Irish elite for a more Central European style ethnic purity argument. It failed however to develop a triumphalist, superior Celtic identity narrative like the French did, instead accepting the Anglo-Irish and British Celticism of metropolitan romantic reaction to modernity.

The term Celt, abandoned in the medieval West, re-emerged in a 'widely and eagerly accepted' 1497 forgery by an Italian monk, Annius of Viterbo, who traced European nations to Gallic descendents of Japheth*, the son of Noah, such as Druides, Bardus and Celtes (Chapman 1992: 201-2; Piggott 1966: 7). In early modern Europe, the Celts were known almost exclusively from classical accounts. As several of these placed them solely in Gaul, French Celticism was the

*His brothers Ham and Shem fathered the African Hamites and Asian Semites.

strongest and most durable (see pp.203-5), but in other ancient texts, Celts occupied all north-west Europe (McKendry 1999: 182). They were therefore potential ancestors in several emerging, early modern, national identity discourses in search of a legitimising ancient past, usually in competition with Teutons or Latins. Sixteenth-century scholars of classical texts made Celtic druids into patriotic symbols in France and Britain, where Annius's claim that Celtes ruled in ancient Britain had 'wide circulation' while Germanic 'Celtomania' was contested but not 'isolated', often tracing 'Scytho-Celtic' from Babel via Scythia (Piggott 1966: 6-7; McKendry 1999: 182-83; Zapatero 1993: 23, 28 & 31; see pp.203-7). Swedish Scytho-Celticism piggybacked on Jordanes's sixth-century notions of Sweden as home of Goths and civilisation, while Celts were popular in southern Germany, where they were historically attested and offered an identity distinct from Prussia (McKendry 1999: 184-85; Sklenář 1983: 93). Tenuous classical clues, heavily reinforced by linguistic evidence, led to a gradual acceptance in the eighteenth century that the Insular Celtic (Kymric and Gaelic) languages of Ireland, Britain and Brittany were related to those of ancient Gaul (Zapatero 1993: 30). This allowed eighteenth-century Welsh cultural nationalists, Ireland's Protestant ruling class and, in the later nineteenth century, Ireland's Catholic peasantry to enthusiastically adopt Celtic ancestry. Ethnologists like Arnold strained to 'find a definition' to 'suit both branches of the Celtic family,' Kymri and Gael, and argued that while 'the sensuousness of the Latinised Frenchman makes Paris*'; the sensuousness of the Celt proper has made Ireland' (Arnold 1962 [1867]: 342 & 346). Militarism bound Insular and French Celts for Knox, and an Irish ethnologist saw Celts as behind all French 'popular struggles' (DUM 1855: 732-33). The later nineteenth-century shift from ethnic to racial classification made the Spaniards the new and, in socio-economic terms, much more comparable closest relatives of the Irish.

The seventeenth-century association of French and British megalithic monuments with Celts spread to Spain, especially through translated French works which 'reinforced the idea' of pan-Celtic unity, but the Celts really achieved a 'preferential place' in prehistory from the mid-nineteenth (Zapatero 1993: 23, 28, 31 & 36). The 'secure identification' of the historical Celts with the La Tène Iron-Age site in 1871-72, after initial suggestions by Jubainville in 1863 on the basis of classical texts, supplemented by 'mythological statements' and 'linguistic evidence', was a major turning point in Celtic studies, universally accepted for a century (Zapatero 1993: 26 & 33-35; Collis 2003: 64). French and Central European prehistorians attached similar finds 'from the Jura to the middle Danube and from north of the Carpathians to south of the Alps' to the insular Celtic zone identified by Anglo-Saxon scholars (Zapatero 1993: 41-42). This helped make Celts the

*The blood of the French, he explained, had 'an undoubtedly Celtic basis', and 'Celtism' thrived among them, but 'decisive... contact with a stronger civilisation' had made Gaul essentially Latin (Arnold 1962 [1867]: 349).

chosen ancestors of Galicians and even give them walk-on roles in Romanian, Polish and Czech identity stories (Zapatero 1993: 45; Pârvan 1937: 170; Picot 1883: 92; Sklenář 1983: 93; see 425-27). The ‘Celtic past’ which gave Bohemia its name was discovered in the fifteenth or sixteenth century, allowing Czechs to claim ‘a substantial part of Celtic history’ took place ‘in Central Europe’, but competed with claims that the ancient Boii were really Slavs (Sklenář 1983: 93; Filip 1977: 13). Nineteenth-century Swiss, Spanish, British, French and Belgian nationalism exploited the resistance of local Celtic tribes to the Romans (Megaw & Megaw 1999: 22; Zapatero 1993: 38-40). Since 1980 the European Union has also appropriated Celtic identity, subsidising international archaeology exhibitions with subtitles like ‘An Early Form of European Unity’ and video presentations with the twelve stars of Europe rising from a well-known Celtic archaeological site, favouring nations with ‘well-developed myths of Celtic identity’ such as the French, while excluding others, like the English (Dietler 1994: 595-96; Zapatero 1993: 54). An 1981 work on ‘Celtic Consciousness’ even aimed ‘to provide a link and common background for French- and English-speaking Canadians’ (Quinn 2005: 128).

Increasingly sophisticated sixteenth-century scholarship of modern languages and ancient texts gradually led Scottish, Irish and Welsh scholars to link Anglo-Saxon with Germanic and Welsh with ancient British, and identify separate Celtic and German linguistic groupings (Chapman 1992: 204-5; Betham 2000 [1834]: 6-7). The Welsh argued from the twelfth century on that they were the original Celts, ‘from whom the ancient Gauls,’ and all ‘other peoples of the earth were descended’, and from the late seventeenth century, often promoted the ‘close relationship of Hebrew to Welsh’ (Holzmann 1855: 5; Piggott 1966: 7). Because Caesar noted that southern Britons spoke the language of Gaul, eighteenth-century antiquaries concluded that the Insular languages were related to that of ancient Gaul, transforming the Celtic issue (Chapman 1992: 204). The Breton and Welsh linguists Paul-Yves Pezron (1703), who Davis says promoted Celtic ancestry for nationalist ends, and Edward Lhuyd (1707), popularised the link between Britons, Welsh and the Gallic Celts, using the term Celtic for the entire grouping (Piggott 1966: 10; Chapman 1992: 205; Betham 2000: 336-37; Davis 2002: viii; Zapatero 1993: 30). The Insular Celts were rarely seen as Celtic before this, because no classical references located Celts in the British Isles (Dietler 1994: 585; Piggott 1966: 5). Broca said the term Celtic was chosen for reasons of prestige rather than linguistics, because Caesar’s Celts in ancient Gaul ‘played the biggest role in history’, but their language was almost unknown (Broca 1864: 460-61). Holzmann agreed that Insular peoples were ‘naturally’ delighted to be seen as Celts and particularly satisfied by the search for Kymric or Gaelic roots for Gallic words (Holzmann 1855: 5). The ‘normal term’ for prehistoric Britons switched from Briton to Celt in the eighteenth century, with the Scots, Irish and Welsh ‘universally accepted’ as Celts by the early

nineteenth (Collis 2003: 71-73; Chapman 1992: 205). Betham in Ireland argued in 1834 that the ancient 'Irish, Britons, and Gauls' were 'branches of the same people' with 'the same language... origin, religion, laws, institutions, and customs' (Betham 2000 [1834]: vii). Simon James associates this change with an increasing Welsh and Scottish 'sense of being 'other'', but Collis instead links it to romanticism, the image of the druid in controversies about rationality and religion, and history-based arguments in disputes about Scottish church organisation, which he says inspired the Scot John Pinkerton to pour 'scorn on the Celtic languages' (Collis 2003: 71-72). The Irish historical connection made the role of Celts in Scotland controversial, but Collis says it was 'widely accepted' by 1767 (Collis 2003: 73). Some historians argue however that just a 'few' sporadic pre-Revolutionary 'Celtomaniacs' used 'fanciful speculations' about biblical genealogy to invent Celtic ancestors, and that theories of a Celtic language group were 'isolated, unsystematized' and widely ignored until nineteenth-century philologists demonstrated that Celts were Indo-European (Dietler 1994: 585 & 588; Tristram 1996: 59).

Unlike the Nordic Teuton, a common international narrative of the Celt consolidated neither within anthropology nor between it and literary-political Celticism. I argue that while the French and Scots had the weight within international ethnology to rehabilitate their dark brachycephals or detach a scion of the blond northern race as their national Celts, Irish ethnology was too dependent on Britain to rebrand the local 'Iberian' type as a superior national race. Irish nationalists instead cultivated the spiritual, emotional and rather pathetic romantic Celt created by British and French literary figures like Macpherson, Renan and Matthew Arnold.

Romanticism and the Celts

Most ethnological stereotypes stressed the power and modern efficiency of the ethnologist's own group and corresponding inferiority of 'enemies', but 'contested' nationalities of 'imperial peripheries throughout Europe' from Poles to Irish Celticists, could compensate by tapping into the romantic reaction against modernity (McDonald 1997: 229-30; Manouelian 1900: 392). Respecting the ethnological rule of international consensus on racial stereotypes, the weak people exoticised itself, while offering itself to more powerful neighbours as a better but less successful other-self*. Several ethnic stereotypes, from Celticism to the 1960s hippy search for 'alternatives' in India, contrasted modern failings like 'materialism, 'Saxon' philistinism, utilitarianism, excessive rationalism, artificiality, industrial urbanization', positivist reason, logic, facts, intellect, rigidity,

*This narrative reproduced on an international scale the common strategy of romanticising some isolated group within a country, as a racially pure repository of the nation's ancient true self (see pp.123-24).

duty, brutal force and professionalism; with romantic emotion, intuition, values, passion, spontaneity, love, sensitivity, gentleness and amateurism (McDonald 1997: 229-30; Sims-Williams 1986: 72). Ethnologists and folklorists were prominent romanticisers. Nationalist ethnographers conflated 'the archaic and the primitive', trying to reconstruct 'past customs of "civilized" peoples' from 'current practices of the less civilized' (Manouelian 1900: 392 & 395). Romanticism arose from the stifling security of bourgeois life. A reaction 'against the mundane securities of British administration, science, civility, art and urban life' began after the country established global power and suppressed the 1745 Stuart rising (Chapman 1992: 124-25 & Chapman 1992: 132-33). It then...

... became possible to glamorise the Old Highlands, rather than revile them. While wolves range round the human winter homestead, carrying off babies... it is unlikely that the human society will rejoice in the wild splendour of the wolf pack (Chapman 1992: 125-26).

Some Germans and locals 'helped publicize a romantic, völkisch, pre-industrial Scandinavia' in the 1920s as a contrast to German industrialisation, but nationalists also romanticised a German people weakened by political division and intimidated by French 'political power and intellectual prestige' (Field 1977: 532-33; Chapman 1992: 133). Industrialisation then gave the same romantic impetus as in Britain. Britain's relatively spontaneous fringe romanticisation may also have created a model which German nationalists could instrumentalise for national mobilisation, as occurred with many modern technologies. Modern Celts and Germans were both 'vogue figures' for late eighteenth-century romanticist 'intellectual Britons', 'serving rather similar symbolic functions' as 'latter-day barbarians' (Chapman 1992: 131). The Celts found expression in *Ossian* and the renewed popularity of the Arthurian legends, while Gothic novels embodied the 'ghosts, irrational passions, supernatural creatures and wide circulations' of the Goths (Chapman 1992: 131). However a German dynasty ruled Britain and romanticism revolted against the Germanic Anglo-Saxon 'established forms' 'at the centre of England's conception of itself', so romanticisation of 'the barbarian Anglo-Saxon' was 'feeble compared to that of the Celt' (Chapman 1992: 132). The Anglo-Saxon epic '*Beowulf*, for all its pagan passion' remained largely a scholarly text (Chapman 1992: 132). After 1870 and World War One meanwhile, Germans switched, in French and British eyes especially, from a 'nation of 'poets and thinkers'' to superhumanly efficient brutes, with confirmation found even in the 'ruthless' German sentence structure (McDonald 1997: 229). The French and other Latins meanwhile 'readily assumed' an image as 'excitable, fun-loving, soulful, and sexy or passionate', in contrast to the 'self-consciously rational' English or Germans (McDonald 1997: 229). However Romance culture largely drew on civilised sophistication rather than natural wildness for international ethnological relevance. Nativist primitivism, influenced by

anthropology, also influenced ‘constructions of national and regional identity’ in Poland and other Central European subject nations around 1900 (Manouelian 1900: 391). The intense romanticism of Slavs and Celts both confirmed, colluded with and compensated for the internationally dominant narrative of modern Germanic superiority (see p.227-32). However Slav romanticisation, like that of the Germans, had far less appeal beyond the ethnic group than Celticism did. While Central European ethnic nationalism demanded exclusive allegiance to the ‘home’ group, Insular Celts inhabited Western Europe, where national syntheses, which might include a Celtic component, were more tolerated. Their more absolute modern weakness, and more industrialised neighbours also recommended them as a romantic object.

Celticists also pioneered romanticism. The ascription of sites like Stonehenge to druids, the ‘pan-European popularity of the Ossian epic forgeries... and the Romantic Celtophilia’ of English, French and Welsh writers like Walter Scott and Chateaubriand dramatically raised the profile of romantic Insular Celticism, which was already well advanced by 1800 (Dietler 1994: 588; Collis 2003: 72-73). L.P. Curtis says its ‘most important source’ was 1750s-1760s poems which created ‘a mood of noble melancholy out of Celtic druids, bards and warriors’, written in English by mostly Welsh and Scots writers, including James Macpherson (Curtis 1968: 111). The ethnologist Jean Cuisenier traces not just continental Celtomania, but much of romanticism to the influence of Macpherson’s *Fingal, an Ancient Epic Poem: composed by Ossian, etc.*, published in Edinburgh in 1762 and translated into several European languages (Cuisenier 1999: 25; Thiesse 2001: 25 & 54). Its success ‘was immense’, provoking ‘new interest’ in...

...the cultivated public, for wild nature, for the fairy tale past of a very nearby people... Ossian stimulated in every European country at the end of the eighteenth century the desire to rediscover an ancient national poetry and to collect popular customs and beliefs, unpolished and crude certainly, but stripped of any artifice (Cuisenier 1999: 25).

The mid-eighteenth century was ‘still reluctant to find anything of literary or cultural value coming out of the mouths of dirty and bare-legged mountain savages’, but Macpherson made supposedly ancient Gaelic tales acceptable by approximating them to classical literature, and by ‘opening the literary canon... did much to’ make rural folk tales acceptable (Chapman 1992: 121-22).

Geography was crucial to romanticism (Sims-Williams 1986: 72). Too close to the object and ‘you simply become like your poorer neighbours’, but emulating too distant an object feels like play-acting, lacking the authenticity of life on the edge (Chapman 1992: 139). Romantics have to

identify with the romantic object, to claim the perceived freedoms, authenticity and exciting wildness of Celts, Gypsies, cowboys, Indians, medieval knights, the working class, or African-American urban gangstas. The full emotional satisfaction of authenticity, of 'keeping it real' (in the language of rap romanticisation of 'the street') is felt by romanticising ones own community. The Gaelic Scottish Highlander, as the closest threatened wild human species in secure, unthreatened eighteenth-century Britain, was a far better romantic object than, 'say, the Lothian peasantry, who were too close,' or the distant 'South Sea Islander' (Chapman 1992: 127).

British romanticism looked beyond itself, to the outer edges of its own rationality and geography, for inspiration and embodiment... romanticism in Britain lived in Macpherson's Ossian, Mary Queen of Scots, the Highland clans, Arthur and his knights (Chapman 1992: 132-33).

Chapman sees three waves of French 'Celticising frenzy', in the Baroque reaction to classicism, the romantic period and late nineteenth-century nationalist opposition to 'international scientism' (Chapman 1992: 206). Non-Greek or Roman elements of French culture were attributed to the Celts, granting France 'a *national antiquity* as prestigious as that of classical antiquity' (Cuisenier 1999: 26). Napoleon ostentatiously carried Macpherson's Ossian with him on all his campaigns and founded the *Académie Celtique* in 1805 (Dietler 1994: 588). A speech at its opening claimed 'nearly all the peoples of Europe' were descended from Celts, though France, as 'the eldest daughter of *la Celtique*', deserved the 'best and largest part of' its 'glorious heritage' (Dietler 1994: 588). An 'ever wider circle' of 'veritable Celtomania' marked the intense nationalism of 1810s France, though claims of 'the highest level in science, art and civilisation' for the Celts drove more scientifically-oriented members out of the *Académie*, leading to its demise in 1812 (Cuisenier 1999: 26-27). French scholars 'abandoned all but archaeological research on national antiquities' just as the brothers Grimm completed their incomparable German folk tale collection (Cuisenier 1999: 27). Despite continuing competition from Roman and Frankish narratives, the Celtic Gauls became France's favourite ancestors.

However French Celtic narratives were more traditionally nationalist than romantic, perhaps because French romanticism was weak, 'often' seen as having peaked 'in a belated hurry,' in 1818-22, and 'disappeared by 1845' (Chapman 1992: 134). Napoleon's Celticism helped justify annexing 'all the ancient territory of the Gauls', but 'the symbolic potential of the Roman imperial legacy' intrigued him still more; he dressed state pomp in classical motifs and launched 'systematic' archaeological and restoration work in Rome (Dietler 1994: 588). While the British 'centre' 'benignly tolerated... colluded in' or 'even initiated' 'fond elaboration of fringe identity' 'in

‘opposition’ to the central identity’, Chapman says that in France this ‘was continually interrupted by’ regime change and invasion in 1789-1968, when the priorities were survival and ‘a long and bitterly contested process’ of self-definition (Chapman 1992: 133 & 135). The Revolution itself offered an alternative wild, anti-establishment collective narrative, and late industrialisation rendered the peasantry ‘banal by its omnipresence’ (Chapman 1992: 133 & 137). Ancient Gallic ancestors were initially the major focus of ‘turbulent Celticism’, safely ‘well away from the British navy’, but romanticisation of Celtic Bretons, often imported from Britain’s ‘far more advanced’ Celtic fringe romanticisation, ultimately prevailed in the late nineteenth century (Chapman 1992: 206-7). Thiesse says French nationalists used Brittany and especially its megalithic prehistoric monuments from the 1790s on to portray the ancient Gauls as Europe’s pre-eminent Celts, establishing Bretons in national myth as the purest descendants of France’s Gallic ancestors (Thiesse 2001: 54 & 125). Ironically, rival Breton and French nationalisms both exploited this narrative, the French state using it to eradicate the only Celtic language still spoken on its territory (Dietler 1994: 593-94).

Perceived ancientness and universality, first as Europe’s aboriginal population, then as its first Aryan invaders, gave the Celts a special international mission as romantic ancestors, fulfilling the same role for Western Europe as a whole, as isolated, backward national enclaves of race purity like the Aran Islands (Broca 1864: 461-62; Wilde 1849: 217; see pp.123-24). Renan said of them that ‘no human family has ever lived so isolated from the world and so pure of any foreign mixture’, imposing ‘an impassable barrier’ to outside influences (Sims-Williams 1986: 72-73). This ‘separateness’ led the Insular languages and cultures to be exoticised and marginalised, ‘treated as relics of ancient greatness to be marvelled at like museum exhibits’ (Tristram 1996: 59). Several writers trace the ‘alien classificatory concept’ of Celts, as ‘a necessary source of contrast for self-definition as “civilized”’, ‘projecting an outsider’s sense of uniformity on diverse peoples’ of a universal European fringe, to the ancient Greeks and Romans (Dietler 1994: 586; Evans 1999: 6-7). Some even claim there was no classical evidence of anyone calling themselves Celts (Evans 1999: 6-7). Even ancient writers like Strabo and Polybius agreed that the Greeks had extended the term Celt from a tribe near Marseilles to all of Gaul or north-western Europe, which they recognised were ‘completely unknown’ (Bertrand 1873: 423 & 245). Broca said the Greeks divided all barbarian Europe into Celts and Scythians, with Celtic territory receding as knowledge increased (Broca 1864: 4558-9).

The use of ancient Celts as an antidote to modernity also helped make them an eminently international narrative, dominated by the cosmopolitan urban elites*. Renan, Arnold and scholars throughout the Continent evaluated the ‘moral and spiritual lesson’ of Celtic literatures ‘for metropolitan Europe’ (Sims-Williams 1986: 73; Morash 1998: 212). In 1892, Douglas Hyde said the Celtic race ‘of half Europe’ was ‘making its last stand for independence’ in Ireland, and because the Irish ‘alone’ produced ‘an early art and literature, *our* antiquities can best throw light’ on its heritage (Morash 1998: 206; Hyde 1991 [1892]: 529). Celticist Irish nationalism mainly emerged among the Anglo-Irish elite, criticising the initial anti-Celticism of the Catholic lower orders (DUM 1855: 729). The Protestant Thomas Davis’s radical nationalist movement, Young Ireland, which rebelled unsuccessfully in 1848, ‘first introduced’ Celticism into Irish ‘popular politics’, defended the Irish language and had its ‘moral centre of gravity’ in the ‘still faithful and romantic’ peasantry (Hutchinson 1987: 105; DUM 1855: 729). Its allies in the slowly emerging Catholic middle class, like Daniel O’Connell’s non-violent mass-movement, had little time for ‘indigenous ideas’, welcoming the triumph of England’s ‘great liberal middle-class civilization’ over the ‘violent emotionalism and rusticity’ of ‘native Gaelic traditions’ and the Irish language, which blocked, or was irrelevant to Catholic progress (Hutchinson 1987: 60-61 & 100-5; DUM 1855: 729). Douglas Hyde blamed the final end of the ancient civilisation ‘of the Gaelic race’ on the Anglophone Catholic seminary established in Ireland in 1795 and the ‘neglect’ by O’Connell and ‘almost every’ later Irish leader of ‘racial customs, language and traditions’ (Hyde 1991 [1892]: 530-31).

Anglo-Irish Celticists and the largely ‘educated city-based’ Irish language revivalists contrasted ‘the *Idealtypus* of an authentic’ native Gaelic-speaking ‘organic folk community’ with Britain’s ‘Imperialist urban class society’, idealising ignorance of English ‘as a lost state of pristine purity, virgin, unsullied authenticity’ (Leerssen 1996: 196-97; Hutchinson 1987: 119). George Petrie, a ‘cardinal figure’ in Ireland’s 1830s Celticist revival was ‘profoundly influenced by’ Wordsworth’s pantheism (Leerssen 1996: 101; Hutchinson 1987: 79 & 81). ‘In revolting against the hegemony of English ‘scientific’ civilization’ Yeats also ‘turned quite naturally to English romantic sources’ of Celticism, like ‘Arnold, Morris and the vague Pan-Celticism’ of ‘uprooted Scots and Welsh poets in Bohemian London’ (Hutchinson 1987: 135). As a Protestant writer of international renown, he had a universalist concept of Ireland, as ‘the spearhead’ of a wider folk insurrection ‘against the

*Links with discourse on extra-European peoples reinforced this internationalism. *Ossian* and Sanskrit both became standards of the Enlightenment ‘Moderns’, in their intellectual battle with the ‘Ancients’, undermining the claims of precedence of classical civilisation by demonstrating still older cultures in Europe and beyond (Thiesse 2001: 28 & 175). Cuisenier believes global exploration influenced the early nineteenth-century Parisian learned society, the *Académie Celtique*, which applied Rousseau’s dictum that ‘strangeness is the effect of difference, not of irrationality’ to ancient Western Europe (Cuisenier 1999: 26). Native Americans heavily influenced primitivist perceptions of Celts as ‘hideous heathen’ savages, and more positive romantic eighteenth-century images of druids (Piggott 1966: 15-18).

scientific state', because of its unique preservation of 'the full imaginative vision of the folk' (Hutchinson 1987: 132). Influenced by Irish and foreign Celtic scholarship, the nationalist heroics of the Fenian movement, occultism, James Frazer's new anthropological science of comparative mythology, Norwegian nationalist theatre and Wagner's opera, Yeats assembled similar components to those of contemporary *völkisch* nationalism (Hutchinson 1987: 130-34). He believed Irish Celtic 'natural magic' was just 'the ancient religion of the world', 'a vast cosmic history' which 'could be interpreted and understood only by analogy with European and Oriental occult lore' (Kelleher 1950: 214; Hutchinson 1987: 132-33). Classical, Christian and modern universalism degenerated the 'small-scale individualized' folk communities from which nations emerged in the heroic ages, into a materialistic 'mass vulgarized society' (Hutchinson 1987: 132-33). This process could be reversed by a romantic revolt, in which history 'reserved for Ireland a special destiny' to produce a new Homer or Goethe (Hutchinson 1987: 133).

Celtic romance and Anglo-Saxonism

Matthew Arnold's *The Study of Celtic Literature* (1865-66) and Ernest Renan's *La Poésie des races celtiques* (1854), which influenced him heavily, were massively influential in France and Britain respectively, giving 'a wide European public' its first 'synthetic, generalised picture of the various Celtic-speaking peoples', their literatures and psychological stereotypes (Sims-Williams 1986: 71-73; Chapman 1992: 215). Their Celts were 'figures of wish fulfilment, of opposition to the prevailing philosophy and actuality of industrialising England'; 'free, unpredictable, natural, emotional, impulsive, poetical, artistic, expressive, unreliable,' in 'structural opposition' to 'restrained, predictable, cultured, stolid, scientific, rational, reliable, impassive' Anglo-Saxons (Chapman 1992: 214-15). Numerous commentators trace a single thread of Celtic romanticisation from Macpherson to Renan and Arnold and on to the 'supreme expression of Celticism', the late nineteenth-century Irish Celtic revival, led by Protestant writers* like the young William Butler Yeats and George Russell (alias A.E.) (Chapman 1992: 217-18; Curtis 1968: 113). Though recognising criticisms of its authenticity, Arnold considered Macpherson's *Ossian* 'the very soul of the Celtic genius' (Arnold 1962 [1867]: 370). Kelleher criticises Arnold's remarkably 'free handling' of Celtic literature and concentration on secondary sources, arguing that he adopted his view from Macpherson before ever approaching the subject (Kelleher 1950: 206).

*Some Latin American 'whites' and perhaps Ukrainian Russians may have joined the Celticist Anglo-Irish in 'creole' nationalist identification with native culture, but this was rare in Europe. Most ethnically differentiated elites, like the Galician Poles or Bohemian Germans, strongly identified with their ethnic 'mother country'.

Macpherson gave him what he wanted and what he felt ought to be right. *Oisín* fits Arnold's formula for Celticity far better than any authentic Celtic poetry would – as in turn Arnold's formula fitted the needs of the Celtic revival better than the history of any Irish period (Kelleher 1950: 207-8).

Though produced by the same 'unscientific' ethnology as the Aryanism or Germanicism of Gobineau and Chamberlain, the romantic Celt.

Kelleher says the Irish revivalists therefore precisely reproduced Arnold's picture of Celtic literature, and apart from Douglas Hyde, his ignorance about Celtic literature (Kelleher 1950: 204-5). Like all romantics, they 'found an escape from' modernity, trying to 'create a new Ireland and to animate it with a new Celtic spirit' by rediscovering 'ancient bards and heroic warriors' in folklore and history (Curtis 1968: 113). As usual in ethnology, Insular Celtic nationalisms relied 'heavily on more positive readings of [the] same alien stereotypical images' as exotic others that foreigners like Arnold applied to them, though these appeared quite unsuitable for describing the national self (Dietler 1994: 586; Chapman 1992: 3). Leerssen identifies a powerful Irish nationalist 'auto-exoticism', adoring a mythically embellished 'golden primordial Gaeldom' (Leerssen 1996: 143). MacLoughlin for example described ancient Gaelic warriors as 'loving and entering into the spirit of nature' in a particularly Celtic way (MacLoughlin 1896: 32).

Arnold's key to the common Celtic character of the Irish, Welsh and French was emotionality, or what he calls sentiment (Arnold 1962 [1867]: 343). The Celtic nature was 'quick to feel impressions, and feeling them very strongly; a lively personality therefore, keenly sensitive to joy and sorrow', presenting in hardship the 'wistful regret... passionate, penetrating melancholy' that Renan noted (Arnold 1962 [1867]: 343). However Arnold said 'its essence is to aspire ardently after life, light and emotion, to be expansive, adventurous, and gay... sociable, hospitable, eloquent, admired, fighting away brilliantly... sensuous; loves bright colours, company, and pleasure' (Arnold 1962 [1867]: 343-45). Arnold's Celts 'are Nature's own children' in communion with its 'delicate magic' and 'intimate life... her weird power and her fairy charm' (Arnold 1962 [1867]: 374). Perhaps due in part to his mother's Cornish ancestry, Arnold identified 'something feminine' in the sensibility and 'nervous exaltation' of Celts, leaving them 'peculiarly disposed to feel the spell of the feminine ideosyncrasy' (Arnold 1962 [1867]: 347; Leerssen 1996: 98). The social anthropologist Maryon McDonald suggests the feminine-masculine opposition as the template for the positivist-romantic dichotomy in ethnic stereotypes (McDonald 1997: 229-30). Victorian Englishmen and positivist anthropologists ascribed 'similar structural positions' to women and 'the social periphery', defined both as silly, emotional and stimulating in opposition to their own stolid

practicality (Chapman 1992: 216-17; Fee 1979: 418-23). Arnold felt, 'in spite of good sense disapproving, magnetised and exhilarated by' the 'lively Celtic nature' (Arnold 1962 [1867]: 347-48).

Pessimism helps explain why the Irish did not devise a more typically triumphalist ethnological self image. Kelleher identifies a recurring 'emotional tone' in Celticist revivals from *Ossian*, which captured 'the atmosphere of melancholy and defeat that pervaded the Scotch Highlands' after the failed 1745 rising, to Renan's Brittany, Arnold's Celts and 1890s Ireland (Kelleher 1950: 208). Spirituality made sense of defeat. The Celts of the 1890s revival were 'doomed by their own spiritual sensitivity', defeated because 'distracted by more important, if less pressing, matters' (Kelleher 1950: 216). The revivalists turned 'every weakness Arnold deplored in the Celt' into 'a strange characteristic strength' (Kelleher 1950: 204-5). The Celt's 'lack of wholeness' was due to English rule, while vague Celtic poetry reflected a preference for 'the thing "half-said"', the Celtic audience's 'quick response completing' a 'subtly sketched allusion' (Kelleher 1950: 212). Beddoe, Thurnham and Hector MacLean believed the greater 'enduring power' of Teutons gave them a Darwinian biodynamic advantage over blond aristocratic Celts, who were reduced 'by slaughter and emigration' in Ireland, and were regrettably 'being rapidly expended in the service of the empire, or are melting away' in the 'great cities' of Scotland (Beddoe 1971 [1885]: 296; 1905: 237; Thurnham 1864: 399; MacLean 1872: xlii). MacLean said their 'immense aggressive courage', 'love of glory and... daring deeds... 'too often' caused them the 'bitter misfortune' of being attacked in their own country' and exiled (MacLean 1872: xliii). He attributed medieval chivalry, crusades and Irish missions to Christianise Europe to Kimmerian 'sympathy for weakness and distress' and 'interest in the well-being' of all mankind (MacLean 1872: xliii). This remarkably gallant race also allowed women a superior social position than among the Romans or pre-Celts (MacLean 1872: xliii).

The relatively straightforward ethnic superiority ideology and anti-Celtic prejudices of Anglo-Saxonism crucially influenced Romantic British Celticism. Eighteenth-century antiquarians like Pinkerton and Whittaker mocked the barbarous 'savage Celts' who 'stood in the way of progress', while Knox's contemporaries often held 'diluted, non-explicit' but ubiquitous 'anti-Celtic reservations' (Leerssen 1996: 95-96). Leerssen says Carlyle inspired a 'Celt-hating' generation of 'hugely popular' 'mid-Victorian historians' like Froude, Kemble, Stubbs, Freeman, Dicey and Green, who 'celebrated the Anglo-Saxon conquest as a veritable ethnic cleansing' of Celts (Leerssen 1996: 97-98). Novels, pamphlets, history books, 'and cartoons or prints' represented Paddy, their stereotypical Irish Celt, as incompetent with money, intellectually and scientifically deficient, violent, indolent and intemperate (Curtis 1968: 13). The Scottish phrenologist George

Coombe placed the Celts ‘far behind’ the superior Teutons, and especially the Anglo-Saxons (Horsman 1976: 398). These claims were instrumentalised politically. The anthropologist Avery explicitly aimed to shift the blame for Ireland’s problems from English maladministration to ‘hereditary, and ineradicable’ race, so that land reform merely gave ‘free scope’ to the Irish peasant’s racial lack of initiative (Avery 1869: ccxxix-ccxxx). He said Irish history was such ‘an unremitting series of internecine wars, turbulence, treason, violence and blood’, that without English conquest, the natives ‘would have utterly destroyed each other long ago’ (Avery 1869: ccxxv). Many Anglo-Irish remained Anglo-Saxonist. O’Grady berated fellow landlords for neglecting Ireland’s Gaelic heritage, but was himself initially unaware ‘that Ireland had a history’ (O’Connor 1991: 23-24 & 131). Many leading Protestants acquired Irish nationalism almost accidentally, through an American mother, Irish nanny, adventurer lover, or schooling at home rather than at boarding schools (O’Connor 1991: 26-27, 31, 38, 43 & 50).

While Celtic romantics from Macpherson to Arnold rebelled against Anglo-Saxonist anti-Celticism, their representations of the Celts were far from incompatible with it. Arnold’s Celt was recognisably an antithesis of Knox’s businesslike Anglo-Saxon. It ‘never,’ despite ‘admirable gifts of quick perception and warm emotion,’ had enough ‘steadiness, patience, sanity’ to succeed ‘perfectly’ (Arnold 1962 [1867]: 344). Because ‘the Celtic genius’ chafed ‘against the despotism of fact,’ and was ‘perpetual straining after mere emotion,’ it achieved ‘nothing’ ‘in the plastic arts,’ lacked the ‘patience for science’ and was even more severely ‘lamed’ in ‘business and politics’ (Arnold 1962 [1867]: 344-45). This explained its ‘failure to reach any material civilisation sound and satisfying, and not out at elbows, poor, slovenly, and half-barbarous’ (Arnold 1962 [1867]: 345). Anglo-Saxonists and more scientific later ethnologists were meanwhile happy to apply Arnold’s melancholic, ethereal romanticism to their inferior Celts or dark Irish aborigines. ‘Irrascible, warm-hearted, full of deep sympathies,’ Knox’s ‘dreamy’ Celts were ‘[c]hildren of the mist,’ ‘nature’s antiquaries’ and ‘the seer of second sight’ (Knox 1850: 322-23). Citing Arnold and Renan, Dickson believed that ‘in the undertone of sadness that runs so largely through Irish music we may still hear the wail of the downtrodden race’ (Dickson 1898: 17). Transferring Arnoldian features to Irish and Scottish pre-Celtic aborigines, Dickson and Hector MacLean ascribed imagination, subtlety, excitability ‘deep pathos and a particular kind of humour’ in literature to them (MacLean 1872: xlix; Dickson 1898: 12). Dickson added that ‘Irish character’ owed its ‘fairy lore’ and amiable and ‘distinctive qualities’ like respect for women, politeness, ‘attachment to home and kindred,’ cheerfulness and piety to its ‘unhonoured and unsung... non-Celtic masses’ (Dickson 1898: 17). Arnold and Knox were meanwhile both convinced by clichés about the French and Irish as emotional people who knew how to have fun. Edwards described both the French and the Irish as

witty, lively, gay but inconsistent, loving 'glory and pleasure' (Edwards 1845: 42). One English Francophile argued that French 'moral characteristics... tilted' towards the Celtic 'cheerful spirit, lively literature, passion for great leaders, taste for military pomp, feasts and spectacles,' and 'weak instinct for centralised municipal self-government' (Topinard 1873: 158). A group of leading French anthropologists characterised the Insular and French Gaels by their 'energy, lively, cheerful, witty and unreliable character, loving glory and pleasure, aptitude for culture, sciences and letters, etc.' (Périer, Bertillon & Lagneau 1861: 344-45).

Politically meanwhile, British romantic Celticism and Anglo-Saxonism only differed by degree. 'Ardent Anglo-Saxonists' created 'a striking contrast and antithesis' between the literally unruly Celtic peoples of Ireland and the continent, and the Anglo-Saxon 'free institutions' which no Celtic peoples had ever experienced (Curtis 1968: 4-5 & 12). Curtis links the common English scepticism that 'the 'average' Irishman' could 'control himself let alone manage any considerable number of his fellow countrymen', to representations of Irish Celts as the racial 'antithesis' of English character (Curtis 1968: 4-5). The Irish Unionist Dickson argued that the dark aboriginal Irish were courageous, but that their 'inferior' social position was due to inaptitude for 'organisation and cohesion', so that 'clan-jealousy' for example 'wrecked the Jacobite cause at Culloden' (Dickson 1898: 14). He ascribed the deplorable Northern Irish 'party spirit' to 'ancient and radical' 'racial antipathy' among these aborigines, rather than the ostensible sectarian political issues (Dickson 1896: 158). Arnold similarly justified English rule by warning that the 'undisciplinable, anarchical, and turbulent' Celt lacked 'a promising political temperament' because he gave 'himself body and soul to some leader' 'out of affection and admiration', and had 'just the opposite of the Anglo-Saxon temperament' (Arnold 1962 [1867]: 347). Leerssen argues that Arnold's 1867 essay attempted to defuse Thomas Carlyle's message to Celts of '*Willst Du nicht mein Bruder sein, schlag'ich Dir den Schädel ein*'* (Leerssen 1996: 97-98). However Arnold shared Carlyle's conviction that the '[n]oisy, turbulent, irreclaimable savagery' of the Irish 'is doomed to... disappear', like the American Indians who had earlier been invited to 'join us', but had refused and were now 'extinct' (Carlyle 1892: 49-50; Leerssen 1996: 98). Arnold differed only in trusting love rather than force to Anglicise the unruly romantic Celts. Carlyle claimed to defend 'the laws of Nature', by taming or chaining 'into wholesome slavery' those like the 'Celt of Connemara,... a savage who in his sullen stupidity, in his chronic rage and misery, cannot know the facts of this world' and who was holding himself back by '[f]ruitless futile insurrection' (Carlyle 1892: 50-51). A 'beneficent hand' was required to...

...get some work out of him, – Nature herself, intent to have her work tilled, has no resource but to exterminate him as she has done the wolves and various other obstinately *free* creatures before now! These are hard words, but they are true. (Carlyle 1892: 51-52)

Knox did not share Carlyle and Arnold's Whiggish optimism that the Celt could be tamed. His Saxons and Celts were locked in mortal conflict, perhaps because 'two sinister Irish Celts' called Burke and Hare mired him in a grave-robbing scandal when he 'bought a number of cadavers' for dissection (Curtis 1968: 69; Malik 1996: 89). Knox's Celt would never submit to Saxon rule and had to be brutally suppressed and eventually eradicated, a policy justified by the Celts' own traditions of autocracy. 'As a Saxon,' Knox claimed to 'abhor all dynasties, monarchies and bayonet governments, but this latter seems to be the only one suitable for the Celtic man' (Knox 1850: 27). The Celtic race in Ireland, Knox demanded...

...must be forced from the soil; by fair means, if possible; still they must leave. England's safety requires it. I speak not of the justice of the cause; nations must ever act as Machiavelli advised: look to yourself. The Orange club of Ireland is a Saxon confederation for the clearing the land of all papists and jacobites; this means Celts. (Knox 1850: 379).

While the Orangemen could 'clear them out... by the sword' within 'six weeks', Knox preferred 'the quiet and gradual extinction of the Celtic race in Ireland' through legislation (Knox 1850: 27 & 379). Kelleher says that although Arnold's sympathy for the Celts 'made him unique of his kind and generation', many thought the Irish question 'could be solved by sound British sense, a little fair give-and-take' (Kelleher 1950: 199). However British commentators 'seem never to have considered seriously the third alternative to the kiss or the kick, that of letting the Irish have the limited independence and national recognition they' demanded (Kelleher 1950: 199). Carlyle believed Britain could in 'no conceivable circumstances' concede Ireland even autonomy, and a minister proposing it 'would deserve to be impeached' (Carlyle 1892: 43).

Irish Celticism

Scythian or Phoenecian Irish

Hutchinson identifies three waves of romantic nationalist interest in Celtic culture and antiquity in Ireland: in the late eighteenth century, the 1830s-1840s and the end of the nineteenth century. Each was led by the Protestant Anglo-Irish ascendancy, British settlers who for centuries were firmly in

*Be my brother, or I'll bash your skull in.

control of the country's politics and economy, but who used Celticism to create a narrative of national synthesis with the Catholic peasantry. Each romantic Celtic revival helped inspire armed insurrection against Britain. Cosmopolitan elitism and a romantic obsession with antiquity made scholarship an essential element of romantic Celticism. From the 1740s 'small groups of enthusiastic amateurs' in Ireland 'delves into the Gaelic past, collecting legal manuscripts, folklore and poetry', and concocted 'at times bizarre archaeological and philological speculations about the Irish race' (Hutchinson 1987: 55). Europe's 'wider and competitive romantic movement', including Ossian, fed a growing Insular Celticism, but Hutchinson says Irish Gaelicism had a specific and 'pointed political significance,' of 'turning away from contemporary *English* civilization and the bitter religious identities of the recent Irish past' (Chapman 1992: 207; Hutchinson 1987: 56). Irish cultural nationalists, right up into the twentieth century, made ancient and early medieval Gaelic culture a major font of European civilisation, its monks rechristianising the West after the fall of Rome (Hutchinson 1987: 58 & 123). As well as inverting the English claim to have civilised the Irish by making the English the barbarian destroyers of high Celtic culture, this narrative put the stress on Irish autochthony (Hutchinson 1987: 54 & 58). The later eighteenth century, when economic prosperity, a long internal peace and 'sentimental primitivism' attenuated 'the anti-Gaelic stance of the Anglo-Irish élite', was a heyday of Irish antiquarianism (Leerssen 1996: 70). An eighteenth-century 'patriot' movement won autonomy from London, and Revolutionary France aided the unsuccessful 1798 rebellion of the United Irishmen (Hutchinson 1987: 55). Hutchinson says Celticism long remained marginal however. The patriots identified culturally with their English origins and the classical Mediterranean rather than romantic Celtic antiquity, and though their aristocratic leaders favoured some Catholic rights, their aim was equality of citizenship and participation in the British Empire rather than cultural separatism (Hutchinson 1987: 60-62 & 67-68). Celticist 'worship of blood, soil and geography' was much more important for the middle class 1798 rebels, but Hutchinson says it 'played even here a secondary role' (Hutchinson 1987: 67-68).

The 'Patriotic element in public life', in collaboration with native scholars, had 'close ties' since the mid-seventeenth century with the 'Phoenician model', which proposed that Mediterranean Celts colonised Spain, Gaul, Britain and Ireland (Leerssen 1996: 72-73; Betham 2000 [1834]: viii, xv & 424). This opposed the Conservative 'Scytho-Celtic' model of antiquaries like Ledwich in Ireland and Pinkerton in Britain, which traced the Gaels, or Scoti, back to Japhet, via the similar sounding Scythians (Leerssen 1996: 72-73). They argued that barbarous Scytho-Celts colonised Ireland from Britain, and were civilised by the Vikings and English (Leerssen 1996: 73; Betham 2000 [1834]: 16-17). Eighteenth-century Phoenicianists like Charles O'Conner and Sylvester O'Halloran, both Catholics, and the English official Charles Vallancey found parallels 'between the language,

monuments and religious practices of Gaelic Ireland and those of the ‘sacred’ cultures of Egypt, Greece and India’, giving the native Irish ‘a prestigious, highly civilized origin’ (Hutchinson 1987: 55; Leerssen 1996: 73). The Anglo-Irish Sir William Betham, who succeeded Vallancey as the leading Phoenicianist, argued that Irish was ‘the genuine remains of the antient Phenician tongue’, while the Celts were ‘colonies of that enterprizing people, whose merchants were princes, and the honourable of the earth’ (Betham 2000 [1834]: 100). By finding similarities between Irish ‘(which he did not understand)’ and other languages, including Etruscan (which nobody understood), Betham argued that the Phoenician ‘language, religion, and institutions’ were ‘identical’ to those of the ancient Celts and placed both within a great Oriental civilization ‘stretching from Yemen to Siam’ (Betham 2000 [1834]: viii & xv; Leerssen 1996: 92). Phoenicianism drew on ancient Celtic annals, biblical accounts, classical references to the Phoenician tin trade with Britain and pre-philological linguistics (Leerssen 1996: 72). Betham admired the ‘high state’, ‘lustre and splendour’ of Phoenician civilisation and argued that Irish Gaels, as ‘a colony of the people’ who gave the Greeks their alphabet were, ‘no doubt,’ literate before them (Betham 2000 [1834]: 421-22). ‘Greek and Roman’ destruction and vilification of Carthage, falsifying and destroying the records of the Phoenicians who civilised them, was meanwhile offered as a parallel for Viking and English ‘violent disruptions’ of Gaelic civilisation (Leerssen 1996: 74; Betham 2000 [1834]: xviii). The Ledwich-Vallancey debate became ‘increasingly vituperative’ in 1775-1800, with Vallancey’s Phoenician model keeping ‘the upper hand’ in Ireland, while ‘most if not all English writers’ remained convinced by Pinkerton and Whitaker’s Scytho-Celtic approach (Leerssen 1996: 73).

Political turbulence and ‘the rise of the Indo-European model’ destabilised Irish antiquarianism (Leerssen 1996: 73). Conservatives saw the 1798 rebellion as ‘conclusive proof’ of ‘irredeemable’ native Irish ‘barbarism’, vindicating ‘the negative estimates of Ledwich and Pinkerton’ and placing ‘the entire Phoenician school under a cloud’ (Leerssen 1996: 73-74). Nevertheless, says Leerssen, ‘the Patriotic, orientaling model of Irish antiquity, though not often openly propounded, was tenacious enough’, and all Irish antiquaries ‘in the first half of the nineteenth century’ shared ‘an intense and openly expressed disgust’ for Ledwich (Leerssen 1996: 75). Phoenicianism ‘remained viable’ until the Indo-European status of Celtic was gradually secured in 1831-54, and this was even initially taken in Ireland and Britain as evidence for the Phoenician model, because it argued for an eastern Celtic origin (Leerssen 1996: 89-90).

The Aryan Celtic Irish

Gaelic antiquarianism suddenly went out of fashion after the 1798 rebellion, and the emerging consensus that the Celts were Indo-European handed the next Irish Celticist revival, in the 1830s

and 1840s, a much more attractive strategy than wild Phoenician claims (Leerssen 1996: 75). In 1831, linguists and ethnologists still disputed whether the Celts were Indo-European (Prichard 2000 [1831]: 20). ‘Many’ continental writers, including Frederick Schegel and Malte-Brun and ‘several well-known authors’ in England, including Pinkerton, Davis and in 1828, Vans Kennedy, declared Celtic completely unrelated to other European languages (Brandes 1857: vi; Prichard 2000 [1831]: 20-21). Morton remained undecided as late as 1839, Wilde implied in 1844 that the status of Celtic was still contested, and Schegel dismissed Celtic languages as ‘highly corrupted, very mixed jargons, composed of Celtic, Latin, Anglo-Saxon, English, etc. debris’ (Morton 1839: 18; Wilde 1849: 231; Pictet 1836: 268). However Franz Bopp, ‘the patriarch of comparative philology’, moved in stages in 1816, 1823 and 1838 from excluding to including Celtic in Indo-European (Tristram 1996: 37 & 49). Rask (1818/1836), Prichard (1831), the Swiss philologist Pictet (1836), Zeuss (1837) and Bopp (1838) authoritatively established the place of Celtic within the Indo-European language family by systematically comparing Irish and Welsh with Sanskrit, Latin or Greek, and Zeuss in 1854 ‘gave the definitive summing up of the case’* (Davis 2002: xii-xiii; Leerssen 1996: 90; Pictet 1836: 271-72; Prichard 2000 [1831]: 25 & 65; Ballantyne 2002: 40; Tristram 1996: 49). Prichard and Pictet found that analogies between the vocabularies and inflection structure of Celtic and Sanskrit were ‘far too numerous and too regular’ to be coincidental, often resembling one another more than those of other European languages, including Germanic, resembled Sanskrit or one another (Prichard 2000 [1831]: 91-93 & 184-85; Pictet 1836: 271, 277 & 432-33). ‘A simple glance’ demonstrated to Pictet that Celtic pronouns were Indo-European (Pictet 1836: 432). Prichard added that the similar principles that Celtic, Sanskrit and ‘several European languages’ were ‘founded on’, were so ‘deeply interwoven with’ their ‘intimate structure’ that they had to be related (Prichard 2000 [1831]: 184-85). Tristram says nineteenth-century Celticism ‘was essentially based on’ a unreflexive positivist philology, in which the Celtic ‘linguistic construct *created* cultural and political realities’ like the Insular identification of themselves most strongly as Celts, despite ‘readily observable affinities’ with ‘immediate neighbouring cultures’ (Tristram 1996: 56-58). Prichard thus deduced that the Celts were ‘of eastern origin, a kindred tribe with the nations’ of India and Europe (Prichard 2000 [1831]: 187).

Irish scholars and cultural nationalists were quick to agree, helping French and German academics to link their own cultures with continental Iron Age archaeology, in return for international prestige for the Irish Celts and Irish research (Ballantyne 2002: 38-39; Morash 1998: 212). Holzmann said Leibnitz and Keysler in the eighteenth century saw Irish as useful to explain ancient Gallic, but that

*Resistance continued. In 1876, Hölder still cited Rapp’s 1855 opinion that Gaelic had merely borrowed basic words from ‘Indo-Germanic’ languages (Hölder 1876: 19).

Insular languages were largely unknown on the continent until Bouquet in Paris equated Welsh and ancient Gallic for the first time in 1738 (Holzmann 1855: 4-5). Only in the mid-nineteenth century did Mone, Leo and Zeuss exclusively link Gallic to modern Insular languages (Holzmann 1855: 5-6). Before the verdicts of Bopp and Zeuss, says Tristram, few international scholars showed more than ‘a dilettant concern’ with Celtic languages, but philology gave them ‘unprecedented’ new prestige ‘in the mind of the general public’, ‘above some of the more widely used languages in Europe’ (Tristram 1996: 59). Irish scholars gained from giving the ‘international community’ of French, British and German Celtic scholars ‘access to information’ on ‘the Celtic dialects’, creating close links with them and using them to ‘assert Ireland’s pre-eminence over Britain in the formation of Western civilisation’ (Hutchinson 1987: 117-19; Prichard 2000 [1831]: 20). Philological discoveries bore unforeseen ‘political fruit’, as pro-Celtic writers like Arnold exploited the ‘growing ‘Aryanization’ of cultural attitudes’ to argue that Celts were ‘linguistically and culturally’ ‘our brothers in the great Indo-European family’ (Leerssen 1996: 95; Davis 2002: xi). Partly due to this recognition, he claimed, English ‘antipathy to’ and ‘radical estrangement from’ the Irish, ‘has visibly abated among the better part of us; the wish to make amends, to do them justice, to fairly unite, if possible, in one people with them, has visibly increased’ (Arnold 1962 [1867]: 302). In 1895, Bryant claimed Ireland’s isolation and perhaps ‘the reputed fierceness of her warriors’, saved its primitive common ‘Aryan’ institutions from Roman interference, allowing an exceptionally uncorrupted ‘free development of the North-western Aryan’ (Bryant 1889: xvii-xviii).

Hyde boasted that ‘the greatest philologists of Germany, France and Italy... emulously’ studied Irish (Hyde 1991 [1892]: 532). Standish O’Grady introduced the leading German Celtologist Ernst Windisch to the field, and Ireland’s Celtic Revival inspired Zimmer’s ‘pan-Celtic language politics’ (Tristram 1990: 20-23). Prichard and Pictet believed living Celtic languages illuminated the evolution of Indo-European and Pruner-Bey used them to explain ‘ancient Celtic names’ on the continent (Prichard 2000 [1831]: 93, 120-24 & 133; Pictet 1836: 436 & 441; Pruner-Bey 1864b: 660). From mid-century, ‘a clearly defined’ ‘inner core of professional’, mutually supporting Celtic philologists were regularly cited by physical anthropologists, publishing from 1870 in Jubainville’s Parisian *Revue celtique*, while the Sorbonne established a chair of Celtic Studies in 1876 (Hutchinson 1987: 117-19; Curtis 1968: 112; Collis 2003: 64; Dietler 1994: 590-91; Davis 2002: vii-viii & xvii). The Berlin philology chair of Hermann Ebel in 1872-75 established Celtology in German philology, Heinrich Zimmer founded a chair in Celtic philology there in 1901, and he and Kuno Mayer helped establish the *Zeitschrift für Keltische Philologie* in 1896 (Tristram 1990: 20-23, 30-31 & 38; Curtis 1968: 112). A chair in Irish archaeology and history was created for Eugene O’Curry in Dublin in 1854, Irish was taught at Galway’s university college in 1849-62, and then

reorganised on German lines in 1908 (Tristram 1990: 16-17 & 25). Other Celtic Studies chairs were established in Britain and North America by 1916 (Tristram 1990: 37).

Tristram says Irish became ‘the most important Celtic language’ for philologists, due to the incomparable stock of very ancient manuscripts and modern works collected, catalogued and written by scholars like Eugene O’Curry and John O’Donovan (Tristram 1990: 14-17). These documents gave Irish ‘historical importance’ and ‘a venerable position in the ranking’ of Indo-European tongues (Tristram 1996: 59). Pictet studied Irish and Welsh in particular, because of ‘their superior culture’ to other Gaelic or Kymric languages (Pictet 1836: 272). Medieval Welsh and Gaelic annals which purported to record ancient myths and histories were also a key source for almost all Irish ethnologists and important foreign ones, though suffering from the same vagueness and internal inconsistencies as classical texts, plus doubts about authenticity (Wilde 1849: 218-19; Pruner-Bey 1864c: 229-30). Though even the most pro-Celtic researchers advised critical caution, admitting the annals were ‘mainly’ created by medieval bards with their own political agenda, attitudes to them were often politically influenced (O’Grady 1878: 19; Latham 1852: 85, 132-33 & 140; Pictet 1836: 268; Bryant 1889: 2; Sullivan 1971 [1873]: lxxvi). Borlase said Irish ‘native’ scholars were ‘full of the faith’ in the annals, ‘that patriotism inspires’, while the ‘opposite’ school ‘is foreign, sceptical and destructive’ (Borlase 1897: 1054). Dickson, a unionist, called the annals a patriotic compilation of ‘the Irish oral traditions’, no better than in ‘any other semi-barbarous nation’, but nevertheless containing a nugget of truth (Dickson 1896: 159). They...

...boldly undertook to carry back Irish history to the arrival of “Miledh,” said to have sailed from Spain, *via* Scythia and Egypt (!)... and to give names and dates to all the kings of Ireland (!) ... filling in the pictures of most of them with details of unnatural villainy too gross for the latitude of Dahomy, and yet all the while implying that their country had enjoyed a happy and heroic past (Dickson 1898: 15).

Before these ‘warlike Milesians’, they introduced invasions of Firbolg who crossed England and Wales from Belgium and ‘Tuatha Dé Danann from the north through Caledonia’ (Bryant 1889: 21; Leerssen 1996: 72; Wilde 1874: 246). Maintaining the African theme, the British antiquary Pinkerton compared Celtic mythology to...

...that of the Hottentots, or others the rudest savages, as the Celtae anciently were, and are little better at present, being incapable of any progress in society (cited in Prichard 2000 [1831]: 21).

In contrast, Irish nationalists like Wilde, O'Donovan, Standish O'Grady and Sophie Bryant called the Irish annals 'the most light-giving of all' British and Irish traditional histories, or criticised historians who dismissed them, though unable to read them (Wilde 1849: viii; O'Grady 1878: 19; Bryant 1889: 16). Hyde boasted that Jubainville believed 'early Irish literature... best throws light upon the manners and customs of his own ancestors the Gauls' (Hyde 1991 [1892]: 529). Pictet and Broca described 'the Irish and Welsh traditions' as 'an important and entirely unexplored' source of 'precious clues' on the history of the Celts, neglected out of distaste for Celtomania (Pictet 1836: 267-68; Broca 1873: 591). Jean-André-Napoléon Périer privileged Roman accounts of the legends of the druids, 'the institutors of the [French] nation' (Périer 1864: 622).

International philology demanded that Irish ethnology discard the imaginative antiquarian tradition for scrupulously apolitical, professional scholarship, though traditionalists and amateurs still drew 'on earlier approaches' or just partially absorbed the new philological methods in the second half of the nineteenth century (Davis 2002: vii-viii & xvii). James MacLoughlin hailed eminent British, French and German scholars for doing so much 'to rescue Celtic studies' 'from neglect, and... the wild theories and reckless assertions of over-zealous enthusiasts' (MacLoughlin 1896: 26). Initial reluctance to accept Celtic as Indo-European reflected snobbery against the insular Celts, but also a sceptical reaction to their shrill nationalist claims. 'Twenty-three words, most of them twisted into the most incongruous forms' proved to one author that Celtic was 'closely allied' to an ancient Central American language, 'Hebrew, Syriac, Arabic and Talmudico-Rabbinic' (Ross 1878: 123). One of Betham's principal Phoenicianist arguments was that 'a great majority' of Mediterranean coastal place names and all Celtic personal and place names in ancient Gaul were 'either purely' or originally Gaelic (Betham 2000 [1834]: 99 & 141). While Italy was Irish for 'land of corn', Hibernia and Eire came from a Carthaginian word for the far west and most egregiously, 'Hercules' (whose deeds were allegories of Phoenician colonial voyages) meant 'defender of the west' in Gaelic (Betham 2000 [1834]: 80-82, 96 & 101). Pictet accepted that 'the absence of method' and 'systematic ideas, produced by a badly applied sentiment of national vanity' lay behind Celtomania, but argued that its extremes reflected equally extreme English suppression of insular Celtic languages (Pictet 1836: 265). However he and Ross argued that the 'more rational work' of Prichard and others had replaced speculations which traced Celtic to America and Africa and made it 'the parent tongue of Greek, Latin, Sanskrit, &c.', or even the language of Japhet (Pictet 1836: 266; Ross 1878: 123).

The determination of 1830s Irish and especially Catholic Celtic revivalists to earn scientific reputations and avoid accusations of amateurish nationalist romanticism, while resurrecting 'Gaelic

literature, music, architecture and fine arts' from obscurity, illustrated their marginal position in international scholarship* (Leerssen 1996: 144-45; Hutchinson 1987: 85). Revivalists like George Petrie and Wiseman adopted Indo-Europeanism and lashed Betham's old-fashioned 'fantastical speculations' and ignorance of comparative philology (Leerssen 1996: 90-94). While continental philologists like Pictet, Bopp and Zeuss had no use for 'the speculative antiquarian tradition of Anglo-Irish savants', the Irish grammars, dictionaries and manuscript collections produced by 'the tenuous and struggling tradition of native scholarship proved to be of greatest value' (Leerssen 1996: 91). Pictet partly relied on the Catholic O'Connor's expertise on ancient Celtic manuscripts (Pictet 1836: 269). Later nineteenth-century scholarly societies were consciously apolitical, sometimes sponsored by aristocrats, but led by 'scrupulous' middle-class 'secular intellectuals' from both communities (Hutchinson 1987: 117-19; Curtis 1968: 112). Catholic scholars like Eoin MacNeill combined scientific rigour with nationalism and despite including an ethnological foreword in one monograph, hated racial definitions of the Irish nation (Hutchinson 1987: 120-21). He criticised 'Celtic xenophobes' who simply inverted English prejudices, proclaiming the ancient and racially pure descent of Irish Celts from Milesian warriors from Spain (Hutchinson 1987: 124). MacNeill's 'sophisticated but predatory' Irish Celts were racially mixed, relatively recently immigrants, who long remained in conflict with the pre-Celtic population and 'were riven by internal strife' until Christianised (Hutchinson 1987: 124-25). The nationalist Sophie Bryant similarly accepted that the annals' claim of the Irish being 'all... of the same race' was a 'bardic fiction' to promote national unity (Bryant 1889: 23). Curtis says more objective methods and better documentation in 'studies of early Irish history and ethnology' also helped Irish nationalists, by contributing to the 1890s decline of Anglo-Saxonism (Curtis 1968: 27). Leerssen says that 'dilettanti and amateurs' like James perpetuated Joyce Betham's 'stubborn loyalty to exotic national roots' however, 'and the gradual marginalization of Bethamite speculation and Phoenicianism... took decades of bitter controversy' (Leerssen 1996: 94; Quinn 2005: 21). The eclectic discipline of ethnology was particularly forgiving. Morton and Wilde gave considerable credence and space to Betham's theories, Morton admiring his 'ingenious' linguistic comparisons (Morton 1839: 16; Wilde 1849: 222-23).

Anglo-Irish Celticism

Eighteenth-century Catholic antiquaries like O'Halloran and O'Connor specifically aimed to reconcile Anglo-Irish with Catholics, even claiming they were 'one common stock' (Hutchinson 1987: 56). In 1830-45, as the sometimes sectarian savagery of Catholic involvement in 1798 faded

*Political upheavals like the 1798 rebellion also discouraged 'wild theories about the prestigious or barbaric origin of the Gaels', frightening ethnologists into concentrating on 'matter-of-fact' descriptive studies (Leerssen 1996: 75).

in memory, sections of the Protestant elite again adopted a Celticist 'programme of uniting native and settler into a common Irish national awareness' (Leerssen 1996: 100-1). Among intellectuals like the Protestant Samuel Ferguson and Irish-speaking Catholics like O'Donovan and O'Curry, 'a non-contentious, non-partisan interest' in Irish culture and antiquities began to replace sectarianism (Leerssen 1996: 101; Hutchinson 1987: 83). Hutchinson says this 1830s revival turned the contrast between 'contemporary secular industrial society' and Catholic Ireland's peasant backwardness into an asset, claiming 'continuity with the religious and artistic glories of early Christian Europe' which both Catholics and Protestants could accept (Hutchinson 1987: 76 & 87). But although Catholic nationalism ultimately accepted romantic Celticism, it now began rejecting the Anglo-Irish fusion model, just as Broca's republican French ethnology rejected the narratives of conservative elitists like Gobineau and Lapouge. Daniel O'Connell's non-violent 1830s mass-movement made Catholicism 'the index of nationality' for the first time, creating an 'atmosphere of mutual bitterness and heightened national feeling' (Hutchinson 1987: 79-81 & 103). Thomas Davis's radical nationalist Young Ireland movement allied with O'Connell and largely appealed in practice to the slowly emerging Catholic middle class, but disliked his alienation of Protestants (Hutchinson 1987: 100-5). Unionists like Ferguson also resented the Catholic nativist claim to a 'monopoly on Irish nationalism, leaving Protestant unionists implicitly to the outer margins of non-Irishness', and sought a new identity as 'Irish and unionist', rather than just 'an English colony' (Leerssen 1996: 101). Davis argued in verse that 'every race and creed', from 'the brown Phoenician, The man of trade and toil... the proud Milesian,' the Firbolg, Kymri, and Dane to 'the iron lords of Normandy, With the Saxons in their train' could 'be by love combined' in a single Irish nationality (Davis 1991: 54; Curtis 1968: 112). Though these groups would 'not forget / The fountains whence they rose', they should heed neither 'race, nor creed, nor clan' (Davis 1991: 54). A unionist journal exhorted Irish Celts to 'finally shake of the yoke of the other race altogether', or even better, 'unite with them in equality and brotherhood' (DUM 1855: 734). The 'fusion of races', 'assimilation of sentiments, this interchange of thought, this kindly culture, the higher elevating the lower', Sir William Wilde argued, 'must always tend to great and good ends' (Wilde 1874: 258). Ireland desperately needed 'fusion... of races... opinions and sentiments', especially as Saxons and Celts were an ideal mix (Wilde 1874: 259). A 'blending of races' was meanwhile responsible, according to O'Grady, for the 'purest type of Irish beauty' (O'Grady 1878: 16).

These proposed Irish race fusion syntheses resembled those of contemporary French and especially British national ethnology. Many conservatives still attributed the 'Irish problem' to inevitable conflict between incompatible races. Curtis says Beddoe believed 'racial differences explained' England's failure 'to govern Ireland' (Curtis 1968: 72). Dickson and the Anglo-Irish Celticist

Ferguson meanwhile argued that despite ‘thirty-five centuries of intermixture’, the incompatibility between Ireland’s ‘two most dissimilar races’ or the highly traditional Gaelic and highly advanced English cultures, caused ‘much of the dissension and misfortune that have disfigured our national life’ (Dickson 1896: 157 & 159; Hutchinson 1987: 91-92). The Anglo-Saxonist Avery blamed ‘the Celtic Irish’ for ‘resolutely’ refusing the advantages of fraternising ‘with the intruding race’ as other conquered peoples did (Avery 1869: ccxxvi). However Whig ethnologists like Huxley and John Lubbock saw that this diagnosis only led to endless repression, ethnic cleansing, separatism and ‘increasing enmity’, and promoted successful British race synthesis as an alternative to Home Rule (Irish autonomy) (Foster 1997: 434; Lubbock 1887: 418; Pike 1869: ccxxxiii). Keith said Huxley’s 1870 address on ‘English’ ethnology was ‘forced on him by the unhappy state of affairs in Ireland... then going from bad to worse’ (Keith 1928: 305). The leading naturalist Lubbock, writing to the Times, objected that the four ‘nationalities’ of the United Kingdom were not ‘real’ races (Lubbock 1887: 418). Huxley was ‘convinced that there was an admixture of Celtic and Germanic blood throughout the British Isles’, regarding the Irish as...

...no more Celtic than the Cornish, and if certain virtues were claimed for the latter (intelligence, perseverance, thrift, industry, sobriety, lawfulness), they must logically be claimed for the former. (Foster 1997: 434).

Despite assuming that ‘no one would claim most of these virtues for the Irish’, Huxley’s ‘conviction of admixture... translated itself politically into liberal unionism’ (Foster 1997: 434). Lubbock and MacLean believed that recognising ‘the undeniable ethnological fact’ that England, Scotland, and Ireland were ‘all composed of the same elements,’ in similar proportions ‘would do much to mitigate our unfortunate dissensions and add to the strength and welfare of our common country’ (Lubbock 1887: 420; see Fig 4). ‘Very many of those who imagine themselves to be Celts, and the natural foes of the Sassenach^{*}’ he argued, ‘are descendants of English colonists’ in Ireland, while even some Scottish Highland clans were Teutonic (Lubbock 1887: 419). The races were ‘so much intermingled’ that if Britain really was divided ‘according to blood,’ it would create ‘an endless number of bitter disputes’ (Lubbock 1887: 420). Arnold agreed that despite some strong opposition to the idea, the English must partly be of Celtic race, as there was no record of its ‘deliberate wholesale extermination’ (Arnold 1962 [1867]: 336-38). He attributed English ineptitude in the plastic arts, ‘emotional and sentimental’ approach to religion, and the ‘style’, ‘melancholy’ and ‘natural magic’ of English poetry ‘to ‘the Celtic part in us’’, adding that no European nation’s poetry caught ‘the passionate penetrating accent of the Celtic genius’ like

*A Gaelic word for ‘Saxon’ or ‘English’.

Byron's did (Arnold 1962 [1867]: 355 & 371; Morash 1998: 212). He argued that the British should allow their German, Latin and Celtic parts 'to continue and perfect' one another, instead of clashing (Arnold 1962 [1867]: 383). He added that:

The fusion of all the inhabitants of these islands into one homogeneous, English-speaking whole, the breaking down of barriers between us, the swallowing up of separate provincial nationalities, is a consummation to which the natural course of things irresistibly tends; it is a necessity of what is called modern civilisation... The sooner the Welsh language disappears as an instrument of the practical, political, social life of Wales, the better; the better for England, the better for Wales itself. (Arnold 1962 [1867]: 296-97).

Arnold's concern was specifically with academic politics. He called for chairs of Celtic studies in 'the great and rich' English universities', because both English and Celts were 'deeply interested in' England 'knowing' the Celts (Arnold 1962 [1867]: 384). MacLean argued that Britain's Anglo-Saxons and Kimmerian blond Celts were already racially similar before merging to form the common English language and racially 'principally Kimmerian' English nation (MacLean 1872: liv-lv). The Saxons, unmentioned by earlier writers like Tacitus, were 'doubtless' a mixture of local Germans with Kimmerian-Tartar immigrants from Central Asia, while the Celtic Kimmerians already had a 'strong intermixture of Teutonic blood'(MacLean 1872: liv). The American craniologist Morton saw Anglo-Saxons as largely Teutonic but 'partially blended' with Celtic blood (Morton 1839: 17). Dickson in Ireland similarly believed 'the bone and sinew of England are largely Celtic still', and criticised the popular error that England's population was 'mainly Anglo-Saxon', (Dickson 1898: 13). He argued that Caesar had found most of England in the hands of 'tall, fair-haired "Celti"' and that if 'the feeble' dark Iberians hung on in Wales, 'the stalwart Celti' must also have survived (Dickson 1898: 13). Even the Catholic Sullivan believed the pre-Roman Britons of the south-east were 'Germanic' with extensive Celtic mixture (Sullivan 1971 [1873]: lxix-lxx).

Protestants saw antiquity as their link with Irish Catholics. Ferguson and O'Grady aimed to foster a common sense of Celtic cultural nationhood with Catholics, by taking pride in a Gaelic 'common ancestry' and Gaelic antiquities (O'Connor 1991: 26; Hutchinson 1987: 91-92). Yeats wanted a romantic pagan Irish nation to subsume both communities (Hutchinson 1987: 135). Hyde declared it 'our business,' as 'Unionists or Nationalists', to make 'the half unconscious feeling that the race... at one time held possession of more than half Europe' into 'an active and potent feeling,' to 'increase our sense of self-respect and of honour' (Hyde 1991 [1892]: 528-29). In the 1830s, systematic collaboration began with Gaelic-Catholic scholars, but many researchers were still Anglo-Irish, and 1830s revivalists, including Catholics like O'Curry and O'Donovan, researched

and translated the Irish annals within Protestant dominated research institutions like the Royal Irish Academy and the Archaeological, Celtic and Ossianic societies (DUM 1855: 728-29; Wilde 1849: 218-19; O'Connor 1991: 24). Curtis says the late nineteenth-century Gaelic revival owed much to 'countless' flourishing Protestant-dominated literary and scholarly societies after 1850 and especially in the 1890s (Curtis 1968: 111-12). Protestant ethnologists made Irish antiquity prove fruitful race fusion. Wilde stressed how in the annals, succeeding races of conquerors merged into a single nation, making 'the present Irish race... very mixed' (Wilde 1849: 237). The Dananns and Firbolg 'coalesced' to create 'the true old Irish peasant and small-farming class', and both their skull-types appeared 'among the present truly Irish inhabitants' (Wilde 1849: 239; 1874: 246). Wilde listed the benefits of mixture, noting that the Firbolg introduced agriculture; the Dananns, metallurgy; the Milesians, 'beauty and governing power; the Danes, commerce and navigation; the Anglo-Normans, chivalry and organised government' (Wilde 1874: 259). The ancient Britons also 'accepted their fate' and 'fused with' their Norman conquerors, themselves a 'mixture of Norman, Gaulish, Scandinavian, and general Celtic blood' (Wilde 1874: 258). The similarity of three Teutonic crania to old Irish skulls whose burial circumstances precluded a 'hostile introduction', suggested to John Grattan that 'some intermixture of Teutonic or Scandinavian blood may have obtained a friendly footing' in pre-Christian Northern Ireland (Grattan 1858: 244). This specifically legitimised the 'Anglo-Saxon' Protestant colony in Ulster to which he belonged. The Irish language, as the chief modern emblem of Celticism and the key to a superior Indo-European status, became the main bidding agent of the ancient Irish nationality. Wilde, Grattan and Bryant cited 'clearly decisive' philological evidence, including that only 'one language [was] known in manuscripts or spoken amongst us' for Firbolg, Dananns and Milesians, and perhaps even all the other Insular Celts being Gaelic-speaking Celts (Wilde 1874: 246; Grattan 1858: 246; Bryant 1889: 21). Bryant argued that a common language was crucial in allowing 'all the peoples of Erin' to settle 'down together side by side under one set of social ideas and institutions, with an obvious tendency to obliterate race-distinctions,' and permit social mobility (Bryant 1889: 25).

Some Protestant cultural nationalists were political radicals, but most of this provincial elite merely wanted greater recognition from the metropolitan centre. Like Wilde, they declared loyalty to the Queen, while criticising English policy in Ireland (Wilde 1849: vi-viii & xii). The staunchly Unionist *Dublin University Magazine* directly attributed physical 'degradation' in the West of Ireland to 'the disastrous effects of hunger and ignorance', caused by seventeenth-century English settlement policy (Vogt 1865: 569-70). Western peasants had the features 'of an abortion', it said, and 'the imprint of barbarity', with low stature, mouths 'hanging open and projected forward, the teeth are protruding, the gums salient, the jaws advanced, the nose depressed', but in areas without

settlements, 'the same race' was an epitome 'of beauty and physical and moral vigour' (Vogt 1865: 570). 'O'Grady was a fervent believer in the Union' and campaigned actively against land reform, but felt that the 'manifest superiority of eloquence and pen' of the Irish aristocracy who 'were the natural leaders of the United Kingdom' was wasted as a colonial ruling class (O'Connor 1991: 26 & 130). O'Connor says he planned to renew the Empire by remaking it in the likeness of the landlords, who were to embrace the native tradition and identify themselves as Irish (O'Connor 1991: 130-31). O'Grady wanted to awaken 'his fellow landlords to their exploitation by England' and 'to unite them with the workers against' capitalism and English taxation (O'Connor 1991: 130). Even the radically disloyal Thomas Davis, who incited the 'Irish born man' to free 'Ireland' from the tyrannous 'Anglo-Norman yoke', warned not just against 'traitor arts, or bribes, or blows From England, but also from 'France, or Rome' (Davis 1991: 53-54). The shock that the Anglo-Irish Yeats might have been responsible for inspiring nationalist violence meanwhile 'dogged him to the end of his life, cropping up more and more insistently in his verse' (Kelleher 1950: 202-203).

As in other national synthesis models (see pp.232-36), Protestant cultural nationalists promoted cooperation and reconciliation with the still often Gaelic-speaking peasantry, but rarely considered relinquishing political and economic dominance. They rebelled against their provincial background, but 'unable to subsume themselves in a Catholic democratic identity', instead allotted themselves 'a national role' as aristocratic leaders and shapers of the nation (Hutchinson 1987: 135). Hutchinson argues that the 1830s revival was really aimed at the 'Protestant landlords and educated middle strata' as 'the natural leaders of Irish society', who though anti-nationalist, 'were now somewhat disillusioned by... British policy and anxious to restore' their popular legitimacy (Hutchinson 1987: 88). The 'country people' idealised by revivalists were not the radicalised peasant mass that campaigned for Catholic emancipation, but isolated communities on 'Ireland's far western shores' and especially the Aran Islanders (Hutchinson 1987: 88). Ferguson foresaw an independent or autonomous Ireland, governed and largely owned by Anglo-Irish Protestants, with the Catholic peasantry in their old subordinate position. He helped establish the *Dublin University Magazine* in 1833, 'to defend Tory and Protestant interests' following Catholic emancipation and expansion of suffrage, and to 'recapture for the Protestant landlords the leadership of the Irish nation' (Hutchinson 1987: 79 & 90). His purely cultural Celticist nationalism was conveniently compatible with an aristocratic commitment to 'racial-essentialist' social stratification (Leerssen 1996: 185). Ferguson believed 'ethnic, inborn national character' created 'essential' physical and mental differences between the 'Milesian... native Irishman' and 'sober Saxon', but that the Protestants could help their 'less intellectual and devoted [to Celticism] countrymen' to advance (Hutchinson

1987: 91-92; Leerssen 1996: 185). Though the traditional *Gemeinschaft* idealised in romantic Celticism was seen as specifically Gaelic-Irish, and the vilified modern *Gesellschaft* as Anglo-Irish, 1890s Protestant intellectuals like Yeats also incongruously offered to guide Catholics in the national culture (Leerssen 1996: 164-65; Hutchinson 1987: 91-92). Like Ferguson, he saw Irish culture as passive material 'to be moulded by an artistic elite who would create the authentic Irish nation' (Hutchinson 1987: 135). Yeats believed that Romantic poets like himself, by 'fashioning [Ireland's] reservoir of myths into a coherent vision, would transform the revolt of the elite into a national insurrection of the spirit' and 'launch a new renaissance of the peoples' (Hutchinson 1987: 133).

Although genuinely devoted to Irish culture, the revivalists' chief design was for a fusion of cultures, in which the memory of the ancient glories of the native civilization would colour the dominant English culture of Irish Protestants, providing them with a sense of honour and dignity as leaders of an Irish society distinct in values and interests from their partners in the richer and more powerful island. (Hutchinson 1987: 90).

In ethno-racial terms, Protestants were British immigrants with little claim to Gaelic culture. Thomas Davis and the Young Irelanders therefore defined nationality by the 'commitment to [the] country's welfare' produced by 'culture and environment' rather than 'race', 'birth or religion' and the Irish as a race mixture (Hutchinson 1987: 98 & 105; Davis 1991: 54). *Dublin University Magazine* used Celticism itself as an index of Celtitude. The Welsh were 'unquestionably the most Celtic people of Europe,' as they retained their language, literature and 'Bardic institutions... with a tenacity' that shamed so-called Celts, while the Scots had also kept their 'ancient Celtic costume' (DUM 1855: 728). The Irish Gael meanwhile, though 'the eldest' Celtic nation, 'are not so Celtic in spirit', because they were 'losing fast' their language, their national costume was 'now as unknown to them as that of the Ninevites' and they regarded their literature 'with cold and apathetic indifference' (DUM 1855: 728). Irish Protestants meanwhile held 'a proud pre-eminence' in 'bravely endeavouring to preserve our ancient language and literature' (DUM 1855: 728-29; Leerssen 1996: 100-1). Protestants also reinforced their Irishness through the non-ethnic, geographical logic which associated landscapes or primordial monuments like the pyramids and Stonehenge with modern nations. Leerssen says Ferguson's Irish nationalism was primarily invested in the geographical 'sense of place which unites the loyalties of Milesian and Anglo-Irish' and was 'one of the few neutral points of non-contentious loyalty left' (Leerssen 1996: 185). Petrie's career meanwhile began in landscape painting and he invested his Ordnance Survey 'topographical labour of love', which saturated the territory with carefully studied Gaelic ethnographic detail, with 'hope and enthusiasm' (Leerssen 1996: 185).

Some mid-nineteenth-century Protestants went beyond fusion, trying to ‘steal’ the Celts from the Catholics*. Adopting continental ethnic stereotypes, Ferguson argued in 1852 that the Milesians were actually Germanic Goths, whose greater bellicosity allowed them to conquer the more civilised ancient Irish Celts (Leerssen 1996: 186). This made the Bronze Age, megalith-building Celts the noble ancestors of Ireland, while severing their exclusive racial link with the modern ‘Milesian’ peasantry. British settlers and ‘boorish Milesians’ were both Germanic latecomers, ‘neither having a superior’ ‘right of presence’ (Leerssen 1996: 186). An unsigned 1855 *Dublin University Magazine* article on ‘Ethnology, Religion, and Politics’ went even further, arguing that the British origin of Irish Protestants did not make them Saxons, and claiming Protestants had ‘a very legitimate claim to the title of “Celts” in Ireland’ (DUM 1855: 728-29).

The vast majority of the northern Protestants are of Scottish or Welsh extraction, and consequently Celtic. Indeed, there is a strong probability that many of the Scots... only returned to the localities where their ancestors... dwelt ages before. (DUM 1855: 728).

Southern Protestants meanwhile, through intermarrying with natives ‘at a time when *they* were more Celtic in spirit’ or coming from ‘parts of Britain where... the perennial and ineradicable Celtic race still lingered’, exhibited Celtic characteristics ‘more fully’ than Irish Catholics (DUM 1855: 728). The magazine argued that throughout Europe, the ‘obscure sentiment,’ which had ‘long prevailed,’ that ‘the great Celtic family’ was ‘essentially connected’ to Catholicism, and Protestantism to the ‘Gothic race’ did ‘not for one moment stand the test of ethnological induction’ (DUM 1855: 721 & 726-28). Protestantism prevailed ‘very extensively among the Celtic and indigenous races’, it said, including in Celtic Britain and racially Celtic parts of Germany, and was attributable in Scandinavia to the indigenous Finns (DUM 1855: 727 & 729-30). Contemporary Welsh ethnologists also identified ‘a relationship between the philosophical principles’ of the Welsh language, ‘the early Celtic Church, and the Protestant Reformation as a rebellion against a foreign (Roman Catholic) usurpation’ (Davis 2002: xvi). The *Magazine* compared the Papal-sanctioned Teutonic Norman invasion of Celtic Ireland to the Albigensian crusade against the Iberian cousins of the Celts, adding that continental Gothic monarchs suppressed Protestantism in Celtic nations like France (DUM 1855: 726-27 & 730-31). It argued that England’s purest Gothic blood ‘was most obedient to’ Rome while Protestantism, promoted by Welsh and Scottish dynasties, followed the ‘large infusion of Celtic blood’, reported by the ethnologist Latham (DUM 1855: 730-31). Turning its own conclusion that the 1848 revolutions were a Celtic uprising against

*The most effective grab for the Celts was the later Kimmerian narrative (see pp.342-48).

Goths into a criteria for ethnic diagnosis, the magazine noted that while supposedly ‘Saxon England has exhibited so much sympathy with the oppressed nations of Europe, Celtic Ireland’ ignored its supposed racial compatriots (DUM 1855: 733).

The third revival

Despite fears in the 1880s that economic gains by the peasantry would blunt Irish nationalist radicalism, Kelleher argues that romantic Irish nationalism was always ‘a middle-class notion,’ and that the spread of education and prosperity ‘greatly increased’ receptiveness to it (Kelleher 1950: 202). Catholics seized the political initiative, including for the 1867, 1916 and 1919-21 uprisings, and from the 1880s discovered in Arnoldian romantic Celticism, ‘a marvellous way’ to persuade ‘a battered and demoralized people that they had pedigree and potential enough to confront the British Empire’ (Quinn 2005: 128). While Catholic scholars had long worked alongside Anglo-Irish colleagues in apolitically exploring the Gaelic language, folklore and legendary past, Catholic rebel movements now adopted Gaelic names like the Fenians and Sinn Fein (Curtis 1968: 112). Kelleher says the 1916 uprising was led by ‘schoolteachers, minor poets, Gaelic enthusiasts, their head full of Yeats’s poetry’ and ancient Gaelic heroes, offering role models of ‘war, rebellion, and heroic death’ (Kelleher 1950: 202; Curtis 1968: 108-9). The 1890s Celtic revival derived ‘much more’ of ‘its content and inspiration’ than previous revivals from academic Celtic studies and a ‘growing body of folklore’ collected and published in Dublin and London, synthesising these with Celtic ‘mythology’, ‘fantasy’ and the Young Ireland political tradition (Curtis 1968: 108, 111-12 & 115).

The Anglo-Irish still dominated cultural nationalism, but the Catholicisation of Gaelic culture by figures like the historian Eoin MacNeill, a leading organiser of the Gaelic League and its main link with the Catholic church, ‘implicitly subverted’ their contribution, preparing the way for the exclusively Catholic Gaelic ideology of the twentieth-century Irish state (Hutchinson 1987: 120-21 & 127). Catholics for example borrowed the Celticist fetishism of the Aran Islands, which MacNeill researched and Hutchinson says ‘became (by their remoteness from English influence) the sacred heartlands of the Gaelic revival’ (Hutchinson 1987: 122; see p.123). Though denying political intent, Douglas Hyde and his Gaelic League colleagues overtly linked the Irish language with nationalism and supplied separatist cultural materials which radical nationalist politicians and academics like MacNeill ‘fully exploited’ (Curtis 1968: 114-15; Leerssen 1996: 158-59). By 1890, Gaelic or Celtic ‘living Irish culture’, which was previously open to nationalists and unionists, was becoming a nationalist ‘badge’ (Curtis 1968: 114-15; Leerssen 1996: 158-59). After works like Standish O’Grady’s 1878 *History of Ireland*, and some 1880s Celticist cultural associations, the third Celtic revival crystallised in the 1890s as ‘more and more young Irishmen succumbed to the

Celticist attractions' of nationalist newspapers, the Gaelic League and a kaleidoscope of other social, political, paramilitary, scholarly, literary and drama organisations (Hutchinson 1987: 115; Curtis 1968: 115; Leerssen 1996: 159 & 164). Though Irish Celticism lacked the eminent historians of Anglo-Saxonism, Curtis says it had had 'many more journals and societies specifically dedicated to the promotion of all things Celtic, Gaelic, or Irish' and the superiority 'of the Irish or Celtic race' (Curtis 1968: 114-15). This "'racy" ethnocentrism' suffused a constant stream of literary, journalistic and academic works, including by Lady Gregory, George Sigerson, Sophie Bryant, Hyde and Fiona Macleod (Curtis 1968: 110-13). Curtis says Sinn Fein, which led the successful independence campaign in 1919-21, was in ways a racialised nationalist...

...political expression of the Celticist revival: its name, its emphasis on self-reliance and pride in race, and its increasing resort to proclamations, titles of address, and names in Irish showed that its leaders were not insensitive to the work of Hyde and the Gaelic Leaguers (Curtis 1968: 115).

The new ethnocentric Catholic Celticism resembled Central European models, but drew most directly on British or Anglo-Irish sources. The 1890s Celtic revival allied those who tried to reconstruct 'a populist rural Gaelic civilization based on the language and customs of the 500,000 Irish-speaking peasantry on the Western seaboard', with the literary circle around Yeats and A.E., which strove to create 'a distinctive Anglo-Irish nation by a literature in English infused with the legends and idioms of these same Western peasants' (Hutchinson 1987: 119). Catholic localist nationalism swallowed the romantic Celticism of the Anglo-Irish cosmopolitans, but rejected their proposals of synthesis for the simple ethnocentric model of a Gaelic, Celtic, Catholic, Irish race and total separation from Britain (Curtis 1968: 111). Yeats, 'quite ignorant of Irish history' therefore 'found it hard to identify with the real religiously based passions of Catholic Ireland' and 'inevitably' clashed with 'Gaelic Catholic revivalists, who regarded his elitist dismissal of most of their heritage as an alien intrusion' (Hutchinson 1987: 135). MacNeill opposed pan-Celtic solidarity with the 'mainly Protestant' other Insular Celts (which cosmopolitan Gaelic revivalists promoted) as 'a general neo-pagan revival' 'to detach Celticism from Catholicism' (Hutchinson 1987: 124; Leerssen 1996: 159 & 164). Curtis calls ethnocentric Celticism the 'dominant Irish response to Anglo-Saxonism', with Milesian and Teutonic origin theories serving the same nationalist requirements, but says Celticism was much more central because Ireland lacked a confident national political independence (Curtis 1968: 108-14). He compares Hyde's call for 'culture purity' to Freeman's 'equally absolutist' Anglo-Saxonist rejection of 'corrupting' foreign cultural influences 'twenty or thirty years earlier' (Curtis 1968: 113).

However the anti-modernist, nationalist Celticist focus on purity, race, antiquity and a mystical peasant connection to the land also strikingly recalled contemporary German *völkisch* nationalism. Aside from occasional clandestine dealings with Irish insurgents, German influence entered Ireland via Young Ireland and philology. Hutchinson says Young Ireland was influenced by Prussia's 'virile nation-building model' rather than what they saw as failing 'English democratic-utilitarianism', and proposed a Prussian system of peasant proprietors (Hutchinson 1987: 95-97 & 100-3). Like other branches of philology, Germans 'principally investigated' Celtic studies from the start, aided by Insular Celts (Prichard 2000 [1831]: 20; Kelleher 1950: 198). Stuart Piggott says the English pronunciation of the word Celt with a K sound was probably imported from later nineteenth-century 'German philological studies of the Irish language', along with a less durable vogue for spelling the word as 'Kelt' (Piggott 1966: 4). Germans instructed the Irish in comparative philology, provided access to old Irish religious manuscripts from the continent and helped organise and teach Irish language studies in Dublin and Galway (Tristram 1990: 15, 18 & 24-25). Such was their influence that Celtic linguistics students at Trinity College Dublin were required to learn German until at least the 1970s (Tristram 1990: 42).

Catholics like Eoin MacNeill and convinced Protestant nationalists like Hyde, whose folklore studies in the west of Ireland had aroused 'deeply anti-English feelings', and Sophie Bryant substituted the old Anglo-Irish synthesis with a concept of absorption into a homogeneous Celtic race (O'Connor 1991: 27). Though projected on Irish antiquity, this implied the ultimate dissolution of a separate Protestant identity. MacNeill and Bryant saw the 'superior democratic' Irish nation as 'a unit of nature and culture', 'able to assimilate her invaders' into its 'substance' and remain pure (Hutchinson 1987: 123; Bryant 1889: xviii & 27). Bryant made this an ethnological law, due to 'the extraordinary assimilative force' of its superior Aryan identity (Bryant 1889: xviii & 27). Hyde said Teutonic settlers failed to disrupt Ireland's 'social life', as their descendants married 'Irish wives, turned into good Irishmen,' and could not 'speak a word of English' (Hyde 1991 [1892]: 529). The continuity of 'Irishism' was only 'damaged', he said, by the expulsion of 'the Gaelic race' and plantation of 'aliens' in Ulster, 'whom our dear mother Erin, assimilative though she is, has hitherto found it difficult to absorb', and by the ownership of most land by British-based landlords (Hyde 1991 [1892]: 529). Nationalists like Bryant, O'Grady and MacLoughlin saw the ancient Irish as 'a rich mixture of Milesian, Firbolgian, Tuatha de Danann and Gaelic blood', 'crossed and re-crossed from time immemorial', but left out the alien post-Celtic invaders (Bryant 1889: xiv; O'Grady 1878: 15; Curtis 1968: 114-15). Tales of Gaelic and Firbolg heroes with the wrong hair colour proved this mixture for MacLoughlin (MacLoughlin 1896: 89-90). Bryant and Sullivan attributed absorption to the social mobility, regardless of race, afforded by the common Gaelic language,

creating 'natural paths of communication between the aristocracy and the democracy', and by the 'just and sympathetic government' of ancient Ireland establishing 'customs and laws' to protect 'the poor and weak' and open opportunities for 'talent and industry' (Bryant 1889: 22-25).

Hyde, who was later president of independent Ireland, exemplified the narrow margin remaining to Protestant Irish nationalists. He based his Irish nationalism on 'the half unconscious feeling' of 'racial memory', spoke continuously of descent from ancient Celts who were 'almost extirpated and absorbed' outside Ireland, and stated as 'fact' that 'we are our father's sons' and 'not of Saxon origin' (Hyde 1991 [1892]: 528-29; Morash 1998: 206). Yeats similarly claimed his own 'wild Celtic blood' helped him and his Celtic Twilight colleagues to put into English the 'undefinable Irish quality of rhythm and style' (O'Connor 1991: 168). Hyde insisted on the special responsibility of the 'old Celtic race', with surnames in 'Mac' and 'O'', to know Irish, and referred to the old Gaelic nobility as 'the great Milesian families' (Hyde 1991 [1892]: 530 & 533). Nevertheless, his claim to Irish racial descent was essentially emotional and cultural rather than biological, won by honouring Celtic ancestors, and especially by preserving their language. He implored 'the noble Gaelic race to throw off the insidious' Saxon culture, and by learning Irish, 'return to a pure Irish culture' (Curtis 1968: 113). As an Irish-speaking Protestant folklorist, Hyde had a weak biological, and excellent cultural claim to Irish race. Tellingly, he called 'Ireland of today', and not 'the Irish', 'the descendant' of seventh-century 'Ireland' (Hyde 1991 [1892]: 529). He recognised that the millennial 'national life centred' around, and began among the peasant 'bulk of the Irish race', but regretted that it had become uncultured and unread (Hyde 1991 [1892]: 529-31; Morash 1998: 208).

The French and Irish dilemma

Romanticism, the recognition of Celts as Indo-European, Gaelic scholarship and the quarrel of two races led the French and both Irish communities to embrace Celtic national ancestors. However the quite dark pigmentation of both nations collided with the German and British ethnological orthodoxy of tall, blond northern Celts, encouraged by the Aryan and Retzius theories. French and Irish ethnologists had radically different solutions of to this common dilemma. While the French remodelled the Celtic race to suit their own people, the largely Protestant Irish ethnologists used an elitist Scottish blond Kimmerian Celt narrative to downgrade many Catholics to inferior pre-Celtic Iberians.

The Revolutionary period contrast with tall blond Germanic Franks and ethnological observation gave the French people an identity as a darker shorter people. In Broca's 1860s research, dark-

haired 'Celts' 'predominate considerably' in the southern, central and western 'three fifths of France', with almost 19 million inhabitants, separated by a mixed 'Kymro-Celtic zone' from the nine million people of the northern and eastern areas dominated by blond Kymris (Broca 1871: 299-300). Thurnam agreed that small dark Celtic brachycephals were a majority in France (Thurnam 1864: 399). British and Irish unionist ethnologists reached the same conclusion about the Irish. Dickson thought 'most' of the Irish population were 'darker aborigines', 'a much larger proportion than Britain, while MacFirbis's work, which Bryant said breathed 'somewhat strongly the spirit of ascendancy', also considered the dark Firbolgs most numerous (Dickson 1896: 156-57; 1898: 12-13; Bryant 1889: 22-25). Huxley in 1870 meanwhile placed 'many Irishmen, Welshmen, and Bretons' among his darker southern European Blond-'Australoid' hybrid (Huxley 1870: 408; Eickstedt 1937b: 48; Foster 1997: 434). Beddoe sharply criticised the 'artificial' methodology of a survey that made the Irish blonder than the British, insisting that the 'original' and modern 'Atlantean Irishman' were dark with fair eyes (Beddoe 1898: 165 & 170). Ireland's culturally most Gaelic towns 'offered the most remarkable specimens of the aboriginal dark-haired Irish race', with other locations fairer-haired and therefore more mixed (Beddoe 1861: 562).

The French were securely identified as ethnically Celtic by 1830, but Dietler identifies 'a virtual frenzy of Celtic identity' in 1850-1914 (see p.239). Vercingetorix rose 'from obscurity' to become 'a preeminently national hero', Celtic references multiplied in street names, sculptures, monuments and 'a stream of books', a Celtic studies chair was founded in Paris in 1876, and history, a mandatory primary school subject from 1867, stressed a 'heroic and dramatic' Gallic ancestry (Dietler 1994: 590-91). Topinard in 1885 described the Celtic race as 'the essential part of the present French race, that which gives it its psychological qualities, that which even more than the Gauls defended the national soil at Gergovia' against Caesar (Topinard 1885: 400). The humiliating defeat of 1870 reinforced the cult of Vercingetorix and the Celts as figures of defeat and resurgence, while Gallic solidarity was used in the 1890s to campaign for French, Belgian, Dutch and Rheinlandish confederation against Germany (Dietler 1994: 591-92). Ethnologists like Pruner-Bey were confident that linguistic continuities between ancient Gallic and modern Breton and even southern dialects of French would come to light (Pruner-Bey 1864b: 661). Curtis claims meanwhile that all British ethnologists considered the Irish 'a branch of the extensive Celtic race' or even 'the most 'Celtic' of all' (Curtis 1968: 22). Haddon found 'traces' of the ancient Celts 'perhaps more frequently in Ireland' (Haddon 1898: 583-84). In 1844, the Edinburgh Review ascribed the similar French and Irish national characters to 'their Gaelic blood' (Horsman 1976: 399). Anglo-Saxonists dressed anti-Irish xenophobia as more acceptable 'scientific' anti-Celtic racism, which fluctuated in response to 'political agitation and agrarian crime in Ireland', and immigration into England,

especially flaming up during Irish Home Rule campaigns in the 1830s-40s and 1880s (Curtis 1968: 16 & 27). By the mid-nineteenth century they had assembled ‘all the components’ of their stereotypical ‘native Irish’ Celt, alien in race and inferior in culture (Curtis 1968: 5-6). Knox declared that in Ireland, there was ‘no amalgamation of the Celtic and Saxon races’, which naturally ‘abhor one another’ (Knox 1850: 68).

Even French writers like Broca, Bonté, Bertrand and Périer, who were determined to prove the Celts were brunettes, had to admit that most classical texts suggested that tall, blue-eyed blond ancient Celts had invaded Greece, Anatolia and Rome (Holzmann 1855: 56-57; Lagneau 1876: 139; Broca 1860b: 516; 1871: 284; Bonté 1864d: 281; Bertrand 1873: 435). Broca said Prichard made this opinion ‘prevalent in England’, it was ‘already adopted in Germany,’ and ‘even by many French authors, became in some sense classic’ (Broca 1873: 579). Amédée Thierry, Prichard, Bodichon, Moke, Roget de Belloguet and the Pruner-Bey school reported fair-haired and usually tall Gauls (Bonté 1864d: 281-82; Périer 1864: 604-5; Broca 1864: 461). Almost all ethnologists until about 1870, including Broca, Thurnham and Bonté, and many afterwards, believed the blond dolichocephalic Aryan Celts of archaeologists and linguists preceded the Teutons in northern, central and western Europe (Blanckaert 1989: 188; Broca 1864: 463; 1864a: 557-59; see pp.204-5). Retzius’s dolichocephalic Celt reinforced the blond Celt. He based his Celtic oval dolichocephal on British, Irish, French and Bronze Age Scandinavian skulls, linking them in 1852 to the Gauls, Welsh, Cimbri and Belgae (Retzius, A. 1864: 102 & 122; Thurnam 1864: 401-2; Broca 1864: 463; Blanckaert 1989: 183). Prichard, Nilsson and Retzius found ‘loads of individuals and skulls from the Celtic stock’ with ‘long, often very low and narrow’ skulls, which Retzius connected with Irish skull casts sent him by Wilde and a London colleague, and of the ‘especially long heads’ of ancient Swedish Celts (Retzius, A. 1864: 33 & 102). Three similarly long-skulled French visitors who claimed to be of ‘Celtic stock’ and said Celts inhabited France in the most ancient times, meanwhile convinced Retzius that ‘the dominant’ French race was probably dolichocephalic (Retzius, A. 1864: 33-34).

Broca complained that this tall blond Celtic narrative ‘excluded’ the small, dark ‘real Celts of Gaul’ ‘from the Celtic race’ (Broca 1873: 579). As most British ethnologists saw the Irish as dark, and the Celts as blond Aryans, they confiscated the prized Celtic franchise of Irish nationalists*. Huxley said the Irish were wrongly called Celts and Dickson dismissed Ireland’s dark Firbolg majority from the blond Celts (Foster 1997: 434; Dickson 1896: 160). Though in 1885, Beddoe said the fair

*Simon James and Malcolm Chapman similarly presented their post-modern deconstruction of the Celt in terms of scientific objectivity and similarly threatened Irish Celtic nationalism.

Celts ‘contributed the language and much of [the] character’ of the modern Gaels and the moist Gaelic climate or ‘a selection of the bold, the adventurous, the sharp-sighted’ may have made blue-eyes more common there, he always appeared uncomfortable with allowing the Irish any blond superiority (Beddoe 1971 [1885]: 298-99; 1905: 236-37). British ethnology could draw on continental writers like the French-speakers Alfred Maury and Omalius who doubted whether the Insular languages really were Indo-European, Omalius declaring them Western European aborigines in 1864 (Périer 1864: 618; Omalius 1864: 187). Nineteenth-century German Celtomaniacs like Holzmann, Moke and Karl Barth meanwhile believed that ‘all’ pure ‘Germanic peoples in Germany and Scandinavia’ were blond Aryan Celts, while small, dark, modern Kymric and Gaelic speakers were not (Hölder 1876: 20; Holzmann 1855: 1, 6 & 57; Diefenbach 1861: 132). The Celtomaniacs wanted to stretch the Celts east, not west and free the Gallic language to become more like German.

If losing their Celtic heritage were not bad enough, theories like those of Retzius, Quatrefages and Pruner-Bey, with precursors going back to the 1690s, made the dark French and Irish into pitiful vestiges of conquered primitive aborigines, gathering all Europe’s pre-Aryan remnants in a single racial family with ‘Australians’, ‘Negroes’, or ‘Esquimaux’ (Lewis 1872: 264; Jackson 1873: 401; Curtis 1968: 72; McKendry 1999: 186; Zapatero 1993: 37; see p.209). Building on these theories, plus classical references, Asiatic Aryan narratives, supposedly ‘Mongolian (Ural-Altai)’ or Finno-Ugric traits in Celtic languages, and Ledwich’s Scythian theory, numerous Irish, British and continental authors identified usually brachycephalic pre-Celtic elements of ‘the Scythian East’, ‘Turanic’ cousins of modern ‘Fins or Laplanders’, ancient Aestui on the Baltic, Attila, Japan or ‘even a Mongoloid type’ among the Insular Celts (Boyd Dawkins 1876: 21; Borlase 1897: 1026-28 & 1032; Grattan 1858: 243; Hölder 1876: 19; Rhys 1876: 27; see Fig. 3.2). Several British authors made them a ‘missing link between’ the Basque and ‘poor hunted Berber’ of the West and the Baltic Finns, Turanians or even Sumerians of the East (Rhys 1876: 27; Dickson 1896: 160; 1898: 17; Hyde Clarke 1876: 25; Borlase 1897: 1026-28 & 1032). The German craniologist Hölder went to (literally) great lengths to give the Insular peoples a Scythian steppe origin, bringing them via Spain, to somehow give them an Iberian physical type. Retzius’s specific craniological succession was discredited in the 1860s, but his general sequence from pre-Aryan dark to Aryan fair race remained perennially popular, as it suited both the blond Aryan narrative and Germanicist ideas of blond progress. Everyone who believed the blonds were the only real Celts saw brunettes as indigenous Western European pre-Indo-Europeans (Périer 1864: 618-19). The amateur Scottish ethnologist Campbell concluded ‘almost instinctively,’ that MacLean’s blond Kimmerians and brunette Atlantians ‘represent in some degree invaders and aborigines, Aryans and Turanians’

(Campbell 1872: lvii). He claimed that as the Kimmerians resembled war leaders in Indian, 'or any other ancient heroic Aryan' epics, and Celtic heroes in old Gaelic stories, and that as ancient skulls even proved the 'good white' Kimmerian teeth of one Celt, 'I take a long stride at once, and call' all fair-haired people Aryans (Campbell 1872: lvii-lx). Hyde and other folklorists identified 'primitive European races (ousted thousands of years ago by the Aryan-speaking Gaels)' by their different 'folk-lore from... their masters' (Dickson 1898: 13).

The French fight back

The Retzius theory threatened both French and Irish nationalist ethnology, but while the French saved the dark aborigines from inferiority and gave them back the Celts, the Irish mostly just tweaked dominant British models to make them less offensive. French ethnologists had two important resources. Up to the 1830s, pre-Aryan scholarship created a robust tradition of dark Celts, as Europe's universal natives and nationalist opponents of Teutonic Franks, while the modern majority of the small, dark type turned it from a defeated vestige into an absorbing popular mass.

Desmoulins in 1826 identified a Celtic Western European race with 'average stature', dark hair and eyes, and fairly rounded face, which included 'veritable Celts' plus 'Iberians and Italiots', and distinguished them from the oval-faced Kymri (Broca 1873: 586; Omalius 1869: 16). Humboldt in Germany also distinguished brown Celts from blond Teutons (Bonté 1864d: 281-82). In the 1830s, the French ethnologists Broc and Edwards claimed Caesar's Celts and Michelet's French, both 'medium height, [and] spherical-headed', had an 'identical' 'moral character' (Edwards 1845: 42). Broc's Celts were dark, taller than Greeks and Romans, and their 'debris' appeared among the modern Welsh, Bretons and Basques (Broc 1836: 30-31). Even some northern antiquaries accepted not entirely Nordic Celts. Arndt and others included Celts among their pre-Aryan brachycephals, while Nilsson distinguished brachycephalic Stone Age Celts from dolichocephalic Bronze Age Celts (Retzius, A. 1864: 64 & 103). British ethnologists, and especially Anglo-Saxonists, generally thought in terms of dark Insular Celts. In 1813, Prichard contrasted the blond, blue-eyed lowland Scots, descended from 'the Picts, a German race', with the shorter, darker-skinned, very dark-haired 'and not so well formed' 'Celtic Highlanders', Welsh and ancient Celts (Prichard 1973 [1813]: 506-7 & 535). In an 1861 study of Ireland with Barnard Davis, Beddoe, who was later convinced that Celts were blond Aryans, neatly equated darker hair with the native Celtic Irish and fair hair with the Teutonic English (Beddoe 1861: 562). An ethnological populariser in 1902 simplified British race geography to progressive fair Teutons and dark 'Melanochroi', including the Celts, whose influence was 'a check in progress' (E.N.F. 1903: 194). For monogenists like Prichard, and to an

extent Pruner-Bey, brunettes Celts could be blonds Aryans, modified by environmental influence (Broca 1864: 461; 1873: 579).

Broca fully accepted the Celts as ‘the first Asian conquerors’, but clashed with followers of Retzius on whether Europeans were their biological rather than just cultural descendants (Broca 1864d: 309; 1871: 365; Blanckaert 1989: 193-94). Broca and his allies said Pruner-Bey’s school gave their conquering Aryans numeric predominance in Gaul, in order to ‘put the facts in harmony with linguistics’, and nevertheless partly explained modern brunettes by race crossing with autochthones (Bonté 1864: 627; Broca 1864: 461). Many other researchers accepted, like Belloguet (1861) and Moke that the tall, blond, long-headed Celtic conqueror progressively mixed with the larger small, round-headed ‘primitive population of brown colour’ in southern Gaul, who Belloguet called Ligurians, until the blonds disappeared (Thurnam 1864: 397; Périer 1864: 604-5). The Belgian ethnologist Omalius initially followed Desmoulins in defining average stature and dark hair and eyes as ‘the original characteristics of the Celts, Latins and Greeks’ (Omalius 1869: 16). However he ‘was always embarrassed by a swarm of contradictions’, including with Roman accounts of tall, blond Gauls, which he resolved by converting to blond original Celts (Omalius 1864b: 267-68; 1869: 16-17). The Gaulish nobles, whom the Romans fought and wrote about, were blond ‘descendants of conquerors of Gaul, the least mixed with the blood of the vanquished’ darker native majority (Omalius 1869: 16-17). He gave as evidence historical references to pre-Celts south of the Garonne and a classical reference which suggested the Gauls were a mixed ‘intermediate race’ between blond Europeans and dark Arameans (Omalius 1869: 16). Quatrefages also ascribed the mismatch between tall, blue-eyed blond Gauls of the classics, and ancient evidence for a ‘very different type’ in Gaul, to the role of non-Indo-European races ‘in the formation of the European populations’ (Quatrefages 1871: 19). Polygenist opposition to genocide theories (see p.210-11) helped preserve the dark aborigines. Omalius noted that the Romans never claimed they annihilated the natives (Omalius 1869: 16-17). The archaeologist Bertrand argued that because genocide made no sense, Gaul must have been inhabited ‘since the earliest times’ by ‘sedentary tribes, agricultural or industrial, forming the permanent base of the people’, above which ‘various layers of conquerors or civilising immigrants established themselves’ (Bertrand 1873: 240-41). Périer, Broca and Bertrand explained that history only remembered the tall, blond and extravagant Kymric contingent among the invaders of Latium, Greece and Asia Minor, rather than the unremarkable small, brown masses (Broca 1871: 292; Périer 1864: 594 & 602; Bertrand 1873: 240-41).

Broca rejected Rialle’s argument that the linguistic Celts were a single physical race, arguing that skeletons from Celtic tombs and their present day descendants were too diverse (Broca 1864a: 559-

60). Broca suggested there were about a hundred thousand Celtic ‘first invaders’, compared to a million natives, so that after a few generations ‘the Celts would have more or less disappeared’, leaving ‘the Europeans... lightly modified in their organic type’, though profoundly so in their language, mores and culture (Broca 1864c: 194-95). Ancient references to Celto-Scythians and Celto-Iberians proved that indigenous physical features survived in Europe, he added (Broca 1871: 368). Noting that blonds were a minority in France, concentrated in areas where history said Kymris and Teutons invaded, Bonté argued that the native ‘*brown population*’ and possible later ‘*brown conquerors*’ must have ‘*absorbed*’ the blond Celtic conquerors ‘*in which case we could now no longer be considered Arians*’ (Bonté 1864: 625; 1864d: 282 & 285).

Broca’s new paradigm

Drawing on Thierry and Edwards (see pp.233-34), Paul Broca established the central narrative of late nineteenth-century French and much foreign ethnology, making the French a synthesis of two types. As the dominant founding-figure of the internationally influential French school of anthropology, Broca’s race geography of tall, blond, long-headed Kymri minority in northern France and shorter brunette Gall majority in ‘the ancient Celtic region [la Celtique] of Caesar’ was rapidly, durably and almost universally accepted in France and abroad* (Périer 1864: 610-11 & 614; Bonté 1864: 625; 1864d: 281-82; Ranse 1866: 483; Zaborowski 1890: 245-46; Beddoe 1890: 483). Thierry, inspired by France’s ‘quarrel of two races’ between aristocratic Franks and Celtic commoners, identified ‘two great families’ in ancient Gaul, differentiated by language, customs and ‘social state’: the more numerous and earlier settled brunette ‘Galls’ in eastern Gaul and Helvetia, and the ‘Kimris’ of the north (Edwards 1841: 51-53 & 59). The name Kymri came from the Welsh word for Wales, and in linguistics, denoted the Welsh, Cornish and Breton branch of Celtic† (Edwards 1845: 18). Thierry borrowed the linguistic distinction between Kymric and Gaelic to name his two continental Celtic races. Despite the Welsh being relatively dark, the Kymric label attached itself to the blond race due to the widespread association of Kymri with Cimbri, an ancient tribe from Jutland, and the Belgae, who Caesar reported both in northern France and southern Britain (du Caillaud 1915: 136 & 138; Steinmetz 1938: 394). Edwards and Broca equated Caesar’s Belgae and Celts, whom he said were divided by the Seine and differed in ‘languages, institutions and laws’, with Thierry’s Kymri and Gauls (Edwards 1841: 51; 1845: 27; Broca 1871: 282; Périer

* These ‘two principal [French] races’ became such an established convention that René Collignon used them as technical standards in 1883 (Collignon 1883: 470). He picked specimens from ‘*départements* reputed to be the most’ Kymric and Celtic, on the basis of predefined features, such as for the Celts: ‘small stature, dark or neutral eye and hair colour, brachycephaly and [always rigorously demanded] *flattening of the occipital region*’ (Collignon 1883: 470-71).

† The Breton language was seen as ‘a living relic of ancient Gaul’ until the 1840s and 1850s, when archaeologists like Hersart de la Villemarqué convincingly traced Breton culture from fourth-century British immigrants, allowing the term Brythonic to gain currency for this branch (Dietler 1994: 595; Chapman 1992: 205-6).

1864: 596-97). Edwards added a craniological dimension to a Celtic question initially ‘grounded in comparative philology and history’, associating a medium height, spherical-headed type in the Rhone Valley and Switzerland with Thierry’s Gall (Edwards 1841: 54 & 59; Spencer 1997e: 358). In north-eastern France meanwhile, he discovered a tall, long-headed type with curved nose and jutting chin, which as it extended quite far south, he decided must be Belgian and Kymric rather than ‘Norman-Scandinavian’ (Edwards 1841: 55 & 60). Edwards noticed that ‘tall stature usually accompanied’ his Kimric type throughout Western Europe, reinforcing the correlation between historical and physical race (Edwards 1841: 64).

Research by Broca in 1860 confirmed this correspondence of stature, pigmentation and geographical distribution. His stature maps of military recruits clearly distinguished the short people of the centre and Brittany from the taller ones of the north and north-east (Zaborowski 1890: 246). From the late 1850s on, Broca found there were more longer-headed people in tall Kymric regions, and broad-heads in shorter Celtic areas (Broca 1873: 589; Zaborowski 1890: 246; Piette 1876: 265). Edwards, Lagneau (1861) and Broca (1860-63) particularly identified the Celtic type in the Massif Central and other highlands, and the Kymric in the plains (Périer 1864: 613-14). Broca’s two major innovations were his concept of race fusion and an imaginative revolution in nomenclature. He argued that the infusion of small groups of Celtic speaking Kymric conquerors into the central Gallic population of small, dark, brachycephals created ‘*the nationality of the Celts*’ (Broca 1873: 595). Pruner-Bey hated this idea of a racial fusion of diverse types of Celt, saying his own research, ‘the evidence of antiquity’ and the craniology of Retzius and German anthropologists all showed a uniform Celtic skull type (Pruner-Bey 1864b: 670-71; see pp.208-9).

Nomenclature

Broca’s revolution was largely one of changing the names by which things were known. If the French were Celts, as he argued, they secured all the ancient prestige of the classical and romantic Celts, a treasured national identity resource which they had stood to lose, once they were shown to be mostly dark. It mattered little that his small, brunette, brachycephalic, modern Celtic race had learned their language from tall, blond, dolichocephalic invaders, and had little to do with glorious ancient Celtic exploits. Broca transferred the term Celt, as a title deed to Celtic prestige, to the most typically French race. French anthropologists legitimised this transfer in the 1870s by arguing that Broca’s Celts wandered into Europe from Asia, bringing Aryan and Celtic civilisation with them (see pp.240-44). However this race history narrative was substantially different to that of Broca in the 1860s, which differed little from the Retzius theory. His argument was about the legitimacy of

the paths by which the term Celt was transmitted from its documented classical meaning as the people of Central Gaul, to modern biological groups.

The argument for blond Celts was rather circuitous. Philology showed the Insular languages were Indo-European and as the cultures of the Insular Celts were clearly ancient, they were presumed to be descendants of the ancient Britons. Classical texts and 'a few scraps of linguistics' agreed that Britons and Gauls spoke 'closely affiliated' Indo-European languages (Broca 1864: 460; Bonté 1864d: 282). Pruner-Bey's ally Girard de Rialle argued that philologists had proven the Gaelic and Kymric Celts were 'Aryas' and were too similar linguistically not to have 'a very close ethnic relationship' (Rialle 1864: 551). As ancient Indo-Europeans were blond, so therefore were the Gauls. Finally, the term Celt was extended from Caesar's term for one central Gallic tribe, to all the ancient Gauls, Belgae and Britons and modern speakers of 'the Gaelo-Kimric languages' (Pruner-Bey 1864b: 660; Rialle 1864: 551). Prichard and Broca criticised this use of the name of a disappeared Gallic confederation for a language family mostly surviving in the British Isles (Prichard 2000 [1831]: 24). However Pruner-Bey and Rialle considered it normal practice to derive terms for larger geographical areas or ethnic groups in this way from one component region or tribe (Rialle 1864: 551). The broader alternative classical usage of the term Celt was taken to mean that these Celtic-speaking blonds were the first Indo-Europeans in a broad swathe of north-western Europe, so blond dolichocephals anywhere in this area might well be racial Celts. Pruner-Bey said classical and modern authors identified Celts from Britain and Iberia to 'the Danubian countries'... middle Germany, [and] upper Italy' (Pruner-Bey 1864b: 660; 1864c: 229). Rialle accepted that not all of the first European Aryans used the name Celt, but concluded that 'in general, the ancients gave, rightly or wrongly, the name Celt to all the inhabitants of Western Europe' (Rialle 1864: 551).

Broca insisted that it was better to use Celt in Caesar's more precise local meaning, than for the linguistic Celts (Broca 1864a: 557-58). He congratulated Thierry for having 'proved historically' that the real Celts were 'a distinct race' of small dark people, who Caesar said had formed a confederation in central Gaul and called themselves Celts (Broca 1864: 458-59; 1873: 578). Broca believed this was more legitimate than an externally-imposed term, as the broader classical usage probably was, because races should ideally be known 'under their real' or 'primitive names', under which they 'appeared for the first time in history' (Broca 1860b: 516). Edwards, Broca and several others made Caesar their principle historical authority, arguing that his 'conquest of Gaul and invasion of Britain' made this 'most celebrated of grammarians', 'most valuable authority' and 'great historian' the first 'who really knew Gaul' (Edwards 1845: 27; Betham 2000: 3-4; Périer 1864: 596-97; Broca 1860b: 516; 1864: 459). Comparison of ancient and modern crania and ancient

texts had shown that short, brachycephalic brunettes lived in the same regions since Roman times. Therefore, Broca believed it legitimate to extend Caesar's term for the dark central Gallic race to members of the same dark race identified by Thierry in ancient Spain, northern Italy, Ireland and Brittany (Broca 1860b: 516; 1871: 282-83).

One of Broca's most powerful arguments was that he used craniology rather than linguistics to connect the classical term Celt to physical type, as was more appropriate for the craniology-centred discipline of anthropology, whereas Rialle saw philology as *the* indispensable key to ethnobiological race classification. If anthropology was to become a professional, autonomous, method-oriented specialisation like philology, Broca believed anthropologists and philologists each had to generate their own separate and probably incompatible terminological conventions. His linguist ally Hovelaque agreed that terms like Celt, Kymri, Gael and Gall were merely scientific conventions, dismissing earlier disputes about their essential meanings (Hovelaque 1873: 488-89). Broca's school also relegated classical reference, which generally suggested blond Celts, to a relatively minor role. Bonté criticised the ancients for confused (i.e. non-biological) ethnological understandings, that 'did not always distinguish' between 'Celts, Kimris, Aquitains, Ligurians', while Bertrand said the Greeks gave vague, marvellous and exaggerated physical descriptions of Celts (Bonté 1864d: 281; Bertrand 1873: 246-47). Broca berated 'modern authors' for using the term Celt, 'stripped of all historical value' and reduced to 'a vague idea' by 'limitless extension,' to replace 'the unknown names of prehistoric peoples... everyone used it to label their theory,' leading to 'the successive appearance of' archaeological, linguistic and craniological Celts (Broca 1873: 580). Broca attributed the widely remarked 'throng of confusions and sterile debates' among modern and ancient writers, which plagued Celtic ethnology in France, to each discipline using the incompatible criteria of different disciplines to define racial groups (Broca 1864: 458-61; Zaborowski 1890: 245; Périer 1864: 591; Blanckaert 1989: 187). Bertrand similarly criticised Celticist for extrapolating race theories from a few costume details, supposedly Celtic words or 'a raised stone bearing a so-called *Celtic*' ornamentation pattern (Bertrand 1873: 238). Broca claimed the Retzius-Pruner-Bey race succession theory was based on linguistics, the Celtic language group leading 'those who are not used to' distinguishing language from race to imagine that all ancient Gauls, Gaels and Britons formed 'a sole and single... Celtic race' (Broca 1864: 460).

The practical integration of linguistic, archaeological, historical and anthropological evidence into ethnology, and the want of another name for Europe's first Indo-Europeans, sometimes drew even Broca and his allies into calling them Celts (Broca 1871: 365-69; 1864d: 309-10). Bonté for example was adamant that despite the error of classical writers, the Celts were brown rather than

racial 'Aryans', but then used the term Celt for the blond Aryan conquerors of Gaul (Bonté 1864d: 280-82; 1864: 625). Edwards meanwhile said small, brown Galls were probably more common than Kymris in Wales, but on another occasion that the Welsh were Kymris, (i.e. Kymric-speakers), while Scottish Highlanders and Irish belonged to the separate and 'very different' race of Gaels (Edwards 1841: 59; 1845: 18-19).

The Broca school victory

Broca's brown Celt narrative engaged in complex struggle with the previously dominant paradigm of the blond dolichocephalic Celt. This came 'to a head' in 1873-74 and Ripley says that by 1900, there was 'a complete unanimity of opinion among physical anthropologists' at least, that the Celts were small, dark brachycephals (Ripley 1900: 126).

Such is the view of Broca, Bertrand, Topinard, Collignon, and all the French authorities. It is accepted by the Germans, Virchow, Kollmann, and Ranke as well; by the English, foremost among them Dr. Beddoe, and by the most competent Italians (Ripley 1900: 126).

Piette refused to accept Pruner-Bey's 'very dolichocephalic' oval-skull Neolithic type as 'real Celts' (Piette 1876: 265). Zaborowski said in 1890 that Lagneau's 1870s research into classical sources made it impossible to confuse the dark, autochthonous Celts of 'Central and Western Europe' with their blond conquerors from the north, whose name they had adopted (Zaborowski 1890: 245-46). He added that just 'rare dissidents' like Henri Martin argued that blond invaders imported the Celtic language (Zaborowski 1890: 246). However in Britain at least, this theory, though muddied by a vagueness about the term 'Celt' that attributed it to all three components of Europe's three-race scheme, never went away. Some British ethnologists ultimately accepted the French move in the 1870s to brachycephalic Aryan Celts from Asia. Haddon said he agreed with Broca that the Celts that reached Ireland were 'a mixed people' of 'southern dolichocephals' and the Neolithic 'short, swarthy, black-haired, brachycephalic race of Central Europe', who introduced 'bronze weapons and the "Celtic" languages' into 'ancient Britain' (Haddon 1898: 582-84). However Retzius's dark-blond sequence remained popular while rising Germanicism relegitimised blond Aryans. Broca's allies like Beddoe and Davis and Thurnam supported Broca by identifying small dark aborigines in Britain as Celts, but neither they nor Broca claimed these had devised the Celtic language (Ripley 1900: 125). Beddoe and Thurnam's 'short-headed Celts' in Gaul seems to have reflected Broca's purely local, ethno-cultural usage taken from Caesar (Beddoe 1890: 483; Thurnam 1864: 399).

Why the Irish refused the French solution

Attractive as Broca's strategy may have been for nationalist Irish ethnologists, they were impeded by two factors. First, research conclusively confirmed that, unlike the French, the modern British and Irish were strongly dolichocephalic. Welcker in 1866 made the Irish the longest headed-people of Europe, while Borlase drew on Beddoe and Huxley to say dolichocephaly 'clearly... characterized Irish crania' 'from the remotest periods', with the brief and ephemeral 'reign of the brachycephali' leaving little racial trace (Borlase 1897: 923, 994, 1015 & 1020). Beddoe found from studying over 80 modern and ancient Irish skulls, that they had a particularly homogenous head form resembling Daniel Wilson and Massy's 'Celtic type', a little more dolichocephalic and lower, 'than the English or Welsh skull' (Beddoe 1971 [1885]: 291-92). Huxley meanwhile believed however his brachycephalic round-barrow race never reached Ireland (Borlase 1897: 1012). Despite widespread respect for the Scandinavian theorists, Hector MacLean in Scotland and the 1850s Belfast craniological pioneer and inventor of measuring apparatus John Grattan, were therefore among the very few British or Irish theorists to accept Retzius's brachycephal-dolichocephal sequence (Haddon 1893b: 760; MacLean 1872: xlvi). Although later Irish skulls demonstrated that the prehistoric 'Turanian' 'aboriginal' race, whose skulls were found in 'a large portion' of Europe, 'continued to linger' in the modern population, genocide theory allowed Grattan to argue that the 'numerical superiority of the "long-headed race"' among ancient skulls and its 'universal predominance' in 'our existing population' proved Retzius's succession of broad-headed 'Turanic' and long-headed Celt in prehistoric Britain and Ireland (Grattan 1858: 240-44). The doctrine of aboriginal survival and British, French and Irish archaeological evidence led many in the 1850s and 1860s to reverse this Retzius craniological sequence (see pp.207-16). Wilde imported the 'long-headed' Firbolg pre-Celt before the 'higher', 'more capacious', 'oval or globular-headed' Celt (Wilde 1849: 231 & 237-39; Frazer 1888: 48). O'Grady and Beddoe's blond Celts were also brachycephalic, but Beddoe doubted whether this superior type settled 'numerously in Ireland' (Beddoe 1971 [1885]: 16-17; O'Grady 1878: 11-12). The evident dearth of brachycephals in the islands led many ethnologists to quietly sideline them, morphing the blond Celtic oval head into a mesocephal and finally a dolichocephal, in keeping with Germanist Aryan theory. Frazer said he and Wilde identified inferior dolichocephalic Firbolgs and mesocephalic or long-headed Celts in prehistoric and medieval Ireland, plus later dolichocephalic Scandinavian skulls (Frazer 1888: 47-48). It was therefore difficult for the Irish to exploit Broca's small, dark *and emphatically broad-headed* Celt, except in almost exclusively pigmentation-based schemes.

The second factor impeding a Broca-style narrative of a Celtic majority race was that the tiny Irish anthropological establishment was dependent on Britain and dominated by Protestant elitism. Developing at the race-obsessed turn of the century, ethnocentric Catholic Celticism had ‘a strong measure of race consciousness’, emphasising not only the sophisticated ancient Irish culture, but also ‘the continuity of Irish blood’ since the Milesians (Curtis 1968: 109). Already in 1834, Betham praised the ‘Gael of Ireland’ for remaining ‘pure’ and keeping ‘the traditions of their fathers unadulterated’, unlike most Europeans, who ‘lost their original... unmixed’ character and were ‘jumbled up with their conquerors’ (Betham 2000 [1834]: 422). He claimed, improbably, that ‘the Irish people’ suffered ‘no conquest or change’ for ‘perhaps’ over three thousand years (Betham 2000 [1834]: 422). Celticist nationalist politicians, poets and historians regularly alluded to ‘the purity and antiquity’ of the native Irish race, unblemished by the inferior ‘non-Celtic blood’ of Saxon, Norman or Danish barbarian invaders* (Curtis 1968: 109 & 114-15). Irish Celticism was ‘essentially separatist and exclusive, refusing to accept that anything good had come out of England, except perhaps coal’ (Curtis 1968: 109). One Irish ethnology ascribed to Neolithic Teutons ‘the lowest grade of savagery’, and ‘inferior’ ‘culture and political organization’ to their Aryan Celtic masters (MacLoughlin 1896: 84). The important Anglo-Saxon, Norman and English elements of modern Irish and Scottish lived culture were ‘alienated by a concentration on the Gaelic genealogy’ (Chapman 1992: 92). However the race in question was the vague nineteenth-century ethnic construct. The 1890s Celtic revival was intellectually rooted in philology, archaeology, history and folklore studies, while Irish anthropology remained small scale, overwhelmingly Protestant, and not so much peripheral as provincial within Britain (Curtis 1968: 108 & 111-12). It lacked the critical mass to create a truly independent national Celtic race narrative like Broca’s†. Not only did international interest determine a focus on the Irish language and ancient annals, but as elsewhere (see pp.58-61 & 101), church disapproval of biology diverted Catholic scholars towards the humanities, making Irish Celticist ethnology ‘much less scientific’ than in England (Curtis 1968: 114-15). Anglo-Irish Celticists meanwhile, whose relationship with Ireland had to be more cultural than biological, took their ‘key to native Irish culture’ from studies by Protestants like O’Grady and Hyde of ancient Gaelic manuscripts and the continuing oral transmission of ‘bardic culture, legend and folk-lore’ by peasants ‘around the cottage fire’ (O’Connor 1991: 23-27 & 30)

* Curtis sees the Irish ‘lunatic fringe... who insisted on racial purity’ or that medieval Irish monks discovered America, as ‘innocuous’ compared to Gobineau, Knox and Chamberlain, but Chapman claims the nationalist need to ‘express difference from England’ induced a historiographical ‘near-pathological partiality’ or even ‘schizophrenia’ (Curtis 1968: 115; Chapman 1992: 92).

† Fee says an 1870 anthropological theory by a researcher in Ireland was ignored, in part due to his isolation ‘from the main scientific centres’ (Fee 1979: 425).

Anglo-Irish and English anthropology of Ireland nevertheless began early. Sir William Wilde said that after one early eighteenth century physician, Irish antiquaries like himself and Grattan first took an interest in human remains in the 1830s, supported by the Royal Irish Academy, Wilde studying '1,130 Irishmen, from all parts of the country,' but especially Dublin (Wilde 1849: 224; Beddoe 1971 [1885]: 290; 1898: 164; 1905: 233). The ethnologist John Beddoe, one of Britain's 'most influential' race scientists after 1860, was a major pioneer of Irish anthropological field-work, studying the pigmentation especially of 'about 10,000' Irish people (Curtis 1968: 71; Beddoe 1898: 164-65). He said it was 'the ancient controversy' about the Celts' hair colour that led him 'to begin systematic numerical observations in anthropometry' (Beddoe 1971 [1885]: 1-2). However late nineteenth century physical anthropologists described Ireland as 'an untrodden field' with '[l]ittle or no systematic work' to identify its 'very different types' and 'unravel the tangled skein of the so-called Irish race' (Browne 1900 [1898]: 269; Frazer 1888: 47-48; Beddoe 1898: 164; 1905: 233). Though ahead of Balkan countries, Irish researchers are less represented in my database than 'peripheral' peoples like the Finns, Czechs, Hungarians and Spanish. Their presence is around half that of the Norwegians or Danes and less than a sixth that of the Scots. Haddon remarked in 1892 that 'there is scarcely an obscure people on the face of the globe about whom we have less anthropographical information' (Haddon 1893b: 759). He counted just eight studies of Irish crania in the 1850s-early 1890s, most by British and Irish Protestant researchers, and most examining mere handfuls of skulls (Haddon 1893b: 759-60). Beddoe dated the first large-scale craniological research from the 1890s (Beddoe 1898: 164; 1905: 233). Irish anthropology mostly grew out of antiquarian archaeology, which Haddon complained was almost equally underdeveloped (Haddon 1898: 571). Most late nineteenth-century nationalist ethnologists were humanities scholars, who never carried out primary anthropological research. For historians like Sophie Bryant and Standish O'Grady, the literary scholar MacLaughlin and the philologist William K. Sullivan, scientific anthropology was just another historical source, like philology and the Irish annals.

Tellingly, Bryant almost exclusively cited Irish historians for her 1895 Celticist history of Ireland, but almost all her ethnological sources, and James MacLoughlin's sole ethnological source, were English (Bryant 1889: vii-viii; MacLoughlin 1896: 83). Almost half the citation on Ireland in my database appears to have been by Anglo-Irish writers, and almost three quarters of the rest by British ones. Wilde, father of the famous Oscar, was a consummate European anthropologist, referencing, referenced by and exchanging specimens with writers like Prichard, Edwards, Bertilot, Pruner-Bey, Thurnam and the Scandinavian school, and touring Europe's scientific centres (Wilde 1849: 230; Pruner-Bey 1864c: 239; Retzius, A. 1864: 8 & 64). He was the sole Irish anthropological star however, representing a third of the citation of Irish nationals in my database.

Grattan by contrast was ‘almost entirely overlooked’ (Haddon 1893b: 760). The only dedicated physical anthropology institution in Ireland was the Anthropological Laboratory established in 1891 by A.C. Haddon, later one of the most important English anthropologists, and an Anglo-Irish collaborator, under the auspices of Trinity College Dublin and the Royal Irish Academy, the two most powerful Protestant scholarly establishments (Browne 1900 [1898]: 269). The laboratory examined 257 Trinity students by 1898, and with support from the British scientific establishment also made twelve annual studies of ‘carefully selected’ west-coast districts, starting with the Aran Islands (Browne 1900 [1898]: 269-70; Haddon & Browne 1893: 768-69). Irish anthropometry was highly dependent on British apparatus and techniques. Frazer, Haddon and the Anthropometric Laboratory used largely or purely British designed measuring apparatus, cephalic index tables and measurement points, supplemented by tables and methodologies from the major French anthropologists Broca and Topinard (Frazer 1888: 45; Haddon 1893b: 762; 1898: 579; Browne 1900 [1898]: 271; Haddon & Browne 1893: 772, 775-77; Cunningham & Browne 1898 [1897]: 554-56). Haddon, though Anglocentric, was noticeably more cosmopolitan than Irish colleagues, making references to major French and German anthropologists (Haddon 1893b: 764 & 767). He criticised German craniological standards but implied that he would welcome ‘a Franco-German agreement’ in the area (Haddon 1893b: 762). The Atlantean race psychology of MacLean in Scotland meanwhile combined Arnoldian ‘strong passions’ and the Anglo-Saxonist ‘Irish peasant’ stereotype with continental brachycephalic Celtic features (MacLean 1872: xlvi).

The disciplinary reliance of both unionist and nationalist Irish anthropology on Britain kept them stuck in the reinterpreting stage of nationalist narrative creation. They tweaked the deeply unsatisfactory British narrative of inferior Iberian natives, while Anglo-Irish traditions conditioned them to accept the elitist Scottish blond Celt narrative. However they failed to fully developing Irish ideas like the special Gaelic absorptive power or copy more attractive French and Italian narratives*.

Fair race good, dark race bad

The fundamental European division for British and Irish race scientists was between dark and fair peoples. They almost all adopted the dichotomy of a tall, fair race and the small, dark, inferior, lower class ‘black Irish’, which pro-British writers from Edmund Spencer and the seventeenth-century annalist Duaid MacFirbis to Rudyard Kipling had noted (Dickson 1896: 156). Kipling’s

*Irish and French race classifiers had such weak contact that the radically opposed racial characteristics they ascribed the Belgae never became an issue of debate. The Irish, copied by some continental colleagues, frequently linked the dark Firbolg of the Gaelic annals to the Belgae, because the words were similar (‘Fir’ just means ‘men’ in Gaelic), while all French researchers were convinced they were blond (Wilde 1874: 246; Lagneau 1864: 405).

Black Irish were ‘worse than the worst’, bringing ‘disgrace on the name of Ireland’ while Young called the ‘Irish of the Spanish breed’ thieves, ‘liars from the cradle, but wonderfully sagacious, cunning and artful’ (Dickson 1896: 156). Curtis says Beddoe’s assumptions of blond superiority added ‘a distinctive form of colour prejudice to’ already derogatory ethnological images of the Irish Celt (Curtis 1968: 72). In most British and Irish accounts, the true Celts were blond Belgae, Kymris or Kimmerians, while brunettes were Firbolg, Iberian, Berber, Basque, Atlantean or Turanian. Each term historically connected the races with specific positively or negatively viewed peoples. Dickson said Caesar placed two races in England, ‘a tall, fair complexioned one, similar to the “Celti” of Northern Gaul,’ in ‘the central and most fertile’ areas and ‘a smaller and darker race’ resembling the Iberii in ‘mountainous districts and along the western outskirts’ (Dickson 1896: 157). Late nineteenth-century Irish Celticist ethnologists like O’Grady, Sullivan and Bryant accepted that ethnology had ‘certainly established’ ‘distinct’ tall, fair and smaller, darker types in ancient Ireland, whose descendants were ‘curiously contrasted’ by the colour of their blushes (Sullivan 1971 [1873]: lxxii; Bryant 1889: 21-22; O’Grady 1878: 11-12).

Curtis detects a strong class element in anti-Irish racism, in which Anglo-Saxonist upper classes saw the English working classes and Irish Celts as related dark races (Curtis 1968: 24-25). The menial status of Irish immigrants in Britain reinforced this link, and engendered hostility among their economic competitors in the English labouring classes (Curtis 1968: 24). One anthropologist complained in 1869 that the Irish quarter of any English town was ‘the most filthy, squalid, wretched rookery’, Irish building workers were always the least skilled, and ‘you naturally expect’ that the Irish are responsible for pauper ‘mutinies’ and crimes ‘of savage violence and unmerciful brutality’ (Avery 1869: ccxxv). Nineteenth-century Irish nationalist activism intensified class hatred, as the Irish ‘shopkeepers, farmers, journalists, and provincial country solicitors’ elected in 1885 to campaign for Home Rule were criticised for introducing disruptive and ungentlemanly tactics like filibustering to parliament (Curtis 1968: 25). Leerssen says the Anglo-Irish viewed the native Irish as a sometimes racialised ‘underground or underworld’ (Leerssen 1996: 166-67). This recalled Gaelic legends of most conquered Tuatha Dé Danann being literally driven underground to merge with the fairies, while remnants fomented trouble from inhospitable mountains and bogs, but also contemporary fears that criminal slums threatened the ‘ordered social surface’ of modern Europe (Leerssen 1996: 165-67). Late nineteenth-century Darwinist interpretations of history increasingly merged with Vico’s belief that social inequality stemmed from the ‘conquest and ousting’ of ‘aboriginal inhabitants’ (Leerssen 1996: 166). The ethnicity-class juxtaposition was central to the dark versus blond racial contrast. The most straightforward version was that blonds were simply socially superior, as John F. Campbell of Islay argued from consciously non-expert

observations and the race classification of his 'clansman' MacLean (Campbell 1872: lvi). Campbell's tall, fair Kimmerian 'generally' rose 'steadily... on the social ladder', with specimens 'found about Naval and Military Clubs in London and all over the world' (Campbell 1872: lvi). His 'short, broad, duck-legged, muscular, muddy-skinned, black-haired, squat' Atlantean meanwhile, was 'generally... sticking fast in the mud or seated upon some step below his tall russet neighbour', and also typified the Paris 'Communists' and their London 'admirers, while their opponents 'were long and fair' (Campbell 1872: lvi; 1873: 130). Campbell's 'little dark' Atlanteans of Scotland's western isles were 'the most numerous class, and generally the poorest' (Campbell 1872: lvii). J.W. Jackson and others criticised Campbell's portrayal of the 'dark-eyed' aborigines, but Jackson's unusual theory of race differences in the respiratory system, which explained class, human geographical and history, made the Kimmerian clearly superior (Lewis 1872: 264; Jackson 1873: 401). It was 'the product of a northern temperate climate... specially adapted by the powerful development of respiration for having the blood effectually oxygenated' and therefore far more common 'in the country than the town' (Jackson 1873: 399).

The unionist Dickson, the Anglo-Irish Celticists Wilde and O'Grady, the Catholic nationalists MacLoughlin and William K. Sullivan and English ethnologists like Beddoe and Borlase all agreed that since ancient times, Milesian Gaelic nobles and possibly all Insular 'ruling races' were blue-eyed blonds, 'brave, chivalrous, skilled in war... proud, boastful, and much superior in outward adornment as well as mental culture' to the aboriginal 'servile class' of 'short, dark and sallow Firbolg or Iberian race' (Wilde 1874: 246 ; Dickson 1898: 14; MacLoughlin 1896: 32, 36 & 89; Borlase 1897: 1049-52; Sullivan 1971 [1873]: lxxiii-lxxv; Beddoe 1971 [1885]: 296; O'Grady 1878: 15). Their evidence came from classical sources, the many names indicating fair hair in Gaelic noble genealogies and the highly aristocratic 'ancient tales' and examples of Irish nobles sharing Teutonic prejudices against dark colouring. Beddoe's research concluded that the Irish 'indigenae,' 'labourers and peasants,' and those 'with Keltic surnames' had darker hair than urban elites, 'descendants of the later invaders, the upper classes,' and 'people with English and Scottish surnames' (Beddoe 1905: 236; 1971 [1885]: 291). He demonstrated 'the large infusion of English blood' in Ireland's 'landed and professional classes' by comparing the 78.9% of participants at two high society events with 'English or Scotch' surnames, with his estimate of 58% Irish surnames 'among Irish recruits' and probably higher levels 'among the peasantry' (Beddoe 1971 [1885]: 290-91). Borlase's dark type was 'the Irish of the Irish', especially common in rural areas and as servants (Borlase 1897: 1026). He also distinguished a 'typical and essentially Irish' 'Plebeian' blond with 'a Finnish intermixture', from the 'exceedingly tall and handsome,' healthy and 'powerfully made' 'Aristocratic' blond of the Gaelic clans (Borlase 1897: 1043-46). Anglo-

Saxonists like the Irish Unionist John Mitchel Dickson welcomed MacFirbis's derivation of the 'black-haired' Irish from the Firbolg, calling them 'tattler, guileful, tale-telling, noisy, contemptable, every slave, every mean thief, every churl' and 'ever slow to adapt' to progress (Bryant 1889: 25; Dickson 1896: 156 & 160). Celticist Irish writers accepted that lower classes were darker. Wilde said the Milesian race survived in 'some of the best families... with anything like Irish names', particularly those beginning with 'O' or 'Mac' (Wilde 1874: 246). While Sullivan gave even the Firbolg a blond nobility, Bryant rescued from them brown hair but not from social servitude, allocating them the lowest social strata of ancient Gaelic society (Sullivan 1971 [1873]: lxxiii-lxxv; Bryant 1889: 23).

While the swarthy British poor huddled in cities, British, Anglo-Irish and French ethnologists all concentrated Ireland's purest dark dolichocephals in the impoverished 'boggy or mountainous' rural west, where 'successive invasions' of 'fairer races had pushed them', while superior Saxon or Celtic blonds lived in the richer east and north (Dickson 1896: 157 & 159; Beddoe 1876: 23; 1971 [1885]: 291-94; 1905: 236; Knox 1850: 49; Lubbock 1887: 418-19; Wilde 1849: 231 & 239; 1874: 246; Thurnam 1864: 399; Pruner-Bey 1864b: 670; Borlase 1897: 1026). Wilde said poor western Celts formed 'the bulk of' Irish seasonal 'farm labourers' in England (Wilde 1874: 246). Beddoe said some southern and eastern Irish districts were as blond as England, while large west-coast areas were as dark as Wales, Cornwall, or even northern Italy (Beddoe 1971 [1885]: 291). American research which found Irish immigrants very fair-haired had probably mostly examined easterners (Beddoe 1898: 165). Lubbock, Wilde and Sullivan all concentrated their dark, dolichocephalic Iberian 'or Firbolg race' in the very poor 'extreme south-west', where Sullivan said that according to the annals, the Milesians planted rebellious slaves (Sullivan 1971 [1873]: lxxvii; Lubbock 1887: 419; Wilde 1849: 231 & 239). Beddoe and Frazer found Frazer's soft Celtic lower jaw and Davis's 'long and narrow' 'true Gaelic nostril' in purest form in 'the south and west', 'where there has been least immigration' (Beddoe 1971 [1885]: 292-94; Frazer 1888: 46-47).

Celticists rehabilitate the dark natives

Irish nationalist ethnologists tried to ease the shame of their dark little natives within an inhospitable Teutonic master narrative, just as the French did before Broca's systematic nationalist reformulation of race narratives, creating superior Celts. Broca insisted that just because the numerically inferior, blond Celts imposed their mores, laws, religion and language on them, the natives were not necessarily 'brute savages,' with no 'aptitude for progress' (Broca 1871: 365-66). He argued that unlike Africans, the pre-Celtic aborigines were no more inferior than their modern Basque or Finnish cousins and though 'still plunged in profound barbarity' when the Celts arrived,

were ‘intelligent and perfectible’ (Broca 1871: 366-67). In any case, Broca added, Bronze Age Celtic civilisation was ‘still very rudimentary’, not a politically united invading horde, and far from possessing ‘one of those powerful, irresistible civilisations, which absorb’ and ‘erase all’ (Broca 1871: 367-68). Edwards argued that the civilised ancient Britons were too useful as subjects to annihilate, while Prichard insisted that the ancient Celts and Germans were more civilized than the Romans made out and were therefore white-skinned (Edwards 1841: 25-26; Prichard 1973 [1813]: 237). In Ireland, Sullivan insisted the Iberians were pale-skinned rather than swarthy (Sullivan 1971 [1873]: lxxii). Bryant, relentlessly positive about every Irish racial component, described these early immigrants, who contributed ‘most of the dark hair and dark eyes’ on both islands, as a ‘long-headed, short-statured, lithe-limbed’ dark ‘race, with brain capacity good, and features well formed’ (Bryant 1889: 3 & 21). She linked her Iberians not with the most primitive Stone Age British tombs, but with Tacitus’s ‘brave’, ‘strong and war-like’ Silures and the adventurous and mysterious dolmen^{*}-builders (Bryant 1889: 3-4; Tacitus 1962 [97-98]: 68). Wilde said the features of the aboriginal Irish dolichocephal created ‘a shrewd, intelligent physiognomy’ (Wilde 1849: 229-30). Rehabilitation also meant a battle over race-mentality stereotypes, such as the monopolisation of wanderlust by blonds. MacLean’s Kimmerian blond loved the ‘travelling, or seafaring life’ while his dark aborigines ‘abhor emigration, feel miserable in a strange land’ (MacLean 1872: xlix). Knox’s Celts clung to their impoverished Irish past, despite emigrating to a better life in America (Knox 1850: 322-23). Dickson’s Iberians migrated north from North Africa at a time when land-bridges connected Ireland to Britain (Dickson 1898: 12). The Irish Catholic MacLoughlin criticised German attempts to claim ancient ‘Celtic heroes’ as Teutons, because they were ‘fond of the sea’, but accepted this was ‘peculiarly Teutonic’ (MacLoughlin 1896: 26-27 & 32). Betham however stressed Irish descent from the seafaring Phoenicians, Wilde’s Milesians were ‘good navigators’ and Bryant used Irish wanderlust as evidence of Spanish origin (Leerssen 1996: 92; Wilde 1874: 246; Bryant 1889: 28-29). O’Grady’s dark race may meanwhile have migrated by ship, while his blonds took overland routes (O’Grady 1878: 12).

Perhaps inspired by French championing of a dark civilised people against rapacious blond Aryan Teutons, O’Grady in 1878 was the sole Irish cultural nationalist to ‘own’ the ‘brown-skinned’ but ‘well-proportioned’ dolichocephal as the Irish national race, claiming the ‘future of the world’ lay both with it and with the blonds (O’Grady 1878: 11-12). He argued that they civilised the Aryans, anticipating their rehabilitation as Sergi’s Mediterranean race by over a decade. O’Grady’s typical

^{*}These stone tables, found in coastal areas from North Africa round to the Baltic, were ascribed to a bewildering variety of ethnic groups, but most often used to prove a pre-Aryan northward migration of the Iberian type, which had a fairly similar geographical distribution (Bertrand 1864b: 379; Borlase 1897: 954-955, 959, 961, 966, 977 & 987). Dickson

Irish racial mix had ‘a pure clear skin through which glows the warmth of southern blood’ (O’Grady 1878: 16). The ‘special task’ of his dark, long-headed Turanian, including the ‘Hindoo’, Arabian, Zend, Phoenician, Jew, Pelasgian, Etruscan, ‘and in a less pure form’ the Hellene, Roman, Carthaginian, Berber and Basque, was ‘to found civilizations,’ while that of blond ‘Scythian’ peoples like the Celts, Teutons, Slavs and Tartars, was ‘to crush’ ‘all that the thought and toil of nobler nations had produced’* (O’Grady 1878: 12-13). The ‘uncandid egotism of our northern writers’ caused ‘the colossal’ misapprehension that ‘young warlike’ northern blood ‘refreshed and invigorated’ the ‘exhausted’ south (O’Grady 1878: 13). O’Grady’s Turanian expanded from ‘Southern Asia’, into south-east Asia and the Mediterranean basin, ‘over Spain, France, Belgium, and the British Isles’, where it met ‘the Scythian flood pouring through Germany’ and France (O’Grady 1878: 12). His Basque Turanian was small, but ‘amply atoned’ for this ‘deficiency’, had regular features, small teeth, dark soft eyes and brown skin, while his Scythian Celt was ‘tall and large-limbed, with fierce grey and blue eyes, high cheek bones and large teeth’ (O’Grady 1878: 16). Basque dolichocephaly was European rather than African, O’Grady insisted, with ‘development of the occiput,’ and a vertical forehead (O’Grady 1878: 18). O’Grady tried to redeem skeletal features with fairly negative associations, by associating them with his Basque. It had thigh and shin-bone features which Broca, Topinard and Frazer connected with the Crô-Magnons, but O’Grady forcefully insisted that this ‘intelligent and advanced’ type was no primitive ‘caveman’, and merely interred its dead in caves (O’Grady 1878: 17-18; Frazer 1888: 43; Broca 1878: 196-97).

Even this lonely attempt at a small dark dark national race used Franco-Mediterranean narratives of civilisation, rather than the narrative of peasant biodynamic advantage which Central and Eastern Europeans exploited so fruitfully (see pp.367-71). British authors fully appreciated the power this potentially offered to dark inferior Celts. Latham warned in 1852 that England’s Celtic substrate had a biodynamic advantage over Anglo-Saxons. Three ‘pure sources of Keltic’ blood were ‘in full flow,’ in Britain and Ireland ‘without a corresponding spring’ of ‘equally genuine and typical’ Germans, causing ‘a slow but sure addition of Keltic elements to the so-called Anglo-Saxon stock’ (Latham 1852: 259). While a ‘Gael or Briton who marries an English wife, transmits... a pure Keltic strain,’ the ‘more or less hybrid’ Englishman could not ‘effect a similar infusion of Germanism’ (Latham 1852: 260). For Beddoe it was an ‘undoubted fact that the Gaelic and Iberian races of the west, mostly dark-haired,’ were swamping England’s ‘blond Teutons... by a reflux migration’, aided by ‘conjugal selection, selection through disease,’ and the ‘rapid multiplication’

traced the sallow, diminutive black-haired British aborigines ‘to an earlier human family’ still common ‘in South-western Europe’ and descended from primitive African megalith builders (Dickson 1896: 157).

of the dark ‘artizan class’ (Beddoe 1971 [1885]: 298). The pro-Celtic *Dublin University Magazine* said French popular republicanism demonstrated that the Celtic and indigenous races had ‘been for ages gradually gaining strength’ (DUM 1855: 732-33). Dickson’s inferior dark Firbolg meanwhile enjoyed ‘the fecundity of that “feeble folk” who “build their houses in the rocks” and that larger share of cunning with which nature so frequently compensates the weak’ (Dickson 1896: 160). Borlase, a sympathetic Englishman, called Ireland’s blackest, lowest class type ‘subtle... quicksighted and suspicious’, trusting only to personal skill and when educated could be ‘shrewd, statesmanlike, eloquent, and witty’ (Borlase 1897: 1024). Though enjoying being seen as ‘a down-trodden people’, they were high-spirited and boisterous, and made ‘excellent soldiers’ with the ‘innate love of fighting’ of the Silures (Borlase 1897: 1025). Ireland’s Phoenicianist tradition may have conditioned an unshakeable dedication to civilisation narratives, but the culturally isolated elite anthropologists probably also hesitated to invest in a peasant Celtic identity that obviated their own role as vital leaders and intermediaries with Britain. Also, Ireland’s overwhelmingly rural economy and scanty industrial prospects may have made a lower class narrative implausible.

Black Kelts and Mediterraneans

While yellow Turanians were a major German and Scandinavian concern, black Africans soon replaced them as the relevant aborigines in the British ethnological tradition, joining the dots from Berber and Basque to Irish Gaelic remnants of a conjectured ancient migration north. Boyd Dawkins rejected suggestions of Finnish descent for the ‘Black Kelts’, arguing that the Finns were ‘a tall, fair, broad-headed race’ (Boyd Dawkins 1876: 21). Most leading British physical anthropologists considered the pre-Aryan ‘Black Kelts’, including ‘Bretons, Welsh and Irish,’ ‘akin to’ Spaniards, classing them in the small, curly black-haired, long-headed and inferior Iberian or Mediterranean race of Berbers, Basques and possibly Ligurians, with ‘brown skins; large, lustrous, dark eyes, with long dark eye-lashes’ (Wentworth 1876: 6-8; Boyd Dawkins 1876: 20-21; Lubbock 1887: 419; MacLean 1872: xlvi; Beddoe 1876: 23; Jackson 1873: 399-400). One journalist noted ‘how like the men of the Spanish regiments,’ especially those from the old Kelt-Iberians country, ‘are to the Irish, and especially to the Connemara men, with the same projecting jaw and style of march’ (Wentworth 1876: 8). In the 1890s, Haddon applied ‘modern craniological methods’ of the European three-race paradigm to prehistoric Irish skulls, locating several Neolithic Irish dolichocephalic skulls in the Iberian ‘division’ of Sergi’s Mediterranean race (Haddon 1898: 570, 572-4 & 578 & 581-83). British scholars like the historian Macaulay, who attempted to link the Irish and Latins, conflated the spent cultures of Europe’s Celtic and Mediterranean ‘peripheries’,

*By accident or design, these two races recalled the rival proposals of Irish antiquarians that the Celts originated in the savage Scythian steppes or Mediterranean Phoenician civilisation, with O’Grady championing the pro-Irish Phoenician

lending ‘authenticity to the many racial-linguistic attempts to derive the Irish’ from Iberians or Berbers* (Chapman 1992: 278). Boyd Dawkins, Isaac Taylor, Beddoe and Borlase believed the ‘convergent testimony of history, ethnology, and’ archaeology, strongly supported by the common dolichocephaly of Basques and ‘Black Kelts’, suggested that a Neolithic Iberian race ‘overspread’ North-west Africa and Western Europe from Gibraltar to Scotland and Belgium, though Beddoe warned that ‘the Irish-like element’ among Spaniards ‘may not be Basque’ (Boyd Dawkins 1876: 21; Wentworth 1876: 9; Beddoe 1876: 23-24; MacLoughlin 1896: 83-84; Borlase 1897: 1028). Dickson’s Iberian Firbolgs in Ireland were ‘essentially southern’, and their ‘southern blood still manifests itself in some of the darker aspects of our national character’ (Dickson 1896: 160; 1898: 12). This migration north was calqued on the Anglo-Saxonist racial value scale of colour, which became an important element of *völkisch* anti-Catholic Germanicism (see p.191). This made Catholicism, evolutionary backwardness, nativeness, the south and dark features into parallel vectors of inferiority, and at its most extreme, connected the Irish Firbolg more or less explicitly to apes via Iberians and Africans†. The satirical cartoons of *Punch* magazine, and writers like Charles Kingsley, an Ethnological Society member, could therefore characterise the Irish, ‘prompted by Darwinism’, as sub-human monkeys (Foster 1997: 435; Keith 1917: 18). He wrote from an Irish journey in 1860:

But I am haunted by the human chimpanzees I saw along that hundred miles of horrible country. I don’t believe they are our fault. I believe there are not only many more of them than of old, but that they are happier, better, more comfortably fed and lodged under our rule than they ever were. But to see white chimpanzees is dreadful; if they were black, one would not feel it so much, but their skins... are as white as ours. Tell Rose I will get her plants. (Foster 1997: 435).

‘Black Celts’ in western Britain reinforced ethnological accounts of Iberian migration, which often noted Tacitus’s remark that ‘the swarthy faces’ and curly hair of the Silures of South Wales ‘and the fact that Spain lies opposite’ suggested ‘that Spaniards crossed in ancient times’ (Tacitus 1962 [97-98]: 61). Modern ethnologists from Prichard on, identifying the same small, dark dolichocephal type there, were equally convinced that a pre-Celtic ‘colony of Iberians’, ‘little brown Gaels’ or Firbolg inhabited Wales and sometimes also western Scotland, Cornwall and Brittany (Prichard

side. The term ‘Turanian’ probably reflected the Retzius tradition.

* Díaz-Andreu says northern European commentators and natives alike began to Orientalise Spain in the Romantic period, praising Islamic Al Andalus ‘the only redoubt of civilization’ in medieval ‘barbarian Europe’ (Díaz-Andreu 1996: 71). Victor Hugo described Spain in the 1820s as ‘highly African’ (Díaz-Andreu 1996: 71).

† Foster however traces British simianisation of the Irish to their pre-evolutionary eighteenth-century portrayal as ‘monsters,’ devil’s ‘hybrids’, violating nature’s ‘divinely ordained order’ (Foster 1997: 434). Insurrectionary outrages were interpreted within a Frankenstein narrative, inspired by French Jacobinism, of ‘‘created’ or ‘slave’ Irish... turning on their masters’ (Foster 1997: 434).

1973 [1813]: 506-7 & 535; Huxley 1870: 408; Pruner-Bey 1864b: 670; Dickson 1898: 12; Knox 1850: 49; Hölder 1876: 18-19; Betham 2000: 399; Holzmann 1855: 58; Omalius 1869: 16; Beddoe 1971 [1885]: 25-26 & 294; 1876: 23-24; Sullivan 1971 [1873]: lxxii & lxxvii; Lubbock 1887: 419-20; Thurnam 1864: 399; MacLean 1872: xlvi; Borlase 1897: 1023 & 1026; Wake 1873: 716). Beddoe gave a certain prestige of precedence to the Welsh, by making the Irish descend from them. Beddoe was a Welsh name and he identified centuries of heavy Welsh migration into his own area of England (Allen 1971: xiii). However he and other crypto-Anglo-Saxonists treated the Iberians as a vestigial 'feebler race', penned by blond Celts in the Welsh 'sterile mountains' (Dickson 1898: 13). For Huxley and others, Welsh dolichocephaly also helped tie Irish 'Firbolg' to the British Long-Barrow race, a byword for Stone-Age savagery whose remains proliferated in south-west Britain (Haddon 1898: 582; Borlase 1897: 994). Borlase blamed inbreeding for the 'physical degeneration' of this short and 'feeble' type with an 'ill-filled skull' (Borlase 1897: 956). Several English craniologists linked them with Basques and Beddoe with Iberians and Africanoids (Beddoe 1971 [1885]: 13 & 25-26; Wake 1873: 716; Haddon 1898: 580-83). Though Macalister objected that Ireland had no long barrows, Haddon, Garson and Borlase claimed from old Irish skulls that this people 'certainly' crossed to Ireland, Frazer identifying them with an ancient Irish type more long-headed than an 'average Australian savage' or Hottentot (Haddon 1898: 580-83; Frazer 1888: 45). Haddon, Beddoe and Borlase traced the British Long-Barrow and Irish dark race, via 'the Neolithic Dolichocephals of Western and South-Western Europe' to southern French palaeolithic relatives of Crô-Magnon (Haddon 1898: 580-83; Beddoe 1876: 23-24; Hoernes 1909: 315-16). Beddoe claimed Mediterranean, Crô-Magnon and Long-Barrow descent for a fairly rare short 'survival' with 'large head, shorter and squarer face, coarse features, and cocked nose', which MacLean called the Sancho Panza type, and he and Beddoe invested with the most serious Insular Celtic flaws (Beddoe 1971 [1885]: 10 & 294; Borlase 1897: 1023). Beddoe said it was common in Spain, the Hebrides and the west of Ireland and was...

...curious, psychologically, that the most exquisite examples... never would submit to measurement. Though the head is large, the intelligence is low, and there is a great deal of cunning and suspicion. (Beddoe 1971 [1885]: 10).

Irish Iberians were generally linked to Africa through the Berbers, yet another defeated remnant folk, whom Broca, noting tropical fauna in palaeolithic Europe, thought had crossed a land-bridge to Spain (Borlase 1897: 964). Arabs drove the 'poor Berbers' into the mountains, said Dickson, and 'Aryan Celts' pushed them aside 'everywhere' (Dickson 1896: 157). Berbers kept many ancient Irish cultural features, and their physical traits 'may be met with in the streets of Portadown or

Magherafelt on any market day' (Dickson 1896: 157-58). Douglas Hyde thought frequent mentions of lions in Irish folk-lore suggested an Aryan homeland in Asia, but Dickson countered that it suggested the Firbolg were African (Dickson 1898: 12-13). Hector MacLean also linked his Irish-Basque racial group to the Berbers and gave his Atlantean 'rather full' lips, 'coal-black, or very dark-brown hair, which sometimes curls' and a relatively hairless body and chin (MacLean 1872: xlvi-1). Beddoe thought the 'widely-diffused Ibero-Berber' or Atlantean in Ireland was probably a 'subdivision' of the 'Cro-Magnon or "Africanoid"' race (Beddoe 1971 [1885]: 11; Curtis 1968: 72).

The best craniological evidence for making the Irish African and simian was their alleged prognathism, or forward-jutting lower face. Simianised portrayals of Irishmen in the satirical British press exploited racist evolutionary theories of prognathic Africans as a primitive stage between human and ape (Curtis 1968: 71; Foster 1997: 435). Beddoe said 20% of the Irish he studied were prognathous, more than twice the English or Welsh proportion, and called Ireland 'apparently [the] present centre' of prognathism, though 'most of its lineaments' led to Africa 'as its possible birthplace' (Beddoe 1971 [1885]: 10-11). The ethnologists D. Mackintosh, Daniel Wilson and Frazer also identified a prognathic Gaelic or Celtic type with dark curly hair, blue or grey eyes, 'long slitty nostrils' and a coffin or pear-shaped skull (Beddoe 1971 [1885]: 11; Frazer 1888: 44 & 46). Beddoe said the prognathic Gaels greatly resembled one another 'in other respects', suggesting prognathism was racial rather than 'the effect of misery and oppression' as often argued (Beddoe 1971 [1885]: 11). He found no evidence of Africanoids in pre-Neolithic Britain or Ireland, but said ancient Irish skulls 'may have belonged to it', showing prognathism 'as well as the peculiar form of low straight brow that still prevails' in Ireland (Beddoe 1971 [1885]: 11-12). Beddoe, Ranke and Kollmann insisted that prognathism did not necessarily 'imply intellectual or moral inferiority', as many races had 'points of likeness to the anthropoid apes', Beddoe adding that Irish prognathism went with superior blondness (Beddoe 1971 [1885]: 10, 17 & 294). While most of his prognathic specimens were 'from the labouring classes', Beddoe said 'one of the ablest and most distinguished clergymen in Wales' was prognathic and suggested 'eloquence, or at least' verbosity as 'a general characteristic of the type'* (Beddoe 1971 [1885]: 11). Beddoe however accepted that the prominent brow-ridge of his especially gifted Bronze Age Kymri type had been interpreted as 'a Simian characteristic' among 'Australians', Neanderthals and 'other savage races' (Beddoe 1971 [1885]: 17). He also reported a craniological feature considered to 'rank low' in evolutionary development was 'very general' among the 'Irish or Scottish' Gaels and 'common among Romano-Britons,' but much rarer in Saxon England and Scandinavia (Beddoe 1912: 41-41).

The northward migration of dolichocephalic Iberians was an international commonplace. The Romans believed Iberians preceded Celts and Latins in south-west Europe. The discoveries that Basque was not Indo-European and that small brunettes were common in both Spain and Ireland, plus the general assumption of tall blond Indo-Europeans, combined to create a narrative of small, dark, proto-Basque Iberians preceding the Aryans in western Europe, and surviving among the Irish poor. Retzius identified southern French, Scottish and Irish brachycephals as Iberian and Hölder gave '16 species' of Iberian plants in Ireland as evidence of this (Retzius, A. 1864: 64; Hölder 1876: 19). By the 1870s, Broca's defeat of the Retzius race succession (see pp.215-16) convinced most French and British anthropologists, including Beddoe and Boyd Dawkins, that the small, dark dolichocephalic aboriginal Irish were Iberian Basques, and Deniker identified the dark Irish as an Atlanto-Iberian extension of his Mediterranean race (Wake 1873: 716). Everybody accepted that Iberians stretched north to the Garonne, but Prichard, Ware, Renard, Belloguet, Omalius and the Scandinavian and Pruner-Bey schools included among them the dark race of central France, which Broca's school later called Celts (Lagneau 1860a: 514; Périer, Bertillon & Lagneau 1861: 340; Périer 1864: 621; Pruner-Bey 1864b: 670). Belloguet and others gave it a southern, or African origin, related to Numidians (Périer 1864: 621). For Broca, Périer and Thurnam meanwhile, archaeological finds by Quatrefages and Boucher de Perthes suggested that the 'black'-haired dolichocephalic race 'conserved almost unmixed among' modern Basques', probably occupied 'most of our territory', before 'the brown-haired Celts' (Broca 1871: 282-292; Périer 1864: 623). Jubainville argued in 1863 from the names of rivers that pre-Indo-European Iberians, possibly from Atlantis* invaded Western Europe in 6,000 BC (Collis 2003: 64).

Irish ethnologists exploited the very positive southern origin traditions of the Insular Celts, but ultimately were more influenced by British Germanicist anti-Iberianism. Sixteenth-century Anglo-Irish writers like Edmund Spenser were irritated by Catholic Irish claims to be related to their powerful, prestigious Spanish allies against England (Quinn 2005: 23). Around 1700, antiquaries noted the similar sounds of 'Hibernia' and 'Iberia' and compared the vocabularies of Basque and Gaelic, neither obviously related to other languages, leading one Irish antiquary to claim 'Irish was the original language of Spain' and Lhuyd that the Gaels came from there (McKendry 1999: 186-87; Betham 2000 [1834]: 336-37). Some even claimed Basques and Gaelic speakers could understand one another (Wilde 1849: 220). Perhaps politically inspired, the Gaelic annals supported Iberian origin narratives by Celticists like Wilde that peopled Ireland independently of Britain, attributed a British origin to the lowly Firbolg, 'a small, straight-haired, swarthy race', physically

*The Irish are stereotypically loquacious; a result of kissing the Blarney Stone.

resembling Iberians, and derived the all-conquering Irish nationalist ancestors of choice, the Milesians, from Spain (Wilde 1874: 246). Welsh Black Kelts encouraged this narrative (Bryant 1889: 21; Hölder 1876: 19). Early antiquaries used the Mediterranean connection to link the ancient Gaels with the prestigious ancient Phoenicians, who bravely resisted Alexander the Great and spoke, as ‘many’ Biblical passages suggested, a Hebrew dialect (Betham 2000 [1834]: 79). Later Irish nationalists like Sullivan and Sophie Bryant described their darker Irish type as ‘lithe-limbed’, as in typical ethnological descriptions of Mediterraneans, and claimed Grimm’s discovery of ‘a Gaelic element’ in the fourth century language of Aquitaine supported the account of the annals (Sullivan 1971 [1873]: lxxii & lxxvi; Bryant 1889: 21-22 & 29). Bryant emphasised Ireland’s long history and geographical convenience of direct connection with Spain and southern France, adding that the idea that access ‘to Ireland lies across Britain is one of quite modern origin’ (Bryant 1889: 21 & 27-29). She stressed ancient Irish wanderlust and the ‘incomparably superior’ pre-historic forts on Ireland’s west and south-west coast, where the absence of dolmens[†] indicated Celtic settlement (Bryant 1889: 7 & 28-29). Bryant and Sullivan nevertheless created their southern, non-British link with the world via a blond elite and had no doubt the dark race were primitive plebs. A pre-Aryan, Iberian and Ligurian ‘brown type in Western Europe’, which ‘gradually fused’ with the Aryans, was ‘generally admitted’ according to Sullivan, who argued that if ‘the Milesians really came from Spain,’ ‘their retainers and common soldiers’ were ‘undoubtedly’ Iberians (Sullivan 1971 [1873]: lxxvii). He suggested that only the best of the dark Iberians could rise from their downtrodden status (Bryant 1889: 22-23). Bryant meanwhile distanced her Iberians from England’s technologically primitive long-barrow dolichocephals, linking them instead with Scottish cairns of ‘a more advanced order of ideas’[‡] (Bryant 1889: 3-4). However she made Mediterranean Romans corrosive of ‘Aryan’ purity (Bryant 1889: xvii-xviii).

Kymri-Kimmerians

Aryan Celtic descent gave Irish nationalism and scholarship invaluable prestige. As nationalist Irish ethnologists like Bryant and the Catholics Sullivan and James MacLoughlin accepted the standard British assumption of blond, Asiatic Aryans, they had to make Ireland a blond nation, if only in antiquity. They agreed that the annals and traditional poetry suggested ‘the Firbolg, Tuatha Dé Danand, and Milesians’ were all mostly of the ‘tall, fair-haired, blue-eyed’ Aryan Gaelic Celtic type, ‘gentle... in peace, fierce in war, loving enterprise and the joy of great deeds’ (Sullivan 1971

* Ireland had its own traditional Atlantis legends (of Tír na nÓg or Hy Brasil) and a French visitor in 1796 suggested Ireland might be a fragment of the sunken isle (Quinn 2005: 22).

[†] This was because there were no dolmens in Celtic areas of Gaul, she claimed (Bryant 1889: 7 & 29).

[‡] The sympathetic English ethnologist Borlase linked the degenerate Long-Barrow type with ancient Irish skulls, but not with ‘the prevalent’ modern Irish type, which he said resembled more its earlier ‘tall, powerful, prognathous’, athletic Cro-Magnon ancestor, with its ‘well-filled skull’ (Borlase 1897: 956-59, 977 & 987 & 1032).

[1873]: lxxii; Bryant 1889: xiv & 20-23; MacLoughlin 1896: 32 & 36). Bryant dismissed frequent attributions, since MacFirbis, of ‘black hair’ and ‘Iberian affinities’ to the Firbolg (Bryant 1889: 20 & 25). Not even the sole champion of the Iberian, the historian Standish O’Grady, tried to link the Celts with them. Sullivan questioned the tale of Milesians coming from the south, as they were ‘beyond doubt’ ‘a fair race’ and in the ‘oldest and most characteristic... historical tales... their relations were chiefly with’ northern Europe (Sullivan 1971 [1873]: lxxvi). Anglo-Irish ethnologists borrowed a Scottish narrative of glorious blond Kimmerian Celts, whom Dickson called ‘the fountainhead of that great’ and later historically momentous ‘Scotic race’ (Dickson 1896: 160). The link between Kymri-Kimmerians and two ancient eastern peoples, the Cimbri of Jutland and Crimean Cimmerians, whom many classical writers considered ‘one race’, was a crucial demonstration that blond Celts were Asiatic Aryans* (Edwards 1845: 19-20; Périer, Bertillon & Lagneau 1861: 356; Broca 1873: 591-92; Rawlinson 1877: 156). Though these relationships were largely inspired by classical observations that the names were similar, a reference in the Welsh annals, and some place-name evidence, few French and British ethnologists questioned them (Périer 1864: 603). The leading Scottish Kimmerianist was the linguist and Scottish islander Hector MacLean, ostensibly of Kimmerian type himself and already promoting ‘Celtic ancestry’ to express his nationalism in 1840 (Campbell 1872: lvi; Davis 2002: viii). His Kimmerians were ‘excellent walkers and runners’, ‘horsemen and cavalrymen’, ‘frequently tall... often gaunt’, with a ‘long and high’ head, ‘usually very well proportioned’ legs (MacLean 1872: xli). Like the French blond Celt, MacLean explicitly associated them with Celts, Galli, Caledonii, Cimbri, Scoti and Gaels (MacLean 1872: xl).

MacLean’s Kimmerian was psychologically intermediate between the practical Teutons ‘among whom experience, fact and deliberation play so conscious a part’ and the extreme ‘constructive and artistic ability’ of the dark romantic Atlanteans (MacLean 1872: xlii). He contrasted the ‘very pleasing expression’ of the ‘remarkably clear and lively’ Kimmerian eye, with ‘the fiery lustre’ of the dark aboriginal eye, and ‘cold sternness of the Teutonic eye’ (MacLean 1872: xli). The Kimmerian had the noble recklessness and aristocratic ‘pastoral, hunting’ interests of the Nordic tradition, but instead of Saxon boorishness, acquired the aptitude for ‘abstract knowledge’, and ‘dashing brilliant wit’ of Knox’s Franco-Irish-Highland Celt (MacLean 1872: xlix). MacLean contrasted Celtic philosophers like Voltaire, who ‘make abstract argument, rather than fact or

*Romans writers described formidable Cimbri who raided across the Alps into Italy, Gaul and Spain in 113-101 BC and later mentioned Cimbri in Jutland (Rawlinson 1877: 150-51). Classical texts connected the Cimmerians and Japhet’s son Gomer, eponymous ancestor of the Kymri, to the Galati of Anatolia, who the Greeks saw as ‘Celtic’ invaders from the Danube region (Piggott 1966: 8). By 1611, historians linked Western European and British Celts to Gomer, the Gimirrai people mentioned in Assyrian documents, and the Balkan Cimmerians, who raided the Greeks in Anatolia (Piggott 1966: 7-9; Périer 1864: 615-16).

precedent, their guide' with racial Scandinavians like John Locke (MacLean 1872: xlii). He abandoned cool modern calculation to the Teutons, excusing England's senior role in the British partnership by implying that Scots were let down by higher sentiments. Kimmerian druidism 'had perfection for its aim' while the Germans' religion 'was centred on profit... in full consistency with' their obsession with 'personal freedom' (MacLean 1872: liii). Like stereotypical insular Celts, Kimmerians were 'loquacious, argumentative and fond of disputation' and perceptive but 'not accurate observers', but like Saxons, were 'clear and acute reasoners... extremely precise, and abhorrent of all vagueness' (MacLean 1872: xli). His Kimmerian was 'a clansman... patriot... philanthropist or a cosmopolite', 'full of social sympathy' whose values 'strikingly contrasted with' the Scandinavian stress on 'law and contract' (MacLean 1872: xlii).

Blond Celtic narratives initially struggled against Anglo-Saxonism in Scotland. Leading Anglo-Saxonists like Pinkerton, Carlyle and Knox were lowland Scots. Norman Davies says eighteenth-century Lowland Scots 'consciously adopted' an 'Anglo-British identity', putting their Scottishness 'into voluntary liquidation', calling their country 'North Britain' and loathing the rebellious Gaelic Highlanders (Davies 1999: 839-41). The purity-obsessed Knox brandished his 'Saxon descent' and hatred of Highland as much as Irish Celts... arguing that the 'Caledonian Celt of Scotland' was 'a race as distinct from' the Lowland Scottish Saxon, 'as negro from American', while theories that Celts had ever occupied the Scottish and English lowlands were a 'completely erroneous... fable' (Knox 1850: 13-14 & 57). Knox favoured legislation to eradicate the Scottish Celts, as 'the Celtic race cannot too soon escape from under Saxon rule' (Knox 1850: 27). This Scottish civil feud began to mellow after 'kilted Highland regiments distinguished themselves' at Waterloo, allowing the synthesis of a single Scottish 'national tradition', which embraced a Celtic identity (Davies 1999: 837-38). Loyal Scottish participation in British imperial governance of dark 'natives' and Highland romanticisation meanwhile made Scottish national blonds welcome within the synthetic, four-nations model of British nationalism, which focussed patriotism on crown institutions rather than ethnicity. Beddoe honoured the service to the empire of the blond 'higher types of Scotchmen' 'the dominant breeds of our islands' (Beddoe 1905: 237). The blond fetish in ethnology served the Scots well. Jackson considered Kimmerians 'the most effectively Caucasianised' of all the blond races, the tallest, straightest legged, biggest chested and 'most vigorous'* (Jackson 1873: 398). The Scottish Kimmerian reproduced French narratives of distinctive blond Kymri Celts. If identifying the Celts with the blond race was unsatisfying to France's brunette majority, excluding the sizeable blond minority from an purely brunette French racial identity was also not ideal. As romantic

nationalism excluded the Germanic Franks from French identity, Thierry rebranded French blonds as Kymric Celts, and conflict with Germany made the counter-narrative of racially Teutonic Kymri increasingly unattractive (see pp.239-40). Edwards, Broca and most French ethnologists from the 1860s on therefore made both the brunette and blond, pale, blue-eyed, ‘very tall and thin’ Kymri French, with a long skull and face, into Celts (Périer 1864: 603; Périer, Bertillon & Lagneau 1861: 359-60; Collignon 1883: 504 & 525). Philologists like Henri Martin, who pointed out that many speakers of Welsh and Breton ‘Kymric’ languages were round-headed brunettes, were ignored (Périer, Bertillon & Lagneau 1861: 360). Rawlinson even reported seeing ‘vast numbers’ of blue-eyed, ‘flaxen-haired’ Welsh children (Rawlinson 1877: 153).

Just like the British Kimmerianists, Anglo-Irish ethnologists used a blond Celtic aristocracy to maintain their patronising romantic elitism towards the dark lower classes[†] (Campbell 1872: lvii). Frazer, Wilde and Dickson drew on MacFirbis and Retzius to proclaim that the fair-haired first Irish Celts introduced bronze and conquered the dark, inferior ‘original Firbolg inhabitants’, who were as savage as ‘the Maoris of New Zealand’ and had little or no metallurgy (Frazer 1888: 47-48; Collis 2003: 59; Wilde 1849: 231, 237 & 239; 1874: 246). O’Grady identified the same tall, blond, blue-eyed aristocracy and darker lower orders in ancient Greece, North-Western Europe and Ireland, where ‘successive Celtic invasions’ ‘obliterated’ the language and ‘altered’ the physical appearance of Turanian Basque natives (O’Grady 1878: 15). The Catholic MacLoughlin adopted an English ethnologist’s distinction between Scottish clans of dark type and the ‘tall, powerful, red-haired’ ‘old Celtic type’ of certain and ‘the dark clans of the Western Isles’ (MacLoughlin 1896: 89). Expressing his loyalism, Dixon said the Irish police, ‘recruited mainly from the native population’ but with a height qualification, might be the world’s ‘most entirely Celtic body of men’ (Dickson 1896: 158). Wilde and William Frazer contrasted Iberian skulls ‘of low organisation’ with the ‘better proportioned’ Celtic crania, which resembled ‘the better’ Indo-European form (Wilde 1849: 231; Frazer 1888: 48). However Celticist cultural nationalists were very reluctant to accept Irish Iberians. Wilde, Grattan, William Frazer and W.K. Sullivan’s studies of the ancient or modern ‘true Irish’ agreed that the inferior, ‘dark-haired, ‘black-visaged, swarthy’ Firbolg aborigines were ‘rarest of all’ or rarer than in Wales and the west of England, while fair-haired Celts were ‘much more numerous’ (Grattan 1858: 244; Frazer 1888: 48; Wilde 1874: 246; Sullivan 1971 [1873]: lxxvii).

* English writers still preferred Teutons however. Rawlinson and Beddoe described various ancient Kymri as ‘a ruder and more savage’ ‘weaker race’ with ‘perhaps’ a Germanic ‘noble and military caste’, retreating from Teutons (Rawlinson 1877: 152 & 156; Beddoe 1971 [1885]: 23).

[†] Between 1861 and 1885, the leading European anthropologist John Beddoe became convinced that ancient Irish poetry and fairer-haired districts which were ‘rich, fertile and tempting to a conqueror’, but ‘where the Irish race had undergone little mixture’, indicated that the dark Gaels had a blond elite (Beddoe 1861: 562-63; 1905: 236). Maclean agreed that the true, fair-haired, Kimmerian Celts, calling themselves *Gaidal* or *Galli*, ‘conquered the Atlanteans of Gaul and Spain’ and imposed the Celtic language on them (MacLean 1872: xlv).

Sullivan attributed this to exceptional Darwinian competition during ‘the successive famines’ which ‘desolated’ Ireland, in which Iberians, dispossessed very early of their land, ‘fell victims’ disproportionately (Sullivan 1971 [1873]: lxxvii). Even the ancient Irish equal opportunities system meant that probably ‘only the descendants of the “fittest”” Irish Iberians, either physically strong or ‘able and industrious families who... used the advantages of the Irish law to win a social vantage-ground’, survived the ‘horrible periods of privation and physical suffering’ (Bryant 1889: 23).

British anthropologists regularly spoke of dark, poor ‘Celtic Irish’, Beddoe linking ‘Keltic surnames’ with this type (Bedford Pimm 1869: ccxxxvi; Beddoe 1905: 236; Frazer 1888: 46-47). However Irish nationalists were unusually reluctant to accept that the concentration of racial Iberians on the impoverished west coast of Ireland, where their craniological type ‘nearly all speak Irish’ made them obvious candidates for romanticised modern Celts (Wilde 1874: 246). Elements in British and pre-Broca French ethnology supported this Iberian Celt narrative. Broc, Edwards, Broca, Beddoe and Davis and Thurnam saw the small dark Welsh race as Broca’s Bronze-Age Celts or as Celticised Iberians (Spencer 1997e: 358; Ripley 1900: 125; Broc 1836: 30-31; Edwards 1841: 59; 1845: 18-19). By ignoring skull shape, MacLean linked his dark Atlanteans with both Broca’s broad-headed Celts, and suspicious long-headed Irish and Spanish peasants, calling it ‘the preponderating race in Spain’ and probably southern France (Jackson 1873: 397; MacLean 1872: xlvi). Webster saw it as ‘more scientific’ to explain the ‘likeness’ between the ‘Castillian Spaniard’ and ‘dark Irishman or Welshman’ by ‘the know quantity’ that they shared as Celts than by a common pre-Celtic Iberian ancestry (Wentworth 1876: 16). Frazer linked his ‘typical Celtic or Irish’ skull and skeleton with long-headed racial Mediterraneans like the dolmen-builders, ancient Egyptians and Crô-Magnon (Frazer 1888: 43-48). Périer, who published an influential book on the Celts in 1857, brought his ‘brown’ Gallic race from the west and south, and the Celtic language from the Pyrenees, though distinguishing it from ‘African’ Ligurian (Lagneau 1876: 128-29; Périer 1864: 621-22 & 624). French ethnologists may also have coined the term Atlantean, which MacLean made so popular in British ethnology, from the Atlas Mountains, or from classical legends of Atlantis. In 1827 Bory placed his Atlantean ancestors of Celts, Iberians and Kabyles in Morocco, Iberia and the Canaries, which were ‘perhaps then just one island, since lacerated by violent volcanic commotions’ (Bory 1827: 175; Périer 1864: 622).

Confusion between the philological and physical race supported the Iberian Celt narrative. Beddoe claimed it was ‘generally believed’ that the ‘bronze race spoke Kymric’, but some thought the long-barrow people, ‘if Iberian in blood, were Gaelic in speech’, and sought Gaelic etymologies for place-names near megalithic monuments (Beddoe 1971 [1885]: 27). Black Celts were mostly

identified in Wales, Ireland, Cornwall and western Scotland, just where Insular Celtic languages survived longest. Beddoe noted darker-pigmented people where the medieval Cornish tongue survived, and in forests where Britons took refuge from the English conquest (Beddoe 1905: 235). MacLean discovered several grammatical and phonetic links between Celtic languages and Spanish, Basque and Berber and ‘some apparently Euskarian words’ in West Highland Gaelic, and traced the common grammatical features and ‘symmetry and precision’ of Latin, French and Gaelic to Atlantean racial psychology (MacLean 1872: xlix-l; Beddoe 1876: 23-24). Atlanteans fight as guerrillas he added, but Kimmerians in armies (MacLean 1872: li). Mitchell identified a ‘Spanish Kelt’, resembling the Basque type, among ‘his Highland-Gaelic types’ (Beddoe 1876: 23-24). Beddoe and Pruner-Bey believed Gaelic speaking Iberians preceded Kymris in Britain, accounting for Beddoe’s ‘repeated observations’ of Welsh ‘persons of thoroughly Gaelic aspect’ and of dark Iberian or Basque features, ‘as prevalent’ in South Wales especially, ‘as Radicalism and Nonconformity’ (Beddoe 1971 [1885]: 26-28; Pruner-Bey 1864b: 670; Wake 1873: 716). Though he saw the resemblance between ‘Welsh cave-men and Busk’s Gibraltar skulls’ as evidence of ‘an Iberian substratum’, he said philologists had ‘chiefly’ provided the ‘gradually’ strengthening evidence of Gaels traversing Britain (Beddoe 1971 [1885]: 25-27). Lhuyd attributed most British river names to Gaelic, while John Rhys and others gave evidence of Gaels in Roman Wales, and found stronger Basque traces in Gaelic than Kymric, though this weakened theories of Iberian Silures and ‘small, swarthy’ modern Welsh (Beddoe 1971 [1885]: 26-27; Boyd Dawkins 1876: 21). Boyd Dawkins therefore criticised philological results on Basque roots in Welsh and argued that physical evidence was the conclusive ‘test of race’ (Boyd Dawkins 1876: 22).

Wilde and O’Grady accepted significant fusion between Ireland’s races meanwhile, but most later Irish nationalist ethnologists ignored the French-style narrative of a modern dark race becoming Celtic through fusion with blond Aryans (Wilde 1874: 246; O’Grady 1878: 16). This was probably partly because they were humanities scholars, unfamiliar with the niceties of French race classification, but presumably also reflected Irish nationalism’s new 1890s emphasis on ethnic purity. Irish nationalist ethnology imported blond supremacism from British colleagues like Beddoe, but could interpret his fusion narratives as slights against Irish purity. Beddoe gave the ancient Irish very diverse colouring, but said ‘one distinct’ Iberian cross-breed ‘with a long-faced, harsh-featured, red-haired’ Celtic race, characterised by the unusual combination of dark hair and light-coloured eyes, ‘decidedly predominates’ among modern Irish and Scots, some of their ancient heroes, and ‘their apparent kinsmen’ in Wales and the west of England (Beddoe 1971 [1885]: 290 & 296-98; 1898: 164-65 & 170). Beddoe cited several studies, including Wilde, showing surprisingly few dark eyes for a dark-haired country, and even lower in Ireland’s ‘general

population' than in the Anglo-Irish 'upper class' (Beddoe 1971 [1885]: 290). The homogeneity and 'great geographical extension of this type in the British Isles' suggested to Beddoe that the mixture occurred on the continent (Beddoe 1971 [1885]: 298).

Kymris and Teutons

The most shocking indication of blond fixation among Irish nationalist ethnologists was their distance for French and Scottish models of racially separate, though similar, blond Aryan Celts and Teutons (Périer, Bertillon & Lagneau 1861: 382; Périer 1864: 604-5). The strong influence of linguistics led early nineteenth-century French ethnologists like Thierry, Edwards and Henri Martin and English race classifiers like Thurnam to racially distinguish Celtic Kymri-Kimmerians from Teutons (Broca 1871: 285; Edwards 1845: 19-20; Périer, Bertillon & Lagneau 1861: 382; Jackson 1873: 398; Thurnam 1864: 399). To forge an autonomous Scottish identity within Britain meanwhile, MacLean stressed that his Kimmerian 'contrasts strongly' with the Teutons, 'abounded in the British Isles, France and Spain, ages before' them and was the most numerous 'white' race in Western Europe (MacLean 1872: xl-xli). Ethnologists contrasted southern and central English Saxons with the blond 'big men' of rural northern England and northern Ireland, 'as purely Celtic today' as the Scots (Campbell 1872: lvi; MacLean 1872: xl; Dickson 1898: 12-13; Jackson 1873: 399; Sullivan 1971 [1873]: lxix-lxx). The Saxons never wiped the natives out, and even if they had, would have racially perpetuated the Celts by taking 'the women of the vanquished' as 'perquisites of victory' (Dickson 1898: 13). Some French ethnologists and most fans of the Scottish and Irish Kimmerian, gave it anthropological signs which distanced it from the Teuton (Périer 1864: 603; Broca 1860: 10; Collignon 1883: 504 & 525). In contrast to the blue-eyed 'typical flaxen Saxon or Teuton', it frequently had red, or 'russet orange-coloured' hair, grey rather than blue eyes* and sometimes florid and freckling cheeks (Périer, Bertillon & Lagneau 1861: 359-60; MacLean 1872: xli; Campbell 1872: lvi & lx; Beddoe 1971 [1885]: 298; Rawlinson 1877: 153; Jackson 1873: 397; Sullivan 1971 [1873]: lxxii; Wilde 1849: 237; MacLoughlin 1896: 89; O'Grady 1878: 16; Borlase 1897: 1044-46). Dickson and MacLaughlin noted the recurrence of the names Roe and Finn, meaning red and blond-haired respectively, in aristocratic Gaelic genealogies and Beddoe noted the common native surnames in largely red or fair-haired coastal areas of Britain and Ireland (Dickson 1898: 14; MacLoughlin 1896: 89; Beddoe 1905: 236).

Nineteenth-century ethnologists fought long, complex, inconclusive international battles about the Teutonic or Celtic identity of the Kymri, Kimmerian-Cimbri, Galatians and Belgae (Périer,

*Even Tacitus gave the Caledonians 'reddish hair' (Tacitus 1962 [97-98]: 61). Grey eyes also distinguished Slav and Finnish East Europeans from Nordic Teutons (see p.277).

Bertillon & Lagneau 1861: 382; Rawlinson 1877: 151; Beddoe 1971 [1885]: 20). The Belgae occupied northern Gaul in the fourth century BC, and were usually considered the main Kymric settlers in Britain (Périer, Bertillon & Lagneau 1861: 356 & 382). While many argued from linguistic and cultural evidence of Kymric and Gallic similarity, and physical differences between modern Walloons and Flemings, that they were non-Teutonic 'Celtic-speaking' Kymris, classical texts strongly suggested to others that they were 'half Teutonic', partly 'Celticised Teutons' or had absorbed an 'infusion of German blood' (Bertrand 1873: 435; Hölder 1876: 18; Pruner-Bey 1864b: 661; Edwards 1845: 21; Périer, Bertillon & Lagneau 1861: 356, 362-63 & 382; Beddoe 1971 [1885]: 20 & 23; 1890: 483; Périer 1864: 603; Beddoe 1971 [1885]: 20 & 23). Some 'weighty' English-speaking authors believed Teutonic Belgae facilitated England's 'rapid Saxonisation' (Morton 1839: 17; Beddoe 1971 [1885]: 20). Edwards identified Thierry's Kymri as blonds because they included the Belgae, who Caesar said were blond (Edwards 1841: 52-53 & 59). The Kymri-Cimbri link meanwhile convinced eighteenth-century antiquaries, Retzius's Scandinavian school and Edwards and Broca that 'northern Celts' inhabited ancient Scandinavia (Retzius, A. 1864: 102; Pruner-Bey 1864b: 672; Betham 2000 [1834]: 381-83; Broca 1860: 10; 1871: 285). However the Celtic Cimbri thesis was itself supported by little more than the Scandinavian Celt theory, plus some weak physical anthropology and geographical arguments (Rawlinson 1877: 152-53 & 156). Supporters of Germanic Cimbri by contrast, like Prichard and Pruner-Bey, linked the term Cimbri to German words and the Flemish dialect and noted that Jutland was in a primarily Germanic area, that the Cimbri had Germanic allies, that Roman writers called them tall, blue-eyed blonds, that they had battle-priestesses and finally that several Roman writers listed them among the 'German nations' (Pruner-Bey 1864e: 332; Prichard 1973 [1813]: 486-87 & 500; Rawlinson 1877: 152; Betham 2000: 381-83; Lagneau 1864b: 246).

The Irish Unionist Dickson, representing a beleaguered blond Celtic outpost in Iberian Firbolg Ireland, stressed that the Firbolg were 'racially so distinct from the Celt, that, in comparison, Saxon, Norman, and Celt might be classed as brothers of one family' (Dickson 1898: 12). Borlase in England meanwhile linked the tall, dark, blue-eyed 'Milesian' dolichocephal in Ireland with Tacitus's 'Caledonian Germanic type' and his 'Scando-Germanic' and said his 'Aristocratic' Irish blond was without 'the slightest doubt', a pure relative of Caesar's Teutons (Borlase 1897: 1028 & 1042-46). However even Catholics like Sullivan saw blond Celts and Teutons as 'essentially the same race,' whose 'common language' only split up fairly recently, explaining the Germanic roots for many Gallic words, commonalities between Celtic, Germanic and Slavic conjugations, and German or Scythian origin stories in Irish legends (Sullivan 1971 [1873]: lxxv-lxxvi). James MacLoughlin meanwhile complained that 'remarkably enough, even in Ireland', some saw the blue-

eyed, blond 'favourite and idealised old Irish type' from traditional poetry, 'as non-Celtic' (MacLoughlin 1896: 32 & 36). But even he accepted that classical sources were ambiguous, and Aryan theory and physical traits both suggested that Teutons and Kymri were very close or identical, and the Kymri invaded Gaul from a Teutonic region (MacLoughlin 1896: 88).

Conclusion

Despite the long-established internationalism of Celtic narratives and scholarship, Irish nationalist writers tended to adapt purely British and specifically Scottish schemes, especially in race anthropology. Early modern scholars identified the insular languages with the fashionable continental Celts and later used them to participate in romanticism, an international movement despite its nationalist obsessions. The study of ancient literature was central to Celtic romanticisation, but even Celtophile 'experts' like Macpherson, Arnold and Renan merely harnessed insular Celtic traditions to a metropolitan critique of modernity, while Anglo-Irish nationalists like Yeats adopted this critique to protest their provincial marginalisation from London. They also used British models of Celtic ethno-racial synthesis to claim political leadership in Ireland and political participation in Britain. As Catholics took over the Celticist and nationalist projects during the nineteenth century, they replaced synthesis with a more typically Central European narrative of ethnic purity, though these might also have been calqued on British Anglo-Saxonism. The acceptance of exoticising Celtic narratives certainly illustrates British and Anglo-Irish influence on Catholic ethnic identity construction. Though earlier ethnic narratives equated French and Irish Celts, the French Celts were more orthodox national ancestors, and later biological race narratives connected the Irish with Spaniards instead. Unlike primarily archaeological continental Celticism meanwhile, Insular Celticism drew most heavily on linguistics.

Irish race anthropology was very weak, with almost no anthropological institutions. Most nationalist works were by Anglo-Irish humanities scholars for whom anthropology, like archaeology, was a mere auxiliary to history, and drew largely on English anthropological sources. Their adoption of a Mediterranean narrative could draw both on British traditions of *ex oriente lux* and on migration accounts from the Irish Annals, which conveniently bypassed Britain as a source of the Irish population. Though Irish nationalist ethnologists attributed redeeming features to the dark race, either ignoring or opposing attempts to connect them to supposed inferiors like Africans or the long-barrow race however, only Standish O'Grady actually claimed they were superior. Instead, Irish nationalists insisted on the British and especially Scottish narrative of superior blond Aryan Celts ruling dark servile aborigines, exploiting very contradictory evidence to insist that the

Irish or at least the Gaelic nobility were blond. No Irish ethnologist after Wilde in the 1840s considered linking Celts and dark brachycephals, as Broca taught most of continental Europe to do, or developed an Italian strategy of adopting the dark dolichocephal as a national race. The later Irish nationalist rejection of racial fusion narratives demonstrates an even greater commitment to the blond than in Britain, fuelling the Anglo-Saxonist narrative of southern Catholic inferiority, which fed a wider international Germanicist anti-Mediterraneanism (see pp.191-93). Though this Irish ethnology narrative, like Celticist romanticism, was a provincial echo of the locally dominant core narrative however, they was interpreted within the monoethnic, 'Central European' discourse of Irish nationalism more broadly.

Given the implicit elitism of the blond Celt narrative, justifying Anglo-Irish national leadership, and Catholic Church antipathy towards biological anthropology, Catholic Irish nationalists unsurprisingly concentrated instead on the philology centred discipline complex of Celtic studies, where they had a much stronger international hand. The greatest coup for Irish nationalists was to have the insular languages recognised as the historically important branch of Indo-European that was spoken in much of pre-Roman Western Europe. This gave Irish scholars and particularly Catholic Irish Gaelic-speakers an important international role enduring links with the German scholars who dominated philology, and a set of important academic institutions. To an extent however, Irish language scholarship was a passive beneficiary of foreign philology, which somewhat reinforced the image of Celtic culture as a romantic vestige. Philologists appreciated Celtic linguistic conservatism for example, preserving traces of an archaic auxiliary verb system otherwise only found in India for its valuable insights into broader questions (Prichard 2000 [1831]: 92-93; Pictet 1836: 433 & 443-44).

Poland: The rise of an anthropological power

So if we wanted to breed this kind of pure racial stock, we would have to select from each population, individuals representing a certain race and isolate them in concentration camps, to stop them crossing with representatives of other races. This kind of experiment could be carried out successfully on horses, mice or sheep, but its use on people is unworkable even in a totalitarian system.

A Polish anthropologist in 1939 (Klimek 1939: 35-36)

In Cracow, physiology professor Józef Majer taught physical anthropology from 1856, and Izydor Kopernicki became an extraordinary professor of anthropology in 1886, pioneering Polish prehistoric anthropology (Bielicki, Krupinski & Strzalko 1985: 3; Godycki 1956: 16; Stojanowski 1948: 1). In the 1870s and 1880s, they anthropometrically studied ‘over 7000 adults’ in Galicia, mostly from doctors’ reports on military conscripts, plus studies in hospitals and prisons (Bielicki, Krupinski & Strzalko 1985: 3; Majer & Kopernicki 1877: 4-5). This early and powerful growth of the discipline collapsed when Kopernicki died in 1891. His chair was unoccupied for seventeen years, and systematic surveying ceased, though ‘provincial doctors’ like Władisław Olechnowicz, Leon Rutkowski and Julian Talko-Hryniewicz continued research, aided by intellectuals like Benedykt Dybowski, a zoology professor, Ludwik Krzywicki and Władisław Wścieklica (Czekanowski 1948: 19-20; Stołyhwo 1957: 5-6). In 1908, Kopernicki’s Cracow chair was finally filled by his student and collaborator Talko-Hryniewicz, and a chair in ethnology and anthropology was established in Lwów, the second city of Austrian Galicia, which Jan Czekanowski occupied in 1913 (Stołyhwo 1957: 10-11; Jasicki 1957: 18-19; Godycki 1956: 17). Other research centres rapidly developed after Polish independence in 1918, but Jan Czekanowski’s Lwów school and the Cracow school of Kazimierz Stołyhwo, who also developed anthropological institutions in Warsaw, remained the leading typologically orientated centres, each using very complex and original statistical typology methods* to construct their own Polish and European race syntheses in the 1920s (Jasicki 1957: 35-37 & 60; Schwidetzky 1935: 194; Bielicki, Krupinski & Strzalko 1985: 7).

*These are examined in pp.172-76.

From 1925 to the late 1930s, these two schools waged polemic ‘open conflict’, in foreign and domestic fora (Czekanowski 1948a: 8-9; Bielicki, Krupinski & Strzalko 1985: 12). When Talko-Hryniewicz retired from Cracow in 1931, all Poland’s leading anthropologists, including Czekanowski and his student Stołyhwo, were candidates to succeed him in Poland’s senior anthropological chair (Jasicki 1957: 32). Stołyhwo was initially considered too young, but Talko-Hryniewicz and other Cracow officials wanted to save the post from ‘the expansionist hands’ of Czekanowski’s ‘one-sided and damaging’ Lwów school, which was systematically occupying most senior Polish anthropological posts (Jasicki 1957: 32-33). Fearing ‘objective,’ apolitical anthropology might ‘disappear... entirely’ from universities, they gave the post to Stołyhwo in 1932, who apart from his wife Eugenia, was the only interwar habilitation outside Lwów (Jasicki 1957: 33-37). Stołyhwo led the increasingly bitter opposition to Czekanowski’s raciological methods, typology and results, but by 1935 this accounted for ‘by far the greatest part of Polish anthropological literature’ (Schwidetzky 1935: 80 & 83). Czekanowski trained eight of the ten Polish anthropologists receiving habilitations (third-level teaching diplomas) between 1918 and 1940 and Lwów had the largest anthropology teaching facility ‘by far’, producing 28 masters dissertations in the first term of 1934 (Czekanowski 1948a: 13; 1956a: 9-12 & 20-27; Schwidetzky 1935: 82). Czekanowski’s magpie-like theory-building method absorbed potential rivals, like Günther and Talko-Hryniewicz, and chosen predecessors like Deniker* into his own system by arguing that they perceived the same underlying reality (Czekanowski 1928: 337-39, 353 & 356). He expertly countered well-grounded criticisms that this could massively distort the original theories, that his system deviated from traditional classification canons, and was based on artificial ‘purely mathematical considerations’, later massaged to fit ‘historical and morphological’ factors (Schwidetzky 1935: 146). This ‘deceptively mild-mannered and soft-spoken’ man, ‘adored by some, admired by many, and intensely disliked by a few’, was ‘usually sharp-tongued and sometimes quite venomous in polemics’ (Bielicki, Krupinski & Strzalko 1985: 21).

The impressive institutionalisation of Polish anthropology helped launch it from peripherality to an internationally recognised raciological centre, whose methods achieved a certain international influence (Făcaoăru 1938: 208). Kopernicki, Talko-Hryniewicz, Stołyhwo, Loth and Czekanowski prepared the ground with internationally respected work on questions of non-solely Polish interest such as Balkan Gypsies, the Ainu of Japan, Siberia peoples, the Neanderthal and Africa (Godycki 1956: 28; Jasicki 1957: 22, 36 & 60; Bielicki, Krupinski & Strzalko 1985: 11; Wrzosek 1959: 165-

*He said his scheme ‘with just slight modifications’ matched Deniker’s prestigious system better than rival schemes like Günther’s did (Czekanowski 1920: 63; 1928: 336-39; Mydlarski 1928: 224). To underscore its claim to be Deniker’s only true heir, Lwów sometimes preferred referencing anachronistic nineteenth-century works, to post-Deniker schemes which had perversely diverged from his tradition (Mydlarski 1926: 188; 1928: 224; Schwidetzky 1935: 163).

71). Citations of Polish writers in my database climbed from 0.24% in 1772-88, behind Hungarians, when Kopernicki was in his prime, to 16.9% in 1919-39, second only to the Germans and British. Poland initially mostly consumed foreign techniques and models, but after 1918 its schools began establishing themselves as exporters, competing with German raciology. The secretariat of the international anatomists' Committee for the Study of Soft Tissues was established in Warsaw in 1926, under Edward Loth (Czekanowski 1948a: 22). Czekanowski's school achieved such international renown, and so successfully placed its adepts in professional posts at home, that it became known abroad as the Polish school. Bodo Skjerl of Ljubljana said Czekanowski's raciology theory was 'one of the most important' of all and lay at 'the roots' of his own 1936 scheme (Skjerl 1936: 285 & 299). While most Romanians preferred Eickstedt's system, Botez used the Polish School method, 'today common in various parts of Europe' (Botez 1938: 9). Stojanowski claimed post-War Russian work was 'quite remarkably subjugated to' Polish anthropology, and used Polish research methods until political changes in the early 1930s (Stojanowski 1935: 34). Lech said Czekanowski's student Leon Kozłowski worked with and directly influenced the leading British archaeologist Gordon Childe's 'adoption of the central European concept of archaeological culture' (Lech 1997/98: 49). The large, diverse and confident interwar Polish anthropology mainly used domestic sources. Rosiński almost exclusively used Polish studies to discuss race psychology, while Stojanowski's critique of Günther's Nordicism ended up focussing on that of Rosiński (Stojanowski 1930; Rosiński 1929: 273). In Czekanowski's bibliography of interwar Polish anthropology, almost all works are in Polish (Czekanowski 1948a: 124-174). However both his school and Stołyhwo's regularly used international conferences and leading foreign anthropological journals to promote their methods and results (Stołyhwo 1926b; Czekanowski 1920: 48-49). Schwidetzky said the international recognition of Czekanowski's system was 'especially' due to its initial publication in German, from which Skjerl for example mostly cited (Schwidetzky 1935: 80; Skjerl 1936: 306). Poles dominated discussions on race at the 1924 Prague congress, remaining very active in later conferences (Pogliano 2005: 32 & 45).

This chapter examines the ethno-racial narratives and institutional organisation of Polish anthropology, to assess how far it moved from periphery to core in the international discipline and what this says about the meaning of core and peripheral status. I concentrate especially on the relationship between this transformation and the move from apolitical Celto-Slavism to nationalistic Nordicism. Majer and Kopernicki were textbook positivist anthropologists, cosmopolitan and internationally respected, but adhering obediently to a set of models and rules, including in their approach to nationalism, which were largely devised in Paris. They were so few and with such limited institutions that they appeared more like international anthropologists based in Poland, than

an autonomous Polish anthropological community. The chapter first examines the relationship between foreign influence and the rising anti-German nationalism of the next period. Though this reaped a bonanza of state support upon independence in 1918, as German nationalist anthropology did in 1933, allowing secure institutionalisation and burgeoning influence abroad, it arguably reflected increasing influence from German hypernationalism. The rest of the chapter examines international dependence and independence in Polish Slav identity narratives, like the interationally important East European ‘underling’ narrative, the switch from broad to long-headed Slavs, interwar use of the Nordic and East European and the Lusatian culture. Despite close parallels with and important influences from *völkisch* German raciology and archaeology, including a thriving Nordacist obsession, I argue that interwar Polish anthropology was more a separate pole within a common Central European community than a German dependency. This large Central European bloc was a crucial bellweather and asset in international anthropology, balancing between core and periphery, and between French and German influence. Raciologists like Bunak in Russia appear to have been as independently-minded and innovative as Polish colleagues. For this reason and given the centrality of the Slav question in Polish anthropology, I regularly include supplementary data from Poland’s Slavic neighbours. Archaeology, which was central to ethnological debate, also plays a large role in this chapter.

Nationalism and foreign influence

The Polish case ultimately confirms the strict dichotomy of nineteenth-century French-dominated positivism and interwar German-style ultranationalism, while illustrating the rich ambiguities and contradictions within it. French universalist, cosmopolitan positivist anthropology was far from apolitical in practice and Polish positivists were ardent nationalists. Kopernicki and Dybowski fled or were exiled from Poland after taking part in the 1863 nationalist uprising (Godycki 1956: 12-13; Stołyhwo 1957: 6-7, 12 & 16). Czekanowski said anthropology, ethnography, musicology, and prehistoric archaeology, which ‘provincial Russian universities’ neglected, had particular ‘intellectual autonomy’ in Russian-ruled Poland (Czekanowski 1956: 5). Positivists were also not above some nationalist point scoring. Kopernicki described modern and certain ancient Slavic crania as ‘shapely’ and ‘completely’ orthognath, without the prognathic, or forward jutting lower face associated with Africans, apes and evolutionary retardation (Kopernicki 1883: 34). He and Majer sceptically called blue eyes ‘an alleged’ Teutonic ‘ethnic [szczepowy] characteristic’ (Majer & Kopernicki 1877: 104-5). Early Polish and Czech anthropology first institutionalised under Habsburg rule, and often presented anthropology as a patriotic science, suppressed by the Germanicising Austrian state. Matiegka stressed consistent obstruction by Austria’s ‘reactionary government’ of Czech anthropological institutions and careers from the 1860s on and Majer started

an optional anthropology course in Polish in 1856, when during Austria's brief Germanisation experiment, compulsory subjects had to be taught in German (Matiegka 1924a: 6-8; Bielicki, Krupinski & Strzalko 1985: 3). A massive drive to study Poland epitomised the positivist national focus. Czech and Polish anthropologists 'worked little' on 'foreign peoples and races', but 'with infinite zeal on the precise knowledge of the physical characteristics of our people' (Matiegka 1924a: 11; Schwidetzky 1935: 77). In Slovakia pre-1918 similarly, prehistory was left to a few 'patriots, enthusiasts' (Stocky 1924: 55). Though Majer and Kopernicki were more modest, Czekanowski claimed that by 1891, the Austrian and Russian ruled parts of Poland were better studied anthropologically than Germany, and the Austrian section was one of the best studied in Europe (Czekanowski 1956: 8 & 13; Majer & Kopernicki 1877: 105). Interwar typologists further intensified this Polish focus. Schwidetzky in 1935 called Poland Europe's anthropologically 'best researched country', with 'numerous older and newer' studies illuminating Jan Mydlarski's 1921-23 nationwide survey of 'over 100,000' military recruits, taking 45 measures and describing 17 traits, including blood group* (Mydlarski 1928b: 195; Schwidetzky 1935: 165 & 199; Bielicki, Krupinski & Strzalko 1985: 10-11; Malinowski & Wolański 1985: 42).

Nineteenth-century Polish anthropologists had partly nationalist motives for adopting positivism. As in Germany, antiquarianism was exceptionally important in Polish romantic nationalism (Sklenář 1983: 68-69). Museums became a 'psychological and ideological weapon' to 'strengthen the sense of national identity' and centres of 'intellectual and cultural life' for a 'small nation fighting for recognition' (Sklenář 1983: 78 & 80). Poles and Germans often assumed on a largely 'emotional' basis, that all items found where history recorded Slavic or Teutonic habitation belonged to their ancestors, and some antiquaries even extrapolated from finds of supposedly Slavic objects elsewhere, that Slavs were native 'in large areas of Europe' (Rączkowski 1996: 190-94; Sklenář 1983: 95). The string of failed uprisings in 1830-64 taught Polish nationalist intellectuals and nobles the need for broad popular nationalism, and so they dedicated themselves to 'organic work', 'a long-lasting educational and organizational activity in the whole of society' (Rączkowski 1996: 195). Desperate to meet Western standards of 'technological progress, prosperity, order, work ethic, respect for the law and refined manners', scholars turned their backs on the older blatantly partisan romantic antiquarianism[†], adopting a self-consciously objective anthropology and archaeology (Tornquist-Plewa 2002: 228).

* His survey was launched by a War Ministry decision to examine 1% of the male population, partly to help design and save money on equipment (Mydlarski 1926: 186; Schwidetzky 1935: 82). Mydlarski organised squads, mostly of medical students, to test soldiers at barracks over the summers of 1921-23, and then compiled maps of anthropometric features, blood groups, and racial geography (Mydlarski 1926: 186-89; Schwidetzky 1935: 165-66; Bielicki, Krupinski & Strzalko 1985: 10-11).

[†] As their Irish counterparts did for similar reasons (see pp.303-6).

Tornquist-Plewa says the self-styled positivist intellectuals ‘whose ideas guided Polish society after 1863’ ‘were deeply influenced by Western European scientism and Darwinism’, advocating Western-style modernisation and dropping attempts to include Orthodox populations in the nation (Tornquist-Plewa 2002: 225). Sklenář sees ‘less chauvinist passion’ in pre-1914 Slavic than German archaeology, nationalism being confined to ‘the fringes’ as the positivist influence of Lubor Niederle in Prague overcame the previous ‘uncritical’ ‘autochthonist school’ (Sklenář 1983: 149). The leading Polish archaeologist Erazm Majewski denied that absolutely racially pure ethnic groups had ever existed (Majewski 1905: 166). Highly influential intellectuals like the Marxist Ludwik Krzywicki (1859-1949), an ethnologist, founder of Polish sociology and social science polymath, are described as ‘strongly anti-biological’, criticising the right-wing anthropologies of Spencer, Gobineau and Lombroso (Bieliński, Krupinski & Strzalko 1985: 5; Lech 1997/98: 29). German and Polish positivist anthropologists like Kopernicki and Virchow appeared more apolitical than French colleagues, adopted several positions which apparently undermined the romantic national claims of their archaeologist compatriots. In archaeology, Poles recurrently complained that Germans, in line with politicised Prussian traditions of eastern research (*Ostforschung*) in anthropology and history, claimed the ‘more valuable relics’ stopped at the Vistula, and allocated them to their own ancestors (Rączkowski 1996: 194; Howorth 1875: 359; Wijworra 1996: 175-76; Mazumdar 1990: 197). Buschan gave prehistoric Teutons ‘a doubtless higher culture’, describing ‘inferior’ Slavic ceramics as clumsy copies of the Germanic Lusatian style, ‘far below... the earlier care and artistry’, which was the ‘richest and most artistic’ in northern Europe (Buschan 1890: 24-33). The more nationalist interwar Lwów school criticised the positive anthropologists for avoiding larger theoretical questions and racial synthesis, but positivism by no means excluded racial-ethnic classification (Czekanowski 1948a: 27; Stojanowski 1948: 1). Ethnic migration remained the favoured explanation for craniological change in Slavic history right through to 1945 and after (Godycki 1956: 26; Krzywicki 1969 (1897): 419; Bunak 1932: 495). Majer proposed Poland’s ‘first strictly anthropological, typological approach’, and his and Kopernicki’s survey ‘was concerned only with’ comparing the three main Galician ‘nationalities’ or ‘ethnic groups’, plus differences between highlanders and plain dwellers (Majer & Kopernicki 1877: 3; Malinowski & Wolański 1985: 36). However they devoted much of their analysis to non-racial questions like growth and childhood development, preferring to list pages of statistics than reach politically useful judgements (Majer & Kopernicki 1877: 10-20 & 49). Types were only ever identified for individual features, rather than as racial complexes.

Overt chauvanistic nationalism intensified from the late nineteenth century on. The Polish ‘provincial doctors’ of the 1890s and early 1900s were more race-oriented and nationalistic than Kopernicki and Majer, acting as ‘the immediate forerunners’ of Czekanowski’s Lwów school (Bielicki, Krupinski & Strzalko 1985: 4). Russian recruitment statistics in 1875 and 1886, which suggested Poles were smaller and punier than Russians, unleashed a Polish press panic about the ‘physical decline’ of the nation, stimulating patriotic public and scholarly interest in anthropology (Czekanowski 1948: 29; 1956: 13 & 16-17; Krzywicki 1969 (1897): 393; Schwidetzky 1935: 78). Schwidetzky says Polish researchers unanimously concluded that the statistics demonstrated racial difference rather than degeneration, though Wścieklica’s ‘Are we Degenerating?’ (1888) seemed to belie this claim* (Schwidetzky 1935: 78; Czekanowski 1956: 15). In the 1890s, artefact archaeology became the most important and contentious theatre of ethnological rivalry between Poles and Germans, both highly conscious of, and often emotionally motivated by a belief that it legitimised modern nationalist territorial claims (Kostrzewski 1927: 1-2; Barford 2001: 278; Rączkowski 1996: 204). This was already an ‘old argument’ and ‘bitter debate’ in the 1880s, Talko-Hryniewicz claiming that Prussia’s ‘aggressive politics’ ‘stupified’ ‘a whole series’ of later nineteenth-century prehistorians, to subordinate themselves to this politically-inspired ‘theory of Germanicism’ and ‘the service of state ideas’ (Buschan 1890: 1-2; Talko-Hryniewicz 1914: 187). Buschan derided the constant flow of ‘most nonsensical’ Slavic priority hypotheses, which like Celtomania, were based ‘on the very thorny field of linguistic comparison’, offering ‘arbitrary and nonsensical’ Slavic etymologies for German place and tribal names (Buschan 1890: 2). Around 1900, the emerging concept of culture areas, and specifically the Bronze-Age Lusatian culture, became the principle objects of dispute, proving prior Slav or Teutonic ethnic occupation of the politically disputed Elbe-Vistula region, and for Slav extremists, westward to the Rhine (Kostrzewski 1926: 8; Rączkowski 1996: 200; Buschan 1890: 1-2). These borderlands also became the prime focus of German nationalist prehistorians, especially after 1918 (Wijworra 1996: 175). Citing Frederick the Great’s cynical boast that ‘as soon as I annex’ Poland, ‘historians will be found who will prove my right to it’, Kostrzewski accused German science, including historians and linguists, of persistently doing ‘all in its power to prove to the world that all Poland is immemorial German land’ (Kostrzewski 1926: 6-7). Revealing anachronisms illustrate this mentality. The German archaeologist Georg Buschan saw artefact archaeology, aided by ‘somatic prehistory’, as ‘the simplest and trustworthy’ proof of the territorial ‘priority of the Germanic ethnic stock [*Volksstamm*]’ but said the distribution of an Iron-Age grave type made the Vistula ‘a strict’ eastern ‘frontier for... Germany’ (*Deutschlands*) (Buschan 1890: 2, 31 & 36). Talko-Hryniewicz similarly wrote that ‘thanks’ to

*He said prosperity boosted stature and growth, but higher Russian child mortality weeded out smaller, weaker children, causing the statistical illusion of Polish ‘developmental backwardness’ (Malinowski & Wolański 1985: 38;

Sophus Müller's artefact archaeology distinguishing 'Germanic from Slavonic graves', 'the territory occupied by the ancient Slavs increased' (Talko-Hryniewicz 1914: 188-89).

Full Polish control over institutions after independence, and clashes over reciprocal territorial claims and ethnic minorities, encouraged anti-German academic nationalism (Rączkowski 1996: 202-3). Stanisław Poniąkowski, a Cracow school associate, claimed the Germanic linguistic sound shift proved 'relatively late and weak Aryanisation of the pre-Teutons' and linked south-German dialects to a previously Celtic-speaking population (Poniąkowski 1929-30: 217 & 270-71). He said different researchers had independently identified Asiatic nomadic, aboriginal European, matriarchal or pygmy forest culture ingredients in the ancient Aryan synthesis and especially among ancient Teutons (Poniąkowski 1928: 216-17). However Cracow researchers contrasted their own 'objective' 'peaceful anthropology' with the 'political undertones' of Lwów, whose leading figures, like Karol Stojanowski and Czekanowski, were among the most jingoistic interwar anthropologists (Jasicki 1957: 33-37). Stojanowski's anthropogeography theory, published in a Poznań newspaper, was as uncompromisingly anti-German as the archaeologist Kostrzewski in that same frontier city. Stojanowski optimistically claimed that 1918 began a new phase of Slavic westward expansion in the millennial east-west pendulum 'rhythm of Slavo-Germanic struggle for the continent', on a par with the tenth-century break-up of the Frankish Empire, which had flipped the German expansionist drive eastward (Stojanowski 1937b: 3). He believed the Poland partitions of 1772-95 compensated previous western German losses of 'Switzerland, Alsace and Lorraine', while Bismark's reconquest of Alsace-Lorraine and the shift of German population from rural east to industrialising west paid for Poland's subsequent independence (Stojanowski 1937b: 3). Czekanowski discounted any Nordic contributions to Poland by 'German infiltrations', which were 'not yet mixed with the native population'* (Czekanowski 1920: 53). He also accompanied the Polish delegation pressing Polish territorial claims at Versailles, criticised the 'primitive method' of the 'German racist tendency', dismissed Germany as one of the anthropologically 'least researched countries' and claimed that the 'very similar' German and Polish 'anthropological proportions' confounded German Nordacists (Czekanowski 1948a: 17; Schwidetzky 1935: 199). Schwidetzky countered that the Lwów school's stark reduction of the 'usual' anthropological estimates of Nordic strength in Germany, in favour of expanded Alpine, Subnordic and Preslavic contingents, was 'false' or 'simplified to unreliability' and based on a limited selection of evidence (Schwidetzky 1935: 199).

Czekanowski 1948: 29-30; 1956: 15).

*He was however curiously open to the idea that the proto-historic Germanic 'Gothic power, which was broken up by the Slavs and used as settlement material', had racially influenced Poles (Godycki 1956: 28; Schwidetzky 1935: 298-99). Identifying some medieval skulls and modern *szlachty* with a 'very large' 'Mediterranean element' as probably 'an anthropological trace of the Goths', he thought it 'strongly probable' that their migration up the Vistula to the steppes was part of the same Nordic thrust as the later Polish Wielkopolska expansion (Czekanowski 1920: 53; 1928: 355).

The interwar period was also the nationalist ‘highpoint’* of the archaeological obsession with proving prior prehistoric occupation of the Elbe-Vistula plain, ‘when with few exceptions,’ nationality ‘defined’ each researcher’s scientific standpoint (Kurnatowska & Kurnatowski 2002: 99; Rączkowski 1996: 203 & 205). Silesia and the Oder basin were the object of Central Europe’s most ‘violent’ archaeological disputes (Sklenář 1983: 151). Reche studied Silesia in 1909 and Stołyhwo led a major 1935-39 anthropometric survey of almost 25,000 subjects in Polish Silesia (Jasicki 1957: 39-40; Malinowski & Wolański 1985: 39-40). The interwar feud which pitted Kossinna in Berlin and his German students against his Polish student and chief opponent Józef Kostrzewski, matched all but the most scurrilous excesses of Nazi anthropology (Sklenář 1983: 161; Rączkowski 1996: 204). Kostrzewski founded and led the Polish archaeological centre in Poznań, whose ‘emotive and nationalistic’ arguments won the support of the Polish public and after 1945, of the Polish communists (Rączkowski 1996: 198 & 203; Barford 2001: 278; Lech 1997/98: 34). While Warsaw archaeologists could still accept ‘moderate German concepts’, this ‘was not likely’ in Poznań, which Prussia ruled until 1918 (Rączkowski 1996: 204-5). Kostrzewski’s duel with Kossinna’s student Bolko von Richthofen in frequent articles for newspapers, popular science magazines and brochures on the prehistoric ethnicity of border regions, mixed scientific arguments with personal attacks, becoming so heated as to lead at one point to ‘diplomatic intervention’† (Sklenář 1983: 161; Rączkowski 1996: 203 & 205-6). Kossinna’s school paid special attention to Silesia, establishing research institutions and carrying out extensive excavations with ‘a powerful political colouring’, while Kostrzewski and his circle obsessively combated German prehistorical claims in 1920s scholarly articles like ‘On our rights to Silesia, in the light of the prehistory of this region’ and ‘Are we the natives of today’s Poland?’ (Kostrzewski 1926: 7; 1927: 2 & 8). In part because German place names there were relatively few, Kostrzewski defined Silesians as Germanised Poles, claiming that even ‘where Polish speech long ago fell silent,’ it stuck so ‘deeply in the minds of the Silesian people’ that ‘every stone bears witness to the eternal Polish character of that land’ (Kostrzewski 1927: 2 & 8-9). Even if Poles had first appeared in Silesia in the fourth century AD as Germans claimed, he added, their subsequent occupation outweighed the relatively brief Teutonic period (Kostrzewski 1927: 5). Czekanowski saw Silesia as ‘essential’ to understanding ‘racial conditions’ in all neighbouring regions and described Eickstedt’s intense 1935-36 analysis of German Silesia as a matter of ‘prestige, the result of moral pressure’ to respond to Polish studies, while deriding ‘very great’ German ‘vacillations’ about the region’s raciology

* While post-1945 German researchers moved away from this nationalistic approach, the Kurnatowskis say Poles remained strongly ‘defensive’ to justify having annexed German territories (Kurnatowska & Kurnatowski 2002: 99).

† Sources disagree whether this was needed ‘to lower the temperature’ or a plot to silence the Poles, which backfired by inspiring Czech solidarity (Rączkowski 1996: 206; Sklenář 1983: 161).

(Czekanowski 1937: 227-28; 1948a: 16). Nazi-period research tried to prove western Polish regions were 'ancient German homelands' to justify their 'reconquest', twice interrogating one Polish archaeologist to make him reveal 'hidden evidence of a Viking burial', proving that Teutons founded the Polish state (Sklenář 1983: 161; Barford 2001: 275-76).

Foreign influence

A reorientation towards German influences accompanied the Polish move to more chauvinist nationalism, and possibly helped cause it. The French orientation of positivist Polish anthropologists also had ambiguities. They were highly cosmopolitan, recognising Paris as the leading world centre, accepting orthodox international opinions, travelling abroad and in contact with foreign colleagues (Jasicki 1957: 18-19). However Czechs and Poles played up international links, especially with France, and downplayed often very close German contacts, which were in any case no less liberal than French contemporaries. Though Polish anthropological institutions flourished in the 'broad autonomy', 'lax' censorship and entirely 'polonized' school system of Austrian controlled Galicia after 1867, Germans were seen as 'traditional enemies, occupiers and oppressors', while 'France and England were essential' to the Polish concept of Europe (Tornquist-Plewa 2002: 225; Bielicki, Krupinski & Strzalko 1985: 1-2). Niederle declared the *Institut International d'Anthropologie* (IIA) 'one of the great scientific institutes of [Czechoslovakia's] loyal ally, France', (Niederle 1926: 241). He opened its 1924 Prague congress with an anti-German diatribe, calling his country 'a true rock of granite' which broke 'all the Germanic floods', and insisting on the French alliance, which for centuries defended Slavs from Germans (Pogliano 2005: 32). Though exaggerated, this rhetorical French bias was not groundless however. Godycki and Jasicki stressed the importance of French and especially Broca's influence, including Kopernicki half-year exile in Paris and Talko-Hryniewicz's short study trip there (Godycki 1956: 13 & 30; Jasicki 1957: 18-19). Topinard's textbook heavily influenced Stołyhwo, who after university went via Berlin and Munich to Paris, working under Manouvrier at Broca's laboratory (Jasicki 1957: 35). Olechnowicz, Krzywicki and Stołyhwo clearly preferred to publish works or abstracts in French or review French texts, though Kopernicki and Talko-Hryniewicz balanced French roughly equally with German, Kopernicki actually publishing slightly more in German and much more in English (Wrzosek 1959). Nine out of Godycki's list of 26 major foreign associations and anthropologists which Kopernicki was a member of or corresponded with were German, compared to just eleven for all of western Europe, while Talko-Hryniewicz's trip also took in Germany, Vienna, Prague and Galicia (Jasicki 1957: 18-19; Godycki 1956: 32). Matiegka says Czech anthropology forged

*The Russians in contrast closed Polish universities after the 1830 uprising and they and the Prussians tried to force Russification and Germanisation (Bielicki, Krupinski & Strzalko 1985: 1-2).

stronger international relationships around 1890, ‘in particular with France’ (Matiegka 1924a: 7). Niederle studied with Manouvrier in Paris, though also with Ranke in Munich (Matiegka 1924a: 8).

Most Polish anthropologists until the 1910s, including Kopernicki, Olechnowicz, Dybowski and Krzywicki, borrowed their European three-race scheme and Celto-Slav theories from French theorists like Lapouge and especially Broca (Olechnowicz 1902: 295; Malinowski & Wolański 1985: 38; Czekanowski 1948: 17, 21 & 25; 1956: 19; Krzywicki 1969 (1897): 376). Majewski adapted French terminology to Polish purposes (Lech 1997/98: 30). Zograf in Russia and Krzywicki showed their commitment to the three-race system by systematically combining tall stature, blue eyes, blondness and dolichocephaly in one type and the opposite characteristics in another, Krzywicki finding such a geographical correlation that he believed the stature map could predict pigmentation (Krzywicki 1969 (1897): 398-400; Zograf 1893: 6). Writers like Olechnowicz dismissed regional types like Deniker’s as not ‘real’ basic types, but merely local variations of the three European races, caused by chaotic historical events preventing an absolutely ‘mathematical mixture of two racial root elements’ (Olechnowicz 1893: 29; 1902: 296-97).

The ‘provincial doctors’ were relatively isolated from the mainstream of French dominated international anthropology, with strong personal and professional links with Russia and Warsaw instead (Czekanowski 1948: 22; 1956: 6, 12-14, 19 & 23; Jasicki 1957: 34-35; Malinowski & Wolański 1985: 39). Students of Rudolf Martin in Zurich, including Czekanowski, Loth, Reicher, Poniatowski and Lubelski, and their students, then became increasingly central to early twentieth-century Polish anthropology, ethnology and anatomy, occupying almost every anthropology and anatomy chair outside Cracow by the late 1940s and introducing German influence (Czekanowski 1948: 32-33; Bielicki, Krupinski & Strzalko 1985: 6-7). Interwar Polish authors in my database published in German almost as much as in Polish, and in Germany as much as in Poland. Half as many cited in France and French respectively. Czekanowski meanwhile cited around 50% more German-language works than French. Choices of anthropometric technique confirm the long-term shift to Germanophone influence. Majer and Kopernicki followed Broca, but Talko-Hryniewicz relied more on German scales, while Czekanowski students used Martin’s techniques (Majer & Kopernicki 1877: 127-30; Talko-Hryniewicz 1916: 411 & 419; Stojanowski 1924: 664; Mydlarski 1926: 186-87; Maciesza 1928: 227). Bibliographical analyses suggest that interwar Polish anthropology was most strongly linked to the German-speaking world. Discounting speeches at international conferences, at which French was semi-obligatory, Czekanowski’s bibliography of Polish interwar anthropology contained 58 German-language works, just 46 French and 13 English (Czekanowski 1948a: 124-174). Poles writing in a foreign language published most often in

Germany, then in Poland, then France and finally in Prague. In 1935, the Poznań anthropological institute had more German than even Polish-language journals (Ćwirko-Godycki 1935: 12-13). German was slightly ahead of French in the foreign language works of six leading Czekanowski students, if international conference papers are not counted, overturning the distinct French dominance among earlier authors (Wroszek 1959).

However the consciously apolitical positivist anthropology taught by Martin highlights the problems of deriving Polish anthropological nationalism directly from the German discipline, rather than from the rise of nationalism in Polish and European society and German cultural influence on Poland more generally. Manouelian suggests that Lwów produced Poland's first ethnological institutions because it was a nationalist hotbed of Polish-Ukrainian rivalry for example (Manouelian 1900: 392). Differences between Polish anthropology and archeology, close partners in race classification, illustrate some factors fostering direct nationalist contagion from German academia. First, the earlier *völkisch* take-over in German archaeology meant Kostrzewski absorbed hyper-nationalism from his German and peers and Kossinna, his teacher, but Czekanowski from his peers alone. Second, Germany exported archaeological extremism through adversarial engagement, in which both sides had the same methods, evidence and preoccupations. Despite protests by liberals in both countries, Kossinna's 1895 argument that ethnicity determined artefact styles became the 'theoretical basis' of archaeological race histories on both sides and a 'key' influence on nationalist twentieth-century Polish and Central European archaeology (Barford 2001: 274; Rączkowski 1996: 200; Sklenář 1983: 149 & 151; Lech 1997/98: 35 & 52-54). Kostrzewski adapted Kossinna's methods, but Czekanowski's system was far more unorthodox, hindering even adversarial engagement. Anthropologists were perhaps under less pressure to engage directly with the national enemy because their nationalist dispute, over whether Poles or Germans were more Nordic, was far less central to public and political nationalism than the archaeological question of rights to territory.

The Slavs

The racial identity and history of Slavs and their relationship with Teutons were crucial in Polish national identity narratives, including in anthropology (Rączkowski 1996: 190). Romanticism was intimately 'linked with the whole intellectual and artistic culture' in Poland, and Polish romantics identified with their Slav ancestors (Lech 1997/98: 27; Rączkowski 1996: 193). The Slav race was the national champion in patriotic prehistory, the good guy in every tale. Kopernicki's research focussed on the Slavs and he allegedly worked in Belgrade 'to be closer to the Slavic movement, in the womb of a heroic people, fighting gallantly for liberty' (Godycki 1956: 13 & 28). Tornquist-

Plewa traces ethnocentric Slavophile belief ‘that the native culture was unique and should be defended and developed along its own tracks’ to early nineteenth-century Polish resentment against Western abandonment, and desire for a ‘modus vivendi’ with Russian rule after 1815 (Tornquist-Plewa 2002: 221). ‘The West’ threatened the national ‘originality’ and ‘high ideals of freedom’, spirituality and social solidarity rooted in ‘ancient Slavic communalism’, becoming for Polish Romantics a ‘doomed’ civilization of ‘egoism, cold rationalism, pursuit of economic gain, materialism and superficiality*’ (Tornquist-Plewa 2002: 223). Herder, who emphasised the historical role of Slavs, ‘greatly influenced’ ‘Slav patriots’ and the Slavophile ideology (Cuisenier 1999: 30). Emulating the German romantic search for the *Volksgeist* in ancient Teutonic sagas, says Cuisenier, Slav students of German professors began to search for and ‘reconstitute old monuments of their literary tradition’ (Cuisenier 1999: 31). The term pan-Slav was first used by a Slovak linguist, and from 1842, ethnographic works and exhibitions on the Slavs multiplied (Cuisenier 1999: 31-32; Barford 2001: 273). Russian foreign policy intermittently exploited the Russian romantic programme of pan-Slavic cooperation to free Slavic nations from German and Turkish rule (Barford 2001: 272). In 1848, an Austrian-Slav congress proposed a federal Austria, while in Russia, Hegel’s pupil Bakunin called on the Tsar to mobilise Slavic ‘creative and revolutionary energy’ by getting rid of German influence and allowing subject nations their independence (Cuisenier 1999: 32). A far less radical movement in Moscow led to a Pan-Slav Congress in 1867, but this remained the last until those organised by Stalin in the early 1940s (Cuisenier 1999: 32).

Cuisenier says the movement foundered on the conflicting nationalist aims of individual Slav countries. Unlike some Russians, Polish Romantics ‘never excluded Poland from Europe’, regularly declaring solidarity with Western European revolutionaries (Tornquist-Plewa 2002: 223). While Czechs and South Slavs welcomed Pan-Slavism as a nationalist ally, many Poles distrusted it as a Russifying tool (Barford 2001: 273; Tornquist-Plewa 2002: 223). Though the nationalist shock of partition stimulated ultra-romantic Slav antiquarianism earliest in Poland, this declined amid the repression and anti-Russian feeling of the 1830-31 rebellion (Sklenář 1983: 94; Rączkowski 1996: 192-93). Nevertheless, Slavs were crucial actors in Polish racial anthropology, though stimulated less by pan-Slav solidarity than anti-Germanism. Rączkowski sees anti-German pan-Slavism as a greater influence on Polish archaeology than even Polish nationalism (Rączkowski 1996: 198). Nineteenth-century Polish antiquaries and twentieth-century anthropologists and archaeologists like Kostrzewski focussed on distinguishing Germans from Poles on their western border and did not distinguish Eastern from Western Slavic relics (Rączkowski 1996: 197). Of the major interwar

*Chapter IV, pp.288-99 examines this very common romantic spirituality narrative strategy in more detail.

Polish excavations noted by one historian, two-thirds were therefore in the westernmost quarter of Polish territory (Lech 1997/98: 37).

Polish, Russian and Czech Slavists collaborated on ‘many common interests’, crucially influencing one another (Rączkowski 1996: 197). Czechs and Poles, especially in 1830s Wielkopolska, were at the forefront of romantic period Slavic archaeology, because Russian studies were in the hands of Baltic Germans in the north and French researchers in Ukraine, while political factors inhibited Slav elites elsewhere (Sklenář 1983: 94; Rączkowski 1996: 194). Kopernicki worked on common terminology with a Czech anthropologist and up to 1918 especially, Czech was the next most popular language for Polish anthropological publications after Polish and the big three; Talko-Hryniewicz studied medicine in St. Petersburg and Kiev, practiced in Ukraine and published copiously in Russian, while in 1926, Stołyhwo completed his doctorate under Matiegka in Prague (Matiegka 1924a: 7; Jasicki 1957: 17 & 35; Wrzosek 1959). In anthropological if not in military geopolitics, a relatively weak Russia supported Polish anti-Germanic arguments from a distance*. Imperial Russia projected its ethnicity far to the west by identifying with a common Slavdom, and so shared Polish interests in promoting Slavs against Germans and combatting anti-Slav racism (Stojanowski 1935: 33). Pan-Slavism also let Poles compete with Russians for leadership of the Slavs and justified rule over Ukrainians and Bielorrussians (Tornquist-Plewa 2002: 222-23; Rączkowski 1996: 201). However Polish nationalists drew on literature and history to justify these eastern claims, rather than on archaeological and ethnic arguments which the contested peoples might turn to their own nationalist advantage† (Rączkowski 1996: 197). The relatively rare Polish worries about the Soviet Russian threat meanwhile invariably mentioned Germany too (Poniatowski 1929-30: 320-21). Stojanowski said Polish anthropology had ‘greater than important’ tasks and ‘must tread the single rational path in search of scientific truth’, when ‘faced with’ ‘analogous’, dangerous German and ‘red’ anthropological ‘racial’ movements like Nordicism and the 1930s Soviet ‘Eurasian movement’ (Stojanowski 1930: 12; 1935: 34).

* Especially in the 1930s, Russian historians and philologists furiously opposed the ‘Normanist’ literal interpretation of Russian chronicles ‘by nineteenth-century German and Scandinavian’ scholars that ‘Germanic northmen... brought civilization to the ‘backward’ East Slavs’ (Barford 2001: 273-74).

† Czekanowski was one of the few to suggest that Poland’s Ukrainian minority, including around Lwów, were racially non-Ukrainian. Despite vociferous Ukrainian and Russian historical arguments for Ukraine’s ‘primitive anthropological unity (homogeneity)’, he believed ‘some special characteristic’ distinguished north-west Ukrainians, who perhaps belonged ‘to different ethnic groups’ that the Eastern and Southern Slavs, driven from the steppe by nomads, had absorbed with their ‘characteristic’ ‘great assimilatory force’ (Czekanowski 1920: 61). Drawing on a Russian philologist, he also tentatively surmised that racially Pre-Slavic ‘Polish tribes’ expanded ‘in the not too distant past’ across northern Ukraine and into the Moscow region before the Russians arrived (Czekanowski 1920: 59-62).

Slavs and the underling stereotype

Classifiers defined the brachycephalic Slavs and 'Celtic' French, both craniologically and in stereotypical race mentality, in contrast to the separate ethnic stock [*Stammvolk*] of dolichocephalic Teutons (Retzius, A. 1864: 11). Based on 'four Slav crania,' later supplemented by 'a large number of living Slavs', Anders Retzius declared the Slavs brachycephalic, and research from 1850 on in France and Slavic areas of Austria-Hungary, 'the most thoroughly investigated parts of Europe', confirmed Celtic and Slavic brachycephaly (Retzius, A. 1864: 8; Matiegka 1924a: 5; Czekanowski 1937: 231). The Austrian anthropologist Weisbach, who saw brachycephals as evolutionarily inferior, concluded from 221 Austrian Slav skulls from museums in the 1860s, that Slavs supplied Europe's 'biggest contingent' of them and were 'without a doubt' broad-headed (Weisbach 1874: 306-7 & 315; 1876: 8). Slav scholars nevertheless accepted Slavic brachycephaly, influenced by the powerful French school of anthropology, for which broad-headed 'Celts' were the French national race. Because modern Poles were typically smaller, darker and more brachycephalic than Germans, this was assumed to be the ancient Slavic type (Talko-Hryniewicz 1914: 188). Matiegka said Retzius's declaration of Slav brachycephaly inspired intensive Czech research on prehistoric crania, Gregor in 1858 confirming Retzius's claim that 'Celts and Teutons' were dolichocephalic, and Vogel and others using his findings and archaeological material in 1868 to trace a Slavic presence back through time (Matiegka 1924a: 5-6).

Germans and Slavs both accepted the stereotypical French brachycephalic mentality, which resembled long-held stereotypes of Slav commoners and contrasted with aristocratic Teutons, facilitating reception of the Celto-Slav theory. Günther therefore chiefly based his stereotype of East Europeans, his main Russian race, on proletarian characters in nineteenth-century Russian novels (Günther 1933: 93; Lutzhöft 1971: 108-9). They were 'cunning, vengeful, servile', greedy and dull, with dirty 'bodies and homes', and could seem 'closed, brooding, ponderous, mistrustful, or also lurking, contented with little' or dully hard-working (Günther 1933: 66-68). To friends, said Günther, presumably posing as such for research, the race could be tender, garrulous, 'helpful and hospitable', and 'reveals a never entirely subdued discontent' (Günther 1933: 66-68). They constantly hatched wild plans but were too unrealistic and indecisive to execute them; accepting failure with resigned fatalism (Günther 1933: 67). Leaders could exploit their 'lively patriotism', 'communal spirit and biddability (*Geführtwerden*)', making them 'willing subjects' of autocrats (Günther 1933: 67). In 1919, Kossinna said ancient Teutons relished 'law and order', and saw Slavs as 'objects of repulsion and monstrosity' with pottery of 'shocking crudeness', practicing a 'type of bolshevism', moderated only by organisational incompetence and 'extreme lack of means' (Kostrzewski 1927: 2; Wijworra 1996: 176). These extreme views belonged to an established class-

race tradition. In Scotland sixty years earlier, MacLean's round-headed peasant was phrenologically inclined to 'veneration, firmness', talent for 'mechanical arts', mining and farming (MacLean 1872: xlvi). 'His patriotism is provincialism, or rather domesticity', he was conservative, suspicious of strangers, with 'very great self-respect, strong love of home, keen and powerful domestic feelings, extreme attachment to kindred' and old friends, 'strong passions', and when 'unenlightened... full of antipathies and prejudices' (MacLean 1872: xlix). They 'resent injuries intensely,' but conceal this (MacLean 1872: xlix). Occasional elitist Poles, like Rosiński, adopted versions of Günther's Slav peasants for their East European equivalent; slow-witted, passionate, but shy and closed unless irritated; prone to remember insults before good deeds (Rosiński 1929: 274). However most Poles put a very different spin on the Slavic underling story*. They followed the romantic period antiquarians who were heavily influenced by Herder's 1784-91 contrast between 'hard-working... helpful and hospitable' Slav 'merchants and farmers', 'cherishing peace and housework', and 'warlike, enterprising, adventurous' and megalomaniac Germanic plunderers, who 'exterminated or enslaved' them (Rączkowski 1996: 198; Cuisenier 1999: 31; Sklenář 1983: 95).

Beside mystical romanticisation and claims to Latin civilisation, the industrious underling was the chief counter-narrative to the Nordic noble warrior or anthroposociological elite (see pp.227-32). It was used in France, but mostly in the nations to the east of Germany, whose contributions to civilisation were underappreciated internationally. Interwar Polish schoolbooks still repeated that Teutons 'were most of all warriors', who hated farming, lived by pillage and were obsessed by revenge, while Slavs were 'straightforward, sincere', honest, hospitable, though in war, their unmerciful cruelty 'astounded and appalled their more civilized enemies' (Rączkowski 1996: 207). Germans stressed the passages of Tacitus which praised Teutons, while Slavs compared his descriptions of Teutonic savagery with Byzantine accounts of their own civilised ancestors (Sklenář 1983: 96). These stereotypes affected interpretations of prehistoric grave-goods. Kalina in Bohemia assigned 'graves with weapons' to Teutons and 'graves of 'farmers' or 'craftsmen'' to Slavs (Sklenář 1983: 95). In Poland, Kopernicki (1877), Olechnowicz (1903) and Kostrzewski (1926) produced evidence of stereotypical Slav traits from sites with supposedly Slavic artefacts. They said large cemeteries containing female and child skeletons, finds of eating and drinking vessels but no weapons and a 'thousand years of almost unaltered burial customs and' ceramic forms, suggesting a numerous, 'very conservative', 'sedentary and pacific' community which loved feasting (Kopernicki 1877: 620; Olechnowicz 1903: 11; Kostrzewski 1926: 9). The weapons common in Western prehistoric burials meanwhile 'denote a bellicose and mobile population' (Kopernicki

*Maclean's impoverished, peasant race was similarly reinterpreted. Borlase accepted it was 'primitive', cunning and obstinate, due to 'oppression and superstition' and constitutionally lazy due to 'deep-rooted fatalism', but it also

1877: 620). Supporters of broad and long-headed Slavs used the same stereotypes of ‘blond dolichocephal’ state-founding skill, ‘restlessness and bellicosity’, founding the Varangian Russian state and probably the Polish state too, with its centre ‘in the north, in Gniezno, before spreading south by ‘military migration’ (Olechnowicz 1902a: 43-44; Rutkowski 1906: 63-67; Stojanowski 1948: 2; Czekanowski 1920: 52-53 & 62; 1956: 25; Rosiński 1929: 266). The ‘enormous’, closely clustered *Reihengräber* dolichocephalic Slav cemeteries, containing weapons and typical Slavic artefacts, suggested a dense warlike population, said Rutkowski, while the now ‘almost entirely eradicated’ Elbe-Oder Slav long-heads mounted ‘the greatest if not the most effective resistance to Germanic predation’ (Rutkowski 1906: 63-67). Poniatowski meanwhile insisted that the Nordics were not original Aryans, but accepted that they became the driving force of Aryan expansion once Aryanised (Poniatowski 1928: 216-17). Talko-Hryniewicz was highly unusual in reversing the standard stereotypes, making the brachycephalic Slavs a conquering ‘warlike, knightly element, perhaps with subjected herders [na podbicie pasterskiej]’ (Talko-Hryniewicz 1902: 759 & 761).

Accepting humble subject class status for Slavs chimed with the traditional historical narratives of Teutons or steppe peoples like Sarmatians establishing the first Polish, East Slav, Croat and Bulgarian states. Centuries of Turkish or German rule meanwhile made narratives of resistance and survival under occupation more appropriate than those of Slavic natural conquerors. Kostrzewski embraced the static conservative Slav peasant stereotype to press the *völkisch* argument that his ancestors lived in Poland ‘since the dawn of time’*. This was an old story, Broc in 1836 arguing that surviving Slav physical traits and language ‘in the heart of Germany’ proved their ‘tenacity’ (Broc 1836: 33). Cleverly exploiting the fundamental incompatibility between an eternal peasantry rooting the *Volk* to the land, and the Nordicism cult of colonising nobles, Kostrzewski called ancient Germanic rule in Poland ‘merely a short episode’, in which ‘foreign newcomers’ ‘stayed here in passing... not connected to the earth’ (Kostrzewski 1927: 4-5 & 8). He compared it to Gothic rule in Italy and Spain, countries with irreproachable claims to high civilisation and a continuous, non-Germanic racial identity, and softened the national dishonour of subjugation by insisting that the invaders were Scandinavian, rather than German (Kostrzewski 1926: 9-10; 1927: 8). Kostrzewski ridiculed claims that proto-Teuton invaders expelled without resistance ‘a farming people, settled for the previous thousand years’, as ‘every historical experience’ showed farmers ‘were so strongly connected to their land that they would bend their necks to a foreign yoke rather than leave it voluntarily’ (Kostrzewski 1927: 4). Provocatively linking Germans to the rootless wanderers despised by all *völkisch* nationalists, he joked that if Germany could claim ‘every country’ where

perhaps had more ‘[c]leverness, shrewdness, quickness, wit’ than its conquerors (Borlase 1897: 1024-25).

* Or *Z Otchłanu Wieków* – the title of a leading Polish archaeological journals.

‘Teutons once lived in passing’, Gypsies might ‘have a right to annex all Europe’ (Kostrzewski 1927: 4). Yet German prehistorians needed the wandering Teuton narrative, he taunted, as Germans migrated late to the Rhineland and south Germany (Kostrzewski 1927: 4-5).

Drawing on Herder’s prediction of Slavs thriving in a future that would ‘arouse the quiet genius of industry and multiply friendly relations between peoples’, the brachycephalic peasant narrative accepted and exploited anti-modern elitist anthroposociological fears that a dark industrial proletariat were swamping the aristocratic blond (Cuisenier 1999: 31; see pp.230-32*). Talko-Hryniewicz contended, based on Poland’s rapid contemporary population growth, ‘that in the eternal struggle’ the ‘vigorous strength of the Slavs’ could ultimately overcome the Germans[†] (Talko-Hryniewicz 1914: 191). The ‘great reproductivity’ by which modern *Górale* (archotypically Polish highlanders) expanded into the Polish plains, proved the demographic vitality of these true racial Slavs (Talko-Hryniewicz 1914: 194). Both Celto-Slavist like Dybowski, Olechnowicz and Talko-Hryniewicz, and believers in long-headed original Slavs, like Potkański and Rutkowski, said ‘everyone unanimously’ saw the ‘brachycephalic race’ as ‘in every case’ stronger in race mixtures, blaming ‘weaker’ dolichocephal physical or mental traits[‡] (Potkański 1902: 261; Czekanowski 1948: 26; Rutkowski 1906: 63 & 66; Olechnowicz 1903: 12). Olechnowicz said the brachycephals pushed north due to their ‘faster multiplication’ and ‘the more rapid disappearance of the pure’ dolichocephals (Olechnowicz 1903: 12). Talko-Hryniewicz’s argument was still more Darwinist. He said ‘smaller numbers’ of ‘physically stronger’ broad-headed Slavs mixed with, imposed ‘their language and culture’ on, and finally replaced the surrounding ‘foreign long-headed’, ‘weak’ ‘old European race of the Paleo-Asiatic type’, with ‘less vitality’, which ‘became outdated’ and ‘gradually died out’ (Talko-Hryniewicz 1902: 761; 1914: 190). This was just like the modern ‘extinction of native peoples who encounter [zetknieciu] higher civilisation than their own’, such as in Russia’s Asian expansion, the disappearance of Hungary’s original Magyar type, and Europe’s thousand-year drift towards brachycephaly (Talko-Hryniewicz 1914: 189-90). Czekanowski imaginatively linked nativist deep implantation with biodynamic advantage to rescue his broad-headed Preslav aborigines from pathetic vestige status. Arguing from geographical correlation between physical features and historical dialects, he said they maintained their vitality as ‘an old

* See also pp.239 & 336-37 on the Irish failure to use this narrative, and pp. 429 & 449-50 on its frequent exploitation in Romania.

[†] Examples elsewhere of this biodynamically virile underling narrative, suggest it was a response to a particular position in the modern economy rather than specifically Slav. In Bucharest, Banu argued that cities ‘extinguished generations of elites’ by reducing birthrates ‘of the superior classes’, so Romanians were ‘a young people’, whose ‘undifferentiated’ rural mass offered great, unexploited biological potential (Săhleanu 1979: 96). The Irish and Romanians however exploited this narrative less systematically than the Poles.

[‡] This narrative could either flatter brachycephalic Slavs or helped rescue brachycephalic Poles from inferiority if Slavs were seen as dolichocephalic (Czekanowski 1920: 66).

native type well adapted to the environment’, becoming the reservoir for the medieval Mazovian Polish colonising drive into eastern Poland and possibly even Russia (Czekanowski 1920: 52-63 & 66).

Kopernicki and the Celto-Slavs

The transition from broad to long-headed Slavs in Polish anthropological narratives, was one of the clearest signs of drift from French to German-style orientation, as Germany replaced Paris as the leading international power in race classification. Kopernicki and Majer accepted the French Celto-Slav theory of dolichocephalic Teutons and northward-migrating ‘remarkably’ brachycephalic Aryan Slavs and Celts ‘from the same trunk’ (Potkański 1902: 245; Czekanowski 1948: 15; 1948a: 27; Stojanowski 1924: 712; 1948: 2). Their anthropometric study found Galicians, and ethnic Poles especially, were ‘distinctly’ brachycephalic, just as ‘all’ interested craniologists ‘since Retzius’ had ‘proven’ ‘modern Slavic skulls in general’, and Poles and Ruthenians ‘in particular’, to be (Majer & Kopernicki 1877: 126; 1885: 59, 72 & 80; Kopernicki 1877: 617; 1883: 40). Throughout his career, Kopernicki attributed longer Slav skulls to mixture with other peoples. He blamed mixture with Finns and Volga Bulgars for Bulgarian and Russian skulls that were longer than those of ‘other Slavs’, consciously challenging Retzius’s orthodox theory of broad-headed Finns, and concluded from gravestones that long early modern Polish skulls were of German origin (Godycki 1956: 25, 29 & 38; Krzywicki 1969 (1897): 424-25). This approach stressed the French narrative of civilising Aryan foreigners, placing the Slavs among them, but awarded prior ethnic occupation to prehistoric Teutons. This implies a cosmopolitan Polish anthropology, in which *völkisch* nationalism was still a minor factor.

From the 1850s, a major focus of interest was prehistoric crania from ‘Kurgan’ burial mounds, spread out in a vast area from Wielkopolska into much of European Russia (Godycki 1956: 26). The two leading Celto-Slavists, Bogdanov and Kopernicki made the first of many detailed studies of the Russian and Polish ranges of the Kurgans respectively, Kopernicki concluding that the Kurgan-builders were a ‘very pure... dolichocephalic race’ rather than Slavs (Jasicki 1957: 18-19; Godycki 1956: 26; Kopernicki 1877: 612-13). Findings like this from throughout the Slav lands played an important role in the realisation that vast areas of Europe had become much broader-headed (Godycki 1956: 26; Krzywicki 1969 (1897): 415-17; Bunak 1932: 494-95; Kopernicki 1877: 615-17; 1883: 3; Potkański 1902: 256). German, Czech, Russian and Polish research showed a gradual Slavic shift from dolichocephaly in the eight to tenth centuries, to brachycephaly in the sixteenth or seventeenth (Talko-Hryniewicz 1914: 189; Deniker 1904: 189; Woltmann 1903: 295-96). As Kurgans showed no sign of a race mixture that could create ‘the present population’,

Kopernicki and his followers believed ‘a dolichocephalic race’, ‘entirely foreign’ to the modern ‘Slavic race’, ‘must have’ peopled ‘all’ ‘Europe, from the Atlantic to the Volga Basin’ and especially Central Europe (Kopernicki 1877: 617-18; 1883: 40; Godycki 1956: 26; Stojanowski 1948: 1; Krzywicki 1969 (1897): 416-17). Remarking a ‘striking’ craniological ‘affinity’ between eastern and western (and especially German and Swiss) dolichocephalic skulls, and ‘a near racial identity’ with north German skulls, Kopernicki proposed that they were all originally Teutonic (Kopernicki 1877: 620; Stojanowski 1948: 1; Krzywicki 1969 (1897): 417; Potkański 1902: 245). The Danzig anthropologist Lissauer supported this theory in 1872, identifying Ecker’s Nordic *Reihengräber* Teutons with very dolichocephalic ‘Baltic-Prussian’ skulls, found with iron knives, and tracing the Franks and Alemanni to the Baltic coast (Stojanowski 1948: 2; Borlase 1897: 931; Lissauer 1872: 123). He believed these skulls were present ‘up to well to the east of the Vistula’ and suggested the ‘tribal seat’ of these tribes could lie ‘in this area’ (Lissauer 1872: 123).

Kopernicki used prehistoric burial practices to clarify the very shadowy succession from dolichocephalic aborigines to Slavs (Kopernicki 1877: 619). He noted that cremation and inhumation ‘which are often found side by side in our burial places, could easily indicate the contemporary existence’ of two distinct peoples with different funeral rites (Kopernicki 1877: 619). Cremation explained the absence of early brachycephalic Slav remains, before Christianisation converted them to inhumation. Kopernicki and Bogdanov, noting that female skulls in ancient graves were usually broader-headed than male companions, argued that broad skulls had replaced long ones in the Slavic areas, as dolichocephalic Teutonic immigrants married the women of neighbouring brachycephalic Slav farmers (Kopernicki 1877: 619; Krzywicki 1969 (1897): 419-20 & 423; Godycki 1956: 27). In evidence, he reasoned that occasional dolichocephaly among modern Ruthenians, appearing ‘precisely’ where ‘history’ showed no ‘foreign colonisation’, must have come from ‘a very ancient crossing’ (Kopernicki 1877: 619). Kopernicki found that skeletons from eastern Poland were shorter and broader-headed than those of the far west, reinforcing his German dolichocephaly argument, and suggesting an easterly origin for the brachycephalic Slavs (Kopernicki 1883: 39; Godycki 1956: 27).

Updating the Celto-Slavs: the provincial doctors

From the early 1890s, anthropometric studies led all anthropologists to recognise ‘two main types’ in Poland, a dark, stocky, ‘clearly brachycephalic’ southerner, resembling the Alpine, centred in Western Galicia and especially among *Górale*, and a fair pigmented, slender, mesocephalic and taller Northern, ‘easily recognizable as the Nordic type’ (Olechnowicz 1902a: 39; Talko-Hryniewicz 1914: 192; Jasicki 1957: 28; Niederle 1916: 86-87; Potkański 1902: 248; Rutkowski

1906: 61 & 66). This, the collapse of the old practice of equating each ethnic group with a single physical type, and the rise of Denikerian multi-race European schemes, all eroded the old assumption of a single Polish Slavic type. Deniker called Slavs an ‘interblending’ of several races and Schwidetzky said that while Mejer and Kopernicki sought the Polish or Slavic physical type, their successors opened ‘a clear separation of the terms people and race’* (Deniker 1971: 345; Schwidetzky 1935: 79; Rutkowski 1906: 64). Most subsequent theories, whether they associated the glorious Slav ‘ancestors’ of the Polish nation with broad or long-heads, contrasted them with primitive, defeated non-Slavic aborigines, who were usually Finns, implicitly excluding them from the racial nation. However many anthropologists used the parallel superiority narratives of conquering dolichocephals and authentic peasant brachycephals to soften this stark Manichean racial dichotomy and ‘rescue’ the excluded Poles from inferiority. It helped that Polish historiography narrated national unification through the movement of the capital from Gniezno in the north to Cracow in the south and then to Warsaw, each region successively contributing a local ruling class. Olechnowicz and Rutkowski used this to rescue racial northerners and southerners respectively (Olechnowicz 1902a: 43-44; Czekanowski 1956: 25).

Despite doubts by Virchow and Majer, Potkański said Kopernicki’s dark brachycephalic Celto-Slav theory still had ‘widespread’ support in Polish anthropology in 1902, though discredited in neighbouring countries (Potkański 1902: 245 & 248; Czekanowski 1948: 25; 1956: 6 & 19). Krzywicki accepted that German settlements in Wielkopolska were fairer-haired than Polish ones and cited Virchow that Polish-German contact always registered on anthropological maps, especially in Austria (Krzywicki 1969 (1897): 396-97). Even Majewski, hyper-sceptical of ethnic races, accepted that Germans were dolichocephalic before Slavs, and that modern Germans were longer-headed than the Poles or French (Majewski 1905: 166). Olechnowicz, Talko-Hryniewicz, who reoccupied Kopernicki’s Cracow chair in 1908, and Dybowski (the most influential Polish anthropologists after Kopernicki’s death) adapted the Aryan Celto-Slav theory to the new situation however, especially by using the *Górale*, or Slavic Carpathian highlanders, and *szlachty*, or Polish gentry (Czekanowski 1948: 25). They kept the three-race theory, but began to see Poland as a multi-racial synthesis. Majer and Kopernicki discovered several physical differences between Polish highlanders and lowlanders, but considered them something to explain away. Olechnowicz, who said ‘every Polish face’ mixes ‘two at least, basic types, and often the third’, began exploiting this material for complex race theorising (Olechnowicz 1902: 295). Majer and Kopernicki saw brachycephaly as the ‘cardinal craniological feature’ of *Górale*, especially in Podhale, but

*Czekanowski claimed Rutkowski independently reached a multi-race conclusion like Deniker’s, because this Mazovian doctor was from ‘deeper provinciality’ than Olechnowicz, and so was less influenced by Broca’s three-race system

‘increasingly’ rare among Poles towards the north and Ruthenians to the east (Majer & Kopernicki 1885: 59, 72 & 80; Olechnowicz 1893: 28). Olechnowicz said his own and Ikow’s research on Bielorrussians and Poles confirmed that skulls steadily lengthened far towards both the north and east, at least as far as Ukrainian and Russian areas (Olechnowicz 1893: 1-2 & 28-30). He believed this ‘law of gradual reduction of brachycephaly, as a sign of the pure Slavic type,’ was ‘entirely analogous with’ how brachycephaly among Western European ‘Celts’ was ‘purest’ in the ‘Alpine heights’ of Savoy, but declined steadily ‘to the west and north west’, and that ‘an organic link’ must connect the two (Olechnowicz 1893: 36-37).

Maintaining Celto-Slav tradition, Olechnowicz and Talko-Hryniewicz* traced the Slavs to these relatively civilised southern brachycephals, who spread north, conquering or mixing with the previously purely dolichocephalic, mostly forest hunters of the north (Talko-Hryniewicz 1902: 759 & 761). Olechnowicz said these ‘probably’ Aryan-speaking brachycephals streamed from the Danube basin as early civilisation and agriculture increased southern Europe’s population, arriving in Poland in the late Neolithic or early Bronze Age (Olechnowicz 1902a: 39-41 & 42-43). Olechnowicz said the transfer of the capitol to Cracow proved a Danubian origin for early Polish culture, and that Ukraine’s *szlachty* were also from the south (Olechnowicz 1902a: 43-44). His race history attributed all civilisational gifts, except that of enterprising warriors with a talent for state foundation, to the brachycephals, allowing them to expand north at the dolichocephals’ expense (Olechnowicz 1903: 11). Because ‘the very same race’ with the same ‘pure craniological type’ occupied the Alps, ‘modern Bavaria, the Czech Lands’, Silesia and the Tatry, and because ‘historical and linguistic research’ ‘sufficiently clarified’ the Celtic-Slavic link, Olechnowicz confidently described the Celto-Slavs as ‘the nucleus of the Aryan race in Europe’, and proposed changing their name to ‘Aryan type of Europe’ (Olechnowicz 1893: 37). The French term ‘Celto-Slav’ implicitly excluded southern German brachycephals he complained, though he left it to his editor to suggest that, as the importer of Aryan speech into northern Europe, the brachycephals might also have been cultural ancestors of the Teutons (Olechnowicz 1893: 37; 1902a: 43). As well as the prestige of being the Aryan race, Olechnowicz made the brachycephals more civilised, while Talko-Hryniewicz gave Poland’s Tatry Mountains, overlooking the *Górale* lands, a special role in their history, claiming Celto-Slavs spread from this ‘the brachycephalic centre for Eastern Europe’ into Central Europe and the Alps (Talko-Hryniewicz 1902: 759 & 761). His dolichocephals survived as mere patches of long-headedness in Poland (Talko-Hryniewicz 1902: 759 & 761).

(Czekanowski 1948: 23).

*Czekanowski disputes this in Talko-Hryniewicz’s case (Czekanowski 1948: 24-25; 1956: 26).

To rescue the aboriginal mass of long-headed Poles from ignominy however, Olechnowicz and Talko-Hryniewicz applied a version of French-style racial synthesis, deriving Poles and Lithuanians from a slow and intensive prehistoric ‘mixture’ of the ‘two racial elements’, which left just isolated pockets of the original pure races, such as the *Górale* (Olechnowicz 1902a: 39; Talko-Hryniewicz 1902: 758). While Olechnowicz gave northerners a state-building role, Talko-Hryniewicz also tried to redeem his Polish aborigines, who he saw as ‘Ural-Altai’ peoples in the south and long or medium-headed Finns in the area of his Northern type, where archaeologists and linguists found ‘Finnish monuments’, place names and dialect words (Olechnowicz 1902a: 43-44; Talko-Hryniewicz 1914: 190, 193 & 356). His Northerner anticipated the geography and many physical features of the East European, but with a race history and psychology recalling Nordic supremacist narratives (Talko-Hryniewicz 1914: 193 & 356). It was more hardworking and skilful than other Slavs, with ‘a more proportional body shape’, giving it ‘certain features of aristocratism’, and at one point Talko-Hryniewicz even hypothesised an original ancient Slav homeland in northern Bielorrussia (Talko-Hryniewicz 1914: 193-94 & 356). A northern variant, which had formed in Mazovia or Lithuania, ‘among woods, in a bitterer climate, where the struggle with the elements was harder, the land flatter and poorer’, was especially common among Lithuanian *szlachty*, he said, including Polish national heroes like Kosciuszko and Mickiewicz (Talko-Hryniewicz 1914: 193 & 356). Its hard upbringing produced a ‘phlegmatic, sombre’ character, the typically ‘northern-Finnish’ simple folk ornamentation, and the ‘greater thrift and colonising ability’ which the type used on the Ukrainian borderland (Talko-Hryniewicz 1914: 356).

Though much western European ethnology portrayed Finns and Tartars very negatively, Talko-Hryniewicz lived for years in Russia, studying Preslavic Siberians, and may have absorbed Russian anthropological openness to Finnish or Asiatic elements in the national ethnic synthesis (see pp. 217-20 & 414-16). However Polish researchers like Potkański, Rutkowski, Kostrzewski, Czekanowski and Klimek, with no such Russian background, also accepted Finnish elements in the Polish national mix, though like Talko-Hryniewicz, these were always very definitely the junior race in Poland’s synthesis (Kostrzewski 1939: 218-19; Czekanowski 1928: 355-56; Potkański 1902: 260-61; Rutkowski 1906: 66; Klimek 1932: 24). More than Europe’s other non-Indo-European ‘vestiges’, ethnology often dismissed all Finns as Asiatic, as some of their linguistic relatives, stretching across the Urals, had distinctly ‘Mongoloid’ features. However in Poland, Russia and Finland, they seem to have offered a localist authentic ‘ancient’ race whose qualities Slavs could absorb in a synthesis narrative, rather than any strong neo-romantic anti-Western Asiatic identity (see p.419).

Szlachty and Górale

Olechnowicz and Talko-Hryniewicz injected contemporary anthroposociological elitism and *völkisch* romanticism into Polish race classification. They bound *szlachty* and *Górale* together in an original Slavic, longer-faced version of the dark Central European brachycephalic type whose taller stature recalled entrenched pan-European stereotypes of the Nordic nobility (Olechnowicz 1893: 32 & 36; 1902a: 41; Czekanowski 1948: 21; 1956: 19-21; Talko-Hryniewicz 1914: 192). Elitism came easily to Talko-Hryniewicz, Rutkowski, Rosiński, Czekanowski* and the many other Polish intellectuals who were among the 7% of Poles who belonged to the *szlachty* (Stojanowski 1930: 9; Bielicki, Krupinski & Strzalko 1985: 21; Czekanowski 1948: 22; 1956: 6 & 23; Schwidetzky 1935: 299; Olechnowicz 1893: 1-2). Dybowski promoted anthropological museums for the ‘social and patriotic’ purpose of creating ‘racial sanctuaries – national pantheons’, to which important figures had a ‘duty’ to offer their skeletons (Stołyhwo 1957: 14-15). Hoping that just as *szlachty* national heroes like Mickiewicz and Kosciuszki expressed the Polish national genius in pure form, their physical features would contain the nation’s racial-ethnic essence, he analysed their ‘racio-tribal components’ in 1899 (Stołyhwo 1957: 15-18).

By identifying the *szlachty* as the original Slavs, and rooting them in the native mountains, Talko-Hryniewicz gave prehistoric *völkisch* authenticity to them rather than Poland’s peasant mass, just as the Irish nationalist elite did with the Aran Islanders (see p.311-12). Around 1900 *völkisch* neo-romantic nationalism made the 600,000 or so *Górale*, and particularly those of the Podhale region, a supposedly pure vestige of the nation’s racial and folkloric heritage, preserved by mountain isolation (Talko-Hryniewicz 1916: 405-6 & 408; Manouelian 1900: 391). The folk artefact collections of wealthier patients at a tuberculosis sanatorium in Zakopane were collected in a museum there in 1889, the first of its kind in Poland, and a visiting ‘controversial amateur architect’, who surmised that the isolated Zakopane locals had preserved ‘the most ancient general form specific to’ the Polish highlands, developed an architectural style drawing on ‘local ethnographical research’ (Manouelian 1900: 393). On the generally accepted basis that isolation preserved racial purity, many Polish anthropologists assumed the Zakopany *Górale* of the Carpathians ‘peaks’ were the original Slavs, leading Kopernicki to visit the mountains in 1888-90 to record anthropometric measures and traditional dialects, dress and dances (Majer & Kopernicki 1877: 4; Olechnowicz 1893: 31; 1902a: 39-41; Talko-Hryniewicz 1902: 758; 1914: 191; Czekanowski 1956: 20; Godycki 1956: 22; Malinowski & Wolański 1985: 37). An ethnographer in

* Czekanowski was described as ‘a scholar in the old, grandiose, professorial style, a sage’ and ‘enchanting’ company, on drinking terms with a dozen European princes and dukes plus (the legend says) one crowned head’, regaling ‘listeners with spicy stories about swimming-pool parties in early-century Zurich’ and the ‘drinking bouts of Russian cavalry officers’ (Bielicki, Krupinski & Strzalko 1985: 21).

1900 meanwhile transformed Podhale from ‘a borderland, into a site of an archaic precursor of a national Polish culture’, arguing that its dialect ‘preserved the language of the forefathers’ (Manouelian 1900: 394). He also stressed the region’s isolation and, like Talko-Hryniewicz, ‘defensively’ rejected or ignored evidence of Mongol, Gypsy, Slovak and Romanian settlements* (Manouelian 1900: 394; Talko-Hryniewicz 1902: 757-58).

Olechnowicz and Talko-Hryniewicz saw the ‘marked’, and for Slavs, unusual uniformity of the Podhalian *Górale*, with 91% brachycephalic and only 1.8% dolichocephalic, as scientific proof that they were ‘the purest’ Slavs, much more so than ‘other tribes of our country’ (Olechnowicz 1893: 31-32 & 37; Czekanowski 1948: 21; Talko-Hryniewicz 1902: 758; 1916: 419 & 424). They said historical and archaeological evidence placed the Podhalian in the centre of the Carpathians ‘cradle of the Slavs’, among the highest and least accessible peaks, where ‘race purity’ was best preserved, and from which Slavs spread out to the Balkans and through Poland to Russia (Talko-Hryniewicz 1914: 194; Olechnowicz 1893: 36). As Podhale was also ‘the centre’, where the two ‘lines’ of transition from dolicho to brachycephaly met, Olechnowicz said the ‘attributes and properties of the race’ must be concentrated and ‘most distinct’ there (Olechnowicz 1893: 31). Talko-Hryniewicz said the *Górale* retained ‘the original Slavic form in speech, habits, ornamentation, costume, domestic furniture, and... building style’, and their folk tales and sayings ‘kept their original simplicity’ (Talko-Hryniewicz 1914: 357). He convinced Niederle that the *Górale* were ‘a special type’ among Poles and Russians and that ‘pale’ Galicians were ‘the purest type’ compared to ‘very mixed’ more northerly Poles (Niederle 1916: 86-87). In 1893, Olechnowicz drew on Majer, Kopernicki and Talko-Hryniewicz to distinguish *Górale* from plains Galicians by their tall stature and narrow faces, and claim that the *szlachty* were taller than ‘the tallest people in Europe, the Swedes’, and had ‘larger skull dimensions’ especially in breadth and circumference than townsfolk and peasants [Włóścianie], ‘and an outstandingly narrow face’ (Olechnowicz 1893: 1-2, 4 & 31-34; 1902a: 41-42). For Talko-Hryniewicz meanwhile, the *szlachty* throughout Poland had ‘certain’ distinctive features that ‘approached the *Górale*’ in type (Talko-Hryniewicz 1914: 194). Though longer-headed than Podhalian, Olechnowicz said that because no *szlachty* were dolichocephalic, ‘exactly that element foreign to the Slavic type’, they had ‘more distinct features of uniformity’, and so represented ‘the pure Slavic type’, with ‘no foreign blood in them’ (Olechnowicz 1893: 9 & 34). Krzywicki and Niederle in 1912-16 also noted anthropological distinctions between the more

* For the early nineteenth-century French geographer Malte-Brun, the *Górale* ‘preserved the essential features of their ancestors’ and had positive characteristics, but ironically, he added that they differed physically and mentally from ‘other Slav races’ and ‘bore an ancient hate’ for lowland Slavs (Quatrefages 1871: 20-21). Quatrefages thought their features suggested Finnish influence (Quatrefages 1871: 21).

brachycephalic, taller and darker-eyed Polish *szlachty* and the peasants, suggesting a ‘separate origin’ or ‘different racial composition’ (Niederle 1916: 87; Czekanowski 1948: 28).

Olechnowicz’s Dinaric *szlachty* theory crystallised gradually. In the 1890s, he suggested a peasant origin for *szlachty*, attributing their bigger skulls to ‘countless generations’ of ‘higher intellectual development’, and their height perhaps to lifestyle, as French theorists saw brachycephalic ‘*Homo alpinus*’ as medium-statured (Olechnowicz 1893: 34; 1902a: 41-42; Krzywicki 1969 (1897): 404; Czekanowski 1948: 21; 1956: 21). In 1902 however, he linked the *szlachty*, due to their narrower forehead, with the tall dark ‘eastern branch’ of the Alpine race, found south of the Danube and especially in Bosnia, where Deniker centred his Dinarics, saying it migrated north to Poland with the other brachycephals (Olechnowicz 1902a: 42; Czekanowski 1948: 21; 1956: 19). Influenced by Olechnowicz and perhaps poetic descriptions of *szlachty* and believing the different *szlachty* and peasant ‘ideals of beauty’ ‘reflected the original racial type’ (gentlemen preferred brunettes, and commoners blonds), Rutkowski also identified Mazovian *szlachty* with ‘tall, dark-eyed, and dark-haired Croats’ (Rutkowski 1906: 60; Czekanowski 1948: 23; 1956: 24-26). In Talko-Hryniewicz’s elitist theory, the *szlachty* ‘knightly element’ spread from the Carpathians to the plain, ‘defeating’ and ‘culturally but not anthropologically’ Slavicising the ‘foreign’ Finnish or Tartar-Mongol ‘mass’ (Talko-Hryniewicz 1914: 194). He pushed the envelope of the three-race orthodoxy more gently than Olechnowicz, distinguishing pristine *Górale-szlachty* purity from regular southern Polish brachycephals, who were adulterated by the ‘various hordes of Ural-Altai... Mongols and Tartars’, rather than introducing a separate race type like the Dinaric (Talko-Hryniewicz 1902: 760; 1914: 193). Recalling the Nordacist jutting-chin-of-power emblem, he explained that unlike the Mongols, the *Górale*-type’s ‘heavily built jaw’ made the chin protrude, ‘giving the face an expression of a certain energy and strength’ (Talko-Hryniewicz 1916: 425). If the ‘physical build’ and ‘merry... chivalrous temperament’ of Poles made ‘them the nobles of the Slav peoples’ meanwhile, Talko-Hryniewicz claimed the medium-height *Górale* type, agile, slender but well-built, and ‘not tending to obesity’, had ‘the same place among the Poles’ (Talko-Hryniewicz 1916: 424-25).

The rise of Nordic Slavs

Turn-of-the-century Polish anthropologists, influenced by German, Czech and Russian colleagues, began moving from Celto-Slavism to theories of dolichocephalic or Nordic original Slavic kurgan people who were somehow brachycephalised in the Middle Ages^{*}. Majewski said that by 1905, the

^{*} The new blond Slavs returned to, and could draw on, pre-Celto-Slav theories of Nordic Aryan Slavs. Ancient accounts of tall, fair haired Antes and Kopernicki’s discovery of ancient skulls with ‘the elongated and harmonic form of the purest Aryans’, led Quatrefages and several later writers to agree with Prichard that the Slavs were as Aryan as Celts or Teutons (Quatrefages 1871: 19-20; Blanckaert 1989: 172; Buschan 1890: 39). Small, dark, modern self-styled Slavs

Nordic was commonly associated with ‘the Germanic racial soul’, impeding Poles from linking it with Slavs, but this made ‘so many’ modern and prehistoric Poles into long-headed ‘foreigners’, that the Celto-Slav theory was increasingly questioned (Majewski 1905: 162). Czekanowski said Matiegka, representing Niederle’s ‘revisionist’ position, ‘liquidated’ Dybowski’s Celto-Slav theory at the 1912 German anthropological congress (Czekanowski 1948: 25). In the broad-headed Slav theory, eastern and southern German brachycephals were seen as Slavs or even Sarmatians, but long skulls from *Reihengräber* found in the 1870s in bitterly contested Polish borderlands like Silesia, West Prussia and Pomerania, plus across northern Poland, were ‘conveniently’ ascribed to Teutons, giving them prior occupation (Hölder 1876: 8; Virchow 1950 [1896]: 189; Buschan 1890: 36; Potkański 1902: 245-6; Müller 1877: 190). Archaeologists severely jolted the Celto-Slav model in the 1870s however by associating the ancient Slavs with grave goods from eastern *Reihengräber* containing dolichocephalic skulls. This led Virchow by 1873 to question Celto-Slavism, because the huge ancient long-headed territory implied a population too big to be ‘denationalised’, and he instead suggested, apparently heedless of the fallout for German nationalist narratives, that long skulls from Wielkopolska were from an ‘original dolichocephalic Slavic tribe’ (Stojanowski 1948: 1; Virchow 1873: 196; Krzywicki 1969 (1897): 423). He offered features like facial breadth of long skulls as better indices of ‘Slavic origin’ (Virchow 1873: 196).

Archaeologists tried to distinguish German from Slav grave artefacts from the 1830s, but artefacts began taking over from skulls as ‘the principle criterion for ethnic attribution’ when Slavs and Teutons began claiming the same Nordic ancestors* (Sklenář 1983: 95 & 125). This ultimately reduced anthropologists to a junior role in the most vital nationalist ethnology issues. The Danish archaeologist Sophus Müller, a leading protagonist in the change, criticised craniological evidence as too rare and corrupted in Slav-Teuton borderlands by racial mixture (Müller 1877: 190). In 1877, Sophus Müller used geographical logic to connect the Slavs with loops of bronze or silver wire called *Schläfenring* (temple-ring) or *Hackenring* (hooked ring), which seem to have been hung on headbands or headscarves, and were found with unburnt female skeletons from eastern *Reihengräber* (Buschan 1890: 17-18; Talko-Hryniewicz 1914: 188-89; Müller 1877: 191-92; Fig. 5.3). Müller argued that the correlation of historically recorded ancient and modern Slav areas with

were therefore ‘not the sons of the historic Slavs’, Quatrefages added, ‘despite the community of nation and language’ (Quatrefages 1871: 21-22). Many early nineteenth-century ethnologists, including Malte-Brun, Bory, Broc and Morton even included the Slavs within a Germanic family or vice-versa (Broc 1836: 23 & 32-33; Morton 1839: 14; Retzius, A. 1864: 11). Broc’s Slavo-Teutons were very tall, pale, blond and tended to fat, bad teeth and hard liquor (Broc 1836: 31). While the men were brave and could endure great fatigue, the women had ‘remarkably ample forms;... a particular odour’, late puberty, ‘very large external genital parts’ and gave birth easily (Broc 1836: 31-32). Even Knox accepted from travellers’ accounts that Sarmatian Russians were true blond Europeans (Knox 1850: 364-65).

* In 1927-29 for example, Reche and Czekanowski attributed Volhynia Nordics to vestiges of Germanic migration and ‘the centre and ancient home of the Slavs’ respectively (Schwidetzky 1935: 194).

the rings' distribution proved they were specifically Slavic (Müller 1877: 194-95). Western German, Swiss, English and French *Reihengräber* contained a 'completely different' series of artefacts, while temple-rings were also not found in Italy, Scandinavia or Finnish and Baltic areas (Müller 1877: 193-94). Sophus Müller gained the rare tribute of acceptance by 'every scholar' on both the Polish and German sides of temple-rings as a key Slav ethnic identifier (Buschan 1890: 17-18; Potkański 1902: 246). His geographical argument and grave goods like Arabic coin pieces which dated the eastern *Reihengräber* to the ninth to twelfth centuries, 'when only Slavs inhabited' Poland, convinced Kopernicki, Potkański, Buschan and Virchow that they were 'indisputably Slavic' (Kopernicki 1883: 3; Potkański 1902: 246; Buschan 1890: 17-18, 26 & 37; Virchow 1896: 24; Sklenář 1983: 125; Talko-Hryniewicz 1914: 188-89). Talko-Hryniewicz claimed temple-rings were 'still worn by our great-grandmothers in the 12th to 13th centuries' (Talko-Hryniewicz 1914: 188-89). Later commentators claimed this evidence and early medieval sources even shook Kopernicki's Celto-Slav convictions and gave Majer 'a certain scepticism' about the Celto-Slav theory (Godycki 1956: 27; Stojanowski 1948: 2; Czekanowski 1956: 12 & 18; Potkański 1902: 245-6). They noted classical texts describing fair-pigmented Slavs, and found a blond majority among Galician Poles, which along with the features of 'mixed types', suggested to them that an originally pale, blond 'Polish people' had interbred largely peacefully with darker immigrants (Majer & Kopernicki 1877: 104-5; 1885: 45; Krzywicki 1969 (1897): 405). However while Virchow saw the temple-ring people as a 'dolichocephalic section of the Slavs', Kopernicki, again acting apolitically, and backed initially by many German scientists, believed them 'more likely' to be Slavicised Germans (Kopernicki 1883: 40; Buschan 1890: 36-37; Potkański 1902: 245).

A second key Slav identifier was pottery 'with parallel horizontal lines and wavy ornament' from hillfort walls in the Polish-German-Czech 'marginal region' on the Elbe and Oder, which Virchow named the *Burgwall*-type (Sklenář 1983: 110 & 125). Ancient settlement walls provoked great controversy among early nineteenth-century antiquaries. Slav scholars like Schafarik attributed prehistoric Western European walls to ancient Slavs, German researchers to Teutons, and others to Celts, Avars or Romans (Buschan 1890: 7). Lisch in 1847 associated wavy-ornamented sherds with Slavs, confirming this in a study with Worsaae of a historically attested Slavic fort, but though several 1850s Slav and German researchers agreed, Vocel in Prague successfully opposed this theory (Sklenář 1983: 95 & 125). Virchow, the leading 1870s and 1880s *Burgwall* investigator, backed Lisch's position in 1869-72 with studies of coastal sites which medieval Scandinavian chronicles said were Slavic, and 'finalized the attribution' of *Burgwall*-type pottery to fifth to eighth century Slavs at the 1874 and 1878 International Congresses (Sklenář 1983: 113-14 & 125; Buschan 1890: 4-5; Collis 2003: 85). As the hundreds of *Burgwall* pottery finds corresponded to

historically attested Slav regions from Saxony and Thuringia eastward, Virchow concluded in 1878, again against nationalist narratives, that Slavs occupied these regions before Germans (Sklenář 1983: 125-26; Buschan 1890: 6). Slavs like Talko-Hryniewicz happily accepted the *Burgwall*-type as typically Slavic but this claim failed to catch on in Germany's prevailing nationalist mood, though Buschan accepted it, identifying Burgwall designs in the modern Slavic folk art of isolated villages (Sklenář 1983: 126; Buschan 1890: 10 & 12; Talko-Hryniewicz 1914: 188-89; Sklenář 1983: 126). Virchow reinforced the Slavic temple-rings and *Burgwall*-type by associating them with 'Slavic Latvian' lake and marsh settlements constructed on poles (*Pfahlbauten*), distributed from the Elbe to Latvia, while coin finds placed all three artefacts in the Bronze and Iron Ages (Müller 1877: 191-92 & 195; Buschan 1890: 8, 13-15 & 19-20).

From studying modern Lithuanian and Latvian dolichocephals, Virchow argued in 1876 that long-headed ancient northern 'Slavo-Lettish peoples' spread west over the Polish plain and across the Oder, and that broader-headed Slavs were therefore no longer racially pure (Buschan 1890: 37). His German schoolchild survey pushed anthropologists towards accepting blond Slavs. The grey eyes common in Slavic Sorb areas of Saxony convinced Kollmann that it was a specifically Slavic type and he attributed much of 'the notable increase' in blondness 'in the north' to Slavs (Kollmann 1880: 108 & 110). Buschan agreed that Poles were on average fairer-pigmented than Germans, suggesting the original Slavs and Germans were grey and blue-eyed blond dolichocephals respectively (Buschan 1890: 38-39 & 41). Virchow's acceptance of German racial diversity due to his schoolchild survey may have encouraged him to seek similar diversity in other nations, while Kopernicki was probably reluctant to abandon the brachycephalic Celto-Slav connection with the French and distinction from Germans (Buschan 1890: 37). By abandoning the Burgwall, Virchow could also claim for Teutons the Lusatian urnfields, which were later a highly contested nationalist asset. However the nationalistic opposition to both their positions by compatriots makes their dispute appear a largely apolitical one between liberal positivists. Virchow saw it as 'conceivable' that Neolithic skulls from places like southern Hungary that resembled Frankish skulls, were Teutonic, 'but since being smitten by the incidence of dolichocephalic Slavs, no anthropologist is so ready to try enlarging anew the Germanic homeland' (Virchow 1950 [1896]: 190).

The geographical and chronological spread of dolichocephals deep into Russia and into earlier prehistory undermined Kopernicki's stance (Buschan 1890: 36-37). Krzywicki said the Russian and Czech anthropologists, Bogdanov and Niederle, accepted dolichocephalic Slavs, Niederle placing the 'very similar' Slavs, Teutons and Gauls in 'the same race of blond dolichocephals' (Krzywicki 1969 (1897): 423; Stojanowski 1924: 713). Previous authors questioned the Celto-Slav theory but

Niederle, a key figure in the development of Slavic studies, combined ‘historical, archaeological and ethnographic evidence’ on ‘Czechs, Poles and Russians’ in the first ‘unified hypothesis’ (Barford 2001: 274; Potkański 1902: 245). In a series of controversial 1890s works, Niederle claimed on the basis of graves containing both temple-rings and long-skulled remains, that Slavs were largely of dolichocephalic origin (Matiegka 1924a: 10; Czekanowski 1948a: 31; Potkański 1902: 244-47). He accepted however that mixture ‘in the east with Asiatic tribes,’ and ‘in the west with... the brachycephalic race of Central Europe’, plus environmental adaptation, meant ‘Slavs really are now brachycephalic’ (Potkański 1902: 246-47; Krzywicki 1969 (1897): 423). The dolichocephalic Slav narrative took off at the same time in Russia. In an 1886-93 study of central Russia, which, history suggested would host the most typical Russian type, Zograf distinguished a short, dark-haired, broad-faced brachycephal from a longer-headed, narrower-faced, tall type with fairer ‘or completely blond’ hair (Zograf 1893: 1-3 & 7). Inverting Kopernicki’s narrative of dolichocephalic Finns mixing with brachycephalic Slavs in Russia, Zograf was ‘certain’ that his tall, long-headed blond was ‘the primitive Slavo-Lithuanian type’, now found in ‘quite an impure state’ due to Russia’s history of gradual mingling with ‘conquered or conquering’ neighbours (Zograf 1893: 10). Zograf identified this with similar types found by Polish and Russian anthropologists among Poles, Ukrainians, Bielorrussians and Baltic peoples (Zograf 1893: 10). It was the dolichocephalic type of the Kurgans and bronze objects with ‘Slav ornamentation’ and ‘without a doubt the heritage’ of the ancient Russian population (Zograf 1893: 10). He detected traces of it throughout Russia west of Nizhny Novgorod, having spread east from around the Dnieper and Waldai plateau, and was ‘best preserved’ around Novgorod, which ‘history’ said was peopled by the Slavic ‘founders of the Russian state’ (Zograf 1893: 7 & 10-11). This theory took firm root in Russia. The leading Soviet anthropologist Bunak also considered the Kurgan-builders Slavs, though much more dolichocephalic than modern Slavs (Bunak 1932: 494-95).

Kopernicki’s ‘great and lasting... authority’ delayed Polish rejection of the Celto-Slav theory until the work of the historian Karol Potkański and the anthropologist Leon Rutkowski in 1901-6 (Czekanowski 1937: 232; Stojanowski 1948: 2). The theory first ‘broke down’ because linguists like Friedrich Müller and A. Schleicher established that Slavic and Lithuanian were much more intimately and enduringly related to Germanic than to Celtic languages (Czekanowski 1937: 232; Müller 1879: 87-88). Following Niederle, Potkański proposed the original Slavs were racially Nordic, arguing in 1902 that historical sources proved medieval Polish dolichocephals were ethnic Slavs (Czekanowski 1948a: 31). He placed the original dolichocephalic centre in Mazovia, where Rutkowski found tall, and exclusively very long-headed skeletons in 1901, signifying ‘the greater purity of the original type’, in *Reihengräber* with temple-rings (Potkański 1902: 252; Czekanowski

1948: 22). As a coin dated the graves from the eleventh century when it was 'most certain' the region was Polish, Potkański argued that these longheads must have been Slavs (Potkański 1902: 253-6). Rutkowski made them direct ancestors of modern Mazovians he had studied, while from village studies, Potkański claimed this area 'was populated very early', making them the 'native population' (Potkański 1902: 253). Even if native dolichocephals had learned Polish, he said, the Slavs could not have been brachycephalic, because the graves would then contain a mixed people rather than just dolichocephals (Potkański 1902: 253). He rejected the argument that the Slavic language could have spread to the area without the physical presence of original Slavs, like the Romans Latinised Gaul, presumably because they lacked imperial institutions (Potkański 1902: 253-54). Potkański cited other old long-headed skulls from across northern Poland, but gave Mazovia the 'purest and most clearly dolichocephalic population', fading towards mesocephaly elsewhere (Potkański 1902: 254-256).

Potkański's northern Slavs remained pure or mixed with another long-headed group, like Prussian Balts or tall Estonians, and in the south, with 'non-Slavic' brachycephals, but he broke Poland's broad-heads into a series of smaller groups, peripheral to the main Polish ethnogenesis story (Potkański 1902: 254 & 259-60; Czekanowski 1948: 22). Citing historical evidence, linguistic division between Polish and other western Slav languages, Lusatian legends and similarities between Polish and Bosnian cattle, he argued that the brachycephals of Bohemia, Lusatia and Małopolska were probably Slavicised Celts of 'Alpine race' who later joined Slav expansion into the Balkans (Potkański 1902: 259-61). Potkański meanwhile hinted that scholars assumed *Górale* racial purity for nationalist reasons (Potkański 1902: 248-49). Apart from the race psychological grounds that 'northern Slavs' historically 'dislike settling in mountains', he found several historical and linguistic indications that these mountains were mostly settled late, by brachycephalic southern Poles, Transylvanian Vlachs (Romanians)* and Germans, and dated supposed ancient *Górale* customs to the sixteenth century (Potkański 1902: 248-50). Potkański reasoned that minus its highlands, Małopolska was 'not brachycephalic enough' to be 'the most original centre of brachycephaly' (Potkański 1902: 251). This was instead in the isolated enclave of pronounced, homogeneous brachycephaly that Deniker and Ripley indicated in Polesie, a region which a Russian scholar said was originally occupied by a single tribe, so later national and medieval tribal divisions were purely cultural (Potkański 1902: 251-52). The Polesie brachycephals might have been a northern branch of the Finns, he guessed, as linguists suggested that Finnish mixture could explain

* Talko-Hryniewicz responded that Vlach dialect words could be borrowed, wooded highlands might be settled first for protection against wild animals, and that 'Lach', a traditional term for Poles which meant 'forest', preceded the word 'Pole', meaning 'field' (Talko-Hryniewicz 1902: 757-58). He was certain that a newly-discovered Stone-Age cave in Podhale would yield human remains (Talko-Hryniewicz 1902: 757).

the 'lilting [ruchomy]' Polish accent, though Rutkowski objected that Russians should then have the same accent (Potkański 1902: 260-61; Rutkowski 1906: 66).

Czekanowski called Rutkowski in 1906 the first Polish anthropologist to reject the Celto-Slav theory, drawing on Niederle and Potkański (Czekanowski 1956: 25-26; Rutkowski 1906: 63-67). He identified as 'our direct ancestors', the band of prehistoric long-heads across northern Poland and modern eastern Germany, who had the same cephalic index measures as the modern Mazovians he studied. As the original Polish elites, including the state's founding dynasty, whose capitol was near the dolichocephalic centre, were long-headed, these formed 'the state, and so also the Polish nationality [narodowość]' (Rutkowski 1906: 65-66). Zaborowski and Kopernicki's 'strange' Slavicised Teuton theory would deny 'the right of belonging to the Slavic family' to the medieval Elbe-Oder Slavs, the closest linguistic relatives of Poles, he said, and also clashed with the Teutons' historical record as warlike conquerors, quick to Germanise their subjects. Though Stojanowski says Rutkowski 'liquidated... the Slavicised Germans from our prehistory', he was a transitional figure (Stojanowski 1948: 2). He accepted that modern Poles were 'mostly' brachycephalic, that dolichocephals had limited influence on Poland's 'more civilised', populous and politically powerful south and that a second wave of brachycephalic *szlachty*, perhaps starting as locally recruited 'lower officials or knights' of the later Cracow royal court, gradually spread north (Czekanowski 1956: 25). Rutkowski stressed Poles were a mixture, but the rising blond Slav theory became just as exclusive as Celto-Slavism, condemning half the Polish population, though the other half, to the inferior non-Aryan race (Czekanowski 1948: 22; 1956: 6 & 23). This was most blatant in Ludwik Krzywicki's theory that Nordic Slavs enslaved the immigrant brachycephals. Arguing from grave-types, he compared the dolichocephals to Arab slave raiding settlements preying on surrounding Central Africans, or to the Varangians and Avars ruling Slavic Russians and Venedi (Krzywicki 1969 (1897): 422-23). Potkański meanwhile placed the brachycephal homeland in Polesie's Pripyet marshes, where historical sources noted no foreign colonisation, so they 'must have stayed there forever among their mud and swamps' (Potkański 1902: 251). Slav anthropologists drew on the Nordacist tradition of Asiaticising brachycephals. Zograf in Russia said a particular skull feature recalled 'the European peoples' among the long-headed blonds, but resembled that 'of the peoples of Mongoloid origin' among his short brachycephals, suggesting they were pre-Slavic eastern Finns (Zograf 1893: 7 & 11).

The half-reluctant Nordacists of Lwów

The new confidence and influence of Polish and particularly Lwów raciology did not assure its independence. The irresistible drift towards narratives of blonder and longer-headed Slavs and

closer institutional links suggested intensifying influence from a German anthropology which worshipped the blond, dolichocephalic Nordic. I argue however that in this very complex relationship, the features distinguishing Polish from German classifiers largely outweigh German influence.

Already in 1902, Potkański recognised that Celto-Slav theory clearly associated Slavs with France, but dolichocephalic Slavs created 'a closer anthropological relationship with Teutons' (Potkański 1902: 244). Though Czekanowski, Klimek and the ardently nationalistic Stojanowski, whose work concentrated on the German borderlands, all harshly condemned German Nordicism, they placed 'the Nordic race in first place' in Poland, making it as or more Nordic than Germany (Schwidetzky 1935: 199; Stojanowski 1930: 12; Klimek 1932: 18 & 30; see Fig. 5.4). The Lwów school found a Nordic 'absolute majority' in Baltic and North Sea coastal 'hinterlands', penetrating furthest inland in the south-east, dominating the north and in relative majority in the south of 'the Polish and German plain', with concentrations in a series of Polish or East Slavic inland enclaves (Klimek 1932: 18 & 30; Czekanowski 1937: 227). Klimek portrayed Slavs as Nordic colonists, whose eastern 'expansion' broke up 'the original zone of Asiatic components' (Klimek 1932: 30). Czekanowski's Nordics meanwhile 'very probably' emerged in the German and Polish lowland 'Nordic zone' and he agreed with German Nordicists that 'insufficiently appreciated heredity laws' explained how 'southern Germany and in the Slavic lands' were denordicised since the Middle Ages (Czekanowski 1928: 355). He claimed ancient Slavs were more Nordic than Teutons, who had a larger Mediterranean component, especially in the west, explaining *Reihengräber* dolichocephaly and dark-haired heroes in Scandinavian sagas (Czekanowski 1928: 355). The exceptional rarity of Mediterraneans in Silesia plus dialect evidence that medieval German immigrants came from 'Central Germany', therefore suggested to him that Silesian Nordics, who became more common towards Slavic areas to the northeast, must be of Slav origin (Czekanowski 1937: 232). Schwidetzky attacked this Nordicist nationalism, questioning the 'doubtful' evidence for Nordic dominance in Poland, but Czekanowski claimed even German scholars like Kruse and Virchow had found north-western Poles were longer-headed or lighter-pigmented than Germans (Schwidetzky 1935: 194 & 197-98; Czekanowski 1937: 232).

In the Lwów school race history of Poland, Nordics were stereotypical enterprising conquerors (Schwidetzky 1935: 194). They penetrated south and east, upriver into brachycephalic territories, establishing the Polish state in 'then' Nordic Wielkopolska, which conquered the other provinces (Czekanowski 1920: 52-53 & 62; Rosiński 1929: 266). Surveys of the anthroposociological and race psychology studies which thrived in interwar Poland and in the Lwów school, examining

schoolchildren, students, soldiers and asylum inmates, show as strong a Nordacist consensus as in Germany (Rosiński 1929: 273; Schwidetzky 1935: 293-95; Stojanowski 1930: 8). Nordics were the most competitive, logical and intelligent, careful, exact critical thinkers and slow but good workers. Almost all studies placed the moody and 'least intellectually developed' Preslavic race, an east-European variant, near the bottom of the list, often beside the lively but careless Alpine (Pogliano 2005: 50). Rosiński ascribed race psychology profiles like the hardworking, thrifty, prudent, sober Alpine homebody with 'a remarkably developed herd instinct' whose highest goal was a comfortable pension, to his own observations, but they echoed German Nordacist race psychology canons word-for-word (Rosiński 1929: 274). The respectable proportion of blue-eyed, blond Poles allowed the Lwów School to promote a nationalist Nordicism, but more right-wing Lvovians, like Bolesław Rosiński and, to an extent, Czekanowski himself, offered a more elitist variety. As well as praising 'the fabulous intuition' of 'the most eminent authority on' German raciology, the extreme Nordacist Günther, and making him his main classification authority after Deniker, Czekanowski said the Nordic used its 'superiority' to forcefully expel other races from Poland (Czekanowski 1928: 355 & 358; 1937: 228). Schwidetzky said that while Rutkowski, Olechnowicz and Talko-Hryniewicz all found the *szlachty* broader-headed and generally darker than peasants in 1892-1912, Czekanowski in 1921 began making *szlachty* longheaded (Schwidetzky 1935: 297). He and Rosiński accepted the anthropologist Otto Ammon's finding that in Baden 'the superior Nordic element' migrated to cities to pursue social advancement, though Rosiński noted that urban race mixing diluted their purity (Czekanowski 1928: 355; Rosiński 1929: 273-75). Rosiński claimed the Polish 'ideal' by contrast was 'country life', rather than 'the mirage of towns', so rural Polish Nordics were 'the least overcome by emigration fever' (Rosiński 1929: 274; Stojanowski 1930: 9). He used demographic gender data to argue that the 'more energetic' Nordics therefore tended 'to submerge' or displace 'weaker elements' from the Polish countryside and become more numerous and uniform there (Rosiński 1929: 273-75; Stojanowski 1930: 9).

The very nationalist Lwów school had a highly ambiguous relationship with the Nordic however, as it was intimately linked with German ultra-nationalism. Stojanowski and Stanisław Klimek portrayed Nordicism as a dangerous tool of German expansionism, increasingly convincing his colleagues as the Nazi threat loomed larger. Stojanowski, who published copiously on anthropology's political implications, called Nordicism a 'religio-political system' based as much on 'irrational faith' as science, which like communism and fascism, aimed to create a 'zoological' or 'sociological' *sui generis* social elite' (Stojanowski 1930: 5 & 11). Klimek and Stojanowski argued that whatever its scientific merit, Germans largely produced and developed Nordicism, decisively linked it with Germanism and would profit from it more 'than we would', so it carried

'great dangers' for Poland (Stojanowski 1930: 9 & 12). They noted that Gobineau's Nordicism spread in 'the entirety of the Germano-Protestant world' but not among the French, precisely because Chamberlain and Woltmann associated his Nordics uniquely with a 'Germanic race' (Stojanowski 1930: 2; Klimek 1939: 28). Accusing his colleague Rosiński of yielding 'to the Nordicist suggestion' by assuming Nordics would naturally achieve their preferred social position, Stojanowski criticised 'attempts to transplant the Nordicist ideas and movement to Poland' (Stojanowski 1930: 9 & 12). Ironically, Klimek mobilised nationalism against racism. If not examined in the light of 'our cultural tradition', ideological dependence on foreign ideas could lead to 'dependence in other areas of national life' (Klimek 1939: 21). Stojanowski saw German eastern expansionism as a major political element in Nordic supremacism, which legitimised traditional Prussian objectives, and he and Klimek warned that as direct neighbours, Poles had a 'special responsibility of vigilance' against rampant racism (Stojanowski 1930: 6-7; Klimek 1939: 21). Nordic internationalism, the call for 'pacifism' among Nordic-dominated 'France, England and America', was a ploy to smooth German expansionism, just as medieval Germans exploited Christianity to expand east (Stojanowski 1930: 7).

Stojanowski and Klimek dismissed Nordicism as an irrational national delusion, arising from Germany's pathological development. It expanded after 1918 'from a scholarly current into a socio-political movement' by giving a shattered nation an ideology of ancient ethnic and biological unity (Klimek 1939: 28; Stojanowski 1930: 3). Citing Czekanowski's evidence, they claimed Polish Nordics were physically relatively underdeveloped and militarily unfit or that 'early historical Teutons' were racially 'very varied' and modern Germans even more so, while Nordics were also 'the most numerous component' of 'Slavs, Balts, ancient Celts etc.' (Klimek 1939: 29; Stojanowski 1930: 8; Schwidetzky 1935: 168). Stojanowski said Germanic eastern expansion could be explained 'more easily and feasibly' than by 'mystic' German anthropology theories of 'lordly' Nordics (Stojanowski 1937a: 9). Criticising Rosiński's argument that there were more men among Polish rural Nordics, because they liked country living, he said that the pretty but feeble Nordesses might instead have been sucked into cities by their higher marriageable value there (Stojanowski 1930: 11). Rosiński failed to note that 'the peasant', even if Nordic, rated a 'strong and hardworking wife' over 'beautiful eyes', and so chose the more military fit and physically developed Subnordic and Lapponoid types, while even women of 'the ugliest' but 'physically powerful' Preslavic type 'find suitors' 'despite their mean form' (Stojanowski 1930: 10). This gave the Nordic bleaker prospects, as its unmarried women married late with other stocks (Stojanowski 1930: 10). Gorgeous but feeble were weak criteria for absolute superiority.

However the mystique of the Nordic, literally the alpha (α) of Czekanowski's scheme, undeniably mesmerised even sceptics like Klimek into dealing with it first and devoting disproportionate space to it. Stojanowski said Nordic superiority was not yet proven, but if it had a scientific basis, Poland's Nordics could achieve social 'primacy' (Stojanowski 1930: 8 & 12). Similarly, while Żejmo-Żejmis overtly rejected essentialist determinism, describing underdeveloped Europe in geographical terms as 'surrounding and peripherally around' core areas, he correlated development with racial and cultural factors (Żejmo-Żejmis 1933: 63). 'Racially', he said, Nordics predominated 'absolutely or relatively' in his core, which apart from slightly under-performing Latin France and Belgium, was 'composed of ethnically Germanic states' (Żejmo-Żejmis 1933: 60-61). He equated his peripheral area with 'the mass of the Slavo-Latin world', linking dictatorship with its 'cultural state' (Żejmo-Żejmis 1933: 61-64). The Lwów school raciological approach undermined its anti-Nordicism. Members accepted almost all the anthroposociological arguments, Klimek stalling only at the final conclusion that races were of unequal value. Stojanowski criticised German Nordacists for making sweeping judgements about racial value before the complex racial-social relationships were properly understood, but also the few German anthropologists mounting a 'weak resistance' to Nordicism for the even 'worse error' of denying the reality 'of any racial types' (Stojanowski 1930: 3 & 11). He firmly believed in differentiated race mentalities and abilities and attributed to race an extraordinary socio-political power to determine conscious life-choices (Stojanowski 1930: 8). Stojanowski argued in 1930 that few Nordic German refugees returned to Posnań after 1918, due to strong 'Nordic agitation', but more Subnordics did because Nordicism identified them as inferior East Europeans and their 'above average intelligence' saw through it (Schwidetzky 1935: 301). He also feared Poland's 'powerful biological base' of 'Asiatic racial elements' might respond to Russian Eurasianism (Stojanowski 1930: 12). Wilhelm Schmidt of Vienna's discovery of 'the same main' social and religious elements among 'primitive peoples' and the world's 'great civilisations' and religions, proving 'the moral unity' of humanity, offered the unequivocal anti-Nordacist thesis that Lwów's raciology never could (Klimek 1939: 39). However Czekanowski said Klimek left the Vienna school because its methods clashed with those of Lwów (Czekanowski 1956a: 25). They both believed 'ethnology and prehistory' had to assess unconscious biological influence on culture, since 'social phenomena' had a 'biological' basis (Klimek 1939: 24). Czekanowski correlated 'anthropological provinces' with 'ethnic territories', identifying anthropological type distribution with dialect areas and like Stojanowski, with migrations of ancient tribes (Czekanowski 1920: 52 & 67; Stojanowski 1924: 762).

Klimek's biological egalitarian conclusions contradicted his own race psychology reasoning, which was identical to that of mainstream German raciology (see pp.167-72). He saw Günther's insight

that races had unequal value as ‘a certain advance’ scientifically, in Nazi race theory and distinguished ‘backward or regressive’ from ‘specialised... advanced or progressive’ human skeletal features by how much they resembled those of apes, but claimed all races combined progressive and regressive features, so none were superior or inferior (Klimek 1939: 29-34). He accepted studies showing ‘really existing perceptible’ mental race differences in reaction times, response to competition and types of talent, but these ‘merits and shortcomings’ made them ‘different’ but ‘of equal value’ rather than ‘higher and lower races’ (Klimek 1939: 34-35). No race ‘entirely’ lacked ‘fundamental psychological elements, like the ability of normal [prawidłowy] thought’ and ‘use of abstract concepts’ but differed in the ‘style’ and ‘development of certain dispositions’ (Klimek 1939: 38). Klimek made these arguments in a 1939 Catholic pamphlet, but in 1932 had been far less reserved towards Nordicism. He then said Nordics were Europe’s ‘specific feature’, especially ‘in the upper social classes’, and ‘the characteristic representative of the White races’ and their ‘dominance’, creating a ‘very great’ difference with Asia (Klimek 1932: 18, 24 & 30).

The Lwów school was no carbon copy of Günther’s *Rassenkunde* however. Aside from the reservations about Nordicism and greater tolerance of Jews and brachycephals, Rosiński’s pessimistic, anti-modern purity fetish appeared quite isolated (Rosiński 1929: 274). Czekanowski distinguished his own scientific approach from romantic Nordicism, dismissing the German ‘cult of racial purity’ and remarking sarcastically that ‘adepts of Gobineau will without doubt’ exploit his acceptance that Nordics founded the Polish state (Czekanowski 1920: 63; 1937: 227). He argued that the racially purest parts of Europe, like Scandinavia, southern Italy, the western Balkans and Kola Peninsula were ‘geographically isolated’ relics, eroded by a ‘constantly expanding central zone’ where his primary races were roughly equally mixed* (Czekanowski 1937: 227). Insisting that race crossing did not weaken races, he and Klimek saw this mixed zone as the vibrant expanding core of modern civilisation, where ‘exactly’ the interaction of complimentary race mentalities produced ‘the highest cultural activity’ (Klimek 1939: 35-36). ‘Ethnological and historical research’ meanwhile showed nations as cultural syntheses, said Klimek, in which foreign borrowing spurred local innovation (Klimek 1939: 37). Stanisław Żejmo-Żejmis’s Lwów school statistical comparison of ‘civilisational and cultural’ development in European countries demonstrated a similar liberal optimism (Żejmo-Żejmis 1933: 58 & 65-66). He synthesised data on mortality and illiteracy rates, representing general health conditions, the economic importance of foreign trade, expressing international integration, the volume of postal traffic (‘economic...

*This perpetuated the ideas of Celto-Slavists like Krzywicki, who located European race mixture ‘mostly’ in the Alpine ‘central belt’ (Krzywicki 1969 (1897): 376).

political and cultural expansion’) and ‘the percentage of the agricultural population and natural growth’, into a single measure of development (Żejmo-Żejmis 1933: 58, 61 & 66). ‘Capitalist-parliamentarian’ ‘Western Europe’ emerged as his highly developed ‘core’, which ‘in the wider world, especially the coloured’ world, ‘represents Europeanism’, while his ‘exterior zone’ included the Soviet Union, Balkans and Portugal, corresponding he said, to the Europes of the iron horse and the dray horse (Żejmo-Żejmis 1933: 60-61 & 64-66). Poland, with statistically greater ‘development of civilisation’ than these countries, was semi-peripheral, on the verge of the intermediate zone (Żejmo-Żejmis 1933: 63-66). Only with time, effort and determination could countries move ‘upwards’ to the core, he argued, but the gradual improvements in annual statistics and ‘characteristic’ ‘political ferments’ ‘outside the “limes occidentalis”’, suggested progress was inevitable (Żejmo-Żejmis 1933: 61-66). Polish Catholicism also stifled bio-racism. In a publication and alongside monogenist views which both suggested Catholic influence, Klimek stressed that cultural ties were much more significant for ethnic and other social groupings than racial ones and that pure race did not exist (Klimek 1939: 26-27, 31-35 & 40).

Rejecting Nordacist distaste for brachycephals, Czekanowski saw Poles and Slavs as a synthesis of Nordics with a smaller contingent of Lapponoids, whom he ‘roughly’ identified with Alpines and named in the belief that Lapps ‘probably’ came from Europe’s ‘central zone’* (Czekanowski 1937: 227 & 232; Schwidetzky 1935: 149 & 151). Leading Polish anthropologists, who included several Jews*, also appeared to avoid the blatant anti-Semitism of German colleagues. Czekanowski claimed in 1956 (though perhaps as propaganda) that Reicher helped protect the Karaites, a small ethnic group of Jewish religion, from the Holocaust, by finding in 1932-33 that they were racially closer to Tartars than Jews (Reicher & Sylvanowicz 1956: 10). Stojanowski said Nordacists hated Jews as competitors to dominate territorial ‘spheres’, but was not clear whether he believed this was true (Stojanowski 1930: 7-8). In keeping with contemporary ethnic thinking, Jews were often separated out and studied as a particular group in Polish racial studies (including by the two most prominent interwar Jewish anthropologists) and often found to have some distinguishing features (Schwidetzky 1935: 165-66; Majer & Kopernicki 1877: 126-27 & 132; Krzywicki 1969 (1897):

*Quatrefages and Hamy coined the term in the 1870s for palaeolithic European aboriginal ancestors of the Lapps and Finns, who were ‘expelled or absorbed’ almost everywhere else (Quatrefages 1889: 313 & 447-51). True to form, Czekanowski exploited the Lapponoid element for nationalist purposes. Schwidetzky complained that he brought ‘a certain Mongologisation’ to his definition of the race, ‘doubtless’ to mop up ‘occasionally Mongoloid features’ in Poland, by including both ‘individuals with true Mongolisms’ and ‘crudely manifested Alpine’ features (Schwidetzky 1935: 149 & 163-64). The ‘fundamental difference’ between German and Polish Silesian race theories, he meanwhile argued, was that Germans attached Silesia to ‘the Nordic lowlands of Germany’, apparently ignoring the ‘very ancient’ ‘prevailing Lapponoid zone’ stretching along the highlands ‘far into Central Germany’ (Czekanowski 1937: 229-30). Czekanowski used his instrument of ‘racial formations’ to enlarge this zone, suggesting that even Günther accepted Silesia an ‘an integral part’ of it, belonging racially ‘very closely’ to Polish highlands (Czekanowski 1937: 228-30).

378-79; Wrzosek 1959: 63-64 & 163-64). Publications in 1891 and 1912 attributed the low average Polish stature to Jews, for example (Czekanowski 1948: 30; 1956: 17; Krzywicki 1969 (1897): 400). However Czekanowski's 1926 research confirmed nineteenth-century Polish studies which judged Jews of mixed biological race, 'like every other ethnic group', and probably of largely local descent, contradicting foreign theories of Jews as a Semitic Mediterranean sub-race (Schwidetzky 1935: 296; Majer & Kopernicki 1877: 126-27 & 132; Krzywicki 1969 (1897): 378-79). Talko-Hryniewicz identified a taller, blond, blue-eyed type with radical Jewish intellectuals. It had a 'phlegmatic' character, preferred intellectual work like Talmudic interpretation to 'practical activity', and was clearly more common among the 1905 Russian revolutionaries than dark-haired Jews (Talko-Hryniewicz 1914: 362).

Though German links were important, the avoidance of racist-nationalist excesses in interwar Polish anthropology was embodied in its internationalism, reactivated by institutionalisation[†]. Czekanowski spoke 'accentless' German, French and Russian, and got by in English, Italian and Czech, while Stojanowski said the Lwów school synthesis was based on international contacts (Bielicki, Krupinski & Strzalko 1985: 21; Stojanowski 1935: 33). French bibliographical connections came a strong second to German in both Czekanowski's and Wrzosek's bibliographies of Polish interwar anthropology and the journals the Poznań anthropological institute subscribed to (Czekanowski 1948a: 124-174; Ćwirko-Godycki 1935: 12-13; Wrzosek 1959). Two thirds of all foreign language conference papers in Czekanowski's bibliography were given at the Paris-based and strongly anti-German IIA, while conferences in neighbouring Slavic lands, especially Prague, were also important. Czekanowski's work experience abroad was mostly in Germany, but he also worked in Paris in 1918-20 (Czekanowski 1956a: 21-22). Polish interwar archaeologists meanwhile had 'good relations with France', used French terminology and classifications, worked with French colleagues and participated in their expeditions in Egypt, and some even visited the Soviet Union (Lech 1997/98: 41 & 46-47). Bibliographical evidence also suggested important links with the Anglophone world, Catholic southern Europe and even Japan. American and other connections became more important after independence, following earlier references to Ripley, and even Germanophone connections included the distinctive currents of Catholic Vienna (Krzywicki 1969 (1897): 376 & 384). Several Polish anthropologists worked or studied in the United States, Vienna and Italy (Reicher & Sylvanowicz 1956: 9; Czekanowski 1956a: 23-25). One Lwów student,

* Ludwik Hirszfeld, who founded sero-anthropology, worked in interwar Warsaw for example (Malinowski & Wolański 1985: 43).

† Racial typology was also far from a universal obsession in Polish anthropology. The internationally important interwar Loth and Reicher schools specialised in the relatively unpoliticised field of soft tissue anthropology, which focussed, like several Cracow researchers, on issues like 'growth and development' rather than ethnic differentiation (Wrzosek 1959: 116-17; Czekanowski 1948a: 15 & 19; Schwidetzky 1935: 83; Bielicki, Krupinski & Strzalko 1985: 12).

Salomon Czortkower, was preparing to become anthropology professor at the University of Jerusalem, but was murdered in the Lwow ghetto (Czekanowski 1948a: 9 & 12).

The most important difference between Lwów and German raciology however, was structural. While right-wing politics determined the shape and relationships of the German discipline, Czekanowski taught biometric statistical method as well as anthropology and constructed his raciological disciplinary complex around it*, instituting the closest ‘collaboration between anthropologists, prehistorians and ethnologists’ in Poland (Schwidetzky 1935: 83; Lech 1997/98: 48-49). The Lwów School applied their statistical method to linguistics, archaeology, ethnography, history and raciology, and fed results from these disciplines into their theories of Slav ethnology (Czekanowski 1956a: 42; Żejmo-Żejmis 1933: 65-66; Stojanowski 1935: 33). Czekanowski himself ‘could speak with authority on... physical anthropology, Mendelian genetics, European archaeology, Slavic linguistics, Slavic and African ethnography and mathematical statistics’, and trained archaeologists and ethnologists as well as anthropologists (Bielicki, Krupinski & Strzalko 1985: 21; Czekanowski 1956a: 9-12 & 20-21). Under his influence, his archaeologist student Kozłowski assumed that ‘skeletal remains of a specific physical type’ found with an archaeological culture, indicated a ‘race’ (Lech 1997/98: 48-49).

Polish nationalist narratives: the Easteuropean

The Easteuropean race was central to both the Lwów and Cracow revolutions against orthodox classification canons. As the blond eastern component of the brachycephalic Celto-Slav race, Haddon claimed in 1924 that they were still ‘universally termed Slavs’ and German Nordacists certainly denigrated the type as archetypically Slavic (Haddon 1924: 27). Both Polish schools recognised the usual, post-Denikerian six to ten European races, and the Cracow scheme was essentially compatible with German and other foreign models, though it significantly reinterpreted the Easteuropean, to make it the national race. Czekanowski’s scheme was one of the most fundamental reformulations in the history of race classification however, aiming to overturn orthodoxy rather than carving a niche within it*. Despite Lwów internationalism therefore, this impeded any engagement with others, and especially Germans. Czekanowski, increasingly in cooperation with his students, developed his European system in 1911-28, defining and ascribing detailed characteristics to ten types, each with Greek alphabet code-letters and names drawn largely

*Lwów adopted its method, and perhaps also its combatitiveness, from Pearson’s biometric school which developed ‘new and refined statistical techniques’ in turn-of-the-century London and used them in ‘a searing criticism of craniological dogma’ (Fee 1979: 429-30). Pearson ‘intellectually horsewhipped’ opponents, scorning all anthropology that was less mathematically-literate than his school as ‘simply outside the field of science’ (Fee 1979: 430-31).

from Deniker (Schwidetzky 1935: 145-46; Stojanowski 1924: 663; Mydlarski 1926: 188; Czekanowski 1928: 336). The Nordic, Ibero-Insular, Lapponoid and Armenoid[†] were primary races or genotypes, while the six secondary types were mixtures which sometimes broke back into their primary components following ‘further cross-breeding’ (Czekanowski 1928: 338-39; 1937: 27; 1967: 60; Klimek 1932: 7; Malinowski & Wolański 1985: 50). He illustrated the relationships of his European races as a square with an ‘X’ linking the corners, each corner representing a primary, and each line a secondary race (see Fig. 2.8). This ‘schematically simple and regular’ system was ‘striking proof’ for Czekanowski that ‘the four primary race elements represented a closed circle of forms’ in ‘genetic equilibrium’, forming a subsystem of his global race system[‡] (Czekanowski 1928: 341-42 & 345; Malinowski & Wolański 1985: 50). As further proof, he and Mydlarski offered the discovery of most of the ten types in a small Swiss region which could not otherwise contain such racial diversity and the correlation of Lwów school primary races with blood groups (Czekanowski 1928: 338; Mydlarski 1928a: 437-38). Mydlarski’s serology linked Poland with ‘the yellow race’, but Czekanowski put Poland near the geographical centre of his closed circle of white races, which included Slavs on an entirely equal standing (Mydlarski 1928a: 437-38; Czekanowski 1937: 227).

The Lwów school not only refused to measure itself against an authoritative international and German consensus, but determined to overthrow it, chiding foreigners for non-compliance with Lwów school standards. Both sides treated one another’s race schemes as perverse deviations from rational typology. At an international congress, Czekanowski’s students criticised the Finnish anthropologist Hildén’s scheme entirely within a ‘Polish school’ context, insisting that ‘the anthropological relationships of Eastern Europe’ were otherwise incomprehensible (Rosiński 1928a: 224; Mydlarski 1928: 224). Czekanowski said German anthropological surveying technique had ‘notable contradictions’, and left so ‘much to be desired’ that inconsistencies were ‘readily comprehensible’ (Czekanowski 1937: 229). Because German data showed different combinations of physical features than in Poland, he said ‘we are logically forced to question’ its validity (Czekanowski 1937: 228-29). Skjerl paradoxically credited sharp criticisms by foreigners like Ilse Schwidetzky, Eickstedt’s most prominent student, for renewing foreign interest in Czekanowski’s unorthodox system (Skjerl 1936: 285 & 299). She relentlessly compared Polish raciology with ‘German or international terminology’ and the ‘usual views’ and standards used in ‘international raciology... for more than thirty years’ (Schwidetzky 1935: 152, 162-64, 199 & 302). Eickstedt and

* Sergi’s Italy similarly celebrated ‘arrival’ in the core by declaring independence from current norms (see pp.271-74).

† Von Luschan identified this in Anatolia and the Middle East in 1907-11 and it was widely seen a Dinaric variant.

‡ In addition to the four European primary races, this involved Arctics and Negrics, with hybrids represented in another, more complex symmetrical diagram (Czekanowski 1967: 55 & 60).

Reche in Germany both dismissed Czekanowski's methods as numeric trickery, while in America, Coon said his scheme disagreed 'in many respects with... the historical discipline' (Czekanowski 1948a: 17; 1956a: 42; Coon 1939: VIII6: 5). Czekanowski also used a nationalist club to bludgeon domestic rivals. He accused conservative Cracovian Slavacists and anthropologists like Stołyhwo and H. Szpidbaum, threatened by the attractiveness of the Lwów school for the younger generation, of seeking the backing of foreigners like Schwidetzky, and the Russians Debetz and Tschepourkovsky (Czekanowski 1948a: 31-34). Schwidetzky identified most of Stołyhwo's race elements 'without difficulty' with 'international race terminology', while Eugenia Stołyhwowa of Cracow praised Eickstedt's technique (Schwidetzky 1935: 162-63; Stołyhwowa 1937: 45).

Following the Finnish example, Stołyhwo's revolution rehabilitated Easteuropeans as an emblematic 'Polish type', 'best preserved in the mountains, in Podhale'* (Czekanowski 1948a: 30). Despite his inovative typological system (see pp.174-76), his race scheme was a relatively minor adjustment of Celto-Slav orthodoxy. Consensus on defining Easteuropeans was weaker than for most races, but by listing one another's races as equivalents, Stołyhwo and most Russian, Swedish, Finnish and German theorists, including Eickstedt's Breslau school, accepted that they were all talking about the same blond brachycephals (Hildén 1928: 221; Schwidetzky 1935: 153 & 163; 1939: 93; Stołyhwo 1926b: 153-54; Bunak 1932: 464). Schwidetzky said his *Homo fanobrachykephalus* was 'unequivocally' the same as 'our Easteuropid' (Schwidetzky 1935: 163). Though Stołyhwo defined no fewer than 18 morphological traits for his Easteuropean, including an attached earlobe and 'medium' upper instep circumference, he felt its 'principal characteristics' corresponded to those of foreign researchers (Stołyhwo 1926b: 153-54). Czekanowski agreed this was the most common type in Poland and also common in Germany, but by rewriting basic taxonomic rules, he made it a mixture, gave Poland's main pure types as the Nordic and Lapponoid (or Alpine), and made the Nordic into the Polish national race (Czekanowski 1948a: 30). This daring reformulation was the key Lwów offense against established typology and chief bone of contention with Cracow (Czekanowski 1948a: 34).

The Cracow Easteuropean

Cracow mostly defended their Easteuropean national race by facing down and reinterpreting German race psychology portrayals of it, and especially Günther's inferior Slav proletarian (Günther 1933: 66-68). Eickstedt meanwhile gave the Easteuropean the same Siberian race origin as

* This built on Cracow's brachycephalic Celto-Slav tradition and perhaps Dybowski's 1898 version specifically. Czekanowski claimed Dybowski's blond brachycephalic 'Celtic' or Celto-Slav race was 'the real initiator' of the Easteuropean, before Deniker (Czekanowski 1948: 26; 1967: 44). Tellingly, Stołyhwo's foreign language use was about as slanted towards French as Czekanowski's was towards German (Wrzosek 1959).

Nordics, but called it a 'phylogenetic old' Europoid form, with 'less progressive' traits than all but Alpines, 'less capable than' Nordics, and found in 'lower social groups' (Eickstedt 1934: 370; Kemilainen 1994: 403-4). Combining sexism and racism, Schwidetzky argued in 1935 that in Nordic-Easteuropid mixtures, women showed primitive Easteuropid characteristics 'more clearly' than men (Schwidetzky 1935: 174). Many German-speaking anthropologists preferred the term Easteuropean to East-Baltic for the race, and found 'Mongolian roots', driving it eastward in their symbolic geographies (Skjerl 1936: 290; Schwidetzky 1935a: 93; Eickstedt 1934: 369). Günther and Hella Pösch saw Easteuropeans as probably a type of Mongoloid, who Günther said evolved European features on their way west (Günther 1933: 111). Serology conveniently gave Slavs a 'strongly Asiaticised' blood group, 'almost unchanged right up to' the Oder (Montandon 1933: 242; Mazumdar 1990: 200). Eickstedt admitted that the Russians shared 'superior blondism', while Fischer's racial family tree made the blond East-Baltics the closest relatives of the Nordic and Phalic (Coon 1939: VIII: 4; Fischer 1936: 276). However Fischer emphatically denied an 'especially close' Nordic-Russian relationship (Fischer 1936: 284). Eickstedt attributed the 'thin eyelid split and protruding cheekbones' of Russians to 'several centuries' of medieval Tartar rule rather than to the Easteuropean, but nevertheless decided this was a very ancient, harmonised Mongoloid-Nordic transition-race (Eickstedt 1934: 366-69; Coon 1939: VIII: 4; Kemilainen 1994: 403-4). German writers happily agreed with Schwidetzky that just like the Nordic in Germany, 'the Easteuropid race', and specifically Stołyhwo's version of it, was the 'fundamental', 'enduring [tragendes] and binding element in Poland', which 'all studies' found was 'numerous' throughout the country (Schwidetzky 1935: 193-95). Günther added that Poland and strongly East-Baltic parts of eastern Germany were 'heavily taxed with criminality' (Günther 1933: 66-68).

Deniker centred his Vistulan variant of the Easteuropean in northern Poland, along with enclaves of his standard Easteuropean, while Schwidetzky said Talko-Hryniewicz's scheme ultimately included a version of the race (Deniker 1898: 129-30; 1971: 345; Schwidetzky 1935: 163-64). It was under Stołyhwo however, who identified it as the 'basic anthropological type' in Poland, and probably more common elsewhere than generally thought, that the Cracow school invested most in this type, in a concerted effort to make it the national race (Jasicki 1957: 36-37; Stołyhwo 1926b: 154). His students judged from Mydlarski's survey data, that a broad-headed, blue-eyed 'blond group, with a reddish hint,' which he named *Homo fanobrachycephalus xanthoides* was very distinct from the Nordic and 'showed a very marked' morphological 'unity', with 'insignificant' local variation, despite varied environmental and racial influences (Stołyhwo 1926b: 152-54). Stołyhwo believed this type probably played 'an important and maybe even decisive role' in the development of the Polish population and was very 'characteristic' for its 'principal evolutionary direction', because the

morphology of all mixed pigmented groups ‘markedly approached’ this type (Stołyhwo 1926b: 152-53). He hinted that *fanobrachycephalus* was ‘the Preslavic type’, whose ‘centre’ of expansion was ‘probably’ in the ancient Slav ‘homelands’ of ‘the north of Central Europe’ (Stołyhwo 1926b: 154). Not content with making his Easteuropean the archetypical Polish Slav, Stołyhwo created a Polish-centred version of the three-race European scheme, in which Fanobrachycephalus replaced the Alpine. Like Czekanowski, he distinguished secondary anthropological types, which ‘probably’ were ‘stabilised’ crossbreeds of a few original fundamental types (Stołyhwo 1926a: 145). While the Nordic and Mediterranean were ‘the most important’ fundamental European types, Stołyhwo saw the Dinaric and *fanobrachycephalus* as possible candidates (Stołyhwo 1926b: 146-47). Comparing shared traits of the fundamental races, Stołyhwo found *fanobrachycephalus* was clearly independent, but the Dinaric looked like a Nordic-Mediterranean cross breed, especially given Stołyhwo’s belief in the genetic dominance of brachycephaly and dark pigmentation and the Dinaric’s ‘disharmonic combination’ of broad skull and long face (Stołyhwo 1926b: 148-49). This made the Easteuropean one of just three fundamental European types, which Stołyhwo said were now a very rare substrate of aborigines, ‘continually’ absorbing ‘influxes’ of African and Asian ‘foreigners’ to produce the much more common secondary types (Stołyhwo 1926b: 147).

The ethnologist Poniatowski, who collaborated with the Cracow school, used a similar process of elimination to make the original Aryan an Easteuropean. The original Aryan race must appear in Europe, he believed, as it must have arrived in significant numbers to make the cultural impression it did, but could not be a European pre-Aryan race like the Nordic (Poniatowski 1928: 217). Nordics, he argued, appeared among the non-Aryan Picts, and were concentrated in North and Baltic Sea coastal areas, despite the inland nomadic orientation of ‘every reconstruction of proto-Aryan culture’ (Poniatowski 1928: 216). Of the five remaining candidates, Poniatowski excluded the Dinaric and Subnordic for their close links to the Anatolian or Nordic races, or the Finns (Poniatowski 1928: 218). As Poniatowski and ‘several’ other authors saw the Easteuropean and Alpine as variants of one another, he argued that the original Aryans had their common features (Poniatowski 1928: 218-19). This implied that these two races, presumably associated with Slavs and Celts, were branchings of the (Celto-Slav) Aryan race, while Teutons were just Aryanised European aborigines.

The Lwów Easteuropean

While Cracow anthropologists dismissed Czekanowski’s races as haphazard recent cross-breeds, Schwidetzky, the chief German critic of Lwów, complained that many of them, and especially the Preslavic and Subnordic, overlapped inexactly with consensus international definitions of the

Easteuropean, Nordic and other races (Stołyhwo 1926b: 146; Schwidetzky 1935: 149-51 & 162-63 & 195-96). She attributed this to nationalism. She said Stojanowski, long an outspoken critic of German Nordicism, adopted 'a second light-coloured race', the Subnordic, to reduce 'the share of Nordic blood' among Slavs, while Czekanowski massaged up Poland's Nordic contingent by 'dismantling' Easteuropean 'mixed types' and adding them to their component primary races (Schwidetzky 1935: 153 & 198; Wrzosek 1959: 285). Czekanowski's student Mydlarski agreed that the 'sharp differentiation' of the Preslavic and Subnordic was the core Lwów divergence from international norms, insisting it was vital to East European anthropology (Mydlarski 1928: 224). The Lwów school accepted that these two subbrachycephalic Lapponoid hybrids both matched Günther's Easteuropean, but suggested he combined them because a 'local equalisation process' sometimes blocked or reversed their separation from the original unmixed form (Czekanowski 1928: 336-37 & 343; Stojanowski 1930: 4). Outsiders saw the Lwów school Preslavic as an eccentric Easteuropean variant, but hardly knew what to do with their Subnordic (Hildén 1928: 221; Bunak 1932: 464). However Czekanowski and his students equated Subnordics with several races widely considered Easteuropean equivalents, including Stołyhwo's *fanobrachycephalus*, while allocating Deniker's Easteuropean, the *race orientale*, to their Preslavic (Czekanowski 1920: 63; 1928: 336-37; Mydlarski 1926: 188; 1928: 224; Schwidetzky 1935: 150 & 163).

Schwidetzky saw Subnordics as the key to Czekanowski's taxonomic sleight of hand, which reclassified the Easteuropean 'core' of the Subnordic, as Nordics (Schwidetzky 1935: 149). Deniker coined the term Subnordic for a tall, blond, mesocephal on the North and Baltic Sea coastal fringes of Nordic territory (Deniker 1898: 128). The Lwów school version was also tall and blond, but was definitely brachycephalic and occupied wide swathes of eastern Poland, for which Deniker had no data, usually mixed with Nordics or Preslavics (Stojanowski 1924: 761; Mydlarski 1926: 188; 1928: 224; Schwidetzky 1935: 195 & 197). Schwidetzky argued that the Lwów school registered most Polish Easteuropeans, including some with Nordic and dark-haired admixture, plus even a few Nordics, as Subnordics (Schwidetzky 1935: 149-50). When Lvovians then simplified the Polish population back into their four primary races, they allocated the bulk of the 'really numerous' Subnordics to the Nordics, most egregiously giving Nordic 'relative predominance' in an area inhabited by two Lapponoid hybrids (Schwidetzky 1935: 198). Klimek similarly put Nordics and Subnordics in his Northern group when he grouped European races by 'morphological and pigmentation' similarity (Klimek 1932: 7). Schwidetzky raised genetic objections to Czekanowski making Subnordics a Nordic-Lapponoid cross. It was 'improbable, if not downright impossible' in crossing fair and dark types, that 'of all' Nordic characteristics, precisely its 'recessive fair

pigmentation' should be passed on^{*}, while 'almost all morphological characteristics' of the hybrid came from the Laponoid 'minority component' (Schwidetzky 1935: 149, 153-54 & 199).

Günther and Eickstedt wanted the Nordic to reflect their own cold, scientific, 'adult' rationality and that of Germany's professional imperial administrators and soldiers, but reckless Teutonic adventurers accounted for the spread of Nordic blood through the world's aristocracies[†]. The Lwów school resolved this inherent contradiction in the Nordacist tradition by distributing Nordic psychological characteristics between a Nordic rationalist and a Subnordic adventurer, 'almost always' presented as temperamentally 'opposite in every feature' (Schwidetzky 1935: 295-96). In repeated Lvovian race psychology studies, Subnordics had 'an unquiet mind' and were 'impulsive, sensitive,' optimistic, emotional, imaginative, friendly, 'inconsistent', insubordinate and talented, especially in human sciences, while Nordics were conservative, 'deep', serious, 'controlled, closed,' even depressive, emotionally 'cool and steady', rational and unimaginative (Rosiński 1929: 273-74; Schwidetzky 1935: 293-95). The Subnordic character resembled romantic Slav stereotypes, and one Lwów school pedagogy professor gave Poles typically Subnordic features: lazier but more adventurous than the cold calculating Nordic Germans, requiring incentives to work hard (Rosiński 1929: 273; Schwidetzky 1935: 294). Lwów school race psychology studies very often placed Subnordics just behind Nordics in value, equally ambitious and competitive and quicker working, but lacking the 'systematic and exact' Nordic care and endurance (Pogliano 2005: 50; Rosiński 1929: 273-4; Schwidetzky 1935: 293-95). This 'less efficient but nicer' argument recalls Irish Celtic attempts to compensate for their material inferiority to the English[‡], but Schwidetzky claimed a scam to pass the *szlachty* off as proper Nordic European aristocrats. Czekanowski and his students made the Subnordic the main *szlachty* race[§], while the alternative Lwów name for the race, 'Sarmatian', recalled the traditional *szlachty* origin myth (Schwidetzky 1935: 297; Stojanowski 1924: 762; Rosiński 1929: 266; Mydlarski 1926: 188-89). According to Schwidetzky, Czekanowski said the Nordic component of the Subnordic made the Polish *szlachty* racially part of Europe's aristocracy, while the Laponoid component was due to the 'lesser exclusivity' of Polish nobles (Schwidetzky 1935: 299). She said he also believed, supported by at least two 1920s Polish anthroposociological studies of college students, that Subnordics made up the new intellectual elite

* Schwidetzky accepted that racial genetics remained a mystery, but the frailty of light pigmentation in hybridisation was nevertheless a commonplace in German science, helping to increase the country's hidden stock of Nordic cross-breeds (Schwidetzky 1935: 153).

† German solutions to this incongruity are discussed in pp.221-27.

‡ This seems due to a similar structural position rather than any direct influence.

§ Rosiński identified 'a very clear' general preference for racially similar spouses, but said Subnordics and Nordics were 'plainly the most exclusive', due to aesthetic queasiness about physical contrasts or inhibitions about social mixing between *szlachty* and Preslavic peasantry (Rosiński 1928b: 274; 1929: 266 & 270). The Subnordic was therefore likely to remain the *szlachty* type (Rosiński 1929: 274).

(Schwidetzky 1935: 299-300). Though the major anthropological institutions were in Galicia, Czekanowski argued that interest in anthropology 'was originally limited to' the blonder Russian-ruled areas and that almost all Interwar professional Polish anthropologists were from there (Czekanowski 1956: 8).

The Lwów school equated Czekanowski's Preslavic type with Deniker's blond *orientale*, but despite sharing the jaw and 'broad and often turned up' nose of that type, Schwidetzki saw it as their 'most problematic' and 'hardest to bring into harmony with the international terminology' (Schwidetzky 1935: 150-52; Stojanowski 1924: 761; Czekanowski 1920: 63; Mydlarski 1928: 224; Rosiński 1928a: 224). She said that while the East European and *orientale* were definitely 'fair pigmented', different Lwów school authors ranged from 'fair-haired and fair-eyed' Preslavics to 'only occasional fairer tones' (Schwidetzky 1935: 150). Czekanowski admitted this, but gave the excuse that the type had an odd genetic propensity to absorb elements from related dark-haired races (Czekanowski 1928: 356-57). He made his Preslavic the tremendously old 'base' of the ethnic Polish population and 'perhaps the most ancient natives of the country', but though their adaptation to local conditions gave them the vitality to join in with a medieval Polish colonial drive, he suggested it was not originally Slavic (Czekanowski 1920: 54, 57, 63 & 67). He implied that western Finns had a special role in creating the Subnordic and Preslavic types, which were crosses of a Laponoid substrate with Nordic and Mediterranean incomers respectively (Czekanowski 1928: 355). Schwidetzky and Czekanowski's student Klimek thought 'many' Preslavic features showed 'a great', if not exact 'similarity' with the Paleoasiatic type, Siberians and Japanese Ainu (Schwidetzky 1935: 151; Klimek 1932: 24). Citing Reche, Czekanowski said Preslavics 'predominated' in and around Neolithic Poland and was still found east of Poland and perhaps south of the Carpathians (Czekanowski 1920: 63 & 66-67). His Nordacist student Rosiński implied Polish Preslavics were an old race in anthropogeographic decline, their territory settled by later conquerers, saying with some backing from Czekanowski, that residual traces showed they once occupied much of modern Polish territory (Rosiński 1929: 266-67; Schwidetzky 1935: 195 & 197). He said other types rarely married Preslavics, who had the mentality of Günther's inferior Slavic peasant and were aesthetically 'the most handicapped' (Rosiński 1929: 270 & 274).

Archaeology the Urnfeld-Lusatian battle

Even more than in Germany, Interwar Polish raciologists concentrated on purely biological races, but needed collaboration with other disciplines to tap the nationalist relevance of ethnic races like the Slavs and Teutons. They therefore continued the anthropological tradition of cooperating with

historians, linguists, folklorists and especially archaeologists in studying Slavic ethnogenesis, which Czekanowski described as the main Lwów school focus (Czekanowski 1956a: 42; Rączkowski 1996: 200 & 204). As archaeological proof of prior Slavic occupation became a crucial stake in nationalist competition with German academics, Stojanowski insisted in 1924 that ‘craniology is becoming one of the most important auxiliary sciences for prehistoric research’* (Stojanowski 1924: 766). Lwów supported the theory of prominent hypernationalist archaeologists like Kostrzewski that Slavs originated in the Bronze-Age Lusatian culture of the Elbe-Vistula region, centred in Silesia. This reinforced the European identity of Slavs, gave the Poles, who ‘stayed’, *völkisch* legitimacy as the most authentic Slavs, and legitimised their territorial claims (Kostrzewski 1939: 218). After 1933, the ‘sharp political focus’ of this question intensified, becoming ‘one of the main problems of Polish archaeology’ (Lech 1997/98: 43-44). The Lusatian issue let Lwów bash Germans and domestic rivals simultaneously. While Niederle and Potkański, who launched the Nordic Slav theory, believed Slavs originated in Poland’s Oder-Vistula region, Cracovian anthropologists, ‘linguists and ethnographers’, and ‘German scientists’, mostly chose an external origin, allowing Czekanowski to imply that they unpatriotically alienated the Slavs from Poland (Niederle 1916: 3; Czekanowski 1948a: 33). Kopernicki, Olechnowicz, nineteenth-century French anthropologists† and many historians and humanities scholars backed a ‘southern, Danubian’ Celto-Slavist origin (Stojanowski 1924: 712; Sklenář 1983: 149; Olechnowicz 1902a: 44). In the spirit of positivist objectivity, they rejected the ‘moribund Romanticism’ of older autochthonist origin theories (Sklenář 1983: 125).

Lvovians meanwhile hinted that Stołyhwo’s linkage of Slavs with EastEuropeans implied an apparently debased origin in the non-Polish impoverished borderland of Bielorussia. Deniker, Schwidetzky and the Russian anthropologist Tschepourkovsky, whom Czekanowski named a major influence on Cracow, saw the EastEuropean type as ‘most marked’ among Bielorussians, while Talko-Hryniewicz thought the anciently settled ‘present Bielorussian population, philological data and the chronicles’ suggested a Slav origin there (Schwidetzky 1935: 193; Deniker 1897: 131; 1904: 202; 1971: 345; Tschepourkovsky 1923: 134; Czekanowski 1948a: 31; Talko-Hryniewicz 1914: 193-94). This narrative made Slavs an easterly people and linked them biodynamically with a disagreeable environment. Potkański, Schwidetzky and Tschepourkovsky agreed the Eastern brachycephal emerged from and ‘still retains its absolute purity’ in the Pripyet ‘mud’ and ‘forest-

* The nationalist archaeological tradition reinforced the Lwów school’s own disciplinary eclecticism. Buschan for example used geographical correspondences between archaeological finds, folklore and place-name evidence, and Zeuss’s localisation of one of Tacitus’s Teutonic sub-divisions, to prove ancient Germanic settlement in modern Slav lands (Buschan 1890: 28, 30-34 & 41-44).

† Quatrefages’s assumption of tall, blond, Aryan, ‘prehistoric’ Slavs however led him to trace them to the Vistula basin, next to the main Nordic concentration (Quatrefages 1871: 18).

swamps' and 'a certain connection with woods and marshes' more generally (Tschepourkovsky 1923: 134; Schwidetzky 1935: 193; Potkański 1902: 251). Stojanowski rejected the long-standing German 'distortion' of Slavs emerging from the Pripyet 'Polesian muds', promoted by the hypernationalist Kossinna school, and interwar Polish scholars claimed 'the complete lack of evidence' for prehistoric settlement there disproved it (Sklenář 1983: 161; Stojanowski 1924: 712).

As German and Slavic scholars recognised artefacts like *Burgwall* pottery and temple-rings as Slavic, early medieval Slavic settlements on the previously Germanic Oder and Elbe were 'precisely classified' (Sklenář 1983: 151; Rączkowski 1996: 199-200). Though fierce arguments still raged about their extent, Polish prehistorians in the 1910s, and especially when their discipline achieved autonomy after 1918, turned to contesting the ethnic groups of the Bronze and early Iron-Age 'last days of prehistory', and especially the cremation urns of the Lusatian culture (Lech 1997/98: 35; Talko-Hryniewicz 1914: 187; Rączkowski 1996: 199-200; Sklenář 1983: 151). Ironically, Slav success in claiming inhumation barrows containing bronze and temple-rings, which were previously seen as Teutonic, made the urnfields controversial in the 1870s, disturbing their long-held association with Slavs (which was inspired by medieval accounts of cremation as typically Slavic) (Rączkowski 1996: 194; Sklenář 1983: 95-96; Buschan 1890: 3-4 & 16). In 1869-72 Virchow presented Bronze and early Iron-Age urnfield pottery, and then *Burgwall* pottery as two phases of Slav development (Sklenář 1983: 126). Müller questioned the automatic Slavic attribution of urnfields however, and Virchow, using new archaeology methods, later abandoned it, identifying urnfields as Germanic or pre-Germanic, and *Burgwall* Slavs as later colonists (Müller 1877: 196-97; Sklenář 1983: 125-26; Rączkowski 1996: 199; Buschan 1890: 4-5, 27 & 31). This dealt with the troubling 'gap of almost a half millennium between' the last urnfields and first 'Slavic skeleton graves', while making medieval German colonisation a *re*-Germanisation, legitimising modern German territorial claims (Buschan 1890: 33; Rączkowski 1996: 199). Virchow argued that the 'universal custom' of cremation, from the Neolithic to the Slavs' arrival in late antiquity, effaced the early anthropological history of the Teutons (Virchow 1950 [1896]: 190). Buschan argued that urnfield culture differed so strongly from that of the *Burgwall* and *Pfahlbauten*, that it seemed a 'scientific impossibility' that it was Slavic (Buschan 1890: 16). He said no *Burgwall* pottery was found in 'the many north German Urnfields', and that ceramics from urnfields near Slavic forts resembled those from an occasional earlier Pre-slavic strata beneath their walls, which Virchow designated in 1886 as probably Germanic (Buschan 1890: 12 & 27).

Buschan's 1890 theory diluted the Slav role in prehistoric eastern Germany still further. He said the Veneti Slavs were 'usually' seen as moving there from the east, after the Teutons left to invade the

Roman Empire (Buschan 1890: 23). As Tacitus described the Veneti as culturally and physically like Teutons, and recent writers linked them with western European groups, Buschan concluded they were a Germanised mixture, conquered by Goths, and ‘no longer... purely Slavic’ (Buschan 1890: 23 & 46). By linking older archaeological features in Germany to them, he denied these to the later ‘true’ Slavic Sarmatians of ‘inner Russia’ (Buschan 1890: 45). When the real Slavs poured into Germany around 900 AD, Buschan argued, bringing with them *temple-rings*, *Burgwall* pottery and inhumation burial, the Germans called both them and the Veneti, Wends (Buschan 1890: 24).

Some Polish archaeologists, preferring anthropological evidence, questioned whether pottery could prove ethnicity (Rączkowski 1996: 199). The theory of the Lusatian urnfields being proto-Slavic nevertheless took ‘firm root’ in most Polish and Czech scholarship, and especially in Kostrzewski’s Poznań school*, backed by foreigners like Gordon Childe (Sklenář 1983: 126 & 149-51; Kostrzewski 1926: 8; 1927: 7; Kurnatowska & Kurnatowski 2002: 99; Stojanowski 1924: 732 & 763; Lech 1997/98: 43; Barford 2001: 278). Stojanowski attributed this theory to Píč in Prague, who traced a single cremating people from the urnfields to indisputably Slavic proto-historical graves (Stojanowski 1924: 713; Sklenář 1983: 151). In 1914, Talko-Hryniewicz associated neolithic cremation urns also with Poland’s early Slavs, who he said only adopted inhumation burial with Christianity, and urnfield ceramic motifs were even compared to Moravian folk embroidery patterns (Sklenář 1983: 126; Talko-Hryniewicz 1914: 187). Majewski was one of the first to criticise Kossinna’s nationalism (in 1902), but himself traced the Slavs to ‘the Polish-German region’ in 1899 (Sklenář 1983: 150). Apart from ‘brief’ stays by Goths and Gepids, neither Niederle, Kostrzewski nor the Soviet anthropologist Bunak recognised any ancient Teutonic settlers in the Oder-Vistula area (Kurnatowska & Kurnatowski 2002: 99).

German prehistorians made Slavic occupation of the Oder-Vistula area ‘an interlude’, following German or Indo-German settlement from ‘as far back as 9000 BC’ to 400 AD, and linked Lusatian culture to Teutons, Thracians or Illyrians (Wijworra 1996: 176; Kostrzewski 1926: 8). As Kossinna had trouble attaching Lusatian culture to Germans but ‘could not bring himself to accept it as Slav’, he gave it to Thracians in 1899, and then in 1912 to Illyrians† (Kostrzewski 1926: 8; Sklenář 1983: 150-51; Kurnatowska & Kurnatowski 2002: 99). These were driven out by the fifth century BC Germanic box-grave culture of the Vistula-Oder region (which Buschan and Virchow had seen as Slavic) (Kostrzewski 1927: 3 & 6; Buschan 1890: 16-17). Kossinna identified ‘archaeologically

* Ironically, Poles had objected when Germans allocated the ‘urnfields’ to them in the 1830s, instead of the more ‘valuable’ bronze relics of the *Reihengräber* (Rączkowski 1996: 194).

† Hoernes introduced the Illyrians into archaeology in 1893 (Sklenář 1983: 151). Previously, Slavs and Teutons were practically Poland’s only prehistoric actors (Sklenář 1983: 149).

differentiated “cultures” in the Rhine-Vistula plains ‘with concrete Teutonic tribes, known from [written] classical sources’, and said Slavs only entered ‘from the East’, when the Teutons migrated into the Roman Empire (Kurnatowska & Kurnatowski 2002: 98; Kostrzewski 1926: 7; Lech 1997/98: 43; Barford 2001: 278). Extreme interwar followers of Kossinna even argued Teutonic occupation from the presence of single artefact types (Rączkowski 1996: 204).

Kostrzewski, using similar methods and sources to Kossinna, argued that Lusatian culture differed radically from the Teutonic northern culture (Kostrzewski 1926: 8; Kurnatowska & Kurnatowski 2002: 99). He neutralised Kossinna’s main evidence for Illyrians in Silesia, a single place name from the ancient Greek geographer Ptolemy, by noting that ‘skeletal graves of southern origin’ in Silesia, Bohemia and Moravia suggested a brief Illyrian Iron-Age incursion, and adding that Ptolemy also placed an ‘undoubtedly Slavic’ place-name just north of Silesia (Kostrzewski 1926: 8; 1927: 3 & 5). Some of Kostrzewski’s strongest arguments were geographic. The Balto-Slavic languages must have emerged somewhere near the original seat of the Balts on the eastern Baltic he argued, while the Lusatian culture expanded into western Ukraine, where even German writers could hardly identify Illyrians (Kostrzewski 1927: 6; 1939: 218-20). Its Bronze Age ‘greatest extent’ meanwhile, between the Elbe, Bug, Baltic and Danube, was ‘almost exactly the same territory’ as early medieval ‘Western Slavdom’ (Kostrzewski 1926: 8-9; 1939: 218). Assuming remarkable certainty about prehistoric ethnic geography, Kostrzewski complained that Illyrian Lusatians left no room for the cradle of the Slavs, as Scythians then ‘occupied’ the remaining space to the east (Kostrzewski 1927: 6). Kostrzewski claimed that in 1925, even Kossinna admitted that evidence for Illyrian being a satem, or eastern Indo-European language had shaken his theory (Kostrzewski 1927: 5).

Kostrzewski adapted Kossinna’s method to suit Polish purposes. While Kossinna equated each archaeological culture with one ethnic group, Kostrzewski argued that they could also be separate chronological phases of a single group (Rączkowski 1996: 204). Kostrzewski could thus claim Kurgan graves, ceramics and ‘numerous’ other links suggested the Lusatian and three other Bronze-Age or Neolithic cultures all ‘developed mainly’ from one another, demonstrating a ‘continuation’ of the same ‘proto-Slavic’ natives, with cremation marking ‘deep’ religious rather than ethnic change (Kostrzewski 1926: 8; 1939: 196, 207, 211-12 & 217-19). Some of these cultures extended well into Germany, pushing early Germans far from Polish-claimed territory (Kostrzewski 1939: 196 & 211). Czekanowski’s student Stojanowski, also based in Poznań, backed this continuity theory with anthropological evidence, arguing that the ‘mostly long-headed’ early Slavs must have come from ‘near the Nordic anthropological province’ (Kostrzewski 1927: 6; 1939: 218-19;

Stojanowski 1924: 732). He declared that the ‘most curious’ correspondence of ‘prehistoric cultures and anthropological type’ in Neolithic Silesia and Bohemia allowed anthropologists to take full part in German-Polish archaeological nationalist rivalry over Silesia*, at the heart of the Lusatian culture (Stojanowski 1924: 732 & 763). Ironically, the Lwów School’s nationalistic Nordic Slav doctrine had almost kept them out of the Lusatian issue. Stojanowski said it had hesitated to accept a ‘fatherland’ in racially Alpine Silesia until the Neolithic Nordic majority there overthrew ‘the last obstacles’ to a Lusatian Slav origin (Stojanowski 1924: 732 & 763-64). As Stojanowski excluded ‘any possibility’ of violent population change on ‘our territory in the Bronze period’, he believed the Neolithic Nordics ‘remained in place up to the Iron Age’, when ‘the colossal and quite violent’ Germanic influx brought down the Lusatian culture† (Stojanowski 1924: 732-33). Drawing on Herderian stereotypes and archaeological finds, Kostrzewski gave Lusatian culture and ‘our Slavic ancestors’ the same peaceful, conservative cultural orientations (Kostrzewski 1926: 9). His Teutonic tribes equally conformed to stereotype, conquering and ruling the Lusatian proto-Slavs for 400 years, before leaving to invade Rome (Kostrzewski 1926: 9-10; 1927: 4-6). Using *völkisch* arguments about peasant nature, he claimed ‘even honest German researchers’ accepted that a Slav lower class could have survived, invisible to archaeology, and that continuing Lusatian funereal rituals, dwelling types and breeds of pigs up to historic times, plus the ‘pure Slavic’ toponymy of western and central Poland, proved the Teutons did not fundamentally alter the existing culture or ‘its creators’ (Kostrzewski 1926: 9-10; 1927: 6-7; 1939: 218). He compared the cultural suppression of protohistoric Slavs to the World War One German occupation (Kostrzewski 1927: 7).

Conclusion

From the 1870s to independence, Poland was a classic example of positivist period anthropological peripherality, with a handful of well-respected but institutionally insecure researchers focussed towards Paris. Though remaining true to French-style Slav brachycephaly, Talko-Hryniewicz and Olechnowicz’s tall, jut-jawed nobles and neo-romantic *Górale* moved more towards German narratives styles, anticipating theories of Nordic Slavs from around 1900. Rising German influence puts the interwar move to the core in doubt. If leading interwar Polish anthropologists accepted the *völkisch* hyper-nationalism, the raciology, half the Nordicism and three-quarters of the racism of their German colleagues, were they independent? They were German trained, devoted to the race

* Stojanowski gloated that this analysis was based on data from a study which the Nordacist German anthropologist Otto Reche wrote in the spirit of this same rivalry (Stojanowski 1924: 763; Reche 1909: 220-30). Reche argued in 1936 that as Slavic was linguistically related to German, the leaders of the Old Slavs were ‘long-skulled Germans’, leading ‘lower orders’ of ‘broad-headed, flat-faced clowns’ from whom modern Slavs were descended (Mazumdar 1990: 198).

† Like Irish and Italian nationalist ethnology, this reversed the roles of vandal and civiliser assigned by the internationally dominant ‘Germanic’ narrative.

concept and anthroposociological elitism, and adopted a Nordic national race. Unlike in contemporary America, France or Britain, the raciological and serological components of anthropology thrived, with even opponents of Nordicism accepting the raciological assumptions which underlay it. The degree of (anti-German) nationalism in the Kostrzewski, Czekanowski and Stołyhwo schools ironically reflected the degree of German influence on them*. While positivist period tradition may explain Cracow's French orientation, the earlier *völkisch* capture of German archaeology helped make Poznań archaeology so jingoist. While the liberal Martin taught the leaders of interwar Polish anthropology, Kossinna taught Kostrzewski.

However core membership in international science never meant absolute freedom from external influence; just full participation by secure national establishments in international debate, and the autonomy to create innovative narratives. By the 1920s, Polish raciology met these criteria. Like Britain in nineteenth century anthropology, it was an independent but lesser pole within the wider raciological community, David to Germany's Goliath, competing for influence within Poland and Central and Eastern Europe but making no impact on the German discipline. It had thriving institutionalisation, multiple competing schools, intense controversy about Nordicism and elitism, robust faith in modernity and far less systematic rightism and anti-Semitism than in Germany. In methodology and obsession with tallness, the continuous Polish interest in class-race was clearly influenced by foreign anthroposociology, but anthropometric results and the native *szlachty* tradition forced significant divergence from foreign norms. Exchanging the Celto-Slav race model of an allied country for the Nordicism of an enemy may even have encouraged an innovative approach to the blond. The 1880s discovery of long-headed, blond Northern Poles brought national synthesis narratives to Polish anthropology rather than German-style Nordacist purity-worship, and both Kostrzewski and the Lwów school exploited contradictions within German Germanicism and Nordicism. Central and Eastern Europeans took the lead in developing two counter-narratives against Western and Germanic supremacy, the hyper-authentic, peaceful, industrious and demographically potent peasant, and the romantic anti-Western (semi-)Asiatic steppe warrior, both accepting the 'facts' as the hegemonic narrative had them, but disputing their interpretation. By accepting a national synthesis of two races, Poles needed these counter-narratives to rescue the less favoured component. The ambitious Lwów school discipline complex had many of the same component disciplines as its German equivalent, but differed radically in having a statistical method rather than a political programme at its heart, and produced a revolutionary race diagnosis system and classification scheme. The lesser innovativeness of Stołyhwo's Cracow and then Kostrzewski's

*Nationalist backing for anthropology thus subsidised German influence. Czekanowski strategy of always being more nationalist than Cracow, including on Slav ethnogenesis, contributed to his greater success in mobilising public support.

Poznań match their greater dependence on foreign models. Lwów's ideosyncrasy may in part be an unintended consequence of its nationalist adoption of Nordic Slavs, which made Slav and Teutonic skulls indistinguishable, and ironically excluded anthropologists from the main nationalist race history battle-theatre. Artefact archaeology instead became the lead discipline on the Lusatian issue, with belated Lwów school support. This may however have trapped archaeology in close combat with Germany, while anthropologists were freer to innovate.

Many German-Polish parallels in raciology derive from a common ethno-national tradition rather than direct influence within anthropology. Far from learning his nationalism from Kossinna, Kostrzewski grew up in a hyper-nationalist Polish family, for example. However the geography of raciology confirms the geography of ethno-nationalism proposed by theorists of nationalism, and was presumably a strand of the same cultural trend. Polish raciology was part of a mostly Central and Eastern European discipline in which extreme right-wing Germans had the leading role but were not the sole focus. Bibliographical referencing indicates close links with Germany, but Slavic studies gave Poles a special relationship with Russian and especially with influential Prague scholars like Niederle and Píč. Anti-German pan-Slavism was a very powerful international bond in anthropology. Even in archaeology, despite very prominent German and Scandinavian influences and the advantage which 'power politics' gave Prussian scholars in distinguishing Slav and Teutonic finds, these regions may have been a common zone of exchange rather than a Germanic centre and Slavic periphery (Sklenář 1983: 125; Lech 1997/98: 52-54). Kostrzewski drew heavily on Kossinna but significantly adapted his method, which Sklenář in any case traces back to Montelius in Sweden and Vocel in Prague in 1869 (Rączkowski 1996: 204; Sklenář 1983: 91). Kossinna's settlement archaeology is sometimes scapegoated as a hyper-nationalist German aberration, but Lech considers it part of the wider 'trend', based on the archaeological culture concept of the Vienna school and anthropogeography, which dominated both Germanic and Slavic interwar archaeology (Lech 1997/98: 48 & 52). German influence continued to be transmitted though disputing common issues, especially in prehistoric archaeology, where Poles and Germans were equally fixated on the Lusatian culture of their borderland. However Lwów's incompatible systems limited even adversarial engagement, while Cracow maintained many traditional French links. Though it left the Lwów school legacies like a deeply troubling Nordicist obsession, the German role seems to have been relegated to more of an important historical factor than a continuous influence. There is a parallel with national ideology, where the ethno-nationalism of

Dmowski, Poplawski and Balinski*, which ultimately ousted 'the old political nationalism... completely', insisted on Poland's prerogatives, but within a neo-romantic context which Germans had taken a lead in developing (Tornquist-Plewa 2002: 228). However even the progressive rejection of international connections by both German and Polish raciology, in favour of nationalist native systems, manifested a common international idea. Despite these complexities, the Polish case clearly reinforces the impression of Slavic Central Europe, Germany, the Balkans and perhaps Russia and Scandinavia forming a zone of enhanced cultural communication and commonality, in which Germany had a special influence.

*This emerged by the end of the nineteenth century, defining the nation 'as an ethnic community, based on the Polish language, Catholic religion and common ethnic roots' and 'soon became popular among broad sections of Polish society' (Tornquist-Plewa 2002: 228).

Between International Science and Nationalism: Interwar Romanian race science

Also in learning from [*valorificarea*] the inheritance of the past, mistakes were made for a period, neglecting or even censoring remarkable works by predecessors, on the basis of the rigid, dogmatic, ideological position of foreign dialectical and historical materialism...

Nicolae Ceaușescu, in the opening citation of a biography of a Romanian eugenicist (Săhleanu 1979: 3).

This chapter is about how interwar Romanian anthropological race classifiers, largely dependent on methods and concepts forged elsewhere, creatively adapted international norms to their local conditions. They were forced to navigate between two currents in which they were weak, peripheral actors: the mainstream of Romanian nationalist identity narration, dominated by the country's politically powerful discipline of history, and the mainstream of international anthropology. The division of this mainstream into French, German raciological and serological channels was particularly helpful in this. The chapter first sketches the stunted development of Romanian race classification, including its double peripherality, and examines the balance between narratives of Western, native Eastern European and Asiatic origin, which were an important part of the struggle between positivist and neo-romantic identity discourses in Romania and most nations east of Germany. I then study the organisational and narrative aspects of interwar Romanian race anthropology's shift from largely French to German dependence. Finally, I consider the solution which race serology offered to the peripherality dilemmas.

Romanian anthropology

Professional anthropology and original anthropometric research in Romania began in the 1860s, though only Octav Gheorghe Lecca specialised in race science before 1918 (Rădulescu 1941: 264; Papilian & Velluda 1941: 6). Alexandru Obedenaru became in 1877 'the first Romanian researcher' to make 'craniological measurements of Romanians', but these studies were brief and published in Paris under the name Obédénare, so many believed he was French (Milcu 1954: 7; Rădulescu 1941: 264; Necrasov 1941: 6; Obédénare 1877: 255). Other physicians applied anthropometric methods to

problems of like psychiatry, criminology and legal identification, rather than ‘real’ anthropological questions (Milcu 1954: 8). Post-1918 circumstances, including the acquisition of significant national minorities, led researchers to systematically address the country’s anthropology, concentrating on racial or morphological approaches to ethnological questions (Papilian & Velluda 1941: 7; Milcu 1954: 8 & 12). As late as 1927, Lahovary ascribed ‘almost all’ anthropometric work on Romanians to foreigners, though Papilian and Velluda showed a dramatic shift to local researchers after 1918 (Lahovary 1927: 12-13). Beforehand, foreigners accounted for about half the names and space in their history, while of 38 interwar researchers, just Pittard and Lebzelter were foreign. The ‘first collective organised forms’ of research connected previously ‘isolated researchers’ in Cluj and Bucharest after 1920, though still on a small scale (Milcu 1954: 8-10). Făcăoaru identified just five anthropological publications in Cluj in 1920-1932, none apparently focussed on race (Făcăoaru 1973: 100). Research developed ‘with greater intensity’ in the 1930s, especially in ethnology, with the 1937 Bucharest International Congress of Anthropology as the ‘culminating moment of this anthropological efflorescence’, stimulating research, publication and the founding of an anthropology institute in Bucharest (Milcu 1954: 15).

‘Research polarised around the anatomical schools of Cluj, Bucharest and Iași’, each with its own ‘network of institutions, social relations, and cultural codes’ (Milcu 1954: 21-22; Bucur 2002: 69). Despite some contacts, these rival schools had such ideological differences and poor communication that in thirty years they only ever met in a common forum at the 1937 Congress (Papilian & Velluda 1941: 8; Milcu 1954: 10; Dumitrescu 1934: 141). Bibliographical citation suggests Bucharest was Romania’s biggest anthropological publishing centre, followed by Cluj. Bucharest and to an extent Cluj writers preferred to cite mostly locally published works. By number of interwar researchers and studies however, and for its anthropological society, Cluj researchers ‘occupied first place’ in Romania, criticising ‘lukewarm’ teaching and research efforts elsewhere (Milcu 1954: 15; Bucur 2002: 41). A Bucharest anthropologist admitted the relatively ‘slow progress’ and ‘periods of stagnation’ of his own centre, neither taking leadership of Romanian anthropology, stirring youth interest nor achieving a broader synthesis (Milcu 1954: 11 & 17-19).

Despite concentrating ‘on racial anatomy,’ anthropology in Iași and in Francisc Rainer’s Bucharest school largely avoided nationalistic or racist point-scoring and the automatic attribution of physical characteristics to ethnic groups (Riga & Călin 1966: 145 & 155; Milcu 1954: 11, 17 & 20; Botez 1938: 12). The ethnic identity of leading personnel may have helped maintain moderation. Rainer was of recent German extraction, while both the first and family names of Olga Necrasov hint at a Slav ethnic background. However a new wave of politicised researchers ‘fundamentally’

transformed Cluj anthropology in the mid-1930s (Rădulescu 1941: 247). Iordache Făcăoaru introduced an intense Nordacist strain into Romanian anthropology from 1932, arguing, along with Nicolae Lahovary, that science proved ever more convincingly the ‘full concordance’ between ‘psychological giftedness’ and ‘somatic structure’, giving races different ‘moral and intellectual aptitudes’ and social niches (Lahovary 1927: 5; Făcăoaru 1938e: 279; 1943: 292 & 295). The arch-nationalist Petru Râmneanțu published his first serological study in 1935 while the work of Victor Papilian, Constantin Velluda and especially Gheorghe Popoviciu became much more nationalistic after the early 1930s. In 1925 for instance, Popoviciu towed the usual serological line that the blood structure of Romanian Jews*, Roma (Gypsies) and Germans resembled that of ‘their origin’ abroad, but changed tack in 1938 to claim minorities were closer to neighbouring Romanians (Popoviciu 1925: 156; 1938: 10). Outside Cluj, Lecca moved the centre of the prestigious prehistoric Adrio-Pontic people from south of the Danube in 1924 to Dacia (ancient Romania) in 1931 (Lecca 1924: 9; 1931: 44). Changed political circumstances help explain this changing tone. In 1925 Popoviciu was writing in a city that Romanians had already ruled for seven years, while his rabid 1938 piece was published just two years before Hungary re-annexed Cluj. Nazi Germany and increasing international tension legitimised racism and intensified nationalism. Romania’s stable but corrupt parliamentary democracy degenerated into a succession of royal, fascist and military dictatorships, which leading race scientists served in, amid assassinations, war, territorial losses and alliances with Nazi Germany (Săhleanu 1979: 18; Treptow & Popa 1996: 64, 119-20, 140-41 & 146; Bucur 2002: 35).

Double peripherality

Milcu and Necrasov said foreign researchers before 1920 collected ‘material... in our country’ to develop ‘their own studies’ on concerns of little interest to Romanians, ‘framing it in the scientific activity of foreign centres (Bern, Vienna etc)’ and ‘did not belong to Romanian science’ (Milcu 1954: 10; Necrasov 1941: 6). Even Pittard, Romanian anthropology’s greatest foreign friend, trained relatively few Romanian students (Milcu 1954: 24). Prichard in 1813 included Romanians among the Slavs, and interwar anthropologists still despaired of the chaos and flimsy basis of foreign race analyses (Prichard 1973 [1813]: 483; Rădulescu 1941: 248; Necrasov 1941: 10-11). Deniker, Günther and Eickstedt’s race maps left Romania blank or gave incorrect information, Ripley and Marcelin Boule made Romanians inferior Alpines, ugly compared to neighbouring peoples and a late-coming minority in Transylvania, while Czekanowski of Lwów gave Romanians

*These early Romanian serological studies, by Manuilă and Popoviciu in 1924-25, though sponsored by the nationalist eugenicist Iuliu Moldovan, lacked an ethnic focus, repeated Hungarian researchers’ findings on Hungarians, and just tentatively introduced the theories that Popoviciu later stridently instrumentalised (Manuilă & Popoviciu 1924: 543; Manuilă 1924: 1073; Popoviciu 1925: 154; 1935-36: 81; Trebici 1995: 9).

a Mediterranean majority, because they lay between the Mediterraneans in modern Bulgaria and a Neolithic Polish find (Rădulescu 1941: 248; Necrasov 1941: 10). Foreigners favoured ‘international’ regional experts over native works. Of citations about Romania in my database, less than a fifth were of Romanians. Of six references Eickstedt cited on Romania, only one was by a Romanian author, all but one of the others were general works on the Balkans or wider areas, and two of the non-Romanians probably never researched the country personally (Eickstedt 1934). Almost a third of the citations in Pittard’s 1920 Romanian synthesis were of Romanians, but that was exceptionally high. Of 16 sources in Lebzelter’s 1929 piece on Romania, just three are by Romanians, including one by an ethnic German (Lebzelter 1929: 67-69). This at least allowed Romanian anthropologists to claim nationalist justification for their work. Borcescu complained in 1918 that foreigners, through ignorance, could make ‘any kind of... assertions harmful to’ Romanians, so ‘small and young’ peoples ‘especially’ had ‘to do everything possible’ to supply foreigners with ‘sure informative’ anthropological data (Borcescu 1918: 10). Rădulescu, attributed the ‘painful recent experiences’ of Nazi Germany and Soviet Russia forcing Romania to give up huge territories, to ‘a merely approximate knowledge of the Romanian realities... given our absence from the foreign scientific field and the abundance of falsified or tendentious information spread by the adversaries of Romanianism’ (Rădulescu 1941: 245).

A good knowledge of our country by a larger public, creators of currents and opinions, but especially by European statesmen who make the destinies of the future Europe, can have no other result but the recognition of the rights which we fully deserve. (Rădulescu 1941: 245).

However Romanian anthropologists generally agreed that up to 1948, the domestic discipline failed to achieve its ambitions. Comparing it unflatteringly with the ‘developed state’ and ‘important works of synthesis’ of Romanian geography, history and philology, they regretted the lack of ‘works of synthesis’ covering the whole country, complaining that most studies were small scale, ‘neglecting racial anthropology’ (Necrasov 1941: 3 & 10; Milcu 1954: 13 & 19; Rădulescu 1941: 245-46). My bibliographical study of interwar Romanian raciology found far more citations of French (367) than Romanian (264) language works. Institutional development was weak. A chair in Iași in 1930-37 and a society and Institute founded in Cluj in 1933 and Bucharest in 1940 respectively, were the country’s only interwar anthropological institutions (Milcu 1954: 10-11). As statistical advances drove up the minimum size of studies, Romanian raciologists constantly complained that too few subjects were measured in Romania and the Balkans. None of the five craniological studies of Romanians which Borcescu listed for the 1870s dealt with more than 20 skulls (Borcescu 1918: 5-6). The few studies were either bald lists of antropometric statistics (eg.

Weisbach), or fanciful race histories, like that of Obédénare, who Pittard patronisingly praised as ‘almost an anthropologist’ (Pittard 1920: 147). Pittard and Necrasov said ‘ethnology’ around 1900 was almost ‘virgin territory’, lacking ‘serious’ studies, while many interwar anthropologists blamed the ‘exceptionally small’ number of anthropometric studies for data too ‘meagre’ and outdated to ‘permit’ race classification (Pittard 1903: 33; 1920: 10; Pittard & Donici 1926: 62, 71 & 114; Lebzelter 1929: 67 & 69; Necrasov 1941: 3 & 6-9; Botez 1938: 37). Isolated regional studies by unspecialised, folklore or medically-trained researchers used incompatible methodologies and produced contradictory results (Rădulescu 1941: 245-46; Papilian & Velluda 1941a: 629; Necrasov 1941: 8-9). Despite plenty of interest therefore, Necrasov said ‘the anthropological structure of the Romanian people is still very badly understood’, and ‘most works’ were just ‘preliminary contributions’ (Necrasov 1941: 3 & 10). The authorities were slow to recognise anthropology, refusing to release stature details of recruits until the late 1920s (Pittard & Donici 1926: 68; Lebzelter 1929: 67 & 69). Milcu said archaeological anthropology was simply not a Romanian concern before 1944 (Milcu 1954: 12). Not only were few digs carried out, but Iași anthropologists stored unexamined material from one important site for fifteen years (Milcu 1954: 12). Pittard reported ‘very few’ pre or protohistoric ‘anthropological documents’ for the Balkans in 1920, making ‘definitive’ interpretation impossible, and twenty years later Necrasov called his excavation at Cucuteni near Iași, the only ‘sufficiently profound anthropometric study’ on a Romanian Neolithic site (Necrasov 1941: 113; Pittard 1920: 20).

Romania’s amateur anthropologists long remained in print with primitive race theories based on one or two anthropometric features, plus some cultural data. Gheorghe Preda, writing in this tradition in 1924, acknowledged Deniker’s scheme, but in practice reduced race to cephalic index alone. As late as 1937, the Romanian journalist Henry Sanielevici traced all global racial diversity to the action of mastication^{*}, and was taken fairly seriously by Romanian professional anthropologists. A few interwar efforts were nevertheless seen as going beyond mere ‘accumulation of facts’ to interpretation and generalisation, included Pittard and Donici’s anthropometric work, the serological studies of Popoviciu and Râmneanțu and the ‘racial diagnosis’ of Necrasov, Făcăoaru, Papilian and Velluda (Milcu 1954: 13 & 22; Rădulescu 1941: 266). In Iași after 1940, Necrasov adopted more modern raciological methods, publishing major studies on parts on Moldavia (Milcu 1954: 20; Rădulescu 1941: 272-74). One of the few technical innovations of Romanian raciology was its graphic methods, though none of these new systems were copied within Romania, not to

^{*} He believed ‘rice... gives the Chinese certain characteristics of rodents: for example, the front teeth, endlessly gnawing grains of rice, develop on the zygomatic bone the superior insertion of the superficial masseter which moves them, and so raises the exterior corner of the eye... *The broad cheekbones of the Chinese are also found among the rodents*’ (Sanielevici 1937: 20)

speak of abroad. Rainer developed a grid diagram to help race diagnosis, on which the colour, form and position of symbols represented an individual's anthropological features (Rainer 1937a: 12-13; see Fig. 6.2). Făcăoaru meanwhile boasted that his original race notation let readers 'grasp in a glance the racial structure of a population' (Făcăoaru 1939: 28; 1973: 123; see Fig. 6.3). Landra said Făcăoaru tried to define the 'anthropological structure of the Romanian population' just like chemists 'work out the formula of a compound', defining it 'with formulae and figures' (Landra 1942: 41). He assigned a letter code to each race, such as 'A=Alpine race,' or 'X=Dalicobrown', followed by the percentage of the race in the study population, written in smaller print 'at the foot' of the code (Landra 1942: 41; Făcăoaru 1973: 122). This system's strong cosmetic resemblance to chemical formulae gave Făcăoaru's racial analyses a solidly scientific air.

The West or the steppe

Romanian raciology illustrates a fundamental narrative choice for most nations east of Germany. While many Romanians and others insisted on their Western vocation, neo-romantic Russian Eurasianism and interwar Turkish and Hungarian Turanianism claimed descent from noble eastern steppe-warriors, rejecting the modern West, and Finns and some Slavs took pride in quasi-Asiatic Finnish ancestors (Bugge 1996: 134; Weidlein 1961; see p.375). A Eurasiatic steppe identity helped justify Russian imperialism from 1840 on, as a peaceful 'reunion with our primeval brothers' or a return to the Slavic 'prehistoric home, and even sometimes encouraged marriage with Moslems 'to regenerate' the original "'Turanian' race' (Figes 2002: 414). It drew on the 'scientific' concept of latitudinal bands tying European and Asian Russia, traced Russian folk culture to the eastern steppes, 'barely penetrated' by European and Byzantine 'high culture', and argued that the 'romantic' or 'peasant' Russian values of fatalism, universalism, contemplation and especially collectivism, were more 'Turanian' than Orthodox or Slavic (Figes 2002: 423-25). Figes says that as Russia colonised Siberia and Central Asia in the 1860s and especially in the 1890s when Western culture 'was seen as spiritually dead' and intellectuals sought eastern 'spiritual renewal', ethnographers and archaeologists found eastern 'antecedents' for Russian folk culture, and musicians adopted eastern themes (Figes 2002: 364-65 & 391). As in Romania, some turn of the century Russian writers portrayed 'Petersburg as a fragile Western civilization precariously balanced' atop 'the savage 'Eastern'' peasant culture (Figes 2002: 421). The 'bitter resentment' of many Russians, including Dostoyevsky and aristocratic interwar Russian *émigrés*, at 'the West's betrayal' of Christian Russia in the Crimean and First World Wars, fueled an elemental, savage 'Scythian' rejection of genteel Western manners, exemplified by Blok's 1918 lines:

We are millions, we are multitudes

And multitudes and multitudes.

Come fight! Yes, we are Scythians,

Yes, Asiatics, a slant-eyed greedy tribe. (Figs 2002: 415-18 & 423).

Late nineteenth-century archaeological excavations of Kurgans helped make Scythians a romantic ‘mythical ancestor race of the eastern Slavs’, supposedly only truly comprehensible ‘through artistic intuition or religious faith’ (Figs 2002: 418; Buschan 1890: 45). Russian anthropologists like Anuchin and Zograf, and then Bunak in the 1930s, traced Russia’s ‘racial composition’ and sometimes its culture to Slavs crossed with semi-Mongoloid Finns, Siberians or steppe nomad groups (Beddoe 1890: 488; Zograf 1893: 12; Bounak 1928: 224; 1932: 469-73, 486 & 492-95). Zograf linked one Russian race type with somewhat ‘Mongoloid’ traits to the ‘Uralo-Altai type... of the ancient, indigenous population’, saying it was concentrated near where the recently studied Eastern Russian ‘Uralo-Altai or Finnish’ peoples lived, or once lived, and bore a ‘great’ anthropological resemblance to them, but not to the western Finns or Estonians (Zograf 1893: 7 & 11). Beddoe said Anuchin also suggested that ‘aboriginal tribes’ crossbred with ‘Slavonic colonists’ to reduce stature in parts of central and northern Russia (Beddoe 1890: 488). Zograf said Russian scholars found numerous Uralo-Altai or Finnish traces in the modern Russian language and folk culture, while ‘our historical annals’ recorded several Uralo-Altai peoples in medieval Central Russia (Zograf 1893: 7 & 11). Three other Slav nations, the Poles, Croats and Bulgarians, had old traditions of steppe-warrior founders. As Poland’s ruling seventeenth-century oligarchy, the *szlachty* emphasised ‘their particular collective identity’ and social position by cultivating Oriental dress and claiming descent from ‘mythical *Asian*’ steppe warriors called Sarmatians (Tornquist-Plewa 2002: 217). Even the Polish Enlightenment reformers who strove ‘to ‘Europeanize’ Poland’, assuaged the conservative and nativist ‘Sarmatian gentry’ by adopting ‘the Sarmatian criticism about parroting of foreign dress, etiquette, customs etc’ (Tornquist-Plewa 2002: 217-19). Some later Polish scholars also proposed a ‘Sarmatian theory’ of Slav origin in the east (Stojanowski 1924: 712). The anthropologist Talko-Hryniewicz even praised the role of Genghis Khan’s ravishing hordes in Polish history. They integrated into the nobility or peasants, according to rank, ‘won fame for their fidelity to and bravery for’ Poland in its medieval wars against Germans, and had ‘lively and intelligent’ upper classes (Talko-Hryniewicz 1914: 358-59).

However ubiquitous European terror of the yellow peril^{*}, plus the enduring Western Enlightenment slur against eastern Europeans as eastern barbarians ‘all of a kind’, informing and justifying a German cultural and political mission to an uncivilised east, inhibited romantic Asian origin

^{*}Fully shared by Russians, and no doubt encouraged by their defeat at Japanese hands in 1904-5 (Figs 2002: 413-14).

narratives (Neumann 1999: 82; Wijworra 1996: 175-76; Mazumdar 1990: 197; see pp.217-20). Tracing medieval Slavs from Scythians east of the Don, to Sarmatians, who vanished from history just about when and where the Slavs ‘so suddenly appeared’, and whom he linked to the word ‘Serb’, Buschan said they invaded Germany from ‘the heart of Russia’ (Buschan 1890: 45). Kossinna traced Slavs to ‘Slavic half-Asia’ and Schuchhardt said they ‘crept into eastern Germany with a completely foreign culture’ (Wijworra 1996: 176). The Polish serologist Mydlarski therefore used the much more ‘Asian’ blood types of Poland than Germany to emphasise Poland’s racial independence rather than any Asiatic identity (Mazumdar 1990: 191; Bielicki, Krupinski & Strzalko 1985: 10-11). ‘Slavophiles and other patriots’, traced Russian culture to ‘the combined influence of Scandinavia and Byzantium’, made the struggle against alien Asiatic steppe barbarians fundamental to Russia’s ‘European self-identity’ and denounced Eurasianism (Figs 2002: 365). Unbearably ashamed of the ‘Mongol yoke’, they pretended ‘the Asiatic hordes’ had left Russia’s ‘Christian civilization’ unaffected (Figs 2002: 366-67). Many nineteenth and twentieth-century Russian liberal intellectuals blamed autocracy on the Tatar legacy (Figs 2002: 369). Bunak joined Finnish anthropologists in denouncing the ‘big mistake’ of linking Alpines or ethno-racial Finns to ‘true Mongolic Asian’ or ‘Central Asiatic types’, which despite ‘convergent forms’, shared a ‘very distant and neutral’ ‘common prototype’ at most (Bunak 1932: 469 & 493; Hildén 1928: 220-21 & 223). He insisted that anthropological and historical analysis showed Russians and Finns hid ‘in the woods’ to minimise contact with the ‘foreign’ Moslem Turkish culture, despite the ‘very long’ Turkish presence (Bunak 1932: 492).

The well-known French saying “scratch a Russian and you will find a Tartar” is anthropologically meaningless. (Bunak 1932: 492).

At least some Western anthropologists accepted the Western pretensions of broad-headed Central European Slavs, linking them with south Germans and distinguishing them from ‘Turks, Mongols, Tartars and Lapps’, while Knox even called the short, dark, ‘remarkably’ inelegant, but ‘noble’ Slavonian race ‘the most intellectual, probably, of all’ and ‘gifted with high feelings’ (Hölder 1876: 8; Knox 1850: 355-57 & 359). The mid-seventeenth-century recognition that Romanian was a Latin language gave ideal proof of Western identity, launching a ‘constant, even obsessive preoccupation’ in Romanian historiography with Roman origins* (Boia 2002: 26). Historians like Kogalniceanu exterminated all pre-Roman inhabitants, preventing them from contributing biologically to the Romanian nation. He said the Romans eradicated [*extirper*] ‘the Dacian nation’ and many

*Early-modern Romanians identified with their Orthodox Slavic neighbours, but nationalism placed a premium on ethnic origin and cultural differentiation (Boia 2002: 30).

survivors, 'preferring death to slavery, perished either by the sword or by poison' (Kogalniceanu 1976 [1837]: 55-56). Boia says Latin origin narratives dominated in Romania until after 1870, their most influential exponent in 1853 presenting Romanian history as simply 'a continuation of Roman history', and co-authoring a Romanian dictionary in 1871-1876 which actively attempted to relatinise the language (Boia 2002: 29-30 & 75). As late as the 1930s however the historian Pârvan claimed Dacians were culturally very close to the invading Romans while Christianity was imported in a Latin rather than a Greek form (Pârvan 1937: 185-86). Latinist extreme nationalists assumed for Romania 'the same civilisation as the French, Italian or Spanish' and claimed all 'disputed multilingual zones' as 'fragments of the ancient Roman colony' (Kolarz 2003 [1946]: 136-38).

Eastern Europeans often internalised assumptions of northern and western superiority, using them in identity narratives as Western outposts against backward Asiatic local rival nations, or to explain economic disparities within countries like Poland, Romania and Yugoslavia. Kostrzewski criticised Kossinna's claims that Teutons civilised the east, and that prehistoric use of bronze never spread to what became Polish territory, but himself argued that ancient Slavs exported bronze-use to a possibly 'pre-Finnish' culture further east (Barford 2001: 274; Kostrzewski 1927: 1-2; 1939: 207). Tornquist-Plewa says that for many Poles, the East and Russia 'meant economic backwardness and stagnation, poverty, disorder, sloth, lawlessness, alcoholism and debased manners' (Tornquist-Plewa 2002: 228). Transylvanian raciologists like Făcăoaru, his Central European orientation reinforced by years in Germany, and with few illusions about his compatriots, found in a 1943 study, 'a surprising regularity' in the superiority of the western provinces across all his categories 'of biological value', including higher proportions 'of the most gifted races'* (Făcăoaru 1943: 295 & 298). Transylvanian students belonged more to Nordicist high-value races like the Nordic, West-European and Dinaric, while elsewhere in Romania, Alpines and Mediterraneans predominated (Papilian & Velluda 1941: 17; Landra 1942: 42). Confirming this superiority, the Transylvanian temperament tended to be 'hypokinetic', he argued, in contrast to the typically 'hyperkinetic aspect' of southern Romania, while 'the frequency of group A decreases from the north and west of the country towards the south and east' (Făcăoaru 1943: 296 & 305). Drawing on universal stereotypes of Transylvanian seriousness and orderliness, 'contrasted with the Balkan superficialities of Bucharest', he said 'the Transylvanian villager' was thriftier and more disciplined, moderate, earnest and orderly than elsewhere (Făcăoaru 1943: 305; Mitu 2006: 91). He was...

*Much of Eastern Europe copied the German idea of a cultural gradient towards an underdeveloped, oriental and barbaric east and south, applying it to foreign neighbours but also within Poland, Hungary, Yugoslavia and Romania.

...a better judge of people and things, is more solid in his work, more kind-hearted and less vain. Excesses of speech, of gestures, of eating, and especially of drinking or sexual excess... have a quieter form, below the level of the other provinces. (Făcăoaru 1943: 305)

Like Nordacist portrayals of the Nordic, Transylvanians were 'more reflexive,' 'reserved,' 'phlegmatic,' and 'perhaps less nice and less naïve, but more mature and more self-possessed' (Făcăoaru 1943: 305).

Kolarz says Latinist nationalism assumed the Roman past invested Romanians 'with an extraordinary mission in Eastern Europe', giving 'Romanian intellectuals' 'a false sense of superiority' and 'unbounded contempt for neighbouring peoples' and 'especially' Slavs (Kolarz 2003 [1946]: 136-38). Romanians were civilised Europeans, resisting waves of barbarian eastern steppe 'warrior conquests', and refusing them any role in Romania's racial make-up (Pittard 1920: 57 & 625-26). Influence from German raciology reinforced this contempt for the East. Făcăoaru's Asiatic line on Slavs hardened as Romania joined the German invasion of Russia. In 1936, he said the 'typical Ruso-Ukrainian' East-European traits were 'usually slightly Asiatic', and in 1938 he argued that Russian history and 'biological structure' showed 'millennia' of mixture 'with the Mongol hordes' made them more like 'Asiatic' than 'European peoples' (Făcăoaru 1936a: 17; 1938e: 282; 1942: 142). By 1943 he was claiming 'Russian anthropologists themselves' admitted Russians had 'over 80%' 'Mongol blood', adding that they mostly belong to the 'least gifted' [*subînzestrare*] or at best 'the averagely gifted' races (Făcăoaru 1943: 284). Făcăoaru and others also used the European-Asian contrast against minorities like Tartars, Jews and Roma, but slurs against alien, inferior Asiatics chiefly targeted Hungarians, the main nationalist enemies, who traced their ancestors to the Urals and whom serology data conveniently showed had much more 'Asiatic' blood than Romanians (Făcăoaru 1938e: 281-82 & 285). After fairly neutral earlier studies which even gave Hungarians and Poles 'exaggerated' levels of the European A property, Lahovary battered the European credentials of Hungarians in 1927, repeatedly comparing their biological index with Asian peoples like the Japanese, to show that 'the Turanic element still predominates' in their 'ethnic composition' (Popoviciu 1925: 154; Verzár & Weszeczky 1921: 35-36; Lahovary 1927: 31-32). He noted that while the difference between the biological indices* of other neighbouring peoples in Central and Western Europe was always under ten percent, and often below five, Hungarians differed from all their neighbours except Romanians by at least fifteen percent, and so, despite frequent crossing, racially 'remained completely isolated' from them (Lahovary 1927: 30). Following Hungary's annexation of northern Transylvania, Râmneanțu and

*The proportion of 'European' A to 'Asiatic' B type blood.

Alexandru Manuilă banished Hungarian origins to the furthest reaches of Asia, calling them serologically ‘absolutely similar’ to their ‘Asiatic brothers’ in ‘Mongolia’, ‘specially to the Japanese’, Finns and Siberian Ural-Altaic peoples, though with more European property than Finns, from crossing with Balkan and ‘Germanic elements’ (Manuilă, Al 1943: 9; Râmneanțu 1941: 148 & 153-54). Făcăoaru meanwhile found, from a statistically dubious small number of results, more ‘Mongolid elements’ among Hungarians than Romanians (Făcăoaru 1937c: 132 & 137).

While positivists were often happy to associate their nation with the West, neo-romantic rejection of Western modernity surged throughout Central and Eastern Europe, and in many parts of Western Europe from the 1890s on. Though prominent in German *völkisch* thought, Turda links peasant-centred neo-romantic nationalism to Eastern Europe’s ‘cultural, political, social and economic backwardness’ (Turda 2001: 106). It linked ‘Romanianness... to ethnicity and traditional values (ie. language, ethnic consciousness, etc.)’ rather than ‘common history or shared cultural memory’ (Turda 2001: 105). Nations like Poland, Romania and Serbia, which canvassed Western help against ‘Asiatic’ national enemies, found it especially difficult to express this through Eastern origin narratives. A key alternative was to claim ones ancestors were the ancient original inhabitants, sometimes exploiting narratives of industrious, biodynamically potent underlings (see pp.367-71). In the north, these could be Finns or, especially in Poland, Slavs. Tornquist-Plewa says most early nineteenth-century Polish romantic anti-occidentalists were Slavophiles, and ‘never’ adopted ‘an Eastern, Asiatic’ identity (Tornquist-Plewa 2002: 221). In the Balkans, groups like Illyrians and Thracians were the most ancient. Romania’s Roman ancestors, but the Dacians still more, were therefore a significant national asset, in place before Slav or Hungarian neighbours. Boia considers the questioning of exclusive Latinity ‘a sign of political and intellectual maturity’ accompanying Romania’s 1859-81 transition towards political unity and independence (2002: 30). However it also resembled the German nationalist claim to a superior *Sonderweg* or special path, fundamentally different to that of the West (Bollenbeck 1999: 297-98).

Professionalising Romanian linguists and historians accepted that Roman colonists came from throughout the Empire or even mostly from the Balkans, rather than solely from Rome, and reconsidered the fate of the Dacians (Manuilă, Al 1943: 10-12; Pârvan 1937: 160-61). In 1860, the linguist and historian B.P. Hasdeu argued from archaeological evidence that Dacians and colonists merged into a ‘Daco-Roman’ people (Boia 2002: 31). The qualities of the Dacians and their relatives the Getes, including the supposed precocious monogenism of their religion, were rediscovered from classical texts (Boia 2002: 31). Boia says the Dacians were typical ancient native

ancestors of the people, replacing earlier noble descent narratives from foreign conquerors* (2002: 32; see p.227). However the Roman myth long remained popular for Western-orientated Romanians, straining to modernise, westernise and stave off Russian hegemony, while rising isolationist, peasant-orientated nationalism from the mid-nineteenth century on and then the national communists of the 1970s-1980s favoured the Dacians, an ancestor group belonging to Romanians alone (Boia 2002: 33 & 36). Romanism tore the country from backward Balkan moorings and tugged it towards a more prestigious Western anchorage. Dacianism separated Romania from the entire world and lauded local specificity and autonomy. Boia says young 1930s intellectuals like Mircea Eliade ‘already felt closer to the Dacians than to the Romans’ (Boia 2002: 34). Interwar Romanian historians were said to ‘agree unanimously on the preponderant importance of the Dacians in the Daco-Roman mixture’, with one arguing in 1935 that the Dacians’ ‘“biological” weight’ remained greater even after the Roman conquest, so Romanians were mostly ‘Romanised Dacians’ (Manuilă, Al 1943: 5-6 & 10; Boia 2002: 34).

Romanian anthropology promised to enrich and deepen Romanians’ relationship with their nation. In the neo-romantic context, where the ethnic soul lived in the ageless bond between peasant and land, race offered an extra layer of antiquity and nationalist authenticity. The ultra-native Dacians, with their territorial priority, appealed to anthropologists, who used the nineteenth-century ethno-racial idea of each race ‘starting’ with a particular ethnic group, which was its true ‘owner’, to claim a retroactive patent on Balkan racial stock. Calling the cuckoo culture illegitimate served Romanian nationalist purposes perfectly as Hungarians were relatively recent immigrants. Anthropologists like Pittard, who strongly sympathised with Romanian *völkisch* nationalism, the Bucharest serologist Alexandru Manuilă and Necrasov made prehistoric Dacians and Getes the ‘direct ancestors of the Romanian people’ (Necrasov 1941: 115; Manuilă, Al 1943: 5-6 & 9-10). Manuilă argued that Romanians were serologically ‘different to’ Western Latin peoples, saying the prehistoric formation of Romania’s biology ‘indicates a confusion with the peoples of the Balkans’ (Manuilă, Al 1943: 5-6 & 9-10;). Though the ‘Latin spirit of Romanianism... appears to categorically’ exclude a link with Slav neighbours, Manuilă insisted the Roman colonists were too few and too mixed to racially transform the population, so Romanians ‘only biologically remained authentic’ (Manuilă, Al 1943: 10-12). Lahovary tied Romanians serologically and raciologically to Balkan peoples, drawing also on archaeology and documentary history (Lahovary 1927: 14-15 & 27). Pittard argued that the Romanian ‘family tree’ was ‘embedded in the prehistoric soil’ of the area since the Neolithic, ‘and

*Curiously, this was a relaunch of the Dacians’ career as politically useful ethnic ancestors. During the sixteenth and seventeenth century Turkish domination, Saxons claimed Dacian descent (Armbruster 1977: 227). This claim to be Transylvania’s most ancient people strengthened their hand in inter-ethnic political rivalry, but was abruptly dropped when the Hapsburg conquest made a German origin much more attractive (Armbruster 1977: 226-27).

less in the flux of foreign blood', and that Romanians saw 'more racial nobility' in this than in Roman descent (Pittard 1920: 56; Papilian & Velluda 1941: 7; Milcu 1954: 24). He insisted in 1920 that Balkan stature and cephalic index data proved the westerly Mediterranean type never entered the Balkans, while Neolithic Balkan skeletons already contained all elements of modern racial variation there (Pittard 1920: 57 & 625-26). His 1903 work suggests these proofs were assembled to support a pre-existing position. On very slim grounds, Pittard identified long and broad-headed Romanians from Bulgaria and Austria-Hungary with Dacians and Getes respectively, arguing that as Romanian racial ancestors were entirely accounted for, 'Rome does not seem to have infused its blood' (Pittard 1903: 36). The nationalist eugenicist Preda also dismissed theories of descent from 'invaders or colonists,' and saw it as 'very likely' that 'our brachycephalic ancestors coexisted with' Europe's earliest fossil humans, like the dolichocephalic Crô-Magnon, or were an 'evolutionary transformation' of them (Preda 1924: 14-15). It was 'scarcely deniable' he concluded, 'that we descend from a natural race, kept by our peasants of the mountains, who avoided in the past and mostly avoid, even today, any mixing of blood' (Preda 1924: 15). Gheorghe Banu, a leading Bucharest eugenicist, said 'the people remained the same through racial continuity, because the same race of origin perpetuated itself through heredity, like a vital uninterrupted current', linking successive generations (Săhleanu 1979: 94). This made Romanians 'the most tenacious race on the face of the earth', he said, in a coded warning that the country could never be permanently conquered (Săhleanu 1979: 33).

Coping with German raciology

The international balance of power within anthropology propelled Romanians from institutionalised dependence on France and Austria, to equally extreme interwar dependence on German training, reading and methodology. Though this reinforced neo-romantic nationalist extremism, its narratives were rather unsuited to Romanian nationalist aims. Among the foreign anthropologists investigating Romania from the 1860s to 1918, the mostly Austrian and Hungarian researchers, who concentrated exclusively on Hapsburg ruled lands, were roughly balanced by works published in Paris, two of which were written by the Romanian Obédénare and the Pole Kopernicki, who worked for a period in Bucharest (Papilian and Velluda 1941: 6; Landra 1942: 28-29; Lahovary 1927: 12-13; Lebzelter 1929: 67-69; Borcescu 1918: 5-6). A dozen works containing 'several' thousand anthropometric examinations made on seven research missions from 1899 to the 1920s by the Geneva anthropologist Eugène Pittard, who also trained and collaborated with a number of Romanian students, dwarfed all these in quantity (Lebzelter 1929: 68-69; Borcescu 1918: 6; Papilian and Velluda 1941: 6; Lahovary 1927: 12-13; Pittard 1903: 33; Necrasov 1941: 6; Milcu 1954: 23-24).

Even the very minor Italian interest and influence appeared to outweigh links with Germany, as opposed to Austria (Landra 1942: 29; Lebzelter 1929: 67-68; Predescu 1940: 324). Well over half the citations about Romania in my database were by Austrians, under a quarter by Pittard, and very few by French or German writers. The studies abroad of early Romanian anthropologists suggest stronger but not predominant German influence. The several leading early biologists who trained in Germany, usually also studied in Italy, France, Austria-Hungary and even Serbia (Predescu 1940: 38, 42-43, 120, 282, 481 & 691). Unanimous praise for Pittard as a friend of Romania, whose 'works radiate a breath [*sufllu*] of sympathy for the Romanian people', and sometimes scathing criticisms of Viktor Lebzelter, personified Romanian love for the French ideal of civilisation and mistrust of the Viennese former imperial masters (Rădulescu 1941: 250 & 261-62; Landra 1942: 29; Milcu 1954: 23-24; Necrasov 1941: 6-8). Pittard inhaled deeply of Romanian neo-romantic nationalism. He described Romanians as 'the majority... in Transylvania, where they are singularly oppressed', and published a work in Paris in 1917 to support their war aims (Pittard 1903: 37; Predescu 1940: 662). Lebzelter 'began a detailed study of the peoples of the Balkans' before 1914 and with government blessing, 'undertook in 1932 a vast racial study of 4339 soldiers' from throughout Romania, about a third of all interwar race diagnoses (Papilian & Velluda 1941: 16; Rădulescu 1941: 262; Lebzelter 1935: 65; Necrasov 1941: 7). He combined this data with that of other Viennese anthropologists in at least five articles on Romania raciology in 1933-35, published in Vienna, Bucharest, Prague and Paris (Necrasov 1941: 7; Papilian & Velluda 1941: 16).

Though Botez, Banu, Donici, Lecca and Popoviciu still mostly read, wrote and studied in French, most of the interwar generation turned decisively towards Germany (Săhleanu 1979: 50, 72 & 80; Necrasov 1975: 210). Of 54 foreign language anthropology journals which Cluj University subscribed to in 1926, 34 were in German, including one from Austria and four of the nine Hungarian journals (Racovita & Valentiny 1926: 368 & 400). The next best represented language was English with six mostly American journals, then five Hungarian, and only then French, with four journals. Italian was represented by three and Spanish and Polish by one journal each. Serology links with Austria, a world leader in blood research and base of Paul Steffan, whose 1932 serology handbook was the bible of Romanian researchers, were strong, providing Bucharest and Cluj researchers with sera and instructions (Dumitrescu 1927: 13-14; Râmneanțu 1938: 223; Râmneanțu & David 1935a: 54-55). The few pre-1930 race syntheses of Romanians usually took an ethnic form, but Pittard promoted methodological advances, and in the early 1930s, Lebzelter and Făcăoaru introduced Germany's prestigious new 'modern' raciology (Rădulescu 1941: 262 & 264; Papilian & Velluda 1941: 15 & 17; Făcăoaru 1939a: 278-79; Necrasov 1941: 8; Milcu 1954: 24). While the older ethnological anthropology equated Romanians with their Dacian 'ancestors',

making them ‘among the most primitive [i.e. early] inhabitants’ of their territory, raciology aimed to look beyond the Daco-Roman synthesis to ‘the problem of *origins*’* (Pittard 1920: 32; Manuilă, Al 1943: 10). Banu even questioned the ability of Neolithic ‘Indoeuropean tribes’ in Romania, presumably including Dacians, to ‘suppress the autochtones’ (Milcu 1954: 19; Săhleanu 1979: 94). This was far less satisfying for Romanian nationalists, who struggled to shoehorn this cutting edge sub-discipline, which following its own internal logic, turned its back on ethnicity and embodied superiority in races which were largely absent in Romania, into Romanian nationalist narratives.

Interwar raciologists were almost exclusively devoted to German methodological models, scales, indices, instruments and anthropometric measuring techniques, including from Rudolf Martin, the SS raciologist Schulz, Eugen Fischer and Karl Saller (Rainer 1937a: 11-12; Papilian & Velluda 1941a: 533-34 & 605; Necrasov 1941: 13-14). Only the foreigner Pittard followed Broca (Papilian & Velluda 1941a: 605). German influence was continuous. Just as the raciology of younger German theorists like Eugen Fischer and Theodor Molison and much younger ones like Eickstedt and Karl Saller replaced Martin’s anthropometry in the mid 1920s, their Romanian followers superseded Rainer, who introduced Martin’s widely popular anthropometric system into Romania (Spencer 1997j: 875; Milcu 1954: 17; Rainer 1937a: 11). Rainer used 13 anthropometric measures, including exotica like the forms of the occiput and nose, and calculated 13 indices, an unwieldy number for later raciology, while Botez, his contemporary in Iași, used the Polish school method (Rainer 1937a: 11, 35 & 57; Milcu 1954: 17; Botez 1938: 9). Făcăoaru and Botez’s student Necrasov, the main younger Romanian raciologists, enthusiastically adopted versions of Eickstedt’s system[†], Necrasov via Schwidetzky, ‘her colleague and friend’ in Breslau, where she trained (Făcăoaru 1943: 295; 1973: 122-23; Necrasov 1941: 102; Milcu 1954: 20). Papilian and Velluda, who were of about Eickstedt’s age, used a very similar method which they claimed ‘the majority of authors’ ‘used today’, but did not credit Eickstedt with it and disagreed with Făcăoaru’s support for Breslau school ‘diagnosis criteria’ (Papilian & Velluda 1941a: 618-19 & 631; Făcăoaru 1943: 295). Their emphasis on measurement alone clashed with Făcăoaru and Necrasov’s loyalty to Eickstedt’s *Ganzheit* or totality approach, which also used descriptive features (Papilian & Velluda 1941a: 618-19; Făcăoaru 1936a; Necrasov 1941: 4 & 10). Făcăoaru and Necrasov added extra races from

* Paradoxically, foreigners like Pittard, Lebzelter and Landra thought most about Romans and Dacians.

[†] Perhaps out of bitterness at her and Schwidetzky’s flourishing post-war careers and the collapse of his, Făcăoaru later claimed Necrasov did not follow this method ‘to the end of the road’ (Făcăoaru 1973: 123). However his own race definitions drew as heavily on more politically extreme or eugenics-orientated writers like Günther, who offered ‘the best’ available definitions, his teacher, Mollison, and Eugen Fischer, than on Breslau (Făcăoaru 1936a: 5 & 16-18). His relationship with Romanian fascists mirrored theirs. Like Moldovan and many other Romanian intellectuals, Făcăoaru was politically active, with ‘unabashed rightist political leanings’, promoting in his Bioanthropology Section of the statistics institute ‘a pseudo-scientific racist current’, ‘directly linked to the ascendance of fascism’ and racist eugenics among the political elite (Bucur 2002: 39; Milcu 1954: 11).

Eickstedt and Günther to their Denikerian European race scheme, but Papilian and Velluda left out the Eickstedt races, placing them in the earlier classification tradition of the 1920s, while Rainer belonged to the still earlier pre-1918 one (Papilian & Velluda 1941a: 619; Necrasov 1941: 80; Făcăoaru 1936a: 11 & 15; Rainer 1937a: 21-22).

Săhleanu hints that Rainer's ethnic origin as 'an assimilated German' impacted on his work, but Bucur identifies the foreign studies of Moldovan and his student Făcăoaru in Cluj as most influential in introducing German influence, including in their bio-political approach to race (Făcăoaru 1973: 123; Bucur 2002: 26-27; Necrasov 1975: 210; Săhleanu 1979: 91). Moldovan studied and served as a military doctor in Austro-Hungary, and though epidemiological research took him all over Western Europe, Bucur believes he became familiar with 'hereditary determinism and genetics' in Vienna and Hamburg (Bucur 2002: 26-27). Făcăoaru completed PhDs in anthropology in Munich under Mollison, and sociology in Berlin, with a dissertation on social selection (Bucur 2002: 37 & 112; Milcu 1954: 16). Bucur sees 'his years of study in Berlin' as the root of his 'uncompromising' lifelong support for 'coercive eugenic measures', and impatience with 'limitations imposed by' Romania's 'local traditions and mentality' (Bucur 2002: 37 & 112). Taking the Third Reich as 'the most successful role model' and 'wholeheartedly' praising 1930s German and Swedish eugenics programmes which 'have solved or' were 'solving the Gypsy problem', he firmly believed in a eugenic state centred around race inequality* (Bucur 2002: 39 & 112; Făcăoaru 1938e: 283). His race value judgements parroted those in the German literature. 'The expression of the eyes' of German Nordics 'indicates self-control and self-confidence', he gushed, and in men was 'harsh, virile, decisive', giving 'an impression of a raw, wild virility', 'especially in the ruling classes' (Făcăoaru 1936a: 14-15). Nietzsche's 'blond beast' recalled Tacitus and Caesar's 'ancient Teutons', while Germans were the blondest Transylvanian ethnic group and had mostly Nordic students (Făcăoaru 1936a: 14-15; 1938a: 26; 1942: 142). Though Moldovan rejected Nordicism for Romanians, he said it 'seems justified and conforms to' the German 'soul', and kept Făcăoaru as 'one of the main contributors' to his race science journal 'during the war' (Moldovan 1943: 16; Bucur 2002: 40). In 1939-40, the leading legal medicine journal gave space to a race analysis of Romania's 'Psychobiological Elites' by Dinu Daniel, who called Gobineau 'the illustrious pioneer of modern ethnography', Günther a 'famous savant', 'the erudite H. Stewart Chamberlain', of global importance, and Himmler, Darré and the Nazi raciologists Mollison and Reche, 'great scientific personalities of the Reich' (Daniel 1939-40: 471-74). Daniel fully accepted the German narrative that Teuton invaders of the Roman Empire founded modern 'Western...

civilisation' by merging with locals to create 'neo-Latin powers', and regretted that Dacia enjoyed no long period of calm in which this could happen (Daniel 1939-40: 489).

Continuing French influence

Though Romania's anti-Germanism was nowhere near as strong as in Poland, its links with France, its traditional model of Latin modernity and geopolitical ally, were much stronger. Interwar Romanian anthropology therefore negotiated between persisting narratives of French Celtic synthesis and new ones of German Nordic purity. The bibliographies of 30 interwar works by 13 Romanian race classifiers cited more works published in France (235) and in the French language (367) than in Germany or Austria (187), and in German (223)[†]. The preference for publishing in French, which my citations database suggests was extreme in the late nineteenth century, was probably a practical rather than indicating a cultural orientation, as French was the main foreign language read by educated Romanians. More of the earliest Romanian serology studies, in the mid-1920s, were published in Paris than Romania, which also indicated foreign dependence. The historian I.C. Brătianu suggested a Celtic element in the Romanian ethnic makeup in 1857, creating a bridge 'to the Gauls and, through them, to the French', and making Romania 'the eastern replica of the French model' (Boia 2001: 90). The founding figure of Romanian prehistoric archaeology, Vasile Pârvan, argued that the material and spiritual 'rural civilisation' of Celts, Italicii and Dacians were interdependent, and that Celts culturally 'unified... the entire Danube basin', including Dacia, preparing the ground for the Romans (Pârvan 1937: 159 & 185). Boia nevertheless calls the Celts 'an unusual presence' in the origin myths of mainstream Romanian historiography and politics, which 'did not manage to impose their presence in Romanian consciousness' (Boia 2001: 90). In Romania's little race anthropology community however, less robust than historiography and less autonomous of foreign and especially French influence, the Celtic theme turned up again and again. France's Alpine Celt model made a great deal of sense, as 'all racial studies' especially in mountainous Transylvania, and including the archetypically Romanian Moți, found a 'large percent' of small, brown and 'very brachycephalic' Alpines (Pittard 1920: 625; Papilian & Velluda 1941a: 620 & 628; Săhleanu 1979: 94-95). Romania's historiographical tradition of Daco-Roman ethnic synthesis was also highly compatible with the French synthesis model. Several Romanian race scientists argued that 'race mixture does not lead to a decline in the development of a people,

* He may have been somewhat unsettled by the Nazi regime at close quarters. He called Germans 'hardworking, consummately measured in every act', but 'much more impulsive and more inclined to brutality,' compared to 'Scandinavian calm' (Făcăoaru 1935-36: 96).

† The vast majority, but not all the works cited were published in Romania (362), France and Germany and in the languages of those countries. English (49), especially from the United States, was the fourth most important language, followed by Hungarian (20) and Italian (15). Romanian anthropology had important professional links with Poland, especially between Iași and nearby Lwów, and the United States, including through Rockefeller grants for eugenics (Necrasov 1975: 209-10; Botez 1938: 9; Săhleanu 1979: 72; Predescu 1940: 463).

“but on the contrary, is a stimulant to the racial functions... epochs of brilliance of civilisations were created by peoples through racial mixtures’ (Săhleanu 1979: 94). Though ancient Greek accounts suggested ‘a strong Nordic component, Necrasov said that ‘like all’ peoples of their day,’ the bronze-using Dacians were a racial ‘synthesis’ or ‘strong melange’ of several races, which mixed with Neolithic predecessors and later invaders, rather than ‘a single and unique race’ (Necrasov 1941: 115-116).

Not content with accepting that much of their people were brachycephalic Alpines, several Romanian raciologists imported France’s ethnic Celts. Nineteenth century historians and archaeologists accepted these had reached at least the fringes of ancient Dacia and argued whether the Dacians and Getes were Teutons, Slavs, Iranians or Celts* (Pittard 1903: 36; Picot 1883: 91-95). French and German Celtomaniacs and some Romanian scholars proposed a Celtic theory based on archaeology, etymology, Dacian ‘mores’ and ‘the ease with which the Dacians renounced their language’ for Latin, which in other countries was ‘a particular trait of the Celtic character’† (Picot 1883: 93-94). The very first Romanian anthropological race history, Obédénare’s 1877 Celto-Slav theory, directly transplanted the French race synthesis to Romania, using it, like many in Romania and abroad, to naturalise social hierarchy (see p.233). A Kymric ‘Dacian oligarchy’ ruled a Celtic lower class, which historians, preoccupied with elites, never noticed, and which survived better in Transylvania than in France (Obédénare 1877: 254-55). Pittard reported in 1903 that broad-headed Romanians, including ‘the great majority’ of peasants, were of ‘Celtic type’ resembling the Trajan’s column Dacians, adding that ‘we had the illusion, looking at our beaters’ on a Carpathian bear hunt, ‘of being surrounded by Bretons’ (Pittard 1903: 36). Having found his Celt, he noted that the dolichocephalic Romanians he studied were tall, pale and frequently blond, and so ‘probably’ Kymris, and possibly descended from Getes (Pittard 1903: 36). In 1924, Lecca accepted that brachycephalic Celts like those in Brittany and Ireland reached Transylvania, but by 1931 he adopted a more German raciological view that these Alpines were Mongolians, unrelated to Gauls and whose main migrations passed around Romania (Lecca 1924: 10-13; 1931: 47).

Even convinced pro-Nazi’s like Daniel argued that Romania’s ‘ethnically superior elements’, ‘sprinkled’ among the population ‘in several islets’, were a crossing of Broca’s ‘small, brown, brachycephalic’ Celts with the tall, blond brachycephalic Galatian race proposed by Jules Guiart of

* ‘The earliest opinion’ including of leading German romantics like Grimm, linked Getes with Goths, trying to explain their language ‘with the help of Germanic idioms’ and comparing Teutonic and Dacian ‘mores’ (Picot 1883: 91-92).

† Anthropologists and these scholars were also fascinated with Dacians sculpted on Trajan’s column in Rome, but disputed whether these were broad or long-headed (Pittard 1903: 36; Picot 1883: 93; Daniel 1939-40: 489).

Lyon and Cluj in 1927* (Guiart 1928: 200; Daniel 1939-40: 489-91). Daniel saw most Dacians on Trajan's Column as 'Germanic, that is Kymric (Galatian)' and 'only a quarter' Celts 'from Asia Minor' (Daniel 1939-40: 489-90). He and Guiart suggested the big, muscular, 'irascible and bellicose, very brave' Gallic Kymris, with a 'terrifying appearance' and 'strong voice', were Galatians, whose forest home once stretching from Brittany to the Carpathians, Daniel finding parallels between Gallic mythology and Romanian folk tales (Daniel 1939-40: 490; Guiart 1928: 203). The 'primitive French race' meanwhile, was 'in great part' 'a Galato-Celt crossing', Joan of Arc embodying 'the heroic virtue' of Galatian Kymric women, but was ruined by southern 'ethnic elements of less value' (Daniel 1939-40: 491; Guiart 1928: 203). The 'Gallic hero' Vercingétorix was Daniel's historical representative of the Galatians, while Decebal, the last Dacian king, not only shared Gallic physical features but had similar trousers, moccasins and beard (Daniel 1939-40: 490 & 93). In 1941, Papilian and Velluda included Celts, who invaded Transylvania 'from the west', in the racial-ethnic synthesis of the archetypically Romanian Moți (Papilian & Velluda 1941a: 634). Migrations from southwest and northwest respectively contributed 'the Alpine (Celtic)' and Nordic races to the Moți 'ethnic base', while 'numerous pieces' of archaeological evidence', especially from northern Transylvania, backed a Celtic origin theory (Papilian & Velluda 1941a: 617 & 634). They said the Moți had 'incontestable Nordic' and 'Northwestern sero-racial' components, resembling those of Western European countries invaded by historical Celts, including Scotland, while 'a series of scientists both Romanian and foreign', gave Romanians 'an ancient Celtic origin' (Papilian & Velluda 1941a: 538, 617 & 634).

Reconciling French and German influences

From the 1860s, Romania increasingly moved towards militant localist nationalism, whose occasional violence foreshadowed interwar fascism (Boia 2002: 95). Admiring German order and seriousness, many intellectuals criticised the earlier sustained campaign of modernisation and Westernisation on a French model as a threadbare ruling-class illusion, concealing the suffering of the 'true Romanian' peasantry (Boia 2002: 77 & 179). From 1900, writers and architects sought the 'Romanian soul' in rural themes and rustic buildings (Boia 2002: 95). These intellectual currents and Romanian irredentism 'radically' challenged the older liberal nationalism, and were part of a broader European post-1890 neo-romantic nationalism, spearheaded by Germany, which made peasants 'the main bearer and transmitter of a "real" Volk's culture' (Turda 2001: 106-7). Săhleanu says interwar Romanian intellectuals, including the sociologists and eugenicists most closely linked to race anthropology, generally gave peasants a central national role, Moldovan considering them

*Necrasov and Rainer equated Guiart's Galatian and types identified by Lebzelter and other anthropologists throughout Europe with a blond Dinaric concentrated in Romania's highlands (Necrasov 1941: 84 & 98; Rainer 1937a: 21).

‘the essence and guarantee of the future of the people and the state’, which had to be protected from the harmful effects of civilisation (Săhleanu 1979: 67 & 84). Preda identified with conservative traditional brachycephals values, and along with Banu, argued that the ‘brachycephaly of our’ highland peasants, plus ‘their conservatism in habits, customs, traditions, love for their people, respect for themselves and their family, etc.,’ suggested they were ‘the primitive root of our people, our autochthonous race’ and ‘ethnic base’ (Preda 1924: 9 & 14; Săhleanu 1979: 33). Resisting ‘numerous invaders’ and ‘avoiding major emigration’, he said this mountain people maintained their physical form, and ‘especially the aristocratic soul that we can boast of’ (Preda 1924: 14). Pittard agreed that peasants preserved ‘the true type of the primitive Romanian,’ with ‘the truest ethnic nobility’, ‘a remarkable intelligence’ and ‘a sense of beauty’ that Western European country people ‘are far from knowing’ (Pittard 1920: 11 & 60).

As elsewhere, he and Romanian researchers prioritised studies of country people, who ‘best preserved the true type of the primitive Romanian’, avoiding ‘the race mixtures which comes with all the bourgeoisies of the world’ (Pittard 1920: 11 & 60). As usual, research focussed on places identified by local legends, marriage ‘almost 100% among persons of the same village’, vibrant folk traditions and handicrafts but nevertheless ‘nearly non-existent civilisation’, as containing racially pure decedents of Dacians or Hungarians or being the Dacian-Roman ‘cradle of union’, from which ‘was born the Romanian nation’ (Râmneanțu & David 1935a: 49-50; Papilian & Velluda 1941: 536; Râmneanțu 1938: 221; 1939: 326). Râmneanțu said Hungarians took pride in the tall, often Nordic and ‘physically handsome’ inhabitants of their only village with embroidery and ‘decorative furniture’ craft traditions, and he agreed with them that the villagers were ‘of pure Hungarian blood’ (Râmneanțu 1938: 221). Ethnic, racial and national purity were equated. For their major raciological study, Papilian and Velluda of Cluj chose the Moți villagers of the Munții Apuseni (who took their name from the ponytail worn by the men) because their original Romanian ‘ethnic purity’ was ‘rarely found elsewhere’ (Papilian & Velluda 1941: 536). They found proof of this ‘ethnic homogeneity’ in folklore, serology, overwhelmingly Romanian declared nationality, traditions that that ‘not a single other nationality has settled’ in their region, and the statistically significant result of a blood data analysis, despite ‘such a small number’ of Moți being tested (Papilian & Velluda 1941: 536 & 611). Râmneanțu and David claimed ‘fairly ancient and incontestable facts’ showed certain Romanian villages were ‘always’ Romanian (Râmneanțu & David 1935a: 50). Popoviciu noted the ‘striking difference’ between Romanians, Hungarians and Saxons, who ‘lived side by side for centuries’ in villages ‘without mixing’ (Popoviciu 1925: 158). Romanians had long used the notion of strict endogamy to claim their nation was of immaculate Roman descent. In 1837, the historian Mihail Kogalniceanu, who later became Prime Minister,

ascribed to Roman colonists ‘a horror’ of marrying ‘the women of another nations’ which ‘still exists today’ (Kogalniceanu 1976 [1837]: 67). Another historian in 1812 argued that while the unfussy all-male Hungarian invaders bred ‘a “mongrel” people’, the discerning Roman xenophobes rejected ‘savage’ Dacian women (Boia 2002: 29).

With a subtlety worthy of subatomic physics, some race scientists maintained the simultaneous *völkisch* purity and French-style synthesis of Romanians. The Francophile Banu considered them a ‘racial and ethnic synthesis’ of Alpines with dolichocephalic Mediterraneans on the Danube but attributed their ‘prolific... demographic expansion’ and ‘great vitality’ to their ‘rural character’ and ‘isolation in the Carpathians and Transylvania’ (Săhleanu 1979: 95). Papilian and Velluda meanwhile, discovering a ‘relatively large’ proportion of Asian blood property among the ultra-‘homogenous’ Moți, who ‘seem to have suffered the least foreign influence’ of any Romanians, similarly claimed they were a pure racial synthesis (Papilian & Velluda 1941a: 613-17). As ‘mixtures or influence from different populations’ could not explain it, they hypothesised an ancient ‘Romano-Celtic’ synthesis (Papilian & Velluda 1941: 613-17).

Romania’s many Alpines, considered Asiatic and inferior by Nordacists, created a particular dilemma. The Romanian Nordacist Rădulescu for example complained that Ripley made all Romanians of Alpine race, ‘which is not on a high step in the hierarchy of races’, while Moldovan argued in 1943 that Nordicism ‘can never be a powerful concept [*idee-forțǎ*] or ideal’ in Romania because ‘we are not of a Nordic essence’ (Rădulescu 1941: 248; Moldovan 1943: 16). Nicolae Lahovary’s elaborate 1927 synthesis of European race anthropology, ethnic history and serology, though never mentioned by Romanian anthropologists, was well known in wider intellectual circles, even outside Romania (Negulescu 1934: 356-57). He confirmed the Nordacist narrative of Asiatic Russians and Alpines, noting a “‘Mongoloid” convergence’ in the anatomy of Alpines, who were ‘somehow intermediate between Europeans properly called and yellows’ (Lahovary 1927: 34). Făcăoaru agreed that Alpines and East Europeans were inferior Asiatics, finding them concentrated in the peasantry in Transylvania, while dolichocephals and tall races dominated among intellectuals (Făcăoaru 1943: 292; 1939a: 296; Papilian & Velluda 1941: 18; Landra 1942: 42-43). With information from local officials, notaries, priests, teachers and neighbours, he found Race X, ‘Nordics and Dalonordics’ were richer than average in a batch of peasants and university students, while ‘Easteuropids and Alpines’ were poorer (Făcăoaru 1939: 27 & 34). He therefore provisionally established a typically Nordacist ‘hierarchy of racial values’ in which ‘certain races are superior’ (Făcăoaru 1939a: 295-96). His data for students, nurses, villagers and criminals ‘corresponded to

expectations’, with fewer ‘superior races’ in lower social groups and ‘the degree of dangerousness’ among criminals paralleling the frequency of ‘inferior races’ (Făcăoaru 1943: 299-300).

Though a devoted Nordacist, Daniel, like 1860s-1870s French and Scottish theorists (see pp.344-45), used blond Celts to reconcile French Celtic synthesis with Nordicism, apparently trying to pass Galatians off as Nordics. He claimed the Galatian ‘infinite minority’ represented the ‘Nordic and dolichocephalic element’ in Romania, giving it Nordic historical and psychological characteristics (Daniel 1939-40: 493). He and Guiart made the ancient Teutons Galatians, Daniel swirling a blizzard of etymological speculation to link Vlach and Wallachia with Wallon, Wales, Gaul, Valhala, Valkyre, and others less likely (Daniel 1939-40: 490 & 492-93; Guiart 1928: 203). Elite psychological test subjects, he explained, volunteer supplementary explanations to yes-or-no questions, give information ‘soberly, explicitly’ and do not pretend to know more than they do (Daniel 1939-40: 487). He said short people suffer from ‘psychic insufficiency’, resulting in failure, so elite men should, like Nordics, be taller than 1.75 metres (Daniel 1939-40: 483). Somewhat diverging from the Nordic however, his elites were ideally mesocephalic, with ‘light chestnut’ hair and skin the ‘colour of a ripe peach’* (Daniel 1939-40: 483-85). To convince purity-obsessed Nordacists, he argued that Gobineau idealised ‘the vigour of the Galato-Celtic crossing’, and that Hitler and Mussolini were both Celto-Galatian mixtures, with the German dictator having a Galatian mother and the Italian, a Galatian father† (Daniel 1939-40: 489-91).

French-style synthesis narratives of unequal but complementary races helped resolve the old Nordacist dilemma of reconciling anthroposociological elitism with *völkisch* peasant worship. In an interpretation closer to romanticisation than to the underling narrative (see pp.288-94 & 37-71), peasants were vital to preserve the nation’s heritage and its mystical bond with the national territory, but were content to serve the national elite race. Romanian Nordacists assumed anthroposociological hierarchies. Făcăoaru’s work focussed on proving ‘social selection determines a varying racial structure in different social strata’, using the ‘precious method’ of ‘anthropology of social classes’, including criminal anthropology, to decide ‘racial hierarchy or equivalence’ (Făcăoaru 1938a: 26 & 28). He consistently confirmed the Nordacist race hierarchy. In a 1939 ‘economic and social valuation’ of races for Eickstedt’s raciological journal, he rated their

* The bodies of his elites ‘should be exempt from all hereditary malformation’ and have ‘a notable anatomical harmony’, while sexual organs ‘should be equally well developed’ and free of ‘any congenital malformation’ and ‘ears well detached’ (Daniel 1939-40: 483-85). While ‘the creases running from the nostrils to the corners of the mouth’ indicated ‘aptitude for command,’ an ‘appendage of the hereditary elites’, an interest in physical exercise, demonstrated their ‘superior psychism’ (Daniel 1939-40: 483-85).

† This was apparently borrowed from an Italian theory that in race crosses, the maternal line provided the physical features and the paternal line, the psychological characteristics (Daniel 1939-40: 491 & 496).

‘economic’ and ‘military service’ performance, ‘capacity for social ascension’, and ‘mental level’ (Făcăoaru 1943: 279, 283, 292 & 310). Though not all ‘cultural or business’ success was inborn, he argued, ‘social ascension is in general impossible’ without talent, so social success indicated inherent ability (Făcăoaru 1939: 26). He used his valuations of races to assess the ‘bioracial value’ of several European peoples, finding that this and alternative hierarchies based on serology’s biological index and ‘mental tests’ on American soldiers descended from 17 European peoples, all ‘correlate quite closely with one another’ (Făcăoaru 1943: 284-85 & 288). Any negative correlation, he confidently added, would be ‘an obvious absurdity’ (Făcăoaru 1943: 288). Lahovary said German scholars found more type A blood in ‘the bourgeoisie and the upper classes’, while a ‘physical type different from the bulk of the people’ strongly suggested racially distinct elites in several other nationalities (Lahovary 1927: 44). Dinu Daniel believed the state had ‘the supreme duty to save the superior individuals, because the existence of the nation’ ‘depended on’ their number and role (Daniel 1939-40: 489). He based his theory on Dr Albert Daniel’s ‘Naturist Hygiene or “Cosmonaturism”’, which advocated ‘regeneration of the Human Species’ by ‘urgently reinforcing ‘the Elites which give Societies a sense of dignity, giving the thinking and active being, the rigid and protective armour of the Knight, of the good Knight, Defender of the weak and Servant of Right’ [capitals in original] (Daniel 1939-40: 472).

This anthroposociological elitism gave peasants a lowly position. In a 1943 study, Făcăoaru confirmed that students from towns were taller, blonder and belonged more ‘*than rural students to the most gifted races*’, and offered concentration in towns as proof of blond superiority (Făcăoaru 1943: 298). Even *völkisch* champions of brachycephalic peasants accepted the musty international stereotypes behind Daniel’s ‘dynamic’ Galatian ‘navigators, voyagers, warriors, adventurers, conquerors, chiefs, loving to subjugate and dominate’, and his ‘static’ Celts, who ‘attached themselves to a given place, made war only in extremis... preferring to submit to a conqueror,’ who let them ‘remain master of their laws [*masure*] and a little scrap of land’ (Daniel 1939-40: 491). Preda unequivocally accepted the ‘very learned’ Lapouge’s anthroposociological doctrine of dolichocephalic ‘social superiority’, due to ‘development of certain parts of the brain’, because ‘they live in more civilised countries, in bigger cities, where greater energy, decision and progress rule’ (Preda 1924: 9 & 11). The brachycephal, though ‘intelligent, peaceful, thrifty, and a good worker’ had ‘much more the spirit of the man who is led’ (Preda 1924: 10). Preda’s own ‘large’ craniological study of Transylvanians confirmed that the enterprising long-heads migrated more, and that their numbers increased from the peasantry to ‘the bourgeois and nobility’, who were more often ‘crossed with foreign races’ (Preda 1924: 12-14). As highlanders had rounder faces and skulls than plains people, while most city-dwellers were long faced and long-skulled, Preda believed

urban conditions selected for long heads, ‘eliminating or destroying round skulls’ (Preda 1924: 13). Banu agreed that cities attracted ‘the most gifted elements’* (Săhleanu 1979: 96). Papilian, Velluda and Daniel added that the Romans, needing ‘patient, modest subjects’, imported ‘imposing masses’ of Celts from Asia Minor, Daniel offering as ‘irrefutable evidence’, that ‘the Romanian people is sober in the extreme, as biddable as one could desire and malleable for good, if it feels the weight of a strong hand [*haute main*]’ (Daniel 1939-40: 492; Papilian & Velluda 1941a: 617).

Romanianising Nordicism

Though too peripheral to credibly redefine international racial hierarchies, Romanian anthropologists felt free to unpick and select from the often contradictory composite of ideological and technical elements in 1930s German race science. Later communist claims that she sought evidence against Nordicism may be exaggerated, but Necrasov adopted raciology without Nordic supremacism (Milcu 1954: 20). Lahovary meanwhile twisted Nordicism to Romanian use, cleverly turning undeniable Slavic influence on Romania into a Nordic infusion, while avoiding association with Germany’s Polish and Russian enemies. He argued that the southern Slavs resembled the originally Nordic proto-Slavs, while agreeing with German Nordicists that northern Slavs, and Russians in particular, lost ‘their primitive type and evolved rapidly... into a new type’, ‘because of ever more frequent crossing with Asiatic’ Finns and Turco-Tartars (Lahovary 1927: 19-20). Despite his Nordicism, Lahovary exploited dark Romanian hair to prove ancient territorial occupation, tracing the 37-60% of fair eyes and hair among modern Serbs and Bulgarians to the Nordic proto-Slavs, while the culturally pre-Slavic Romanians, Albanians and Greeks were in the 18%-24% range (Lahovary 1927: 22). Lahovary linked Romanians to the most ancient Balkan populations via Deniker’s dark, tall, upland Dinaric race, rich in the European serological property and though brachycephalic, considered valuable by Nordicists (Lahovary 1927: 14-15 & 27). Indo-European-speaking Dinarics ‘from Asia Minor’ mostly settled ‘between the Northern Carpathians and Dalmatia’, he said (Lahovary 1927: 14-15). Though his Alpines were inferior meanwhile, they were ‘decidedly different’ from ‘yellows’, with a distinctly un-Asiatic blood type which showed they ‘emerged’ in ‘very similar’ environments to ‘the Aryans’ (Lahovary 1927: 34).

* Like Kostrzewski in Poland (see pp.369-70), these theories directly confronted contradictions between reactionary *völkisch* nationalist defense of peasant conservative traditionalism and the Nordicist celebration of city dwellers and migrants to America who created and dominated the modern world. This contradiction may have been inevitable in a movement which opposed the obliterating bulldozer of modernity, by girding tradition in modern armour. They also resemble the old-fashioned rural aristocratic elitism of John Beddoe in England and Gustaf Retzius in Sweden (see pp.229-30), who feared for the future of the superior Nordic type, which was better suited to aristocratic country pursuits and dashing deeds than to urban stress and smog.

Făcăoaru was the ‘most outspoken’ anti-Semite in Romanian eugenics meanwhile, but concentrated his bile on the locally more important Roma question (Bucur 2002: 146). He proposed using blood group evidence to ‘exclude Jews completely from society’ by control of marriages and sterilisation, and Bucur believes his high-level political contacts gave him knowledge and indirect influence on the fate of Transdnistria’s Jews (Bucur 2002: 39 & 146). But although Făcăoaru said little good about Jews in his raciology, as opposed to eugenic work*, he did not concentrate on them (Făcăoaru 1942: 142). He proclaimed the common ‘Asiatic’ inferiority of Jews, Eastern Slavs, Tatars and Roma, but a 1938 article on these minorities railed at length and almost exclusively about the ‘known’ Roma ‘corruption’, ‘pervertion of concepts about life’, ‘thefts’ and other crimes (Făcăoaru 1938e: 284; Făcăoaru 1943: 292; Bucur 2002: 39). Făcăoaru opposed land-grants to Roma in the 1921 agrarian reform, because assimilating this ‘inferior extra-European’ group ‘into our rural population is a crime and betrays the lack of any respect and concern for the biological integrity of our peasant masses’ (Bucur 2002: 111). Dino Daniel meanwhile called Roma a ‘compact invasion of Negroids’ and the ‘cruellest completion’ of Dacia’s fall (Daniel 1939-40: 489).

Romanian raciologists were too peripheral to credibly redefine international race canons, but began grooming an indigenous type, called the Local, Regional, Carpathian or X type, as a superior, archetypically Romanian race, which might eventually contend for international recognition (Făcăoaru 1936: 15; 1939a: 279; Făcăoaru & Făcăoaru 1937: 127; Papilian & Velluda 1941a: 18 & 93). It attracted ‘the attention of all researchers’ in Romania, who considered it ‘very’ or fairly common there, especially in Wallachia, where Henry Sanielevici first identified it, and the Carpathians (Făcăoaru 1936a: 15; 1937c: 127; Papilian & Velluda 1941a: 548 & 623). Făcăoaru said Romanian researchers had a special responsibility to study this dark, ‘copper’-skinned, ‘tall, or very tall, vigorous, brachycephalic, long and full face’ type, which ‘European anthropology’ ignored, but he considered one of the main Romanian types (Papilian & Velluda 1941a: 623; Făcăoaru 1936a: 15-16; 1942: 141). In Transylvania, he found Race X common among intellectuals rather than peasants (Făcăoaru 1939a: 296; Papilian & Velluda 1941: 18; Landra 1942: 42-43). Other writers connected it with the Dinaric, Mediterranean and sometimes the Alpine, but like Sanielevici, Făcăoaru also referred to the X type as a ‘Brown Dalic’, because it resembled the blond Dalic (or Phalic) ‘in many somatic characters’ (Făcăoaru 1936a: 15; 1939a: 279; Papilian & Velluda 1941: 18 & 93; 1941a: 623; Landra 1942: 42-43). This reference to the Phalic was probably no accident, as this was a very high value race in Nordicist hierarchies, and offered a stepping stone from the dark brachycephalic X to the blond dolichocephalic Nordic (Eickstedt 1934: 355-56; see

* A researcher working under him however found that more intelligent Jews had greater proportions of blood group A (Făcăoaru 1943: 297)

p.269). Făcăoaru, Necrasov, and Papilian and Velluda all found a place for the Phalic in their race schemes, though following Eickstedt, most of them thought it might be 'a Nordic subrace' (Papilian & Velluda 1941a: 620; Făcăoaru 1936a: 16).

The blondness problem

The superiority of blondness was the biggest challenge for Romanian Nordic supremacists. All researchers agreed it was rare in Romania and Făcăoaru found 80% of Romanians were dark haired, slightly more than Jews and much more than ethnic Hungarians or Germans (Pittard 1903: 79; Făcăoaru 1938a: 26; 1942: 141; Milcu 1954: 20). His solution was to separate blond and Nordic. He found an insignificant statistical correlation in Romania between blondness and wealth in 1939, and only partly significant between tallness and wealth* (Făcăoaru 1939: 37). Despite representing bigger samples than individual races, tall and blond groups correlated less well with wealth, because middle-income Dinarics and poor East Europeans reduced their economic averages (Făcăoaru 1939: 37). By 1943 his Nordacist instincts had overcome this evidence however. He used tall, blond and 'pure European'-featured races as control groups with higher degrees of giftedness (Făcăoaru 1943: 292). Făcăoaru also identified Mediterraneans, small and dark like Alpines, but dolichocephalic and considered superior to them, as the most common Romanian race (Făcăoaru 1942: 141).

Aside from claiming blondness did not matter, nationalist Romanian anthropologists could borrow the Mendelian genetic arguments used by German Nordacists to maximise the Nordic component among darker southern Germans, claiming that brunettes were really blond (Rainer 1937a: 20). Several researchers found relatively numerous blonds among Carpathian highlanders (Pittard 1903: 79; Rainer 1937a: 20; Papilian & Velluda 1941a: 633). For Romanian anthropologists, this showed 'there must be an important number' 'among the browns' with 'the recessive, latent predisposition for a fair complexion', kept hidden 'in their hereditary mass' by a Mendelian quirk, but reappearing in interbreeding with other races (Rainer 1937a: 20; Papilian & Velluda 1941a: 607; Lecca 1931b: 5-6). This suggested to Papilian and Velluda, 'a much greater abundance of depigmented racial types (Nordic-East European)' among Moți highlanders than anthropometric observation implied (Papilian & Velluda 1941a: 607). Lecca agreed that anthropologists did 'not give enough attention' to the often 'dark blond hair' of children and common green eyes among Romanians (Lecca 1931b: 6). He said Nordic characteristics, and especially eye colouring, presented 'a weak resistance to Mediterranean or Alpine influences' in race mixing, possibly exacerbated by Romanian climatic

conditions and intensive race mixing (Lecca 1931b: 5-6; Papilian & Velluda 1941: 15). A key piece of evidence for hidden blonds was the ‘discordant’ combination of pale eyes with dark hair, which many researchers found was relatively common in Romania[†], especially in the Carpathians (Pittard & Donici 1926: 102-3; Rainer 1937a: 20 & 57; Dumitrescu 1927: 21; Papilian & Velluda 1941a: 607; Lebzelter 1935: 68). Pittard and Donici suggested it might indicate ‘the absence, or the rarity’ of Nordics, while Eickstedt proposed that cold climate sometimes caused a ‘partial depigmentation’ mutation, lightening eyes, but not hair colour (Pittard & Donici 1926: 102-3 & 113; Rainer 1937a: 20). However Romanian writers unanimously preferred to see blonds, camouflaged by race-mixing, Rainer and Dumitrescu judging from stature and cephalic index that many of these were East Europeans (Rainer 1937a: 20; Dumitrescu 1927: 21). Papilian and Velluda initially agreed, but then made a determined effort to boost the Nordic proportion, arguing that although Moți serology and craniology was largely Alpine[‡], their high proportion of the ‘European’ blood property A suggested ‘a Nordic racial component’ like that of ‘Germans, Danes, Norwegians’, as did their ‘quite significant percentage of Nordic components,’ such as light pigmentation and tallness (Papilian & Velluda 1941a: 607, 615 & 633). The ‘great abundance of depigmented types’ were therefore ‘due to a more Nordic than East European race mixture’ (Papilian & Velluda 1941a: 608). Popoviciu also noted combinations of Alpine and Nordic serology in ‘most mountainous regions of Transylvania’ (Popoviciu 1938: 12).

A Nordic-blond ancestry was needed to reject Kossinna and Woltmann’s Nordicism archaeology and history, from which Lebzelter assumed that the 20% of Nordics he discovered in Romania were of Teutonic descent (Lebzelter 1929: 68; Papilian & Velluda 1941: 16). Even Romanian Nordicismists like Făcăoaru and Rădulescu joined the widespread criticism of this, insisting that Romania’s Dacian ‘prehistoric ancestors’ were often blond[§], and having occupied their current territories ‘without discontinuity’ up to the present, could not be Germanic (Rădulescu 1941: 261). They said studies of ‘the most isolated regions, with the most archaic ethnography’, showed high concentrations of blonds or even Nordic blue eyes and dolichocephaly, and Rădulescu cited Schwidezky in Germany and Pârvan to argue that the ‘Daco-Geti’ and neighbouring tribes were ‘in a great majority blonds’ (Rădulescu 1941: 263). Lecca meanwhile placed the southern, ‘Adrio-Pontic’ branch of the ‘warlike and conquering’ Indo-European-speaking Nordic race in prehistoric

* Necrasov meanwhile suggested that her blond Dinaric type might indicate a separate blond mutation, ‘full of consequences’ for race classification, if it meant that blond Nordics and East Europeans were unrelated (Necrasov 1941: 84-85, 98 & 133). This challenged Eickstedt’s theory, but was convenient for Nordicismists (Eickstedt 1934: 134).

† As supposedly in Ireland.

‡ They used Eugen Fischer’s blunt instrument for easy conversion between serological and anthropometric data. It listed typical ratios of blood factors for the Nordic, Alpine and Mongoloid races.

§ Oddly however, Râmneanțu attributed similar Austrian and Romanian blood structures to an ancient Teutonic settlement, apparently confirming Lebzelter’s theory (Râmneanțu 1941: 147).

Dacia, later spreading out and dividing into Illyrians, Pelasgians, Dorian Greeks, probably also the Etruscans, Italiotes and even the ancient Persian elites (Lecca 1931a: 43-44 & 47). He recognised his debt, despite its ‘exaggeration’, to Denusianu’s ‘very important’ 1913 theory (Lecca 1924: 10). Alexandru Manuilă also appeared influenced by this megalomaniac ascription of all classical culture to Dacia, tracing the ‘great Daco-Gete family’ of the Carpathians, via the Traco-Illyrians, to the ancient Pelasgians, who spread even beyond the peninsula* (Manuilă, Al 1943: 10-11).

Nordicism and nationalism

Paradoxically, raciologists in the tradition of Eickstedt treasured their apolitical scientific identity. Făcăoaru therefore had to struggle harder than many fascist race scientists to reconcile ‘scientifically proven’ Nordicism with peasant-centred nationalism. Compromising Nordicism for nation betrayed his science. His ‘bitterness [was] infinitely greater’ about the communist destruction of his anthropological programme than about the Hungarian annexation of Cluj in 1940, for example, and he dismissed the ‘discordant’ combination of pale eyes with dark hair as a sign of ‘intense bastardisation’, ignoring its potential to boost Romanian blond figures (Făcăoaru 1936a: 10; 1973: 123). Făcăoaru presented himself as a stickler for scientific accuracy, tremendously proud of his scientific ethics. He said race diagnosis ‘has to be more exact’ than medical diagnosis by several doctors (Făcăoaru 1973: 118). He told how in 1948, ‘probably under orders from higher up’, a military doctor tested his diagnoses by ordering ‘in secret that a group of soldiers should go a second time’ to be examined (Făcăoaru 1973: 118). Făcăoaru only realised this later from his notes, but ‘to the surprise of’ this ‘real conspiracy’, his diagnoses were ‘rigorous, like in a photograph’ (Făcăoaru 1973: 118). His results usually confirmed his prejudices, but not infrequently produced unpatriotic conclusions. Făcăoaru declared the ‘peasant masses... the life source of the nation’ but accepted that in Transylvania, inferior Alpines and Mediterranean-Orientals ‘massively’ dominated among Romanian and Szekler peasants, while East Europeans, the Nordicism dregs, ‘appeared the most constant’ race and perhaps even ‘a common ethnic substrate’ (Bucur 2002: 111; Papilian & Velluda 1941: 17; Făcăoaru 1937c: 137). He again chose scientific rigour over nationalism when Romania occupied Transdnistria in alliance with the Axis, and the Romanian military governor helped fund a large and ‘an extended field-research trip’ there ‘by Făcăoaru, ‘to establish the “authenticity” of its Romanians (Bucur 2002: 39). Făcăoaru confirmed the racial ‘great similarity’ between Transdnestrian and other Romanians, but found many more East Europeans than elsewhere and ‘sporadic’ traces of ‘Asiatic and Asiatic races’, due to ‘race mixture with Ukrainians and Russians’ (Făcăoaru 1942: 141-42). Though Bucur presumes this study offered ‘objective,

*Romanians liked to claim imperial glories for the Dacians. The archaeologist Pârvan gave them the region’s ‘largest barbarian pre-Roman empire’, including Bohemia, Bessarabia and Bulgaria (Pârvan 1937: 6).

scientific, biological' justification for Romania's territorial claim, this 1942 note made Transdnestrians mongrelised Romanians at best (Bucur 2002: 39).

As a raciologist, Făcăoaru believed the proportions of different races in each nation determined its biological value, 'historical vicissitudes', 'standard of living and' the 'merit' of their leaders (Făcăoaru 1938e: 279-81 & 286). However his estimate of national racial values shows how thoroughly he absorbed northern European values. He placed Romanians a little below half way in his 1943 comparison of the racial value of European nationalities and in 1935-36 argued that 'every degree of latitude' from south to north in Europe saw a change in 'soul, human mentality and the structure of social life' (Făcăoaru 1935-36: 98).

If we imagine the peoples of the world forming a pyramid, at the base we will find the great mass of peoples with... inferior characteristics, and at the summit... the minority of peoples with the most valuable social characteristics. If Southeast Europe is... at a point more or less distant from the summit... I must definitely situate the north European people at the summit of the pyramid (Făcăoaru 1935-36: 98).

Though surprised by how common drunkenness was among Scandinavians, he said they had the best 'moral character' of 'European peoples', 'disciplined by force at the start', but now becoming 'disciplined from conviction' (Făcăoaru 1935-36: 96). Though some criticised the 'undoubted' changes to 'the specificity of the ethnic form' caused by any infusion of foreign blood therefore, Făcăoaru felt it could equally bring 'favourable' change, depending on 'the average biological value' of 'the new ethnic or racial group' (Făcăoaru 1938e: 280-81). The worst 'for our people are the marriages of our women abroad', he said as their 'average biological value' was above even that of the Romanian bourgeoisie, but the 'almost exclusively' female imported spouses represented a gain if the woman was 'of Indo-European origin' (Făcăoaru 1938e: 286). This was a tender spot, because he himself married Tilly, 'a German woman of healthy Aryan stock', after very thoroughly 'checking [her] genealogical purity and health' (Bucur 2002: 38). The ethnic profit to Romania could be calculated by adding the bride's 'personal biological value' 'to the bio-ethnic quality of the country of origin', presumably making Tilly an asset (Făcăoaru 1938e: 286). His embarrassment at fellow Romanians was most poignantly expressed meanwhile, in vignettes from an international tour of researchers. They 'stood out for' 'spirit of insubordination' and 'deficiency' of 'order, discipline and punctuality', always running 'at least half an hour' behind schedule, while 'total lack of care in packing' led 'part of the baggage' to go astray, 'taking another direction' from Stockholm station (Făcăoaru 1935-36: 93). 'The leaders clashed physically with one another' and hit some

researchers, said Făcăoaru, and though ‘well dressed, almost elegant,’ were ‘more luxurious than practical’, bringing ‘military decorations’ but forgetting toothbrushes, boots, or travel cutlery (Făcăoaru 1935-36: 93-94). At a tasting offered by a German factory, Făcăoaru was embarrassed by his compatriots’ ‘gluttony, unseriousness and lack of dignity’ (Făcăoaru 1935-36: 94). Because the Romanian organisers were paid according to numbers travelling, they passed as fit researchers that had to be hospitalised *en route* ‘for chronic diseases, aggravated’ by travel (Făcăoaru 1935-36: 92). At least he praised his compatriots’ ‘humorous spirit, which gave a note of vitality, joy and exuberance to our national dances’, though he frowned that they were ‘confused with the Spanish and the French, due to... uproariousness, jokes and loud laughing’ (Făcăoaru 1935-36: 93 & 97).

While nationalists like Râmneanu and Popoviciu saw Hungarians as the main threat to Romania, Făcăoaru took a scientific racial rather than nationalist view of Romania’s minorities, pleading for the hidden menace of race mixing to be taken as seriously as more commonly perceived geopolitical threats. He contrasted his bio-politics with the ‘incoherence’ of conventional ethnic nationalism, which advocated the traditional ‘assimilation of minorities but also’ scientific ‘ethnic purity’ (Făcăoaru 1938e: 278). While ‘historic minorities’ like the Hungarians were not ‘too much to worry about’, interbreeding with racially ‘inferior’ ‘dead-weight minorities’ ‘of extra-European origin’ like ‘Gypsies, Tartars, Turks, Gagauz, Jews’ and Eastern Slavs posed a ‘mortal danger for the nation’ through ‘disastrous’ ‘reduction of the biological level’ (Făcăoaru 1938e: 281-82 & 285; Bucur 2002: 146). Făcăoaru was indignant that ‘the most widely read journalists’ criticised state schemes to help Turks and Tartars emigrate, treating these ‘most indolent and most inferior citizens’ as ‘the most valuable, because... they do not trouble social peace’ (Făcăoaru 1938e: 281).

Bucur says that independently of other Romanian eugenicists, Făcăoaru tied his eugenics with Romanian fascism ‘in a personal manner’, despite their apparent incompatibility, creating a ‘profoundly anti-Semitic’ racist symbiosis like that of Germany’s scientific Nordicism and mystical *völkisch* nationalism (Bucur 2002: 112-13). He held an ‘important’ government public health post under the fascist regime of 1940-41, and even, says Bucur, ‘became, in a sense,’ its race and health ideologue (Bucur 2002: 39; Milcu 1954: 16). He sat on the government commission for ‘Defence of the Biological Capital of the Nation’, which advocated ‘Ethnoracial... “homoculture technicians”,’ to ‘determine the biological value of the people and introduce eugenic courts [*instantele*]’ (Milcu 1954: 16). The fascist leader Codreanu ‘spoke from a completely different paradigm’, stressing ‘vaguely defined Orthodox cultural traditions’ and the Romanian nation’s ‘mystical mission’ in language ‘replete with apocalyptic Biblical images’, rather than ‘scientific laws of life’ (Bucur 2002: 113). Belief in an organic nation however connected Făcăoaru’s raciology to Romania’s

völkisch extreme right, which Szilagy-Gal says fused ‘biology and metaphysics in’ slogans like ‘blood is tradition’ and metaphors of the body and disease to describe the state of the nation (2002: 86-87). Făcăoaru’s theory of the nation as a structure of interacting races, each with its niche in the specific local social ecology, allowed him to accept it was ‘first and foremost an organism, with a specific biological structure formed across many millennia’ (Făcăoaru 1938e: 279). His intensified wartime nationalism facilitated this alliance. In the 1930s he praised efficiently planned and organised Hungarian cultural displays, though irritated by their ‘note of tendentious propaganda’, and stressed social class rather than ethnic race distinctions in Transylvania, making Hungarians lighter pigmented than Romanians, with higher value races (Făcăoaru 1935-36: 97; 1937c: 135-37; 1938a: 26-27; Papilian & Velluda 1941: 17). In 1943 however, though careful to give a scientific justification drawing on Hungarian anthropology, he put Hungarians second behind only Roma in Europe for ratio of low value races (Făcăoaru 1943: 284).

Nationalist serology

Nordicist raciology required heavy manipulation to suit a Romanian nationalist agenda, helping to explain Romanian enthusiasm for sero-anthropology. Pockets of strongly A type blood were a gift to Romanian nationalists obsessed with their marginal position in the continent and keen to enhance their people’s European image and portray Hungarians as inferior Asiatics. Serologists unabashedly exploited this for nationalist propaganda, beginning scholarly articles with statements like: our ‘enemies... try to prove that the Romanians hold their frontiers unjustly’ (Popoviciu 1938: 3). Nationalistic Romanian and especially Transylvanian anthropologists enthusiastically grasped serology’s promise that unlike traditional anthropometry, it could link nation with ethnic race. They claimed to ‘read in the blood’ of modern Romanians, ‘the nature and constitution of their ancestral blood,’ ‘usually’ confirming results from ‘anthropometric methods’, but going ‘deeper’ and illuminating ‘more precisely the ethnic past’*, ‘tying us to an origin whose authenticity we no longer have any reason to doubt’ (Lahovary 1927: 49; Manuilă, Al 1943: 6; Bucur 2002: 146). The serologists Sabin Manuilă and Râmneanțu found from their own and foreign research that blood types ‘vary with the ethnic origin of the population’ both in Romania and abroad and that the blood of migrating groups matched that of their ‘ethnic trunk’ of origin (Râmneanțu & David 1935a: 47; Râmneanțu 1939: 329; 1941: 149 & 156; Landra 1942: 32). Râmneanțu and David concluded that serological differences between communities ‘can only be attributed to ethno-anthropological differences’ (Râmneanțu & David 1935a: 47). The disciplinary history of serology reinforced its

nationalism. Like the brash infant physical anthropology a century earlier, it unreservedly linked its newly discovered races to cultural ethnic groups, and assumed the polygenist plurality of human origins (Hirschfeld & Hirschfeld 1918/19: 536; Lahovary 1927: 24; Râmneanțu 1941a: 154). Romanian serologists did not study raciology, and Râmneanțu specifically located his serology not as a branch of anthropology but within nationalist Romanian non-documentary historiography, contrasting this with Hungarian nationalist arguments ‘based solely on historical documents’ (Râmneanțu & David 1935a: 45-46). While these were ‘too rare’ to produce coherent positions, he said, Romanian scholars presented ‘more convincing proofs’ from church ruins, tombstones, place and family names, linguistics and registry books (Râmneanțu & David 1935a: 45-46).

While for Necrasov and Făcăoaru, races like the Nordic or Alpine were the building blocks of human biology, Râmneanțu and Popoviciu largely ignored or even misused them, considering type A blood a much better servant of Romanian nationalism (Râmneanțu 1939: 327). Cluj serologists and Romanian eugenicists derived their biopolitical principles from demography and anthropogeography, in which the nation was the fundamental organic unit, Moldovan distancing himself from Făcăoaru’s strident Nordicism (Săhleanu 1979: 73 & 94; Moldovan 1943: 16; Bucur 2002: 40). Romanian anthropologists and serologists had an extremely close relationship however, frequently collaborating. All major anthropologists saw blood type as an important supplementary anthropometric measure, including blood group research in their anthropological studies, or sponsoring blood research by *protégées*. Serologists considered their method superior, but still tried to reconcile it with raciology (Manuilă, Sauter & Vestemianu 1945: 103). Most anthropologists saw blood group studies as among the ‘richest in results’ for raciology, though the at least 44,000 blood tests in interwar Romania, compared with just 11,260 raciological diagnoses also reflected the relative simplicity of blood testing (Necrasov 1941: 9 & 124; Rădulescu 1941: 264; Papilian & Velluda 1941: 7; Popoviciu 1935-36: 78; 1938: 5 & 7-8; Făcăoaru 1943: 296; Săhleanu 1979: 96; Manuilă, Al 1943: 7). Reflecting ‘relatively strong’ general Balkan interest in blood group research, the first Romanian study began as early as 1922, and the 1937 international anthropology congress in Bucharest devoted as much time to Romanian serology as raciology (Manuilă & Popoviciu 1924: 543; Popoviciu 1938: 7; Eickstedt 1963: 180; Congrès International 1939: 1378-79).

The divergent race concepts of Făcăoaru and his friend and collaborator Râmneanțu reveal important differences between these sister techniques. Both were ardent nationalists, firm believers that culture was biologically based and Germanophiles, neither betraying in post-War ‘personal

*Făcăoaru naturally demurred, bizarrely claiming that as his own bioracial value index correlated more closely with proportions of A to B type blood ‘and the mental level of a people’ than they correlated with one another, ‘racial

writings', any guilt about advocating eugenic policies close to 'Nazi race-purification programs'* (Bucur 2002: 37 & 40). Their 1930s field research biologically distinguished 'authentic "Romanianness"' from 'impure "others"' in the country (Bucur 2002: 38 & 145; Făcăoaru 1936a: 5). Both yoked experimental results to politically desired conclusions, using unsound chains of reasoning. The historian of science Maria Bucur says Râmneanțu's data was 'based on a solid statistical analysis', but he and his colleagues 'chose without much difficulty' to ignore disputes abroad about 'the shaky assumption' that blood type was 'a hereditary ethnic characteristic', nationalism trumping good science (Bucur 2002: 145-46). Râmneanțu used nationalistic language of presentation. He and David claimed to seek 'concrete proofs in one direction or the other', but blatantly favoured Romanian arguments, questioning Szeklers ethnic identity with phrases like 'the inhabitants of the region considered Szekler', and once they had offered arguments for Szeklers' Romanian origin, "'Szekulised" Romanians' (Râmneanțu & David 1935a: 46 & 53). Researchers inserted prejudices into ideological statements, research strategy and interpretation of results. Popoviciu for example exclusively ascribed both the racial base in the region and Romanian nationality to Roman colonists, despite their superficial adoption of other ethnic identities. Arbitrarily identifying one historical group with the region's racial patrimony made scientific cheating entirely unnecessary. Făcăoaru meanwhile regularly proved social classes were racial strata when summing up comparisons between them, by allowing that somatic differences could be due to either race variation in 'force of social ascension', or lifestyle differences, but always finding reasons to dismiss the latter as 'very unlikely' (Făcăoaru 1938a: 27). Cluj race scientists more generally used this trick to always chose heredity over environmental explanations (Bucur 2002: 38 & 145; Făcăoaru 1936a: 5; Papilian & Velluda 1941: 616).

Regarding race science rather than race politics however, there were major differences between Cluj serologists like Râmneanțu and raciologists like Făcăoaru and Necrasov. Făcăoaru isolated himself far to the right of most other Romanian eugenicists, 'Moldovan included, going 'much further...in endorsing coercive eugenics' and a German-style stress 'on racial/ethnic purity' and the 'weeding out' of inferiors (Bucur 2002: 38-39 & 112). Whereas 'science' came first in the raciology value

composition is what determines both' of them (Făcăoaru 1943: 285).

*Râmneanțu nevertheless made 'a successful transition into the communist regime', leading 'a full professional life' as a teacher and researcher, and despite claims of secret police harassment, Bucur says he 'read, wrote, and published with no more imposed censorship than anyone else' (Bucur 2002: 37). She adds that his lobbying in response to publicly-expressed Communist concerns about Romania's declining birth-rate, may have influenced the infamous 1966 recriminalisation of abortion, 'one of the most intrusive' Ceaușescu regime controls on 'individual privacy' (Bucur 2002: 227-29). It imposed regular state gynaecological tests, forcing 'even teenage single mothers' to have children that 'the state would often throw... into appallingly managed orphanages', laying foundations for Bucharest's continuing tragedy of glue-sniffing street children (Bucur 2002: 227-29). Bucur says Râmneanțu reprised his interwar advocacy of state control over all birth control, financial incentives for big families and criminalising abortion, with 'severe

system, in Râmneanțu and Popoviciu's serology it was just a means to nationalist ends. Historians note a clear 'political aspect' to Râmneanțu's numerous studies using 'statistical analysis and various bio- and anthropometric measurements to establish the hereditary background and potential of' Transylvania's ethnic groups (Milcu 1941: 13; Bucur 2002: 37). That Făcăoaru and Râmneanțu were both pro-Nazi eugenicists, demonstrates the huge conceptual range within both eugenics and Nazism. For Făcăoaru, improving national biology meant boosting the proportion or social primacy and biological purity of superior races. For Râmneanțu it was demographic management to promote the more 'valorous' ethnic Romanian peasants who maintained the nation's roots in the sacred soil of the fatherland (Râmneanțu 1943: 390). Făcăoaru stressed Nordicism proven by anthropological science; Râmneanțu, the 'mystical and incomprehensible forces' of national feeling and 'the whispers of secret connections with ancestors' that tied Romanians to their land.

Transylvania, the Acropolis of Romanianism

Transylvania was Romania's best surveyed province, first by researchers from Vienna and Budapest, and after 1918 by Cluj scientists, while most studies elsewhere were described as 'very summary' or 'minimal' (Pittard 1903: 33; Botez 1938: 3 & 38-39; Făcăoaru 1939a: 296-79; Rădulescu 1941: 266 & 269; Papilian & Velluda 1941: 533). Cluj largely monopolised race serology studies, focusing tightly on race differences between ethnic groups, and dominated 'ethnological archaeology', using 'morphological, racial and serological criteria' (Rădulescu 1941: 264-65; Milcu 1954: 13). Făcăoaru, who was exceptional in devoting 'himself exclusively to anthropological research', probably carried out at least a third of raciological diagnoses in interwar Romania, focussing on 1930s Transylvania (Milcu 1954: 16; Săhleanu 1979: 96; Făcăoaru 1939a: 296-79; Rădulescu 1941: 266; Făcăoaru & Râmneanțu 1939: 337-39; Bucur 2002: 38). Cluj was also the earliest serology centre, publishing its first studies in 1924, followed by other schools from 1927, and was by far the most important, accounting for about three quarters of blood tests and over 40 of the 70 or so Romanian serological studies in 1921-45 (Papilian and Velluda 1941: 19; Popoviciu 1935-36: 78-80; 1938: 8; Dumitrescu 1934: 141; Râmneanțu 1939: 326). Râmneanțu, Popoviciu and Sabin Manuilă of Cluj, who compared Romanian blood groups with those of neighbouring peoples and classified blood groups in Transylvania, plus Necrasov in Iași, were the most prolific and recognised Romanian race serologists, each blood testing over 5000 individuals, and the leading Cluj researchers were also surrounded by much more substantial groups of collaborators (Milcu 1954: 13 & 16; Rădulescu 1941: 264-65; Făcăoaru 1943: 296).

punishment' for both mothers and abortionists (Bucur 2002: 227). She says he 'was certainly not reprimanded' for this lobbying or its 'strong language of hereditary determinism' (Bucur 2002: 228).

The immediate cause for the primacy of Cluj race science in interwar Romania, its extreme nationalism and biological determinism, and the concentration of studies in Transylvania, was promotion by the influential eugenics professor Moldovan. He established or dominated a cluster of political, public health and academic institutions, vital for supporting anthropology and commissioning race research (Rădulescu 1941: 275-76; Bucur 2002: 26). The oldest was *Astra*, a nationalist cultural organisation which before 1918 campaigned for Transylvania's incorporation into Romania and from 1925 sponsored Moldovan's eugenic programme, and whose Vice-President, Gheorghe Preda, was a race researcher (Bucur 2002: 33; Săhleanu 1979: 87). With 'ministerial authority' to Romanianise and develop health and social welfare in newly-annexed Transylvania in 1918-20, Moldovan imprinted 'his eugenic vision' on the medical school and eugenics institute that he helped found at Cluj University, and which were key bases for the mid-1930s crop of politicised race scientists (Bucur 2002: 27-28; Rădulescu 1941: 247). From 1927, the eugenics institute, which he directed until 1940, published the country's main race science journal, heavily funded and otherwise supported by *Astra* under his presidency in 1932-47 (Săhleanu 1979: 86; Bucur 2002: 26-27 & 34). These Moldovan institutions linked leading race scientists like his 'closest collaborators' Făcăoaru and Râmneanțu, the most significant Cluj race anthropologists, Sabin Manuilă (another of his students), and the leading serologist Popoviciu, framing their careers and commissioning, funding and publicising their major 'anthropological field research' (Papilian & Velluda 1941: 16; Popoviciu 1925: 152; Predescu 1940: 683; Bucur 2002: 36, 38 & 110; Făcăoaru 1939a: 280; Făcăoaru & Râmneanțu 1939: 337-39; Săhleanu 1979: 68). These scholars and Professor Papilian, who headed the Romanian Anthropological Society in Cluj, repeatedly paid homage to Moldovan's sponsorship and guiding role, calling him an international pioneer in 'the application of the concept of race, ethnic group, nation to politics', whose 1920's eugenics works had insisted on the 'immediate necessity' of research on Romania's races (Făcăoaru 1939a: 280; Papilian & Velluda 1941: 16). He also gave an important 'impulse' to Clujean serology, linking it with ethnography (which focussed on defining the frontiers of national culture), archaeology, demography and social history, in a eugenics-centred ultra-nationalist discipline complex resembling that of contemporary Germany (Papilian & Velluda 1941: 19). Râmneanțu's original research moved progressively towards these areas, and Popoviciu leaned heavily on them, though Făcăoaru's raciology remained at a distance (Râmneanțu 1941: 154). In 1930, the demographer and seroanthropologist Manuilă became the chief state statistician in Bucharest, managing the census and building a kind of colony of Cluj eugenics and extreme nationalism (Trebici 1995: 8). His institute supported seroanthropological work by his son Alexandru and others, became Făcăoaru's base and was linked to the leading Bucharest eugenicist, Gheorghe Banu (Milcu 1954: 11 & 19).

If Bucur is correct, eugenics successfully presented itself in interwar Romania as a very practically useful applied science, sweeping race anthropology into Cluj on its coattails*. Bucharest and Iași anthropology by contrast largely emerged from academic anatomy and palaeontology, and had to compete hard for funding and interest with university disciplines of more apparent and pressing practical utility. Why did eugenics take such hold in Cluj? It may have benefited in the 1930s from Transylvania being the richest and most Westernised Romanian province, but the Magyarisation policy actively discouraged minority education, so most 1920s medical professors in Cluj were from elsewhere in Romania (Turda 2002: section 14.2; Bologa and Iszak 1962: 219). Strong links with German-speaking conservatives promoted race thinking. In Romanian race science bibliographies I analysed, all works and synopses in German were by Râmneanțu or Făcăoaru, and three of the four authors citing more works from Germany than France were also Cluj-based. Turda says conservative Transylvania Romanian leaders before 1914 associated with reactionary racist Austrian leaders, who used non-Hungarian minorities to counteract Magyar nationalism and the Jews (Turda 2001: 100-3). Transylvanian Romanian nationalists like Aurel Popovici, who divided his time between Vienna and Bucharest, borrowed heavily from right-wing German race theories. In 1906, he contrasted Romanian race purity with the assimilationist Hungarians, ‘a Mongoloid race’, ‘doomed to failure’ for miscegenation, ‘especially with the Jews’ (Turda 2002: section 18). Popovici claimed that ‘very many Romanians’ had ‘external characteristics’ of what ‘modern anthropology’ called the ‘Nordic European race’, because...

...the Germanic race... is important for the *entire* Latin race of today, so for Romanians as well... *each* of these peoples had and has Germanic blood in his veins (Turda 2002: section 18).

Nationalism however offers the strongest explanation for Cluj dominance and extremism. Moldovan had an ‘intense preoccupation with the authenticity of the population’ and ‘historic rights’ in the province (Bucur 2002: 69; Săhleanu 1979: 68). He insisted that continuous contestation ‘by Magyar revisionists’ of Romanian rule ‘required a scientific replica’, shifting ‘the criteria for analyzing’ ethnic authenticity from traditional ‘cultural grounds’, which he believed could be ‘manufactured or easily manipulated’, to the ‘greater scientific certainty’ of biology (Săhleanu 1979: 68; Bucur 2002: 68). While ‘cultural artefacts and symbols’ were ‘important markers’ of the national ‘hereditary patrimony’, the ‘biological data’ of demography and

* The communist anthropologist Milcu, trying to place a *cordon sanitaire* around the interwar anthropologists least acceptable to the new authorities and save the rest, argued that Moldovan was peripheral to Cluj anthropology (Milcu 1954: 16). Postwar Romanian anthropology meanwhile achieved a ‘critical reconsideration’ of race, ‘in the light of modern conceptions of Soviet anthropologists’ (Milcu 1954: 19). Milcu also promoted the Rainer cult to give historical credibility to the centralisation of the discipline around his own base in Bucharest. A 1966 biography called Rainer ‘a pioneer as much on the global as on a national scale’ in both anatomy and anthropology (Riga & Călin 1966: 144).

anthropology dispassionately demonstrated ‘the objective reality’ of the ethno-racial ‘basis of legitimate rule in Transylvania’ (Bucur 2002: 68-69). Race anthropologists, delegated to provide biological evidence for the Romanian nationalist case in Transylvania, argued that ‘only research on racial history’ could illuminate Romania’s thousand-year medieval gap in written records (Lebzelter 1935: 65; Lahovary 1927: 4). Medical and scholarly institutions rewarded Râmneanțu’s nationalist serology with several financially ‘substantial prizes’* (Bucur 2002: 146).

The strength and degree of extremism of race science in each Romanian province directly reflected the precarity of Romanian rule there. Romania only acquired Transylvania in 1918, less than 60% of its people were ethnic Romanians, and its Hungarian minority became the state’s most serious nationalist challenge, while Moldavia, with its capital in Iași, doubled in size in 1918, acquiring large Slav minorities (Râmneanțu 1941: 149). Hungary and the Soviet Union siezed back most of these new territories in 1940. Observers from the widest variety of viewpoints contrasted Cluj nationalism and racism to the Rainer school’s cosmopolitan scientific values in Bucharest, with Iași (Moldova) somewhere in the middle. Degrees of faith in positive correlation between serological and anthropometric characteristics bore this out. Cluj researchers found strong associations between blood type A and Nordic characteristics, the Manuilă school in Bucharest and Necrasov also reported some correlations but contradicted those of Cluj, while the Rainer and Banu school found little or no link (Dumitrescu 1927: 23; Rainer 1937: 6; Manuilă, Sauter & Vestemeanu 1945: 68-69, 79, 82-83 & 103; Făcăoaru & Râmneanțu 1939: 338-41; Săhleanu 1979: 96). A 1942-43 study at Făcăoaru’s Bio-Anthropological Centre in Bucharest correlated blood group A with ‘above averagely gifted races’, greater intelligence and political rather than common prisoners (Făcăoaru 1943: 297). Each centre, especially Iași and Cluj, took a keen proprietorial interest in their respective provinces. Necrasov declared that Iași would assume responsibility for Moldavian racial syntheses and herself specialised on that region, while Moldovan’s eugenics and raciological circle had a particularly ‘intense preoccupation with the authenticity of the population in’ and historic rights over Transylvania (Necrasov 1941: 3-4 & 9; Milcu 1954: 20; Bucur 2002: 69).

Serology was popular for its contribution to a controversy ‘hotly debated’ for ‘almost a century’ over whether Hungarians or Romanians ‘arrived first’ in Transylvania, as a ‘basis for claiming undisputed rights over the region’ (Bucur 2002: 68). Historians unearthed, manufactured, and disputed ‘one record after another’ to prove the political legitimacy or otherwise of Hungarian rule, but with almost no relevant written sources for a millennium before the thirteenth century, the

*Bucur says this showed ‘the Romanian scientific community at large’ emphasised ‘hereditary determinism and... ethnic purity’ (Bucur 2002: 146).

question remained wide open (Bucur 2002: 68). Hungarian nationalist ‘historians, linguists and lawyers’ and some German writers argued from the relatively brief Roman occupation of Dacia, plus some linguistic clues, that Roman settlers abandoned the province with the legions in 118 AD and only filtered back north of the Danube after Hungary’s medieval occupation of Transylvania (Bucur 2002: 68). Nationalist Romanian archaeologists and linguists countered with proofs that Romanian heirs to the great Roman civilization were the ‘oldest inhabitants’, and in continuous occupation (Bucur 2002: 68). Romanian anthropologists therefore criticised Lebzelter, who said Transylvania’s central plain was ‘today essentially inhabited’ by Szeklers and Saxons, who found it ‘free’ as far as historical documents go back (Lebzelter 1935: 68). Equally unpopular was his theory that the Transylvanian Romans underwent ‘a slow and progressive peaceful* substitution’ by Slavs, and that ‘Germanic and Turanian conquerors’, presumably meaning Saxons and Szeklers, then drove this mixed population out (Lebzelter 1935: 69). Though the roots of Romanian nationalism go back to eighteenth-century Transylvania, Marius Turda sees Transylvanian enthusiasm for *völkisch* nationalism and joining Romania as a reaction to the nineteenth-century Hungarian drive to create a ‘Magyar Unitary State’, homogeneous in ‘language and national consciousness’ (Turda 2001: 99). As very little of the intellectual and commercial elite was ethnic Romanian, Szilagyi-Gal says that ‘urban-peasant social conflict was often perceived as corresponding to the “foreigner”-Romanian cleavage’ (Szilagyi-Gal 2002: 84). Neo-romantic ethno-nationalists concluded from the 1880s that Bucharest had to become the capital and ‘cultural centre of all Romanians’, and from 1890, in part to distract from land conditions that sparked a major peasant revolt in 1907, leaders of the Romanian kingdom adopted an irredentism which gave Transylvania special symbolic importance (Turda 2001: 104-5; Bucur 2002: 21). As the ‘cradle’ of Romania’s Dacian and Latin ethnogenesis, the nucleus of its Latinism and nationalism and its ‘exemplary model’ of national resistance, Transylvania was considered the ‘essence and “heart of Romanianism”’ (Mitu 2006: 92).

The mountain core

Turda identifies ‘the mental image of a Romanian unit circumscribed by natural frontiers, within which similar cultural patterns developed’ as a central nationalist symbol (Turda 2001: 105). Nicolae Filipescu of the League for the Cultural Unity of All Romanians demanded in 1915:

‘What is the Romanian Kingdom without Transylvania?... A geographical absurdity... A piece of tortuous land which is torn in a semicircle. Show this mutilated figure to a seven year old child and ask him what is missing... He, with his anaemic hand, would draw the line, which completes the circle... At the present borders we are a country without future. In order to accomplish our European

* I discuss this stereotypical dichotomy between peaceful Slavs and conquering Teutons and Steppe warriors on pp.367-

role, we need a bastion that dominates this position. That is why we look to the natural fortress of Transylvania: to the Acropolis of Romanianism'. (Turda 2001: 104)

France and Ireland cultivated similar nationalist discourses of natural frontiers, but neither were split almost in three by one of Europe's tallest mountain ranges. The solution of Romanian historians and race anthropologists, and especially Cluj sero-anthropologists like Râmneanu and Popoviciu, was to make mountainous Transylvania, the national territory most threatened by ethnic separatism and irredentism, a fortified plateau of irreducible Romanianness, Romania's natural racial core and the heart of both the Dacian kingdom and Roman colony (Pârvan 1937: 6). One of the first concrete anthropometric results in Romania was Pittard's 1903 conclusion, confirmed by Austrian researchers in Transylvania, that mountain Romanians were broader-headed and shorter than lowlanders, and craniologically distinct (Pittard 1903: 39, 46, 48, 65 & 83). A well established tradition in history and ethnography 'placed the core of the Romanian people, taking refuge' in mountainous Transylvania during 'barbarian invasions' (Pittard 1903: 46 & 83; Slavici 1881: 49). Fleshing out the Asiatic-European contrast, civilised mountain farmers were systematically opposed to nomadic eastern steppe barbarians. Kogalniceanu wrote in 1837 that a few Dacians fled from the Romans 'to impenetrable mountains', while later Daco-Romans 'stayed hidden in the Carpathians' from the Huns, spreading back into the plains when the last barbarians left (1976 [1837]: 55 & 59). From the Neolithic, Pittard said Wallachia reported successive 'floods of barbarians' from the east and north, sometimes 'almost without interruption' (Pittard 1920: 17-18). Race scientists like Preda and Lahovary used this to explain racial distinctions between Transylvanians and the open plains, which were influenced by 'various surrounding and invading peoples' because 'more open' to migration from 'north and south' (Preda 1924: 14; Lahovary 1927: 16). Daniel attributed Romania's acute biological degeneration to 'the colossal number of invasions' it suffered, beginning with 'floods of cross-breed races which... mixed with the ancient Galato-Celt aborigines, [and] submerged the superior ethnic cores' (Daniel 1939-40: 488-89). Swarthy 'Semite, Armenoid, Negroid' invasions and neo-Finns, including 'vast tribes' of 'Magyars and Turcomans' crossed with 'already impure Slavs', gave remaining superior elements 'the mortal blow' (Daniel 1939-40: 489). Pârvan minimised the cultural influence of steppe tribes, who just imported 'the primitivism' and 'anarchy of a constantly vagabond horde' (Pârvan 1937: 7, 22 & 36).

However no anthropological race became a truly emblematic national race in Romania, leaving it to serologists to politicise the mountain-plain distinction and make Transylvania, due to its relatively high frequency of A, a racial stronghold of European Romanianness against Asian incursions. In

one of the earliest results of Romanian serology, Popoviciu in 1925 argued that the higher, more 'European' biological index in Transylvania, among both ethnic Romanians and Hungarians, correlated 'with the richness in mountains' there, and 'drops considerably' towards the plains of Hungary and Wallachia (Popoviciu 1925: 155-56). Other serologists confirmed higher indices in highlands and 'their diminution in... the plain,' throughout the country (Dumitrescu 1927: 21; Landra 1942: 32; Popoviciu 1925: 158; Necrasov 1941: 125). Popoviciu, backed by Râmneanțu and most others, argued that the 'mountainous centre of Transylvania' was Romania's racial bastion and refuge against 'invading peoples from Asia' who repeatedly occupied the lowland 'regions open to migrations', leaving serological 'traces of mixture with Asiatic elements', and especially high levels of B (Popoviciu 1925: 155-58; Râmneanțu 1941: 153; Landra 1942: 44-45). While 'the A property varies little', he noted higher B levels in Moldavia and northern Transylvania, areas 'neighbouring the route of migration' and 'closer to Russia' and 'Poland, which too is rich in B', plus lower levels in Transylvania and the Banat lowlands, 'less open to the east' (Popoviciu 1925: 156-58). Necrasov blamed the 'greater frequency of group B' and blonds in northern Bessarabia, though otherwise racially like the rest of Romania, on its peripheral position, 'which favours foreign infiltrations' (Manuilă, Sauter & VestemEANU 1945: 68-69).

Popoviciu offered two complex arguments for his blood-based race history scheme. Because serologists found high frequencies of O among 'isolated' populations like northwest Europeans, Filipinos, and American Indians, he called O a residual, primitive property which the newer blood groups dislodged relatively easily, so that when A and B races mixed, B often substituted for O, rather than A (Popoviciu 1925: 160-61). He claimed his own research confirmed 'the diminution' of O 'by the exaggeration of' B (Popoviciu 1925: 161). Calling on the historical record that 'rich and easy to get to' areas like Poland and Hungary were the 'constant goal of barbarian invasions from the east', he pointed out that their low O and elevated B levels resembled those of Romania's lowlands (Popoviciu 1925: 162-63). Popoviciu's other argument for a mountain core of true Romanianness, preserved from Asiatic pollution, itself became an important theme of Romanian race anthropology. He distinguished very high localised frequencies of A in isolated Transylvanian villages from co-nationals in 'regions more open to mixture (in the valley)', attributing them to vestiges of a primordial super-European proto-Romanian race, whose purity, like similar areas discovered by Steffan in the German Alps, was protected by isolation (Popoviciu 1925: 158-59). Supported by Râmneanțu, Banu and the pro-Romanian Italian fascist anthropologist Guido Landra*, he later argued that mountain Romanians had Western European or even Scandinavian levels of the

*Landra saw the discovery of Aryan elements in Romania's prehistory as 'the best favour for the future of the Romanian people, who have finally found their true way, alongside the great Aryan peoples of the Axis' (Landra 1942: 22 & 28).

European property, while upland central Transylvania had the ‘purity of European race’ of ‘only a few mountainous regions of Europe’ (Popoviciu 1938: 12; Râmneanțu 1941: 153; Săhleanu 1979: 33; Landra 1942: 44-45). Following the same logic as anthropometrists, Cluj serologists took up Popoviciu’s search for authentic Romanianness in isolated mountain hamlets. Râmneanțu and others found a ‘somewhat higher’ index in isolated, supposedly ethnically pure settlements, concluding that the ancient Transylvanians ‘over which passed all the barbarian hordes,’ had ‘very rich European properties’ (Râmneanțu 1938: 222; 1939: 326-27). Lahovary has such confidence that highlanders represented the ‘historic and ethnic core of the people’ that he used their blood structure data alone as representative of Romanians as a whole (Lahovary 1927: 34).

The search for isolated, ethnically pure Romanians led Făcăoaru, Râmneanțu and David, Popoviciu and Birău, and Papilian and Velluda (twice) to Transylvania’s isolated and sparsely populated Munții Apuseni (Western mountains) (Papilian & Velluda 1941: 608). Făcăoaru attributed the much higher proportion of ‘uniracial’ individuals among Romanians than other groups there, to ‘less frequent’ race-mixing, adding that other Transylvanian Romanians he studied had a very similar racial structure (Făcăoaru 1937c: 125 & 129). As well as being an exceptionally rich storehouse of Romanian folkloric tradition, these mountains were geopolitically important as the last large area of almost exclusive ethnic Romanian population before the Hungarian frontier. Papilian and Velluda’s 1941 study of the Moți, an especially isolated Romanian group there, also found a high ratio ‘of European property A, and relatively a quite low one of Asiatic B’ (Papilian & Velluda 1941: 609-10). Various Moți blood indices of European and ‘Asiatic properties’ were ‘almost the highest found’ in Romania they claimed, comparable to ‘northern Italians, French, Germans, Danes, Norwegians’, which with ‘their isolation’, suggested very minimal and ‘very old’ foreign influence on the Moți (Papilian & Velluda 1941: 611-14 & 617). Transylvanian race scientists supported the Romanian historiographical narrative of Transylvania’s peasant biodynamic vitality (see pp.367-71). This ‘insisted’ the province was Romania’s ‘symbolic “reservoir”’, ‘continuously’ feeding, ‘like a heart, the national energies’, its ‘ethnic contribution... always’ supplying the ‘somehow weak zones over the Carpathians’ (Mitu 2006: 92). Moldovan made it ‘a powerful... centre of radiation of Romanian life... a nucleus of originary blood... which determined “the biological factor of the entire people”’ (Săhleanu 1979: 66). Râmneanțu drew on Pârvan to make the Transylvanian ‘arc of the Carpathians’ ‘not only an ethnographic hearth’ but an ancient ‘centre of expansion’, the pulsing heart of the national organism from which ‘blood irradiated into all’ Romania in a ‘current of flux and reflux’ (Râmneanțu 1943: 374; 1946: 2). He explained that ‘through the generator of vitality phenomenon, product of the rooting of man in the same earth, the population which retreated into the mountains multiplied’, preparing itself for ‘moments of peace’, when ‘its biological abundance’

flowed 'out to still further distances' (Râmneanțu 1946: 2). 'All anthropogeographic studies' on Transylvanian Romanians recognised their 'superior vitality', said Râmneanțu, producing a demographic surplus which 'very oppressive' Hungarian rule drove in repeated waves to migrate, renewing the Romanian populations of the plains (Râmneanțu 1946: 145-46). Pittard confirmed this migration for the eighteenth century at least (Pittard 1920: 58).

Transylvania and Hungarians

Transylvania was seized from Hungary in 1918, and German pressure forced Romania to cede its northern section, including Cluj, back to Hungary in 1940. Between these dates, the Hungarian-speaking quarter of Transylvania's population generated continuous irredentist resentment in Hungary and corresponding disquiet among Romanians, making this issue the main preoccupation of race serologists, especially in nationalist Cluj (Râmneanțu 1939: 326; 1941: 149; Popoviciu 1935-36: 78-80; 1938: 8). They applied three strategies to the problem. The first, in tandem with the Romanian mountain core theory described above, was to contribute evidence for primordial and unbroken ethnic Romanian occupation. The second, the denigration of Hungarians as Asiatic aliens, also had echoes in mainstream historiography, but could exploit the apparently rather Asiatic Hungarian blood structure. Though Lecca gave Hungarians an 'intermediate' Mongoloid Finnish type, though 'fairly close to the European', serology had a big advantage over traditional raciology, to whom Hungarians presented a rather unremarkable European appearance (Lecca 1931a: 47). The serologists' third strategy, of making Szeklers, the third of Transylvania Hungarians occupying a bloc of territory in the south-east, into Magyarised Romanians, with an 'identical' origin to 'Romanians in general', was rather original, though inspired by the ethnographer G. Popa-Lisseanu's 1932 theory that small bands of Szekler warriors denationalised Romanians (Popa-Lisseanu 1932: 7; Râmneanțu 1941: 149; Râmneanțu & David 1935a: 46). Râmneanțu and Petru David's 1935 serological study of the Szeklers, which aimed to prove this thesis, alone accounted for '20,092 persons', almost half the blood tests in interwar Romania (Râmneanțu 1939: 326; Popoviciu 1935-36: 80). By then, leading Cluj race serologists were shamelessly politicising the issue. A version of Râmneanțu and David's study began by declaring that the almost half a million Szeklers dominated a block of territory 'in the dead centre of Romania' (Râmneanțu & David 1935a: 45). It said 'the last fifty years of Hungarian political' rule tried to make this 'a specifically Hungarian region' and 'Hungary's outpost towards the east', but this was 'in vain' as most Szeklers maintained 'the relations established by their ancestors' (Râmneanțu & David 1935a: 45).

The serologists' declared aim to 'bring together peoples separated more' by politics than 'real differences' by claiming Transylvania Hungarians were racially Romanian, may not have been an

entirely cynical nationalist ploy (Popoviciu 1938: 15). Popoviciu, and Râmneanțu still more, cited many Hungarian language texts, and perhaps genuinely wanted to reconcile the Transylvanian peoples which their bilingual cultural experience suggested were fundamentally alike (Popoviciu 1938: 14). Transylvania's 'Romanian peasantry had a strong sense of regional identity', while Făcăoaru's claims of Transylvanian superiority reflected the 'early disenchantment with the union' felt by many 'young professionals' there, as 'increasing centralization after 1920' 'quickly disappointed' their 'great ambitions in 1918' (Szilagy-Gal 2002: 84; Bucur 2002: 30; (Făcăoaru 1943: 295-305). Popoviciu claimed the true biological nature of Szeklers proved impossible to suppress, their 'great differences of race' from 'Hungarians of the plain' explaining why they...

...have always gravitated towards the Romanian regions to which they felt closer, even as a race. The Szeklers always represented among the Hungarians a way of being, a particular spirit, which comes close to ours. A Szabo Dezso [an extreme racist novelist] remains an isolate in the Hungarian mass, incapable of adapting to the environment, an adept of the Latin culture, desirous thus to come back (Popoviciu 1938: 14-15).

Popoviciu was the first to note Szekler-Hungarian blood differences, Szeklers having 'a similar structure' to Romanians, demonstrating 'Romanian influences' (Popoviciu 1925: 158). However Râmneanțu made it his 'life's work' to prove they 'were in fact Romanians' who came 'to identify themselves linguistically, culturally, and ethnically as Hungarian', after being 'slowly Magyarized' by medieval Hungarian rulers (Bucur 2002: 145-46). He backed repeated studies proving a 'perfect superposition' of 'equal' Szekler and Romanian blood properties, with evidence like family names, Orthodox church ruins in the Szekler lands suggesting a 'very high' original Romanian population, and German historical theories that local Germans had also been Magyarised (Râmneanțu & David 1935a: 46 & 53; 1935b: 49; Râmneanțu 1941: 151 & 154; 1939: 326). Râmneanțu and David claimed their serological results and a complex mathematical formula from an American eugenicist Pearl provided 'biological and mathematical' proof 'that the ethnic origin of' those 'today called Szeklers is identical with' that of Romanians (Râmneanțu & David 1935a: 53). As their *true* biological nature was thus Romanian under the thin Hungarian cultural patina absorbed since the Middle Ages, they 'rightfully belonged to the Romanian kingdom' (Bucur 2002: 145). Râmneanțu said Hungarian historians believed Szeklers had an 'Asiatic' origin like the Hungarians, though perhaps as a Magyarised separate tribe, and that a leading Hungarian anthropologist agreed with him that Szekler soldiers were sent to man Hungarian border fortresses (Râmneanțu 1935a: 45-46; 1941: 150 & 155). They married local women and 'through the authority of military men,' backed by Hungarian rule, 'imposed' Hungarian speech in their families (Râmneanțu 1941: 155). This

cultural Szeklerisation increased the group's numbers and territory, but progressively diluted its original blood structure, a process which the 'circa 20%' of Romanian surnames among people speaking 'only Szekler' suggested had continued 'up until our time' (Râmneanțu 1941: 154-55).

While some Szekler villages had 'blood indices close to those of Uralo-Altai peoples', indicating 'Asian elements', the very high index of others significantly raised the overall average (Râmneanțu 1941: 155). Râmneanțu saw this as proof of Szeklerised Saxons, identifying villages with typically Saxon physical characteristics, family 'and even Christian names,' and culture (Râmneanțu 1941: 155). This was calculated to reinforce the traditional nationalist alliance of Saxon and Romanian against Hungarian domination, by publicising their common experience of cultural colonisation. Comparing Szeklers with 'Uralo-Altai peoples like the Hungarians, Bulgarians or Finns, to whom they are said to be related', Râmneanțu and David said the lower Hungarian biological index proved they had 'nothing in common' in 'ethnic origin' (Râmneanțu & David 1935a: 53-54). Because Bulgarian and Finnish indices differed from those of 'Szekulised Romanians' meanwhile, they declared that the Hungarian historical theory of a common origin 'on the banks of the Volga' for Szeklers and 'the ancestors of the present day Bulgarians' was baseless (Râmneanțu & David 1935a: 55). Though Râmneanțu and David's Szekler theory was based on races changing their language and culture, this theory claimed that Slav-speakers inhabiting previously Thracian, Greek and Roman territory, were actually pure-bred descendents of medieval steppe invaders. Râmneanțu and David's description of 'Szekulised Romanians' as 'in the middle of the Romanian area' on a type of serological diagram called a Streng triangle was equally disingenuous (Râmneanțu & David 1935a: 57; see Fig. 6.4). While the two groups had similar levels of A and B properties, most Romanian populations plotted much higher levels of O than the Szeklers, and so cluster above Szekler areas on the triangle.

Other Transylvanian race scientists enthusiastically took up Râmneanțu and David's Szekler theory. Râmneanțu's friend Făcăoaru found the Szekler 'racial structure', pigmentation and quantity of 'Mongolid elements' were all intermediate between local Romanians and Hungarians, but closer to the former, suggesting all three had 'a common ethnic substrate' (Făcăoaru 1937c: 124 & 135-37; Papilian & Velluda 1941: 17). He said 'Szeklers only vary with respect to Romanians' of the same village, as much as Romanians varied from village to village, and Transylvania Hungarians had a 'more favourable' racial mix than in Hungary, 'probably because of intensive mixing with Romanians, Slavs and more importantly with Germans' (Făcăoaru 1937c: 130; 1943: 284). He and Râmneanțu agreed that 'historical data', blood groups and the anthropometric facial index all showed 'the great mass' of south-east Transylvanian Romanians, Hungarians and Szeklers had 'the

same ethnic, Romanian origin' (Făcăoaru & Râmneanțu 1939: 337-39). In 1938 Popoviciu said most Transylvania 'Hungarians, and in particular the Szeklers,' resembled neighbouring Romanians much more than their 'more Asiatic' compatriots on the plain, and that certain mixed Romanian, Hungarian and Szekler highland villages had remarkably high biological indices (Popoviciu 1925: 158-59; 1938: 8 & 12). He said that despite 'erroneous' enemy claims that non-Romanians or recently Romanianised populations inhabited Transylvania, 'historical documents' showed that foreign rule 'took from the Romanians their nationality' and that 'numbers of' Szeklers and 'even of Hungarians today in Hungary, were Romanians 70 to 80 years ago' (Popoviciu 1938: 3).

The two main Cluj serologists fed off one another's proposals, constantly striving for more ambitious nationalist theories. Popoviciu outdid Râmneanțu's Szekler theory by arguing that even Hungary's Hungarians were originally Romanian, though this left him struggling with the corollary that Magyars could no longer be Asiatic Mongoloids. Râmneanțu and David tentatively extended Magyarised Romanians beyond southeastern Transylvania to ethnic Hungarians near the Hungarian border, with a low biological index approaching that of 'Hungarians in general', saying they 'absorbed some Romanian elements', but could not fully 'Magyarise' them (Râmneanțu & David 1935a: 53-55; Râmneanțu 1937: 145). In a rare use of anthropometric races by Cluj serologists, Râmneanțu said many Transylvanian Hungarians had race types more like Moți than Hungarians (Râmneanțu 1939: 327). In 1933 Popoviciu claimed that western Transylvanian Hungarians also resembled neighbouring Romanians and Szekulised Romanians, with a high European and low Asiatic property, and because this 'European base' was without a doubt 'of Romanian origin', Popoviciu claimed Romania's ethnic Hungarians were 'as a general rule Magyarised Romanians' (Popoviciu 1938: 10 & 13-14). Other blood indices of Transylvanian Hungarians were 'in general identical or very close to Romanians and the Slavs of the north and west', and the 'Magyarised Slavs and Teutons of Budapest' (Popoviciu 1938: 12). Popoviciu then expanded this similarity still further to 'Romanians more recently slavified in Bukovina and in Bessarabia,... those lost in the Hungarian masses of today's Hungary and Czechoslovakia,' and 'the Romanians of the Balkans which adverse political circumstances have little by little made disappear almost completely' (Popoviciu 1938: 3). He claimed the true nature of this population was Romanian, even if its ancestors never spoke Romanian or lived in a Romanian state, by making Romania the heir to the Roman Empire in south-east Europe. Romanianness was projected back to antiquity and the true nature of the region's population arbitrarily attributed to Rome. Having laid a Romanian racial claim to large swathes of south-east Europe, Popoviciu used the same logic to break up the Hungarians. He insisted they 'cannot be considered... a specifically Hungarian race', being similar in blood to neighbouring Slovaks and South Slavs and to Transylvania Romanians in central and

especially eastern Hungary (Popoviciu 1938: 11-12). He therefore claimed Romanians preceded Hungarians 'in these regions' and that most original Magyars 'disappeared in foreign and civil wars' soon after founding the Hungarian state (Popoviciu 1938: 4 & 11). 'Historical documents' and their large regional variations in 'anthropological aspect, clothes, popular poetry, dances, and even moral qualities', showed Hungarians were mostly formed 'from foreign elements' that they 'dispossessed' (Popoviciu 1938: 4). The persistence of 'the Hungarian state and language' was 'thanks to the great masses of Romanians, Slavs and Teutons' that they 'absorbed' (Popoviciu 1938: 4).

Using other serological indices, Popoviciu divided Hungarians into two groups. He emphasised connections between the Hungarians of Debrecen and Transylvania, the 'Magyarised Slavs and Teutons of Budapest', as he called Hungarians there, Szeklers, Romanians and various Slav neighbours, and their racial distance from the 'much more Asiatic' Hungarians around Szeged in the south-east (Popoviciu 1938: 12-13). He attributed this 'powerful Asiatic influence' and an index similar to Finno-Ugrians in Russia, to the confluence of major rivers at Szeged, a 'point of attraction for the Finno-Ugrian peoples', though Nordic levels of A type blood in the area suggested this Asiatic blood was 'grafted onto a Romanian base' (Popoviciu 1938: 11-13). Despite identifying just this one dubiously 'Asiatic' region in Hungary, Popoviciu next compared Hungarians of 'European' racial origin, who corresponded 'perfectly' with 'Romanians in the Streng triangle', with Hungary's racially Asiatic plains (Popoviciu 1938: 13). Popoviciu surmised that 'opposition between the capitol and the province, much more accentuated than in other countries', might have helped distance Transylvanians and Budapest's 'Magyarised Slavs and Germans' from 'the Asiatic element of the plain' (Popoviciu 1938: 13-14). Budapest represented 'the European race and civilisation', which citing Hungarian writers, Popoviciu said 'always remains foreign for the Magyar population, inadaptable, always in revolt against it' (Popoviciu 1938: 14). This contrast of metropolis with plain rather than countryside recalled Romania's nationalist mountain-plain dichotomy, with steppe equated to Asiatic nomads, while European race and civilisation took refuge in highlands or recolonised with cities.

If Romanian bloodstock survived in mountains, it suffered Asiatic dilution on plains to levels approaching Fischer's definition of the Mongoloid race (Popoviciu 1938: 10 & 12). Popoviciu was determined to exclude any suspicion that Hungarian or other 'Mongoloid' blood had done the diluting, instead volunteering Slavs of the north-east, whose serological structure resembled the Hungarians, as the most European option available on the steppe (Popoviciu 1938: 10 & 12). Right-wing German race science influenced Râmneanțu and Popoviciu, but unlike Lahovary, Daniel and

Făcăoaru, they did not parade anti-Slav or anti-Alpine prejudices (Popoviciu 1938: 13; Daniel 1939-40: 489). Hungarians massively outweighed Russians as a perceived threat in Transylvania, defining the main target of nationalist scientific racism. In 1925, Popoviciu attributed rising frequencies of B in Romania towards the surrounding plains to migrations ‘from the east, very easy in these regions, specially to the Slav element of the north-east’ (Popoviciu 1925: 164; Manuilă & Popoviciu 1924: 543). Lahovary then cited two Romanian historians to insist that the relatively similar Hungarian and Romanian biological indices were not due to their ‘long cohabitation’ in Transylvania, but to medieval mixing with steppe people, and ‘Slav-Oriental peoples’ on the southern and eastern plains (Lahovary 1927: 30-31). Râmneanțu, Papilian and Velluda all ascribed increased levels of group B in Transylvania to ‘foreign influence’ from Moldavia (Râmneanțu & David 1935a: 52; Papilian & Velluda 1941a: 613). Popoviciu assertively rejected Hungarian influence on Romanian lowlanders in 1938, arguing they were ‘more exposed to migrations from the south-east’ deriving Asiatic tendencies ‘from the east, from Moldavia’, where ethnic Russians especially had similar indices, and from Slavs beyond in ‘the north-east’ (Popoviciu 1938: 9-10 & 12). He even refused to ascribe the ‘limited regions’ of Szeklers with ‘very high’ proportions of the Asiatic property to racial vestiges of original steppe Szeklers, as Râmneanțu implied, deriving them instead from a probable ‘Romanian source, from Moldavia, to which the Szeklers are also very [racially] close’ (Popoviciu 1938: 10). Szeklers were intermediate between Transylvanian and Moldavian Romanians on one index he noted (Popoviciu 1938: 13).

Cluj serologists were ultra-nationalists, and appreciated serology in large part because they could create nationalist race narratives with it much more successfully than anthropometric raciology. However international serology’s fundamental axiom of Western superiority alienated them from the nationalist Romanian historiography narrative of a local Dacian origin. They were also distracted by Transylvanian issues and compared with Bucharest colleagues, unversed in historiography. Their largely apolitical serological studies of 1920s Cluj recorded similar biological indices for Romanians and their Balkan neighbours or neutrally placed Romanians in their geographical location, between Balkans peoples and ‘the Slavs of the north-west’, which with ‘other points of view’ implied a Dacian origin (Popoviciu 1925: 154 & 164; 1938: 7-8; Manuilă & Popoviciu 1924: 542). By 1937 however, Popoviciu signalled his nationalist radicalisation by making Romanians racially intermediate between Western and Eastern Europe, moving their racial position much further west, and attributing this to a common Roman heritage (Popoviciu 1938: 13). He ‘rectified’ Steffan’s serological map to ‘show our affinities with the populations of the Alps, the Rhine, Scandinavia, Italy, Spain, the Balkans’ the Black Sea coast and Asia Minor (Popoviciu 1938: 13). He attributed the ‘striking’ racial resemblance of peoples from Bessarabia and

Czechoslovakia to the Balkans to ‘all these regions’ [sic] once being in the Roman Empire and so ‘inhabited by peoples more or less related’ (Popoviciu 1938: 4). Popoviciu had a Francophone orientation unusual for Cluj, but Râmneanțu and David’s 1935 Streng triangle also placed Romanians between Western Europeans and a ‘Mongoloid’ cluster of Slavs, Hungarians, Finns, Bulgarians and Turks* (Predescu 1940: 683; Râmneanțu & David 1935b: 56-57 & 62; Popoviciu 1938: 13; Fig. 6.5). Râmneanțu added that the European property of Western Europe and the Nordics and Lapps, was ‘also’ common ‘in the Balkans’ (Râmneanțu 1941: 148). Banu in Bucharest similarly claimed ‘Romanians belong serologically among the peoples of Europe, close’ or ‘identical’ to Central European and Balkan peoples (Săhleanu 1979: 96).

Conclusion

Neo-romantic historiographical accounts of an authentic Romanian peasant nation, descended from ultra-ancient Dacians, suited the needs of Romanian nationalists very well. However most Romanian race classifiers, preoccupied with international narratives of Celts or Nordics, and highly dependent on French and Austrian, and later German training, publications and methods, gave far less attention to their useful ethnic ancestors than their Polish, German or Russian colleagues did. Interwar raciologists meanwhile largely turned from the quite useful, in nationalist terms, French Celtic synthesis model in the face of German domination and technical leadership in the international discipline. They instead devised ingenuous strategies to reconcile Romanian nationalist narratives with German Nordicism, including syntheses using the ‘French’ Celts and exploiting the deep contradictions between elitist, peasant and serological elements of *völkisch* race ideology. In this period of disintegration of international raciological community, even very weak national anthropological establishments could achieve some freedom, playing in particular on the plurality of voices within the core of the international discipline. However these strategies were uncoordinated (variously identifying Romanians with Nordics, Phalics, Alpines, East Europeans and Dinarics), Romanian technical innovations were minor, and the attempt to adopt such unsuitable foreign ideals as the blond Nordic indicated a deep peripheral dependency on both the raciological techniques and master narratives of ‘international’ raciology. The residual positivist ideal of raciology did not help. While Necrasov and Rainer appeared so genuinely apolitical that they made almost no contribution to racial identity narratives, Făcăoaru’s take on positivism promoted Nordicism over Romanian political narratives. As raciologists began to organise professionally, they might with time have crystallised around a nationalist race narrative, as foreign colleagues and Romanian serologists did, but these efforts were interrupted by the transformed political context

* As usual in serology they ignored the ‘recessive’ O property, which gave Romanians a much less western position

after 1948. Serologists did far better in nationalist terms, selecting a discipline which permitted far more outrageous breaches of scientific etiquette and portrayed Transylvanians as superior Europeans and Hungarians as Asiatic barbarians. However even in serology, the international narrative norms mandated a retreat to the old liberal narrative of Latin Romania, rather than the nativist Dacian model preferred by neo-romantic nationalism. This Latinism reflected the strength of a very Manichean European-Asiatic dichotomy in Romanian narratives. Despite neo-romantic Dacianism, this had been deeply ingrained by the Roman origin tradition, was an ideal anti-Hungarian weapon and perhaps for internationally inclined scientists in particular, countered Western assumptions of Balkan backwardness.

The introduction of German raciology illustrates the complexity of cultural transmission. Its reputation for technical modernity attracted scientists and although its political narratives were not very suited to Romania's case, its association with *völkisch* nationalism appealed to Romania's neo-romantic ethno-nationalism much more than the Western retreat from race, despite the French influence on Romania. However just like in Poznań and Lwów in Poland and Breslau in Germany, it also prospered because geopolitically contested Transylvania was crucial to Romanian nationalism, leading to heavy investment in nationalist science there. Building on the province's traditional links with Austrian conservative politics, Moldovan and his students brought eugenics based raciology directly from Germany.

Conclusion

‘Where be your gibes now, your gambols, your flashes of merriment, that were wont to set the table on a roar? Not one now, to mock your own grinning? Quite chapfallen?’

Hamlet to Yorick's skull (V.1.186-90).

Classification emerged from two traditions, the classificatory mania of Enlightenment naturalists, whose concern was especially with global races, and the proto-nationalist inquiry into the origins and filiations of nations. This was conducted by historians, using mostly classical Greek and Roman sources, and antiquaries, who collected ancient objects, etymologies and traditional lore and customs. In the 1820s-30s, medical men like Edwards and Prichard united these two traditions in the new scientific project of ethnology. Ethnologists identified themselves as natural scientists, drawing on the prestige of science, but many came from and worked in the antiquarian tradition. They were especially influenced by philology, which alone of the humanities, developed an ethnic taxonomy technique whose rigour compared with natural science. By 1840 however, academic anatomists like Blumenbach, Morton and Retzius developed a craniological science of ethnicity which Broca, a Paris neurology professor, turned into a quantitative statistical technique for mass surveying. Throughout the history of race classification, scientifically prestigious quantification advanced at the expense of descriptive approaches, despite the inherent difficulty of reducing biological forms to numbers. Broca refounded ethnology as craniology-centred anthropology in 1859 and it took off dramatically, finally winning government support. Ethnology had made European race classification a discipline in the eyes of its practitioners, organised in societies which published journals, but just a few ethnologists, mostly in museums, were recognised professionally as such. A few others managed to classify races as part of their work as professional anatomists or naturalists, but most were hobbyists. Anthropology made the crucial breakthrough to dedicated university chairs, its new main base, allowing systematic continuous training and regularly financed research.

A vital source of political support was anti-clerical republicanism, which in Latin countries especially was locked in conflict with the anti-scientific legitimism of the Catholic Church. However ethnology and anthropology also owed much of their popularity and government support

to the ethnic nationalist belief that nations, though principally defined by cultural features like language, were ancient biological bodies of descent. Ethnology's races were initially ethnic tribes like the Ligurians or Celts, which classical texts mentioned and historians linked to modern nations. Ethnology gave each ancient tribe a set of racial physical features, and even when anthropology moved increasingly to defining races exclusively by these features, the new physical races kept the particular national associations of the ancient tribes. Romantic nationalism decided for example that the French were Celts, ethnologists said the Celts were dark and broad-headed, and anthropologists gave the name Celt to this type and still linked it with the French even after its name had been changed to the ethnically-neutral 'Alpine'. Polygenist theorists developed a model of physically and psychologically fixed eternal race which was tailor-made for ethno-nationalist accounts of the adventures of the nation from prehistory on. In the century from ethnology to raciology, this model proved invulnerable to the greatest scientific paradigm shifts, as monogenists, evolutionists and Mendelians successively adopted its politically essential parts. When key elements, such as racial differences between modern ethnic groups were discredited, theorists fell back on theories that the originally pure race of the group stamped its culture indelibly. Though positivism inclined professionalising anthropology to concentrate increasingly on its positive anthropometric results, which primarily delivered geographical information, the ethnic connection made race history a constant preoccupation, extending the national roots into prehistory. Race schemes were politically hypersensitive, so that even some profoundly innovative taxonomic methods, like those of Sergi and Stołyhwo, produced remarkably conservative schemes. Ethnic nationalism similarly explains why races drew so much more on ethno-linguistic than confessional categories, which were often much more important for individual identity than the rather academic idea of language families. Nordic-Germanic narratives regularly claimed Protestant superiority over Catholicism, but neither Polish nor Romanian anthropology emphasised religion, though it was intensely important in both national identities. Catholic Poland instead stressed the majority Orthodox ethno-linguistic Slav identity. Legitimist, anti-scientific Catholicism was hard for the often republican positivist classifiers to identify with meanwhile. While ethno-political factors were crucial to the narratives and disciplinary development of race classification, so were ideological politics, academic disciplinary self-definition and interaction, and of course scientific evidence and theory. These factors all interacted. The nationalist Polish choice of Nordic ancestors for example largely excluded anthropologists from the central battle in national ethnology, over the borderlands with Germany, because ancient German skulls were identical dolichocephals. Theoretical positions on mono or polygenism meanwhile determined whether classifiers believed Aryans wiped out Europe's aboriginal population.

While social sciences like philology developed around a specific investigative method, race classification eclectically mixed biological and cultural research to trace a historical continuum from biological races to cultural nations. An enduring conviction that psychology was heavily race-determined facilitated this assumption. Races were defined and recognised by collections of disparate markers, from skull shape to design of prehistoric pottery and grammatical system, which were very often given positive or negative associations. The epitome of this practice was the superior Aryan race, which was ascribed linguistic, archaeological, psychological, anatomical and socio-political features. Anthropology aimed to establish biology and especially craniology as much more central and dominant in the classification discipline complex than they had been in ethnology. It excluded philology, whose separate taxonomic systems were fearsome competitors, and the philosophical or political ethnology tradition, which had little connection with anthropometric study and clashed with the apolitical doctrine of anthropology, but promoted archaeology of human remains and artefacts as its main source on the ethnic past. The trouble was that evidence increasingly suggested that cultural and biological traits, or even different biological traits, like skull shape, stature and pigmentation, did not systematically correspond with one another, and certainly not in national ethnic groups. Classification was therefore disappointed by successive sources of evidence that it enthusiastically took up as keys to ethno-racial history, beginning with classical texts and antiquarian etymology, and later including philology, serology and even craniology. Western anthropology therefore gradually retreated from ethnic race in the later nineteenth century, abandoned the race concept by the mid-twentieth century and broke up into various biological and cultural branches, some of which retained the tags of anthropology, ethnology or ethnography. This was partly due to Western nationalist discourse more broadly turning away from ethno-racial superiority narratives like Celticism and Anglo-Saxonism, in favour of narratives of national synthesis and superior civilisation. The ethnic theme still heavily dominated nationalist thinking in Germany, Central Europe and the Balkans however, where race classification revived most strongly from about 1900. It exploited an interpretation of Mendelian genetics which suggested physical traits were inherited in racial bundles, to create new race classification sciences like raciology and serology. These reforged alliances with cultural disciplines and in Germany and to an extent elsewhere, also allied closely with political race theory, the successor of philosophical ethnology which enjoyed a renaissance from the 1890s on. This politicised link with *völkisch* German nationalism however made raciology increasingly radioactive for foreign anthropologists as Hitler rose to power, accelerating the ultimately universal abandonment of race in anthropology.

The positivist doctrine of scientific universalism which gave science its status as a socially accepted source of truth, the transnational geography of races, the practical need for common idioms of communication and the common canons of authorities, disciplinary history, techniques, tools and schemes, all made classification intensely international. The classification community was nevertheless organisationally subdivided into sub-national schools, national establishments, the zones of influence of the three main languages (French, German and English) and, very importantly, into a core and periphery. Rival sectional interests like nationalism within an international union made core-periphery relations almost inevitable, as their defence and promotion required hegemonic power. My research suggests that race classification disciplines institutionalised more securely and often earlier in a north-west European core, which took peripheral classifiers less seriously and even relied on non-locals for authoritative anthropological description of peripheral areas. While the core developed the canonical techniques and race schemes, the peripheries published and attended international conferences less and tended to use foreign 'international' languages (though this was a somewhat ambiguous index of peripherality). While communication within the core was open and multilateral, some peripheral regions communicated almost exclusively with specific, locally dominant portions of the core. Core areas developed straightforwardly supremacist race psychology narratives of conquest, civilisation or Europeanness, while peripheral narratives like those of the hyper-authentic or demographically potent peasant, and the romantic (semi-)Asiatic, were often compensatory instead, criticising materialism and Westernisation as shallow and alien, or promising future success in these areas. Peripheries were also less likely to go beyond the relatively easy task of reinterpreting race psychologies to major reformulation of race schemes. Incorporation into international classification provided peripheral scholars with technical resources and professional validation, but placed their local races at the mercy of broader narratives. International Celtic scholarship boosted the prestige of Ireland's Celts and Celtic scholars, but Morash claims it reduced Irish Celticist politics to a 'mundane, parochial, diminished' affair (Morash 1998: 212). However just as in European integration, core membership never meant freedom from external interference. Even the most powerful participants were part of an interdependent system, whose techniques and races were both international. Peripherality and centrality were defined by the balance and nature of influences, and especially by how much originality was permitted a country in its quest to make the national race superior. While Stołyhwo and Hildén did little more than reinterpret internationally dominant race psychologies, Broca's France, Sergi's Italy and Czekanowski's Poland went beyond this, creating new dominant narratives with at least some foreign reception. At the weakest end of the spectrum, Irish Celticists and Romanians just concentrated on the disciplines (philology and serology respectively) that happened to support their nationalist positions. They made little or no attempt to

mould those disciplines still more to their needs, and Romanian serology even renounced the nationalist doctrine of autochtonism to tally with the international discipline.

Until the end of the nineteenth century, the core was Paris, and the cities of the German-speaking lands, south-east England, Scandinavia, the low countries, Italy and the American north-east. France and Germany, supported by England, had a special importance due to the size and consistency of their contributions to international classification. Other core areas like Sweden, Scotland, the U.S. and Italy made more episodic major contributions, often connected with key individuals like Retzius, Morton and Sergi. The big three also fluctuated in importance, with German peaks in the late eighteenth century and interwar period, Britain in the mid-nineteenth century and France throughout that century, but even at their nadirs, they maintained a significant presence. Each classification discipline had geographic peculiarities, so that Germans massively dominated early philology, the French pioneered palaeontology, Austria had a special role in serology and regional specialisms like Celtic and Slavic studies had predictable regional organisations. The big three countries, and their languages especially, were a vital structuring factor in international classification. Belgium, Francophone Switzerland and perhaps Italy and Iberia tended to defer to and privilege communication with Paris while London was clearly the capital of English-speaking classification, and all ethnic Germans formed a single scientific nation, with which Scandinavia and Central Europe had tight links. Strikingly, Slav classifiers often criticised their German nationalist adversaries and declared fraternity with France, while training in Germany, reading German authorities and adopting German theories. Given the core status of Scandinavia and later of Poland and Prague, and the 'federal' organisation of German-speaking anthropology, it might be argued that the entire north-eastern zone acted as a sub-region of international classification rather than a purely German hinterland. Leading researchers in places like Dublin, Cracow or Lyon were recognised in full standing in international classification, but the weak development of local anthropology left them isolated and dependent on the metropolis. While French and to an extent British provincial cities were in roughly the same peripheral boat, German and Italian race anthropology was very decentralised. In the Balkans, much of Iberia, Russia to the south and east of Moscow, the American West, Asia, Africa and European nations with foreign elites, like the Baltic countries, Ukraine, Slovakia, Finland and Catholic Ireland, there was practically no internationally recognised European classification.

The scientific universalism and prestigious institutions of positivist anthropology, including international conferences, efforts to standardise methodologies and especially the general acceptance of taxonomic tools like the cephalic index, intensified its international coherence. From

the 1870s especially, the Celto-Slav theory helped integrate all Europe's local ethno-racial history narratives into a common three-race system, while Anglo-Saxonist and continental stereotype systems merged. The common stereotype system in which all parties recognised the fundamental contrast between warlike Teutons and peaceful Slavs and French Celts appears to date from an earlier period. Both these stereotypes and the ethno-racial narratives helped develop national consensus on evaluating modernity and responding to it. Race narratives of national synthesis and of pure ruling Nordics offered subtly different models of class hierarchy for example. Many countries developed rival classification schools, based in separate institutions (anthropologicals and ethnologicals in 1860s London, *Muséum* vs. *Ecole* in 1880s Paris), cities (Stołyhwo's vs. Czekanowski's Lwów, Sergi's Rome vs. Mantegazza's Florence) or disciplines (liberal anthropology vs. *völkisch* archaeology and folklore in 1900s Germany), which expressed different narrative and political options. However because the narrative system was international, with even nationalist rivals accepting the same stereotype contrasts, the national debates used pan-European idioms for dealing with a pan-European issue. The institutionalisation of anthropology from the 1860s coincided with a geographical expansion of the classification community, most spectacularly from about 1890, when Italy, the United States, Russia and the newly-independent countries of Central Europe successively became important and contributions began trickling in from the Balkans, Iberia, and larger European colonies. As the core expanded however, it became far less coherent. Nationalist tensions between the two biggest classification 'powers', France and Germany, set in after 1870 but intensified as the German discipline drifted towards *völkisch* nationalism from 1900, while the 1914-18 war isolated Russia and the Central Powers and soured relations on all sides. This was clearest in the emergence of separate French and Anglophone dominated anthropology congresses in the 1930s.

Fledgling national anthropology establishments had to huddle together to demonstrate their universal scientific legitimacy, but once established at home as patriotic sciences, their priority was to burnish national scientific prestige with innovative theories and to reject and reformulate internationally accepted narratives which slighted the national honour. The Celts of Broca and the Gallic school, the European Aryan Nordics of the Germanicists, Sergi's Mediterraneans, Hildén and Stołyhwo's East Europeans and Czekanowski's Slavic Nordics all did this, but while the Gallic school Celts were widely accepted, the later narratives fractured international scientific consensus. If liberal opposition to anti-scientific and especially Catholic conservatism had united positivist international anthropology, anthropologists in twentieth century Germany and countries to its east campaigned for political support on a nationalist platform. Ironically, Catholicism became a divisive factor, a despised marker of inferiority for Nordicists and a barrier to racist science by

Catholics. The failures of traditional craniological classification meanwhile led to a parallel terminal disintegration of its discipline complex, amid a plethora of competing reform proposals. Western European and especially British anthropologists turned increasingly towards intelligence gathering for colonial authorities, and a classification obsession with stages of evolutionary development rather than races, both of which favoured a cultural rather than biological focus. The cultural anthropology of Mauss, Malinowski, Radcliffe-Brown and Boas's students had almost nothing to do with raciology, which meanwhile split into separate, mostly national schools. There were limits to these divergences however. Disciplinary splitting was less pronounced in Anglophone anthropology and international conferences, while nationalist raciologists established new disciplinary complexes. All raciologists meanwhile, despite their sometimes extreme nationalism and chauvinistic racism, maintained a strong sense of apolitical, positivist scientific identity, and were determined to maintain their international links*. International serology and eugenics reconciled racism with universalism with racist internationals that excluded Jews or extra-European 'natives'. Anthropology increasingly moved, including in narratives like the three-race scheme and Scandinavian Aryans, from models of an open international system with a Parisian or West European centre to a closed superior Europe with internal equality.

Fernand Braudel insists that civilisations, which 'can always be located on a map', are 'generally ancient and long-lived' but 'almost unconscious' structures of 'common mentality' which outlive shorter term 'accidents and vicissitudes' of history and profoundly influence 'the whole mass of society' (Braudel 1995b: 9, 22, 28 & 35). My approach to cultural geography therefore stresses spatial connections rather than the processes of history, economics and sociology, and 'accidental' or 'unconscious' patterns that emerge from long-term complexity rather than those produced by conscious organisation. Race classification and European integration, as long-term processes of complex multilateral interaction, are ideally suited to this kind of cultural analysis. As they succeed one another chronologically on roughly the same territory, they can also test the durability or transformation of the region's cultural geography patterns. The spatial organisation of race anthropology underwent important changes, like movements of the core's centre of gravity and the dramatic post-1890 expansion, but the three main linguistic zones and the basic core-periphery geography remained fairly stable. Its geographical parallels with European integration are legion. The Western core, dominated by France and Germany, the enlargement to a peripheral east, the common Anglophone, and possibly also Latin blocs, and the international relations strategies of Britain, France and Germany within international organisations all look familiar. This is not due to a mysterious cultural *deus ex machina*, but to the familiar objects of history and social science.

* Stalin however ensured the international isolation of Russian raciology.

Race classification and European integration were parts of related processes of modern scientific and economic development, and their geographies reflect this quite strongly. After four decades of Soviet control, Central Europe now seems to lean politically and culturally (religiosity, nationalism, language learning) towards America, rather than act as a single bloc with Germany and Scandinavia as before. However this trend had already begun in the interwar period and anyway may not be as advanced in the economic sphere. The Orthodox-Catholic divide, which was relatively unimportant in the narratives and interconnections of the race classifiers, now seems to parallel the geography of integration much more closely and was used both by Huntington and in Central European arguments for integration*. Race classification may have been exceptional in its focus on ethno-linguistic as opposed to religious identities, and Romanian historians like Iorga certainly were interested in 'Byzantine culture', but the pendulum has probably swung recently towards confessional culture narratives and patterns. This might suggest that different circumstances activate different series of potentially important cultural geography frontiers, which otherwise lie dormant. This could be investigated by comparing my research with studies of integration and other cultural phenomena as systems of networks.

If, as Gould argues, IQ testing is the direct descendent of race psychology, genetics may offer a new home to race classification. Since the 1970s, geneticists like Allan Wilson and Luca Cavalli-Sforza have engaged in high-profile and sometimes heated debates about the genetic history of world population movements (Langaney, Hubert van Blyenburgh & Nadot 1990: 43-44; Economist 2000: 11-12). Genetic historians question whether human races have any 'useful biological meaning' and challenge assumptions about 'significant genetic differences' between them, by finding that 85% of all 'genetic variability' is between individuals within supposed 'racial' groups, as opposed to between them (Economist 2000: 11-12; Langaney, Hubert van Blyenburgh & Nadot 1990: 45 & 49-52). Much genetic history nevertheless reproduces a remarkable number of race classification features. Its technique of tracking mutations in mitochondrial DNA resembles the sound shift method of comparative philology. Geneticists are meanwhile 'certain', mostly from twin studies, that genes influence behaviour, and claim to have isolated genes involved in 'a tendency to extreme and sudden violence', 'high intelligence', 'risk-seeking' and hyperactivity (Economist 2000: 13). Recalling the mono-polygenist dispute, which serology revived in 1918, rival genetic theories trace diversity to migrations from a single source, or 'polycentric' separate local divergences in the evolution from *Homo erectus* to *H. sapiens sapiens* (Langaney, Hubert van Blyenburgh & Nadot 1990: 45 & 49-52). As in the 1830s, the migration theory allows dendrographic identity narratives

* This is not to claim that the relationship between geographies of cultural commonalities and communication and those proposed in narratives is not automatic however.

which preserve a chain of overall continuity, but recognise ‘spectacular variations’ between widely separated groups and partial interruptions in continuity due to local geography, climate, ecology and historical colonisation pattern (Langaney, Hubert van Blyenburgh & Nadot 1990: 44-46; Economist 2000: 11-12). Some migration theories assume that modern populations are genetically the same as prehistoric inhabitants of that region, privilege dendographic splitting over fusion and compare ‘arbitrary’, preconceived population samples like ‘Blacks-Yellows-Whites, Negroids-Caucasoids-Mongoloids, Africans-Europeans-Asians’ (Langaney, Hubert van Blyenburgh & Nadot 1990: 46-47). These initial groups heavily influence the resulting classifications, which are therefore, just as in race anthropology, ‘unstable’ and ‘contradictory’ (Langaney, Hubert van Blyenburgh & Nadot 1990: 47). Geneticists who reject these assumptions seek instead, just like race anthropology, to organise discipline complexes with palaeontology, artefact archaeology and linguistics, even using linguistic terms like Bantu and Indo-European for genetic groups (Langaney, Hubert van Blyenburgh & Nadot 1990: 51). As ever, these disciplines ally and clash over classification, sometimes borrowing ‘doubtful and unproven spectacular “results”’ (Langaney, Hubert van Blyenburgh & Nadot 1990: 51). ‘Monogenist’ and ‘polygenist’ factions within linguistics and genetics support one another, but geneticists complain that archaeologists assume ‘out of Africa’ theories without debate (Langaney, Hubert van Blyenburgh & Nadot 1990: 51-52).

Genetic historians sharply criticise the assumptions of their colleagues and recognise that the interaction of multiple genes with one another and the environment makes understanding genetic psychology a ‘surprisingly intractable problem’, in which single genes are often extremely weak contributory factors (Economist 2000: 13-14; Langaney, Hubert van Blyenburgh & Nadot 1990: 44). However some geneticists, like many race anthropologists, naively believed in a purely objective natural history of humanity, underestimating the dangers of laypeople instrumentalising genetic histories which clearly suggest family trees of modern populations, including their degree of closeness. The common theory of Australian Aborigines, Khoisan and Pigmies as ‘direct descendents of our first ancestors’, could imply they are especially backward, or at least diverge far from other humans (Langaney, Hubert van Blyenburgh & Nadot 1990: 46). Genetics also threatens romantic authenticity narratives, the discursive flip-side of primitiveness, like that of Mother Africa. Educated Westerners reject race explanations as unquestioningly as previous generations assumed them. Many accept complex interaction between individual agency and historical, social, economic, cultural and geographic factors, but few willingly include inherited group biological characteristics, or race, among them. If we mainly reject race because its was used for terrible purposes, and offends our meritocratic sensibilities, our scientific grounds for doing so may be weaker than we think, as new generations of geneticists or others might prove. The only safeguard may be to prise

open this historical Pandora's box, nailed shut with such difficulty, to illuminate that people always bring their human agendas to studying human biology.

The experience of race anthropology suggests however that while scientific authorities condemn racism and political use of their work, it is of limited use to racist polemicists. Biology was so traumatised by eugenics and Nazi racism that a conversion to *völkisch* thought seems unlikely. However if biological race is criticised for legitimising existing power structures as natural and fixed, cultural determinism is arguably just a more flexible instrument for the same purpose. It is just as compatible as race with hierarchical ranking of human groups. Anthropological race ranking systems like evolution succeeded Enlightenment hierarchies of levels of civilisation, like those of Montesquieu, Turgot and Adam Smith, and were themselves replaced in the twentieth-century by non-biological concepts like economic development (Stocking 1987: 14 & 160). If culture determines social structure, then change will be slow, and elites can place the onus for it on the mass of the people. Purely biological race is arguably less adapted to instrumentalisation, than civilisation narratives like 'the white man's burden' of helping inferiors up the developmental ladder and the pacifying hope of eventual equality. Culture has and is used to explain different receptivities to Western economic or political models, implying a 'deeper' and more intractable explanation than those offered by economics or political science. Not only is culture slow and difficult to change, but it works at a level of unconscious assumptions and values, below which rational persuasion is ineffective or even offensive, due to associations with sacred, 'absolute' spheres of individual conscience like tradition, religion and nationality. Culture is used in European integration to argue, among other things, for the EU accession of Western Christian, but not Orthodox, parts of the ex-Soviet bloc, to block Turkish membership and to prevent reform of the Common Agricultural Policy.

Illustrations

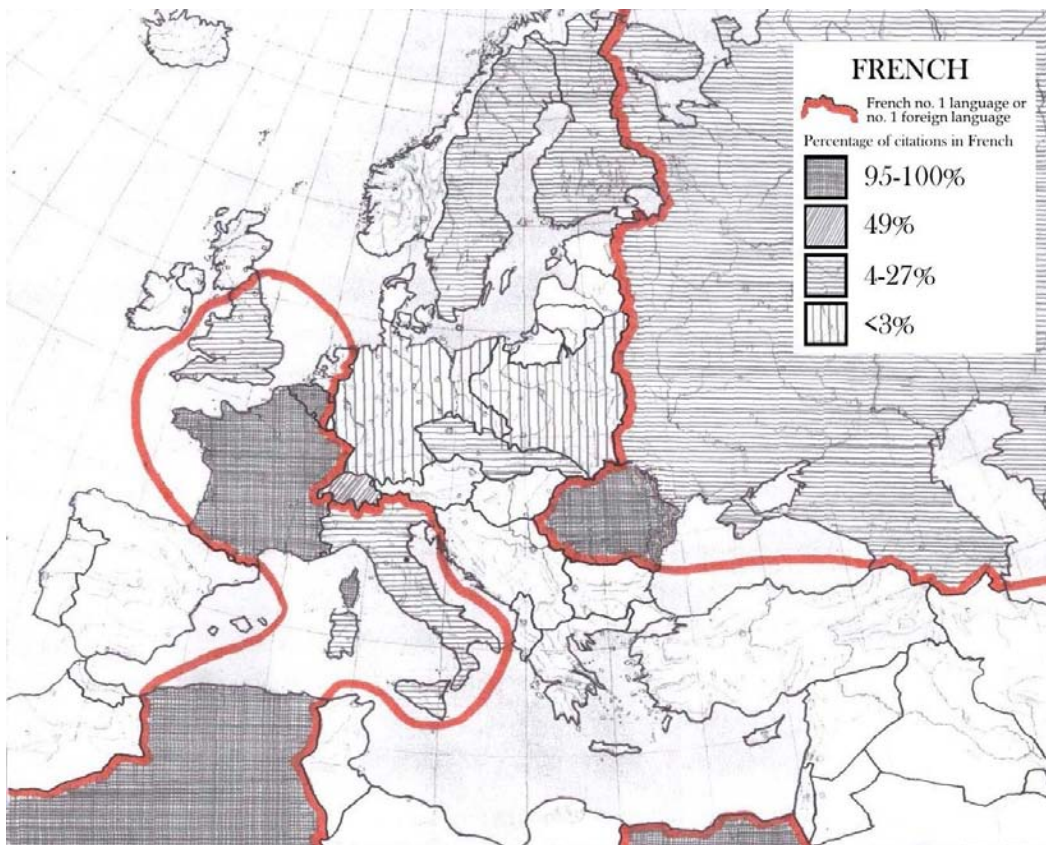


Fig. 1.1a

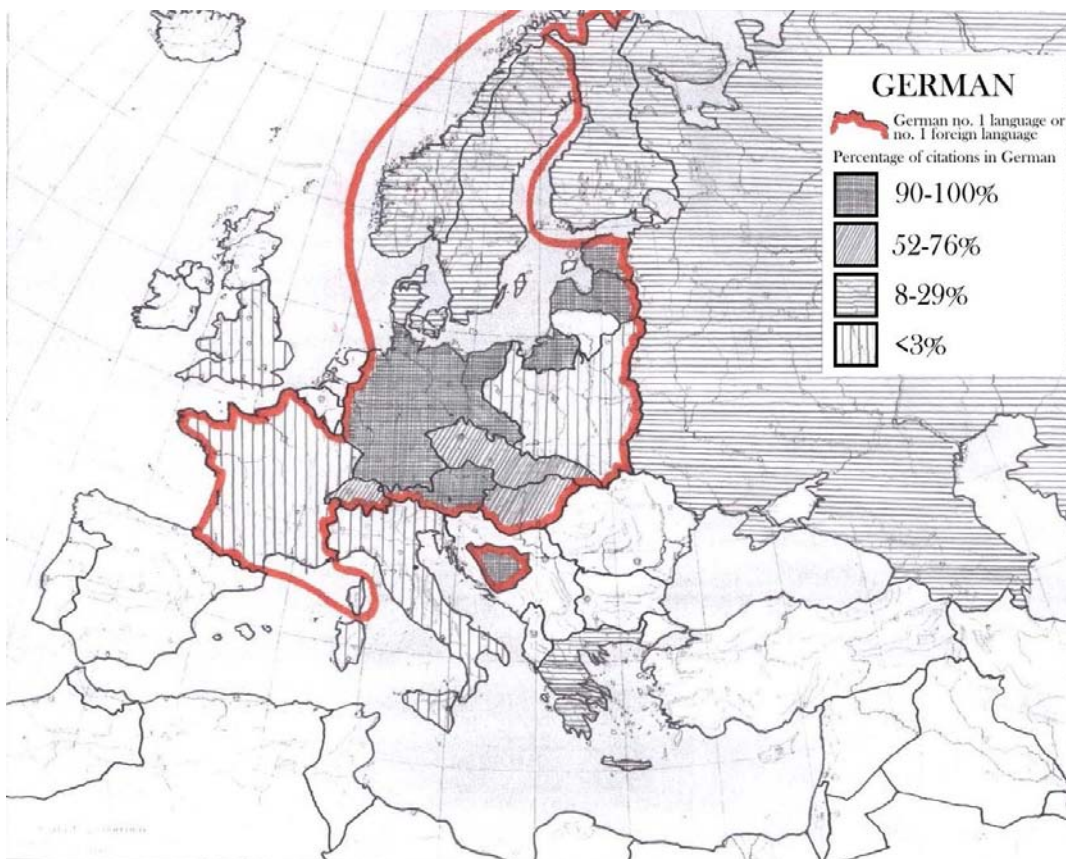


Fig. 1.1b

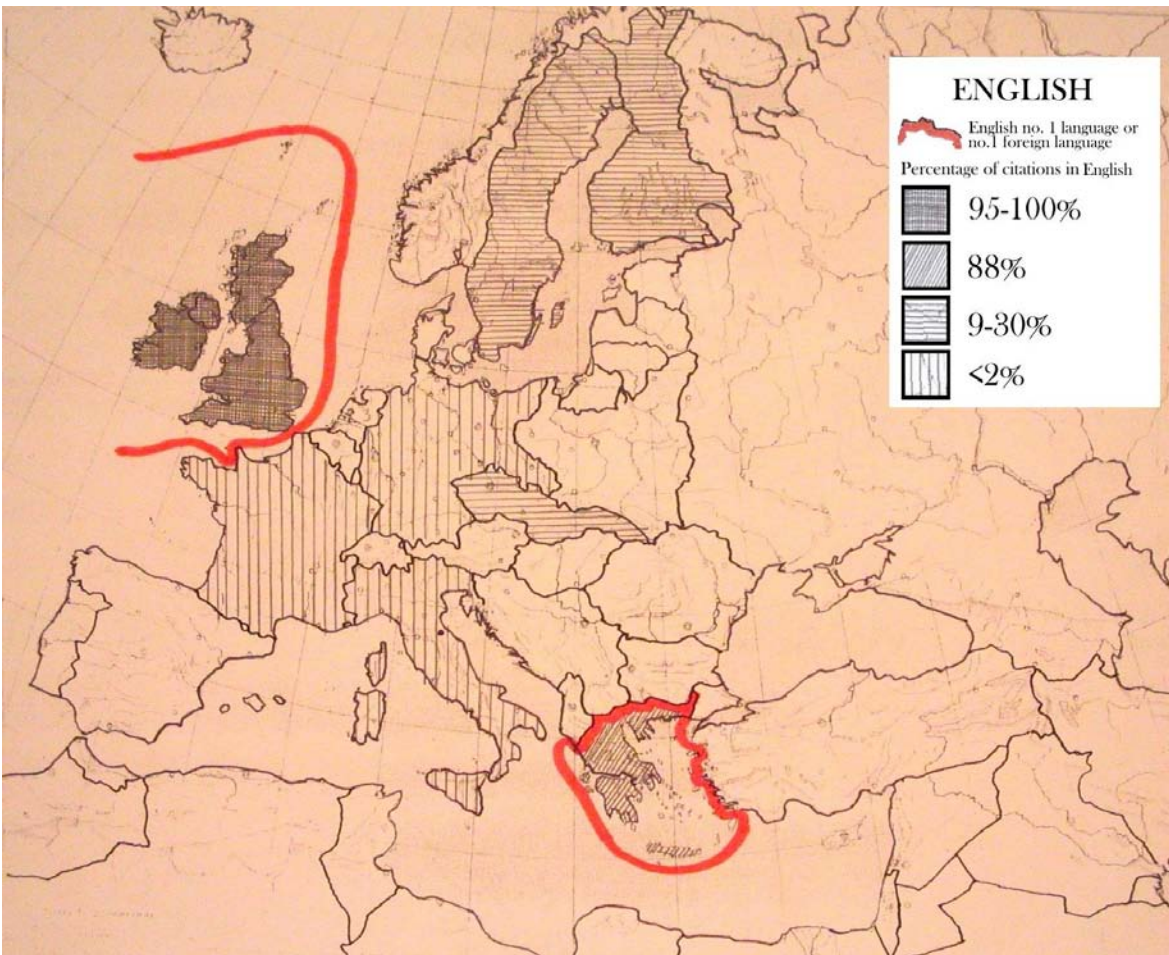


Fig. 1.1c

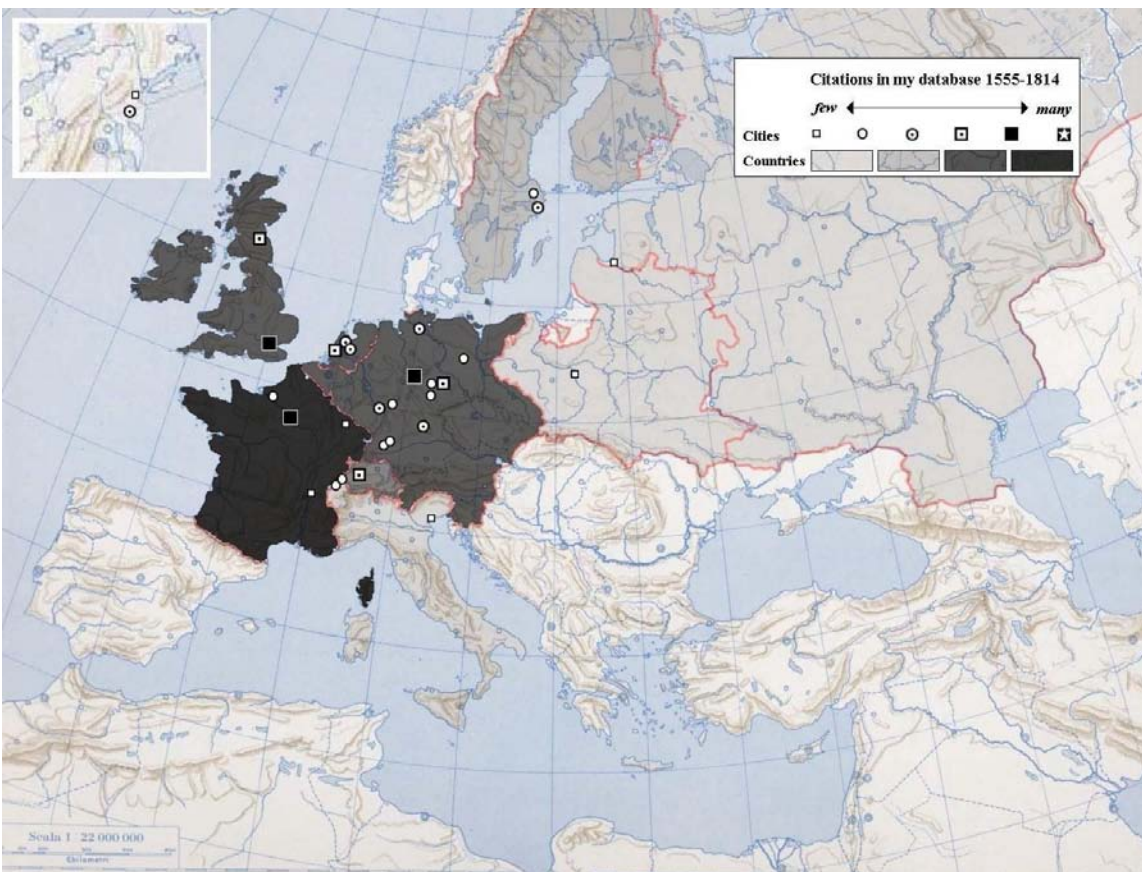


Fig. 1.2a

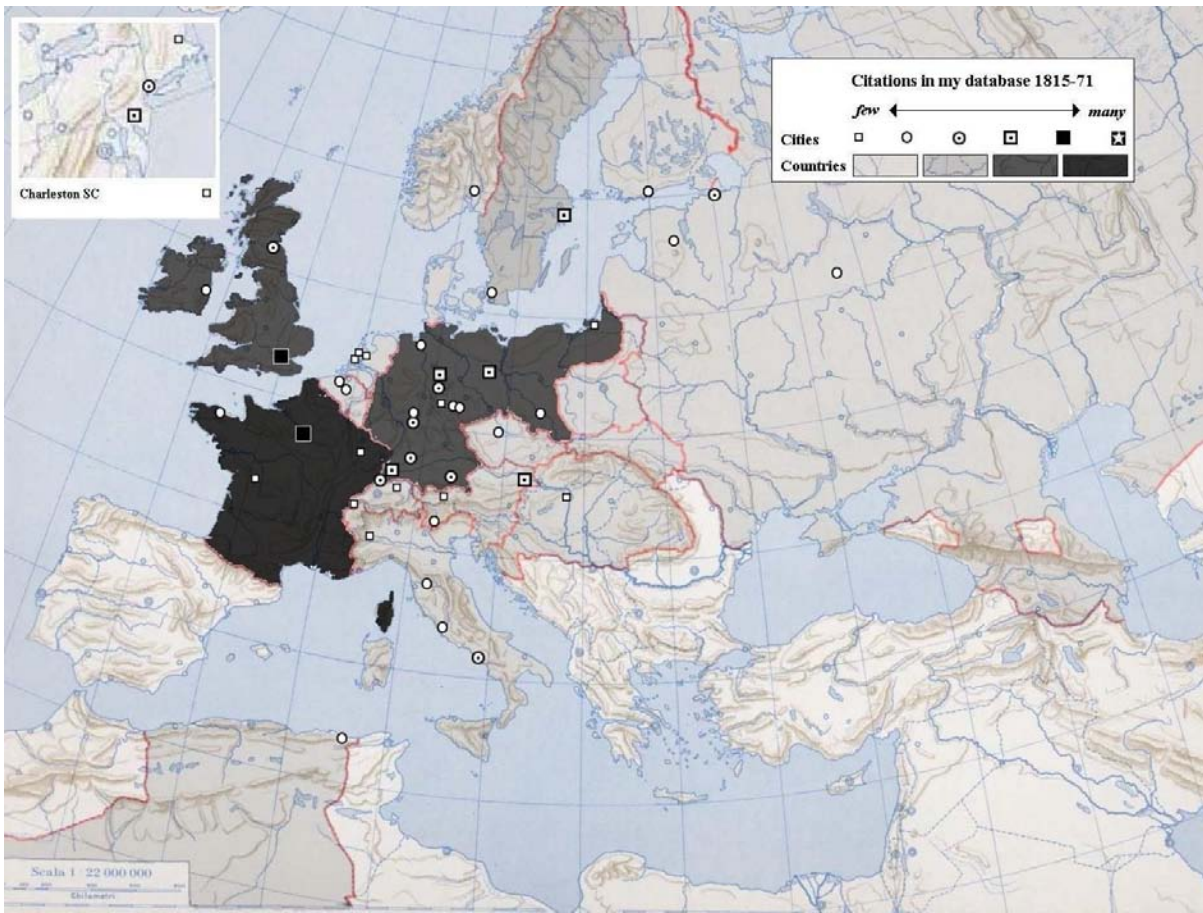


Fig. 1.2b

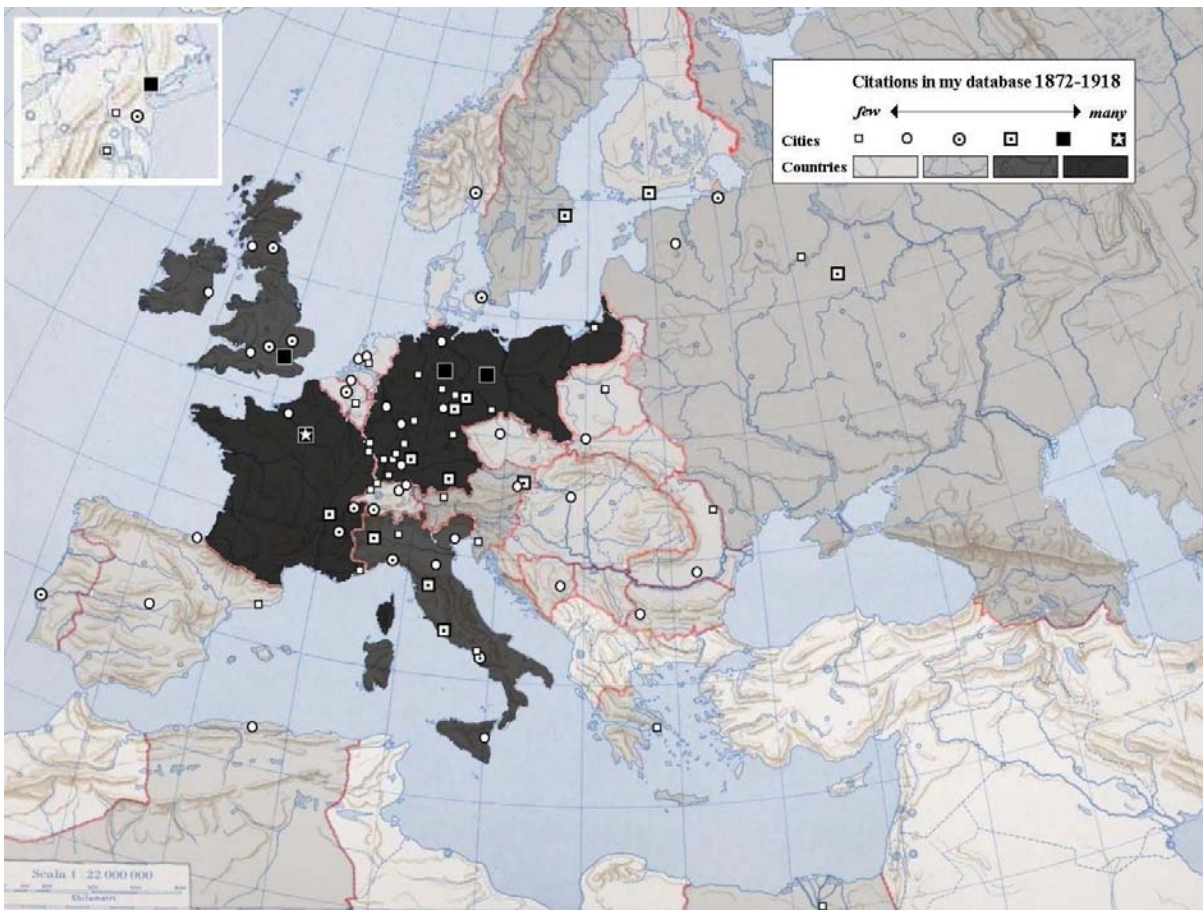


Fig. 1.2c

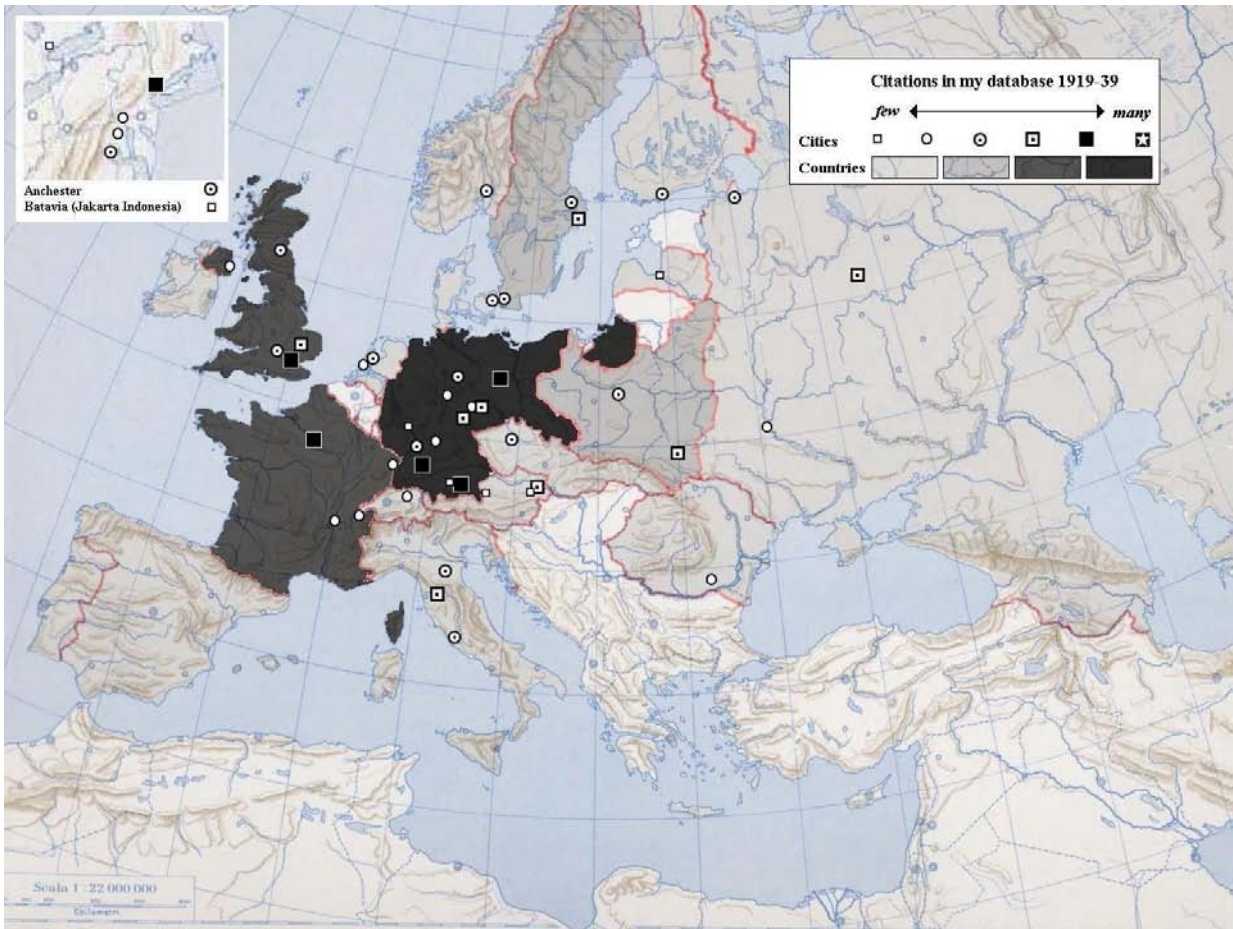


Fig. 1.2d

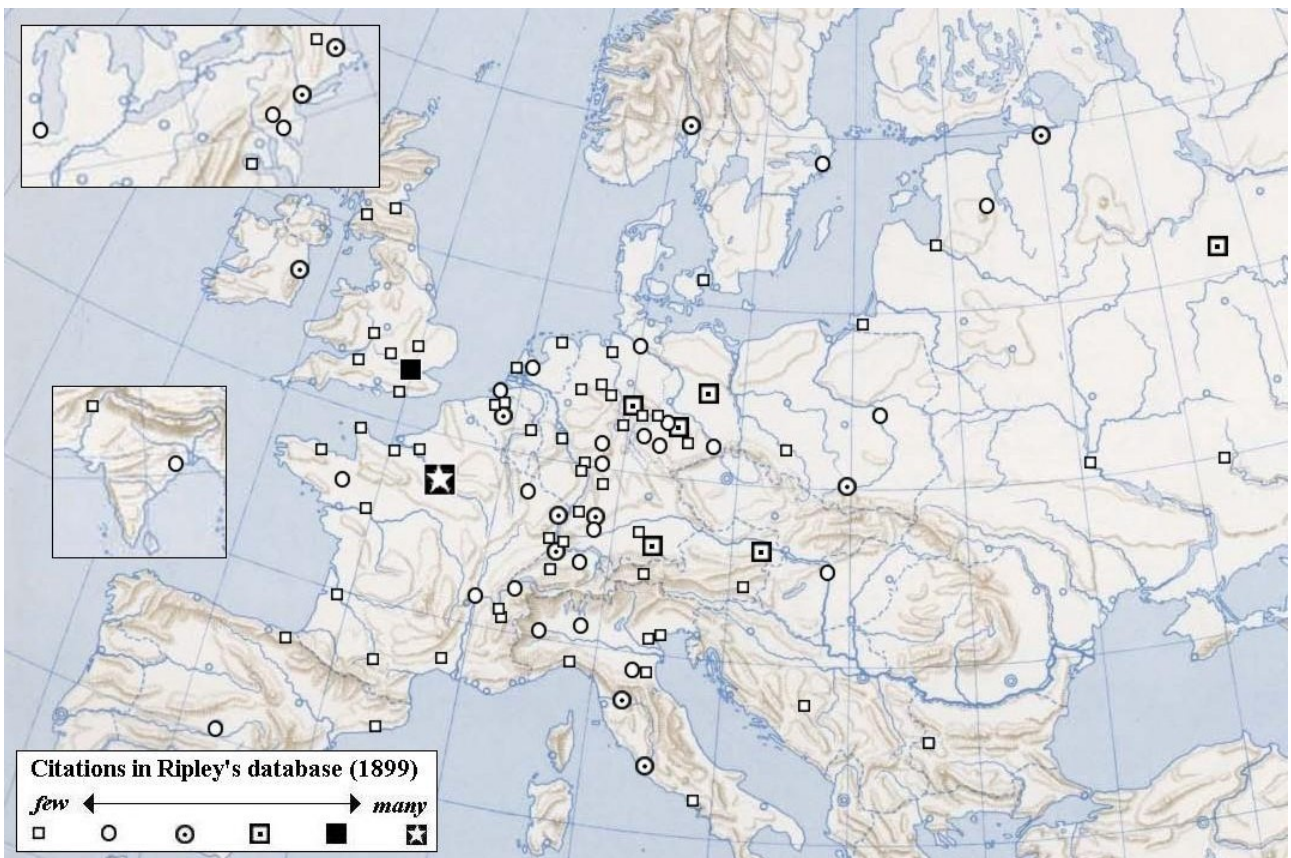


Fig. 1.3

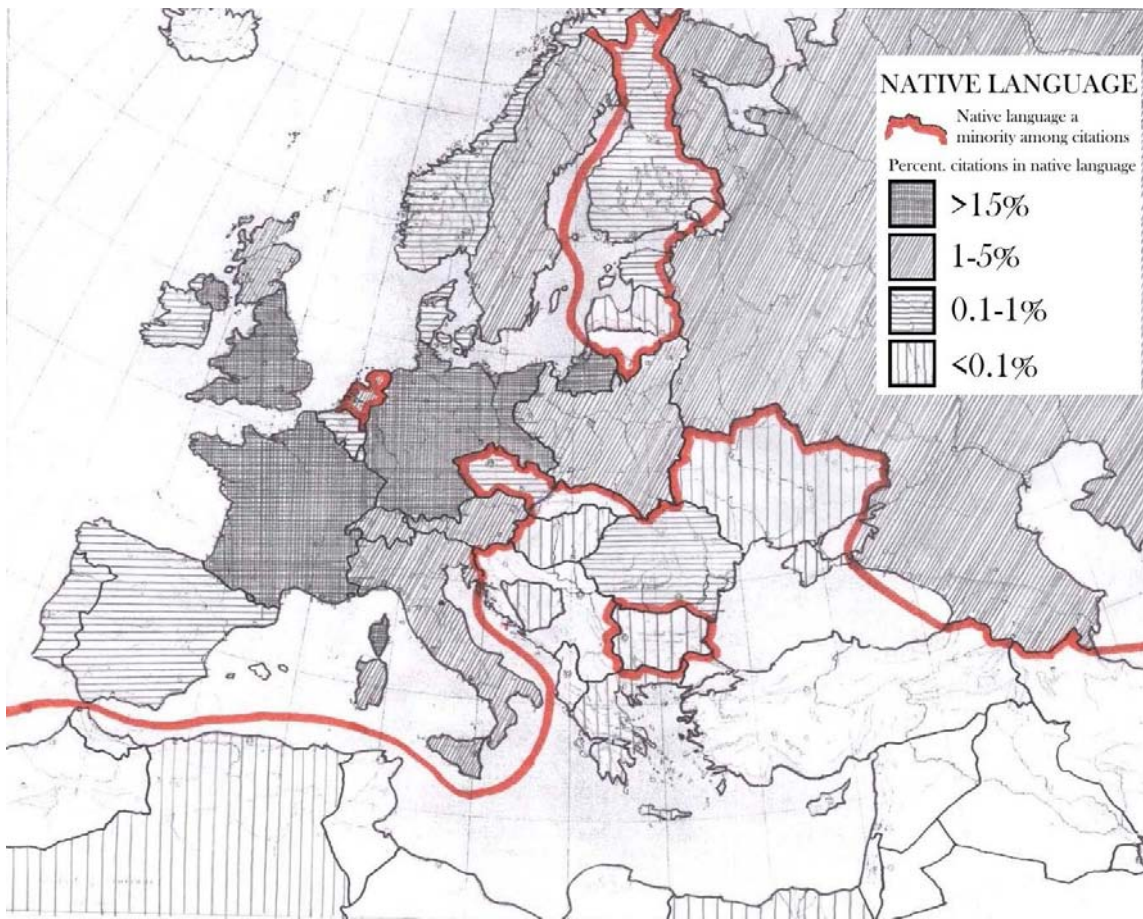


Fig. 1.4

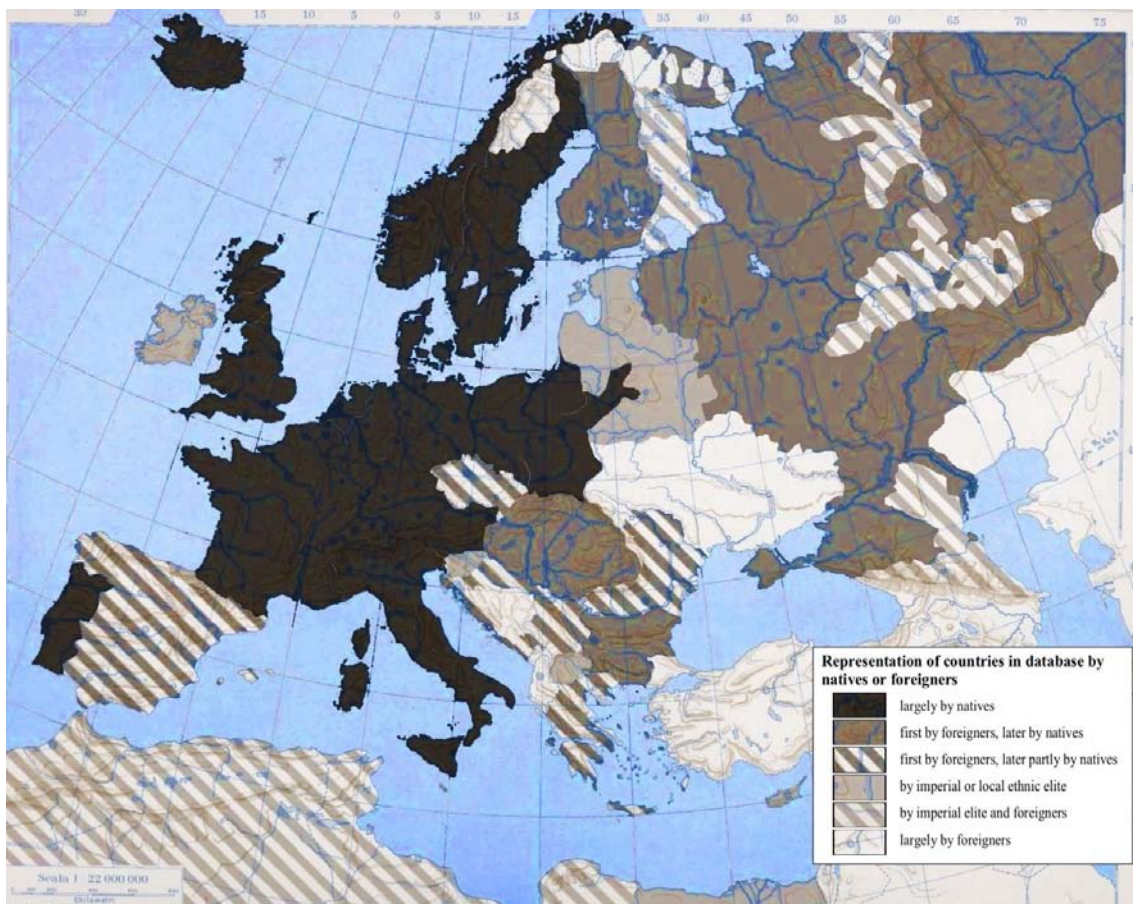


Fig. 1.5

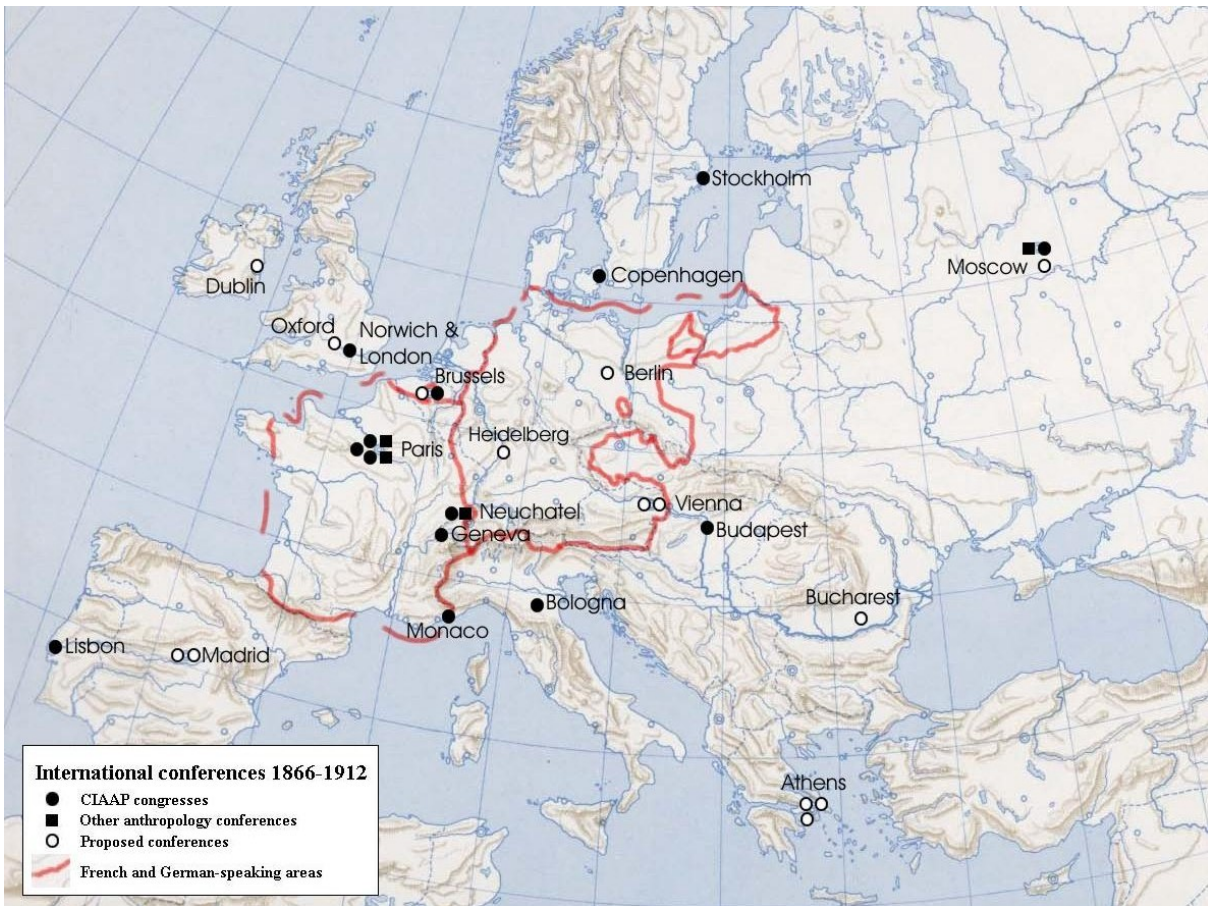


Fig. 1.6a

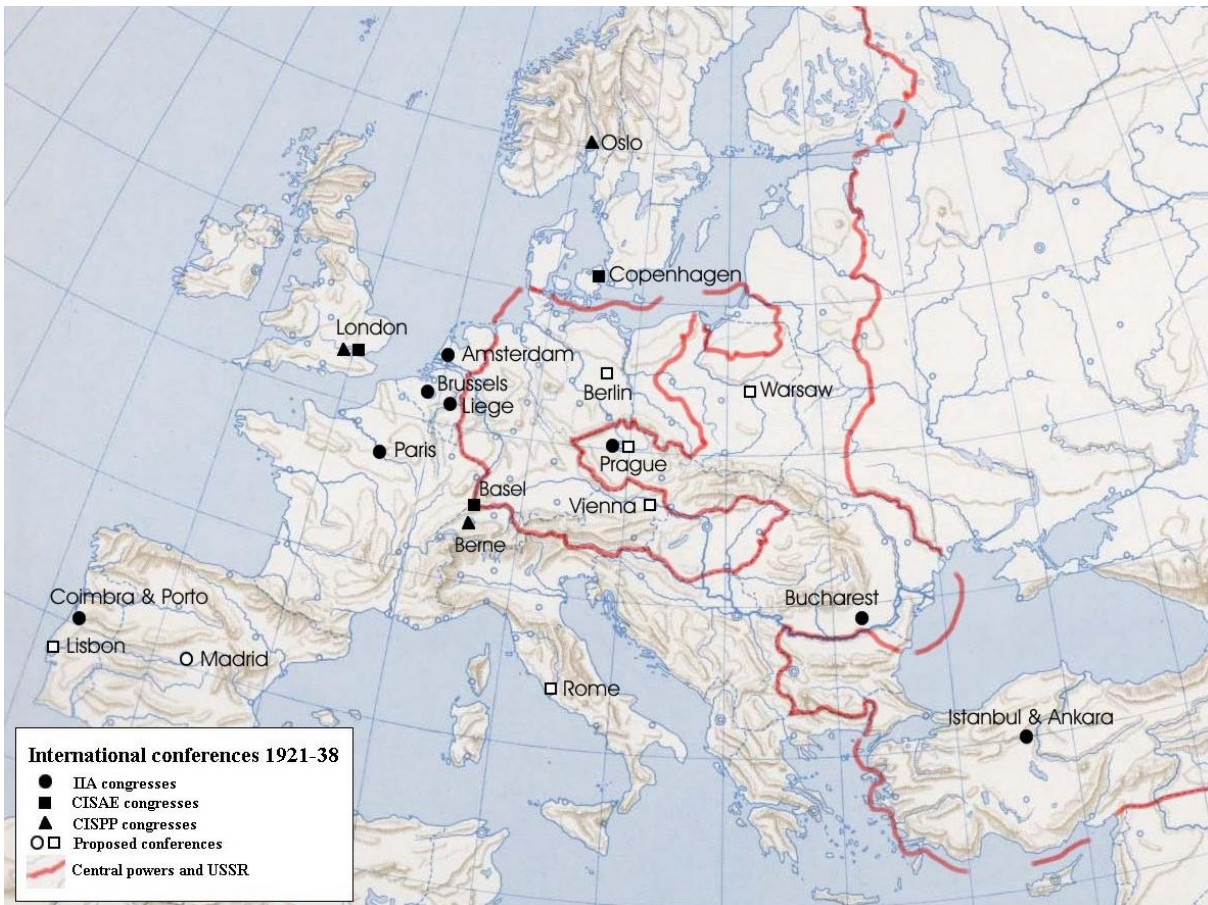


Fig. 1.6b

TABLEAU X.

RACES BLANCHES PURES OU REGARDÉES COMME TELLES.

TRONC.	BRANCHES.	RAMEAUX.	FAMILLES.	GROUPES.	POPULATIONS.	
Blanc ou Caucasique.	Allophyle.	Tchoude.	Esthoniennne.		Esthoniens.	
			Votiaque.		Votiaqs.	
			Miao.		Miao-tsé.	
				Aïno.	Boréal.	Aïnos.
					Méridional.	Kouss.
				Tchouktehi.		Tchouktehis.
				Goloutche.		Kolouches.
			Caucasien.	Géorgienne.		Géorgiens.
		Circassienne.			Tcherkesses.	
			Euskarien.			Basques.
	Sémitique.	Sémité.	Chaldéenne.			Hébreux.
			Arabique.	Himyarite.		Yéméniens.
				Arabe.		Arabes.
		Amara.			Abyssins.	
		Libyen.	Amazygh.	Kabyle.		Kabytes.
				Imouchar.		Touaregs.
			Égyptienne.			Égyptiens.
		Indo-iranien.	Indoue.	Mamogé.		Siapochs.
				Brahmanique.		Indous.
			Iranienne.			Tadjiks.
Helléno-latine.	Hellène.				Grecs.	
	Latine.			Romains.		
Aryane.	Slave.			Polonais.		
Celte.	Germanique.	Scandinave.		Suédois.		
		G. du Nord.		Hanovriens.		
		G. du Sud.		Bavarois.		
	Celtique.	Insulaire.			Irlandais.	
Continental.				Bas-Bretons.		

Typical ethnological taxonomy, subdividing a physical group into language families and then into nations (Quatrefages 1867: 526).

Fig. 2.1

[86] U Huculów z Bohorodzainskiego 50
 U Bojków ze Stryjskiego 69 }
 z Turczańsk. 55 | 62
 Na Bałtyckim stoku Karpat 62
 Średnia u Górali 58,

a zatem nie dorównująca stosunkowi oczu jasnych u ludności ruskiej branej w ogólności.

Równiaki. Porządkując należące tu dzielnice według odsetkowej ilości oczu jasnych, idą one w tej kolei:

Wyżyna Podolska 43
 Podole południowe 53
 Pokucie 51
 Podole środkowe 64
 Podgórze Bieskidów 67
 Powiaty północno-wschodnie . . 70
 Osady między Polakami . . . 72
 Na pograniczu polskim . . . 78
 Średnia u Równiaków . . . 64.

Tym sposobem u Równiaków ruskich ludność z oczyma jasnymi, do ludności z oczyma ciemnymi, miałaby się = 64 : 36, czyli 18 : 10, u Górali zaś ruskich = 14 : 10. Z porównania stosunku jasnej i ciemnej barwy oczu, ze stosunkiem takichże barw skóry, wypadłoby ten ostatni u Równiaków = 15 : 10 i prawdopodobnie taki sam u Górali ruskich.

[87]

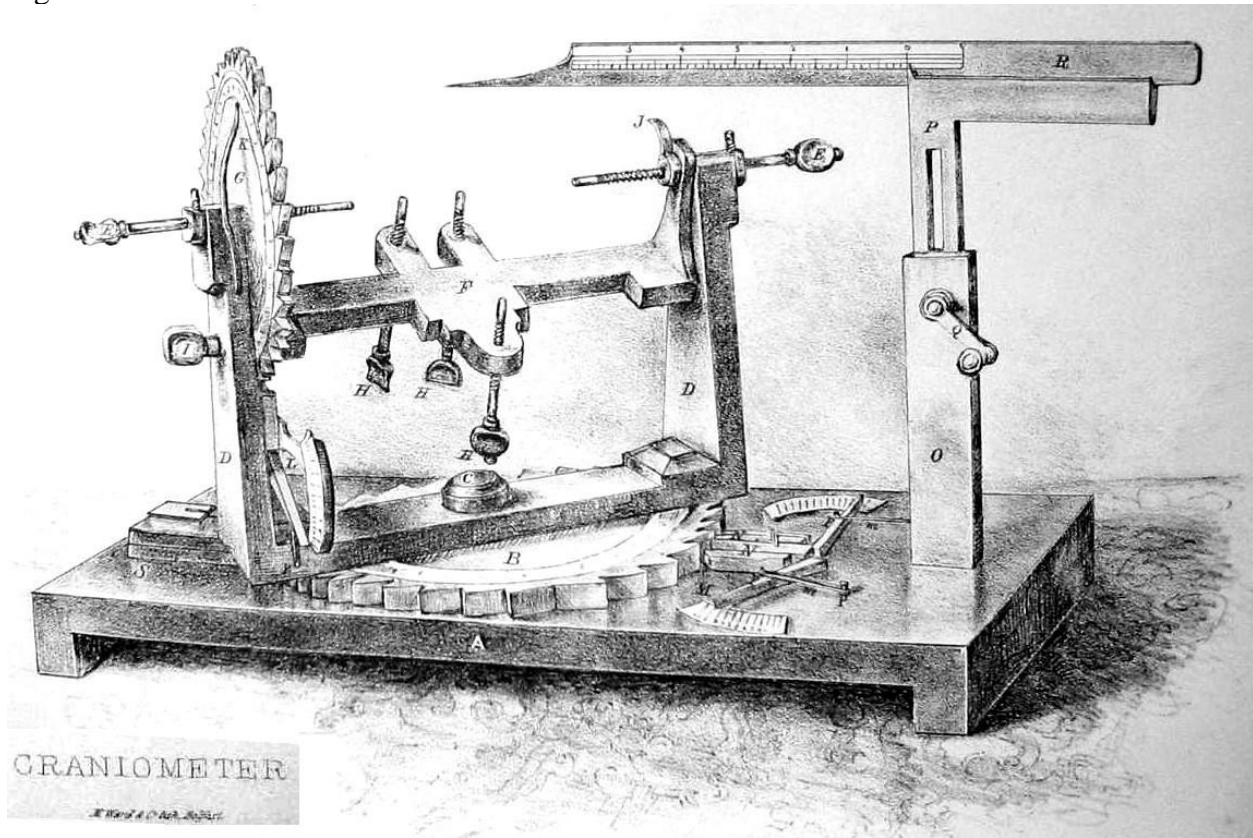
C) Żydzi*.)
 Stosunek liczbowy 4ch barw oczu.

Powiat	Liczba osób barwy oczu								Ogólna
	sivój		zielonój		błękitnej		piwnój		
	rzeczw.	odsetk.	rzeczw.	odsetk.	rzeczw.	odsetk.	rzeczw.	odsetk.	
Birczański	7	87.5	—	—	—	—	1	12.5	8
Bocheński	14	37.9	5	13.5	—	—	18	48.6	37
Bohorodzainski	1	14.3	—	—	4	57.2	2	28.5	7
Brodzki	1	14.3	—	—	1	14.3	5	71.4	7
Buczaki	10	41.7	—	—	—	—	14	58.3	24
Czortkowski	2	20.0	3	30.0	—	—	5	50.0	10
Gorlicki	6	33.3	1	5.6	3	16.6	8	44.5	18
Grodecki	2	33.3	1	16.7	1	16.7	2	33.3	6
Jarosławski	4	22.2	2	11.1	4	22.2	8	44.4	18
Jasielski	2	8.7	7	30.4	3	13.0	11	47.9	23
Kamionecki	18	31.0	28	48.3	1	1.7	11	19.0	58
Kolbuszowski	7	18.9	1	2.7	—	—	29	78.4	37
Krakowski	18	13.6	23	17.4	6	4.5	85	64.5	132
Limanowski	—	—	1	25.0	1	25.0	2	50.0	4
Lwowski	—	—	—	—	—	—	1	—	1
Nowo-Sądcki	3	75.0	—	—	—	—	1	25.0	4
Nowotarski	—	—	5	71.4	1	14.3	1	14.3	7
Pilznieński	13	48.2	—	—	3	11.1	11	40.7	27
Przemyslański	—	—	—	—	—	—	1	—	1
Przemyski	2	50.0	—	—	—	—	2	50.0	4
Rohatyński	7	20.0	8	22.8	3	8.5	17	48.7	35
Ropczycki	1	12.5	—	—	1	12.5	6	75.0	8
Samborski	1	20.0	—	—	1	20.0	3	60.0	1
Sanocki	—	—	—	—	—	—	1	—	1
Skalański	—	—	10	71.4	1	7.2	3	21.4	14
Śniatyński	2	18.2	2	18.2	—	—	7	63.6	11
Stryjski	—	—	—	—	—	—	1	—	1
Tarnobrzeczki	42	46.6	—	—	—	—	48	53.4	90
Tarnowski	23	25.0	—	—	12	13.0	37	62.0	92
Tłumacki	7	10.9	24	37.5	1	1.6	32	50.0	64
Turczański	—	—	—	—	3	50.0	3	50.0	6
Złoczowski	—	—	2	7.4	5	18.6	20	74.0	27
Zółkiewski	—	—	—	—	—	—	1	—	1
Żydaczowski	6	17.5	5	13.9	5	13.9	20	54.7	36
Żywiecki	—	—	—	—	—	—	2	—	2
Suma	199	—	128	—	60	—	439	—	826

*) Stosuje się tu uwaga uczyniona o Żydach w rozdziale o barwie skóry. Zob. str. 78.

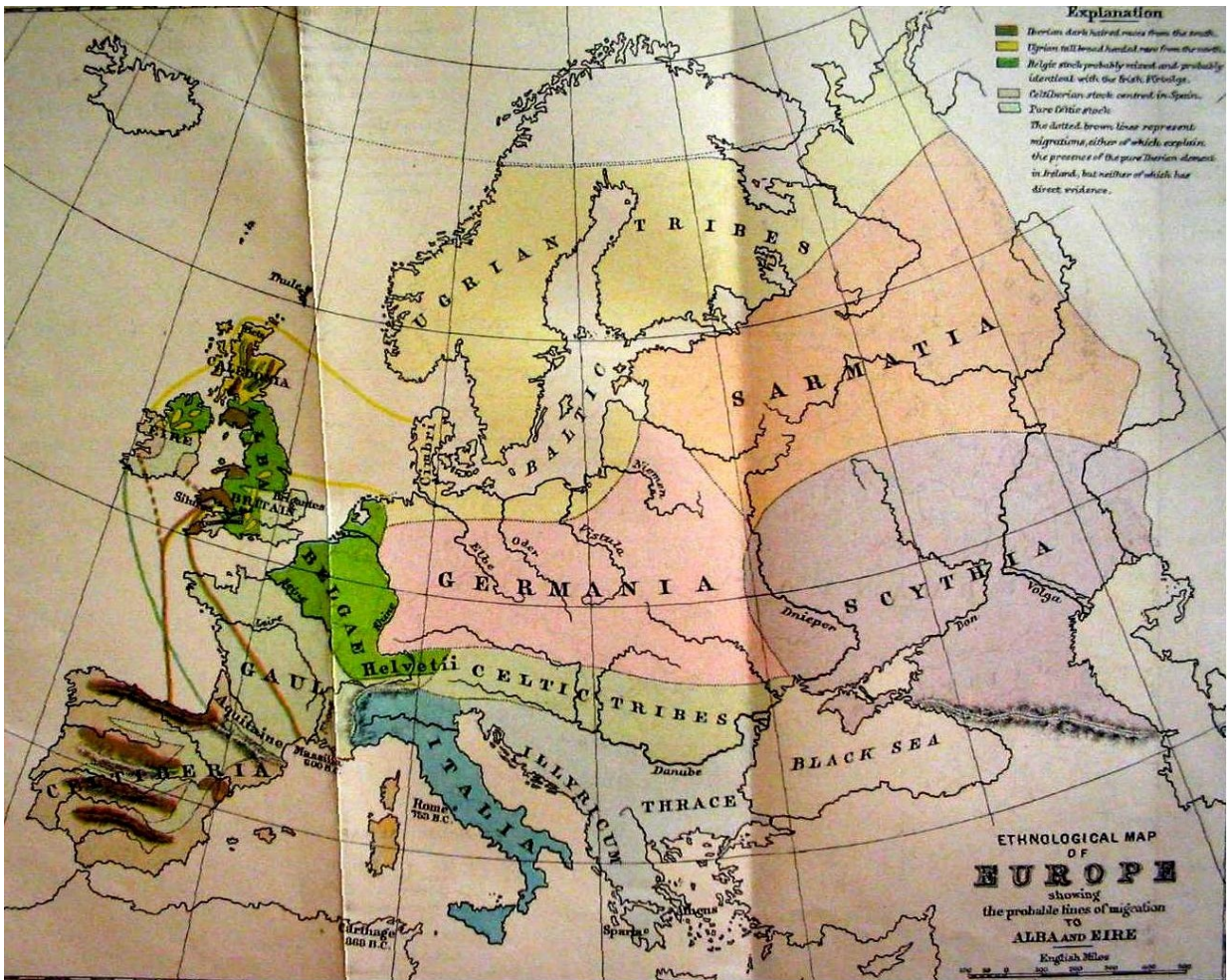
As nineteenth-century anthropologists adopted a mass anthropometry approach, their texts became full of measurement lists like these (Mejer & Kopenicki 1877: 86-87).

Fig. 2.2



Skull measuring device (Gratton 1853)

Fig. 2.3



This ethnological map displays a typical mix of classical geographical concepts (Germania, Scythia) and linguistic/archaeological/classical ethnic groups (Ugrian and Celtic tribes), both conceived biologically (Bryant 1889: 1).

Fig.

2.4

Sanskrit.	Persian.	Russian.	Greek.	Latin.	Welsh.	Erse.	Teutonic.
प—p	پ—p	П—p	π,	c, qu p, in the Oscan.	p	k or c	f
भ—bh	ب—b	B	φ, β	f	b ∞ v	b ∞ bh	f
ध—dh	د—d		θ				
च—ch	خ—kh چ—ch	Ч—ch	τ	c, qu	p	k or c	f
id.			σσ, ππ	c	g		th
id.			ξ, ζ	x			
ज—j	ج—j	Ж—j	γ	g	g		k
श—sh	س—s	С—s	κ, χ κ, ξ	c s ∞ r	g	ch	h sch, S
id.							
ष—sh	ش—sh	Ш—sh	κ, χ	s, c	ch, guttural	s ∞ h	s
id.	с—h		() ol. F	v, f	h	f ∞ h	h
स—s	с—s		() ol. σ () ol. F	s, c v, f	h gw or w	s ∞ h f ∞ h	h

Table illustrating sounds shifts between Indo-European languages (Prichard 1831).

Fig. 2.5

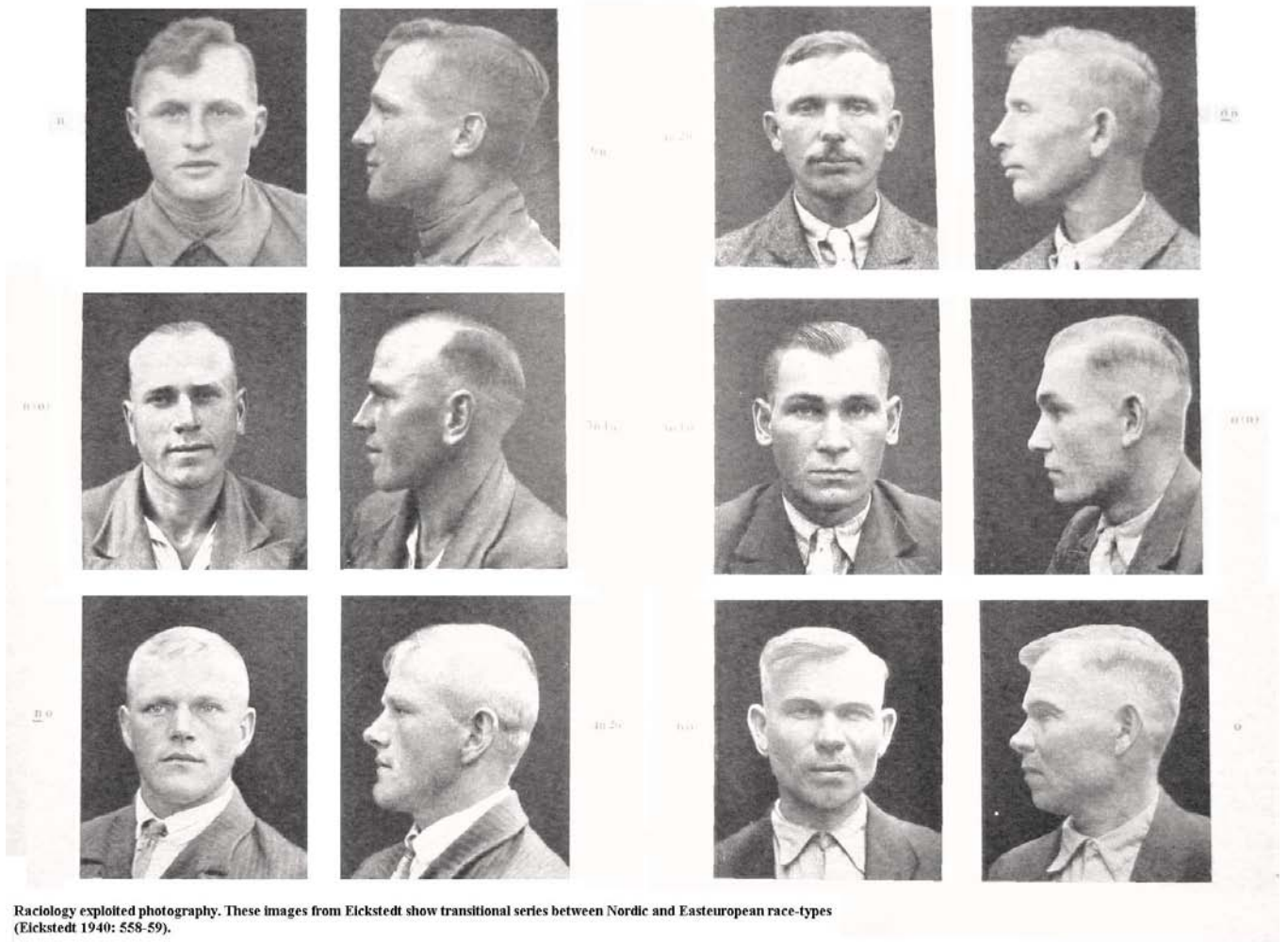


Fig. 2.6

Pearson'a, który daje przybliżoną wartość współczynnika korelacji. Obliczamy go według następującego wzoru:

$$Q_6 = \sin \frac{\pi}{2} \frac{ad - bc}{\sqrt{(a+c)(b+d)(a+b)(b+d)}}$$

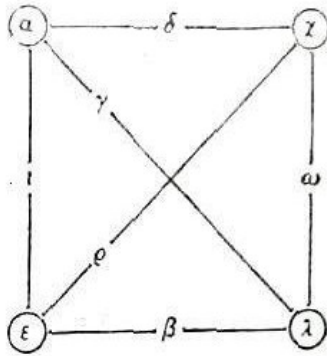
Symbol (a) oznacza tu ilość wypadków, w których porównywane elementy występują wspólnie, (b) ilość wypadków, w których występuje pierwszy a brak drugiego, (c) ilość wypadków, w których występuje element drugi a brakuje pierwszego, (d) ilość wypadków, w których brak obu elementów. Współczynnik Q_6 posiada tę własność, że waha się w granicach od +1,0 do -1,0. Wartość (+1,0) odpowiada identyczności porównywanych elementów, wartość (-1,0) oznacza ich zupełną rozbieżność; (0) oznacza brak korelacji. Obliczając więc dla przykładu stopień podobieństwa zachodzący między elementem 1 naszej tabeli (eksogamiczne klany) a elementem 7 (nominalni naczelnicy), otrzymujemy: $a=9$; $b=3$; $c=0$; $d=3$. Wzór przybiera wówczas następującą postać:

$$\begin{aligned} Q_6 &= \sin \frac{\pi}{2} \frac{(9,3) - (3,0)}{\sqrt{(9+0)(3+3)(9+3)(0+3)}} = \sin \frac{\pi}{2} \frac{27}{\sqrt{9 \cdot 6 \cdot 12 \cdot 3}} = \\ &= \sin \frac{\pi}{2} \frac{27}{\sqrt{1944}} = + 0,82 \end{aligned}$$

Obliczając w ten sposób współczynniki we wszystkich możliwych kombinacjach między elementami, otrzymujemy kwadratową tabelę, złożoną w tym wypadku z 27 kolumn pionowych i tyleż szeregów poziomych. Każda kolumna i każdy szereg odpowiada jednemu elementowi. W każdym kwadracie powstałej w ten sposób siatki wpisujemy współczynnik odpowiadający stopniowi podobieństwa porównywanych elementów. Wynik rachunka przedstawiamy graficznie według metody J. Czekańskiego⁽¹⁾, oznaczając współczynniki od +1,0 do +0,80 czarnym kwadratem, współczynniki od +0,79 do +0,60 kwadratem o trzech grubych kreskach, współczynniki od +0,59 do +0,40 kwadratem o jednej grubej kresce, wreszcie współczynniki od +0,39 do +0,20 kwadratem o trzech cienkich kreskach. Współczynniki niższe od +0,20 i współczynniki ujemne pozostają bez oznaczenia.

Typical Lwów School analysis, illustrating the new prominence of statistical science (Klimek 1934: 64).

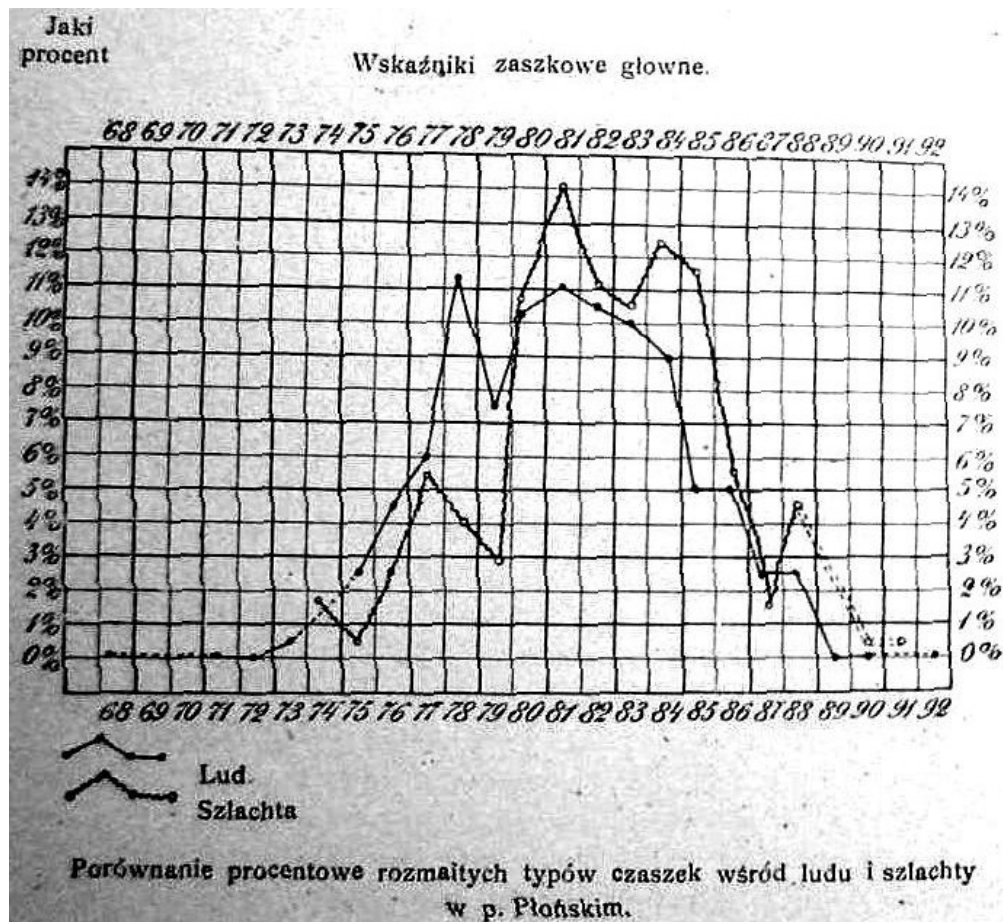
Fig. 2.7



Ryc. 8. Ustosunkowanie wzajemne czterech ras ludności europejskiej i ich typów mieszanych. Rasy są stawiane jako cztery narożniki kwadratu: α nordyczna, ϵ śródziemnomorska, γ armeno-oidalna, λ lapenoidalna. Typy mieszane są przedstawione liniami łączącymi narożniki: γ subnordyczny, β sublaponoidalny, ω alpejski, δ dynarski, ϕ litoralny, τ północno-zachodni.

Czekanowski's European scheme (1934: 47)

Fig. 2.8



Polish seriation graph plotting cephalic index grades (X axis) for nobles (Szlachta) against those of the 'people' (Lud) (Rutkowski 1903: 294).

Fig. 2.9

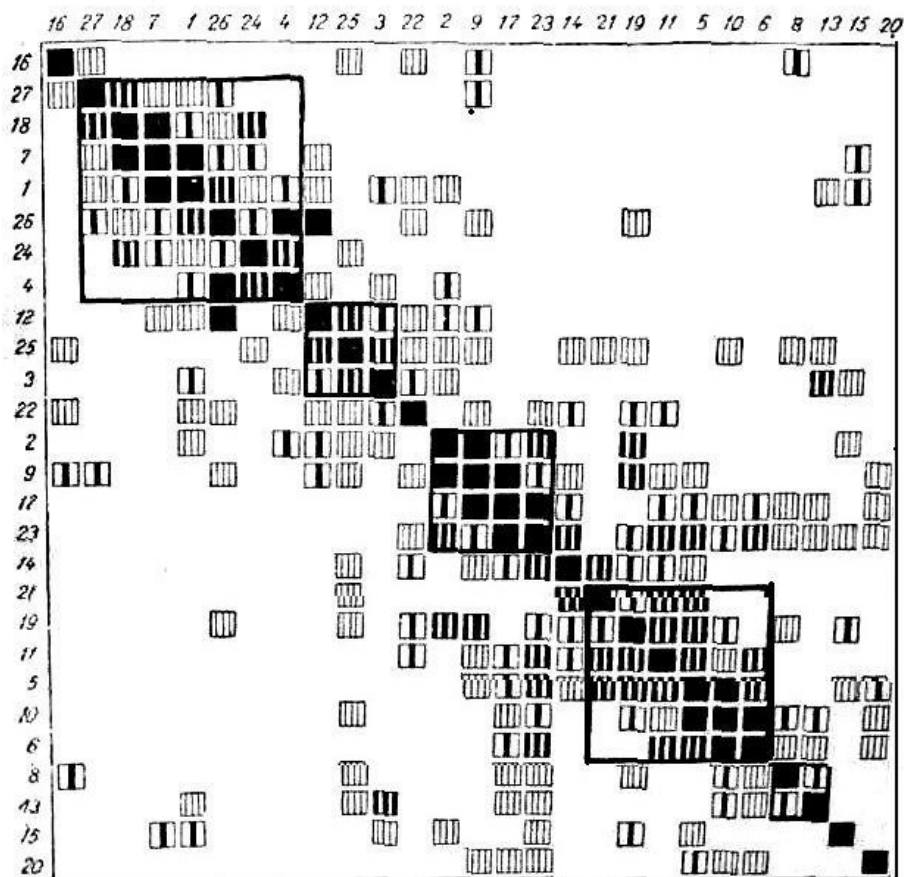
TABELA.

Współczynniki powinowactwa zjawisk antropologicznych i dialektologicznych na polskim obszarze językowym.

Terytorja antropolog. i dialektol.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
1. Kaszubskie	+ 1.	-.07	-.04	-.32	+.20	-.06	-.15	-.22	-.27	-.16	-.19	-.06
2. Centralne	-.07	+ 1.	-.07	+.02	+.27	-.16	-.20	-.24	+.17	+.29	-.04	-.01
3. Chełmińsko-mazowiec.	-.04	-.07	+ 1.	+.11	+.20	-.06	+.36	-.22	-.27	-.16	-.19	-.06
4. Wielkopolsko-kujaw.	-.32	+.02	+.11	+ 1.	+.55	-.26	-.49	-.12	-.81	-.36	-.37	-.21
5. Typ nordyczny	+.20	+.27	+.20	+.55	+ 1.	+.37	+.15	-.70	-.08	-.85	-.95	-.43
6. Typ subnordyczny	-.06	-.16	-.06	-.26	+.37	+ 1.	+.50	-.39	+.33	-.08	-.39	-.13
7. Mazowieckie	-.15	-.20	+.36	-.49	+.15	+.50	+ 1.	+.21	+.73	-.62	-.49	-.26
8. Typ przesłowiański	-.22	-.24	-.22	-.42	-.70	-.39	+.21	+ 1.	+.37	+.39	+.70	+.05
9. Mazurzenie	-.27	+.17	-.27	-.81	-.08	+.33	+.73	+.37	+ 1.	+.55	+.49	-.06
10. Małopolskie	-.16	+.29	-.16	-.36	-.85	-.08	-.62	+.39	+.55	+ 1.	+.65	-.27
11. Typ alpejski	-.19	-.04	-.19	-.37	-.95	-.39	-.49	+.70	+.49	+.65	+ 1.	+.46
12. Śląskie	-.06	-.01	-.06	-.21	-.43	-.13	-.26	+.05	-.06	-.27	+.46	+ 1.

The numerical grid: The first part of the Lwów school graphical analysis method (Czekanowski 1928a: 432)

Fig. 2.10



The graphic grid: The second part of the Lwów School graphic analysis method (Klomek 1934: 65).

Fig. 2.11

Grupy pigmentacyjne	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	Charakter wskaźników przewagi
Kości policzkowe	wyst. miernie	wyst. słabo wyst. miernie wyst. silnie	niewystające wyst. słabo wyst. miernie wyst. silnie	wyst. słabo	wyst. słabo wyst. miernie niewystające wyst. słabo wyst. miernie wyst. silnie	wyst. słabo	wyst. słabo	wyst. słabo wyst. miernie	wyst. słabo wyst. miernie wyst. silnie	wyst. słabo wyst. miernie wyst. silnie	wyst. miernie	
%	100	37,5 37,5 25	15,38 23,08 53,85 7,69	100	57,14 42,86 21,43 14,29 50 14,29	100	100	33,33 66,66	40 40 20	41,18 52,94 5,88	100	
Wskaźnik przewagi kości policzk. wystających miernie nad wyst. słabo	8	1	1,4	0	0,75	1,4	0	2	1	1,29	8	6 pozytywn. 5 negatywn.
Wskaźnik przewagi kości policzk. wyst. miernie nad wyst. silnie	8	1,5	7	0	8	3,5	0	8	2	9	8	9 pozytywn. 2 negatywn.
Wskaźnik przewagi kości policzk. wyst. słabo nad wyst. silnie	0	1,5	5	8	8	2,5	8	8	2	7	0	9 pozytywn. 2 negatywn.
Symbole charakteru cechy:												
□ wyst. słabo												
○ wyst. miernie	○	△ △	△ △	□	○	△ △	□	△ △	△ △	△ △	○	
△ wyst. silnie												

Table used in Stołyhwo's taxonomic method (Stołyhwo 1924-28: 44)

Fig. 2.12

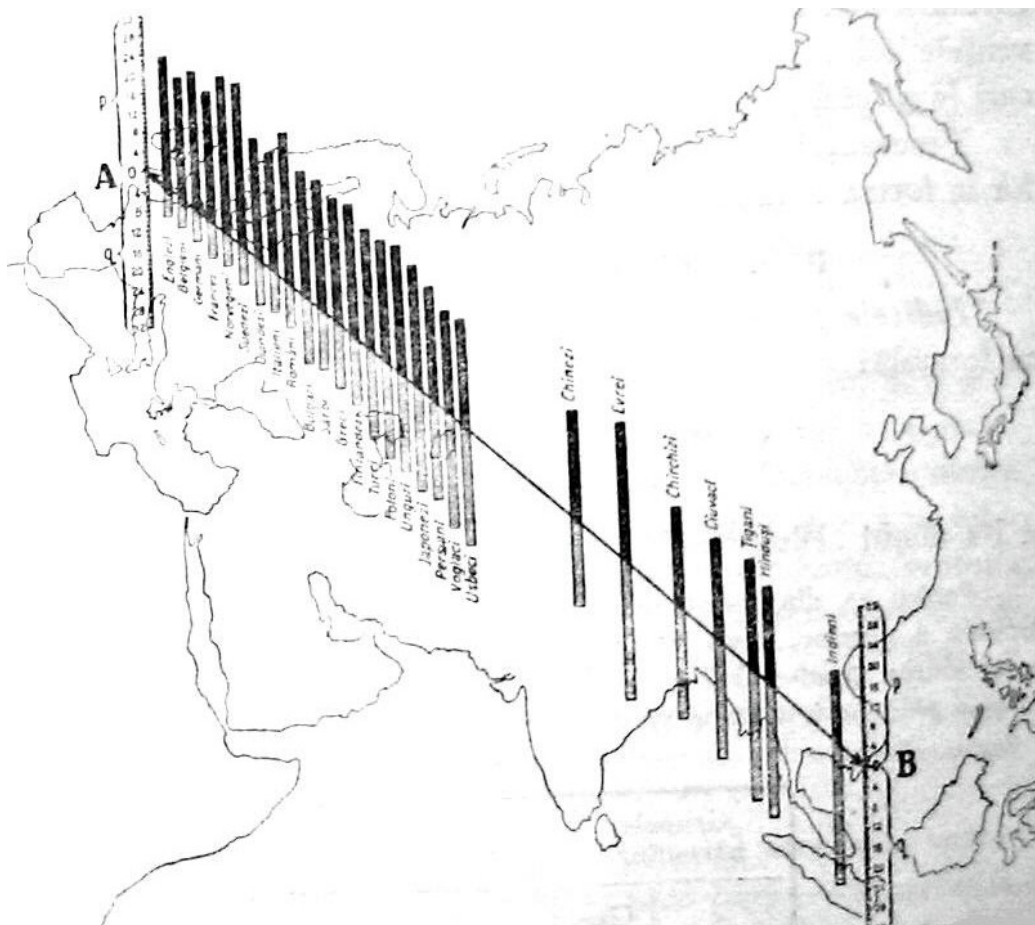


Diagram illustrating the sliding scale of mostly group A blood in Europe to mostly group B in Southeast Asia.

Fig. 2.13

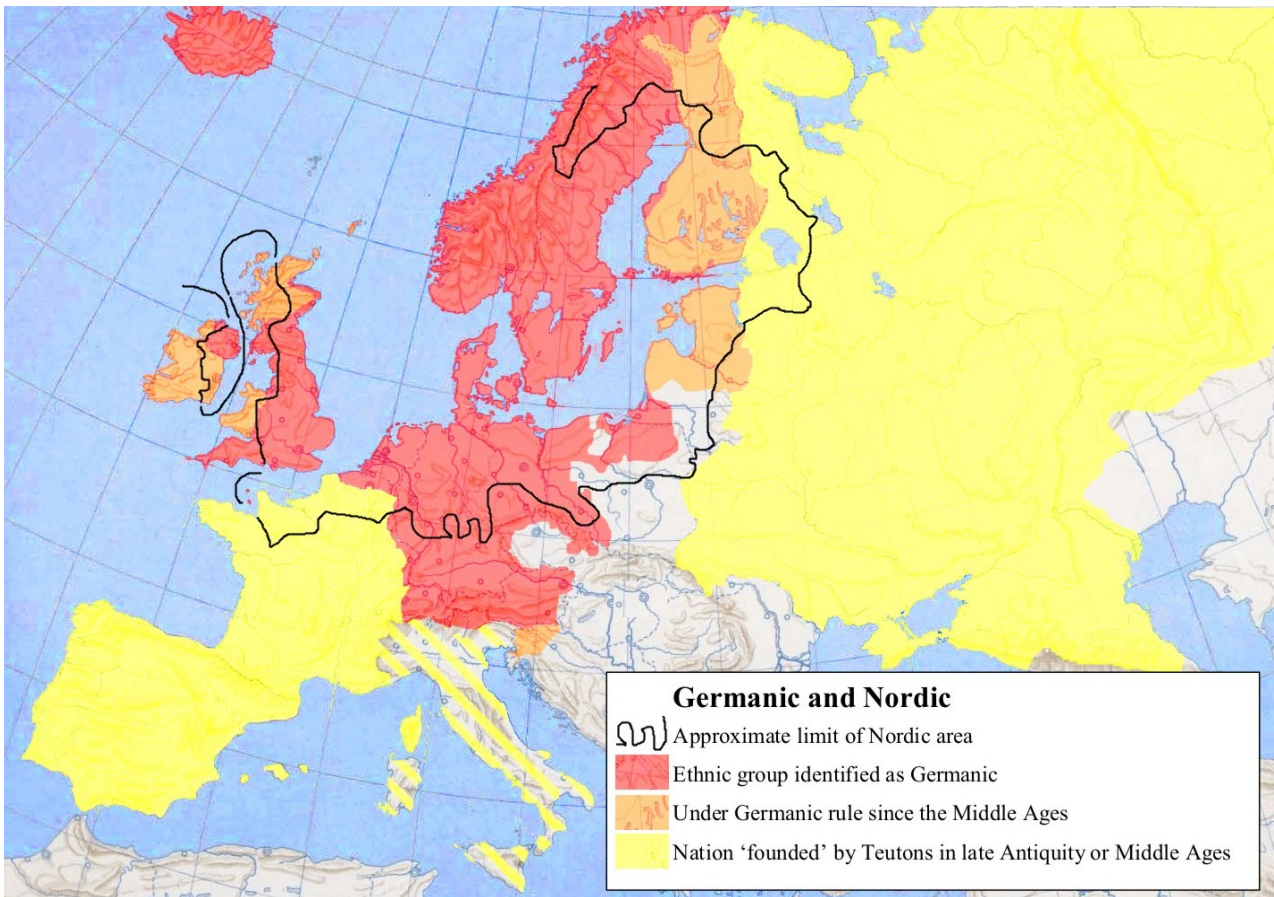


Fig. 3.1

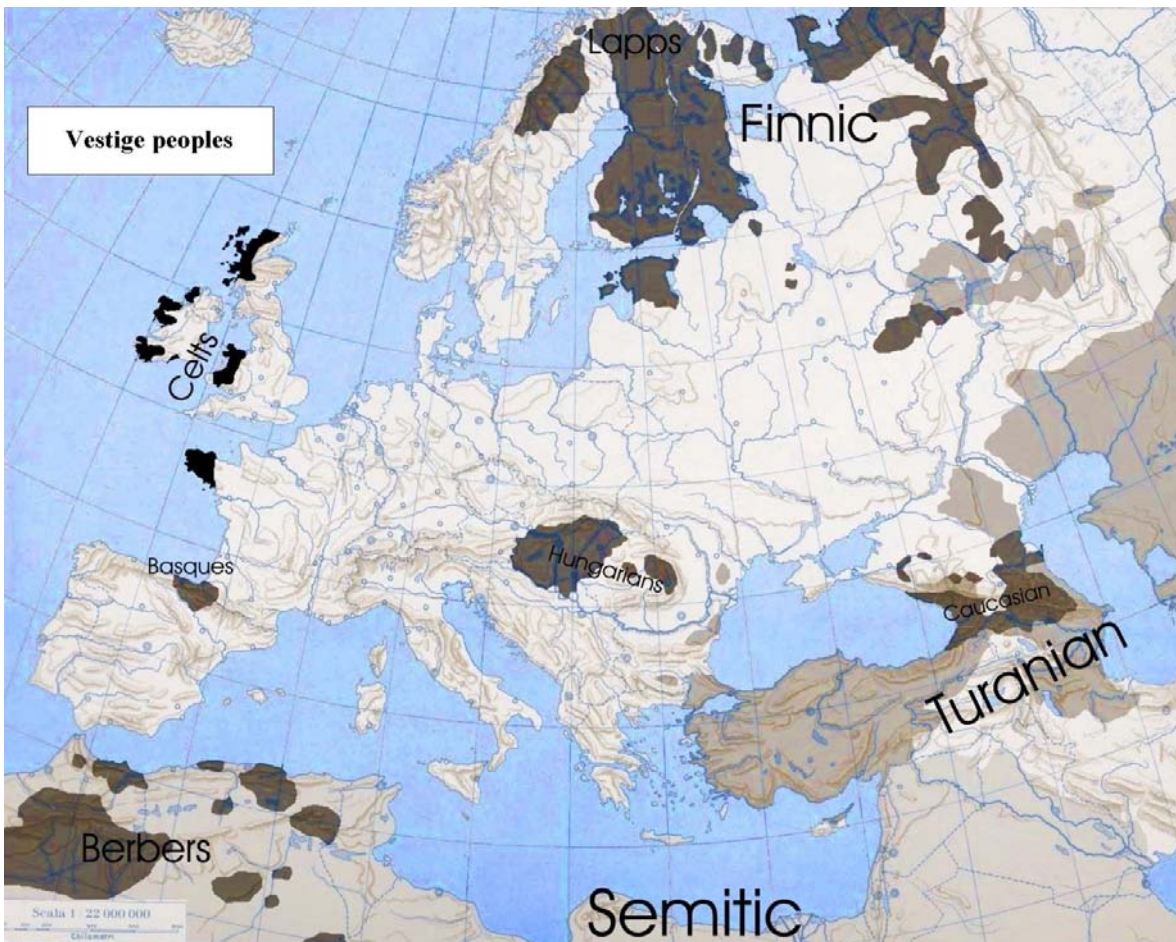


Fig. 3.2



Fig. 3.3

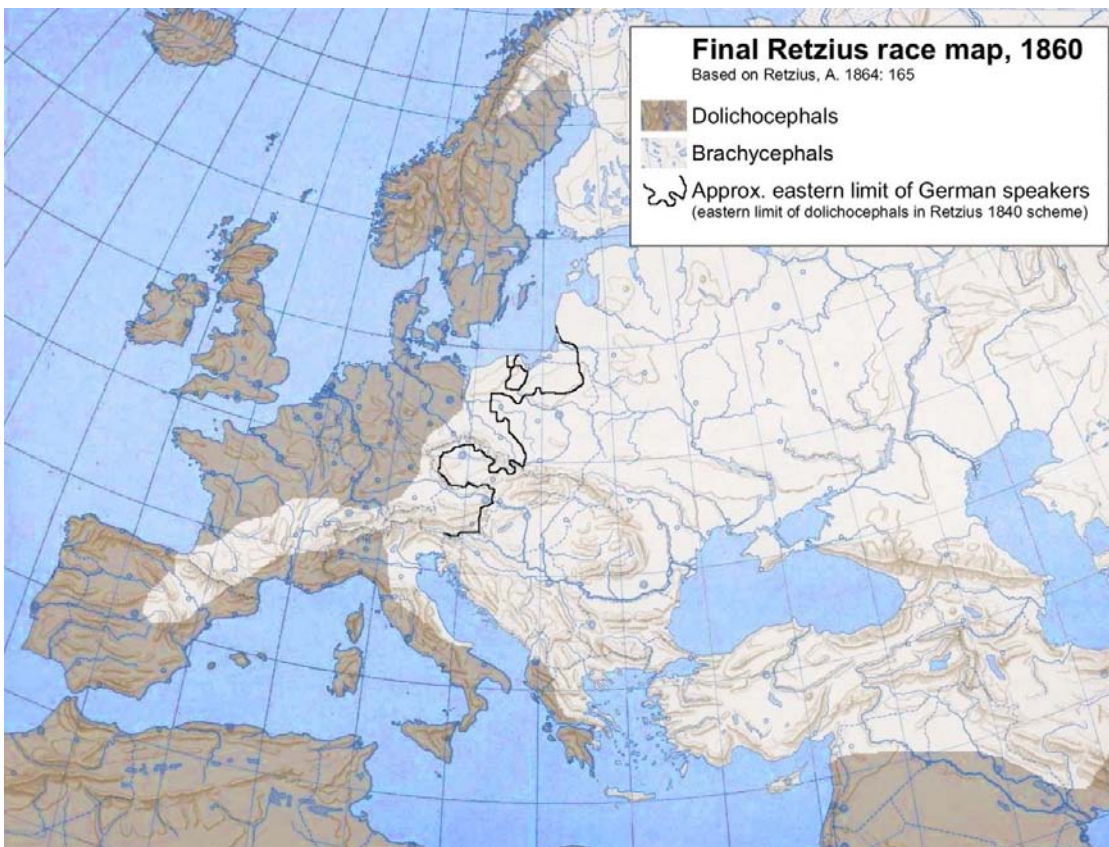


Fig. 3.4



This diagram from a Romanian eugenics text illustrates how the demographic potential of 'Mongoloid' Slavs was feared.

Fig. 3.5

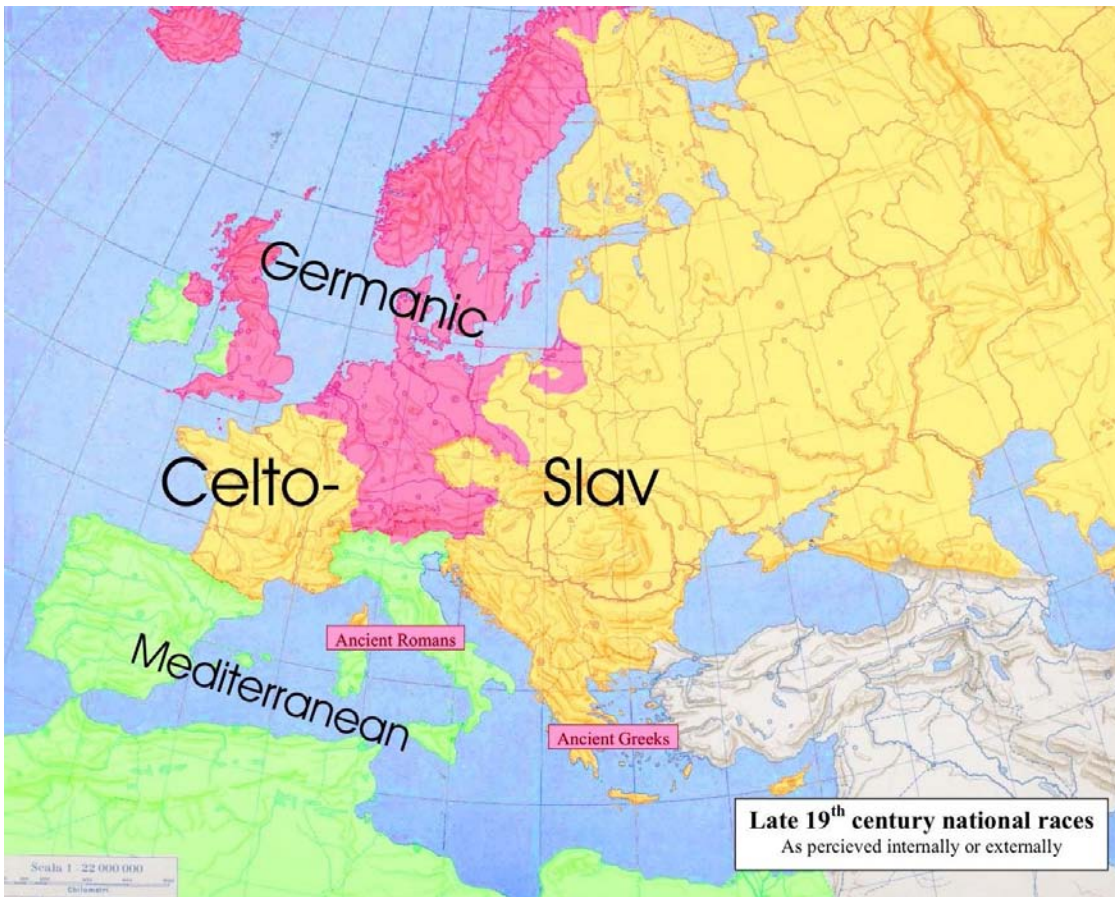


Fig. 3.6

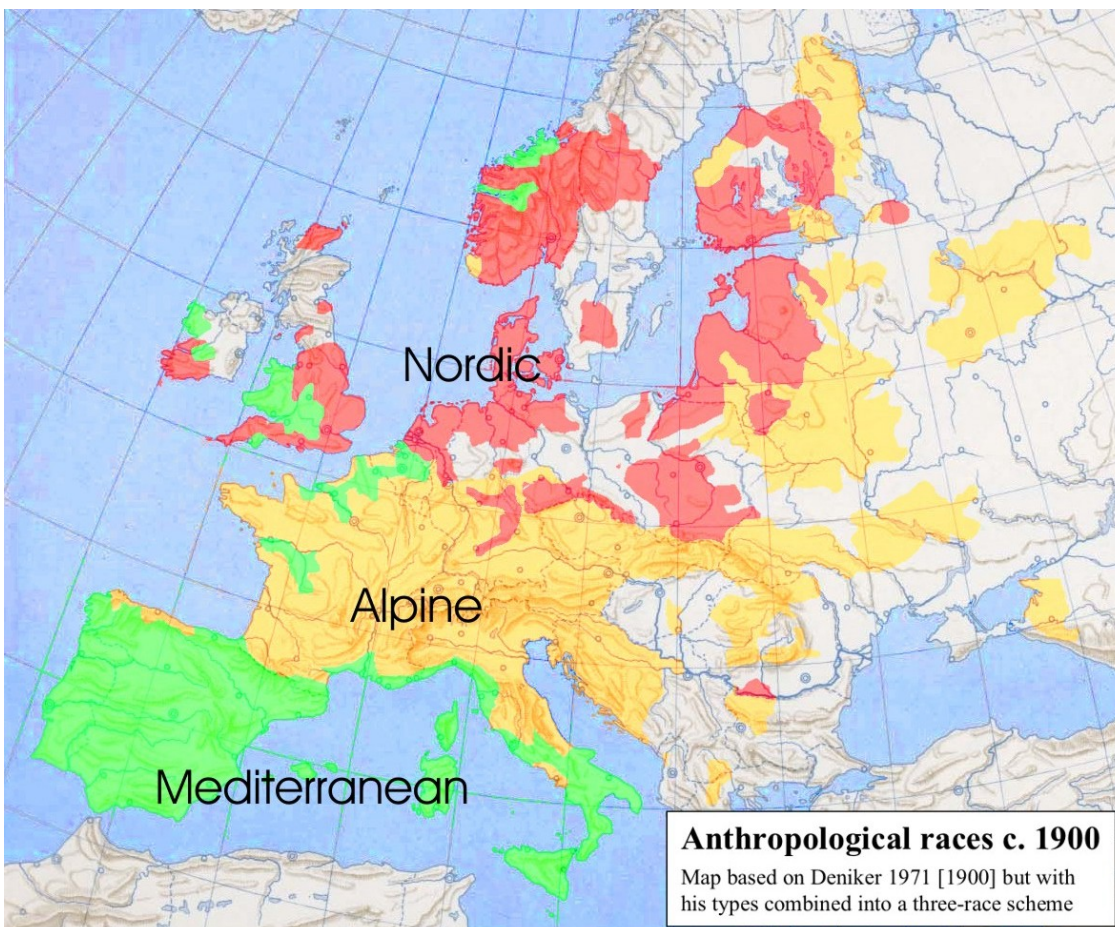


Fig. 3.7

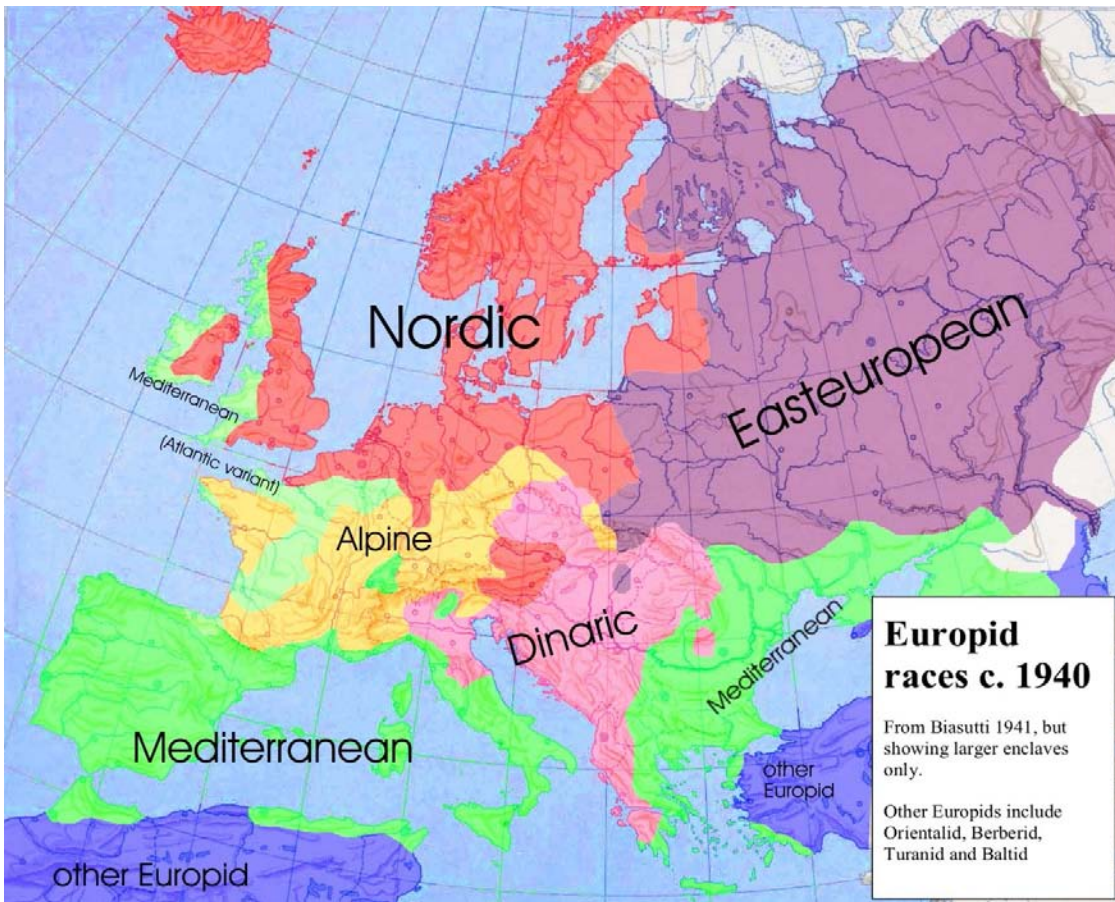


Fig. 3.8



Fig. 3.9



This ethno-racial map manages to convey the idea that Britain's component peoples are syntheses, but nevertheless different (Ripley 1900: 313).

Fig. 4

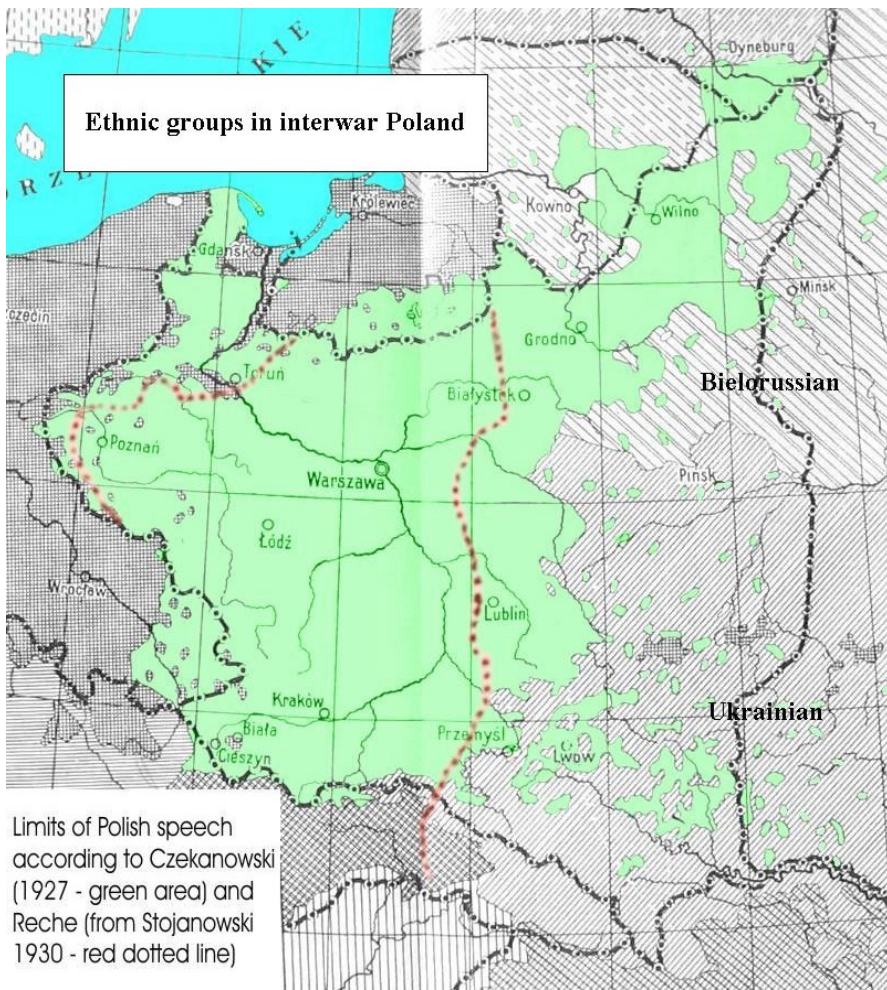
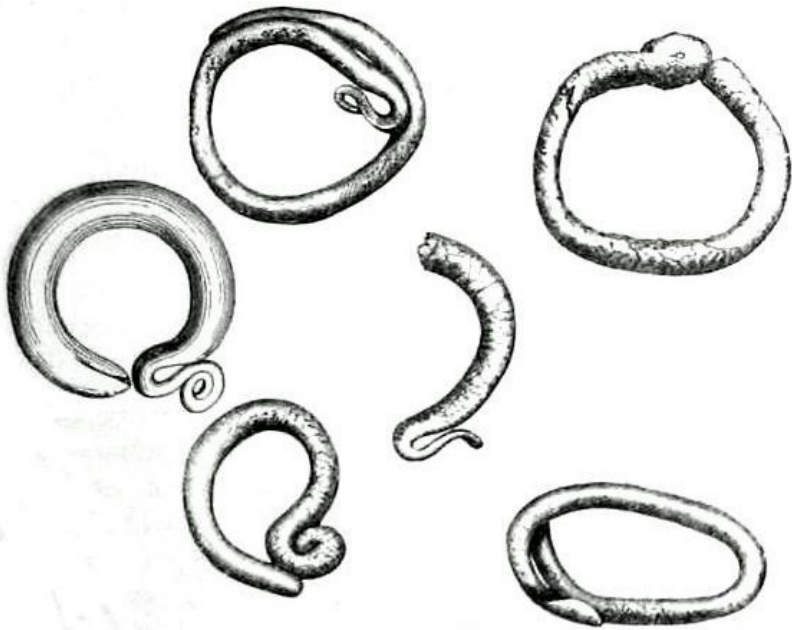


Fig. 5.1

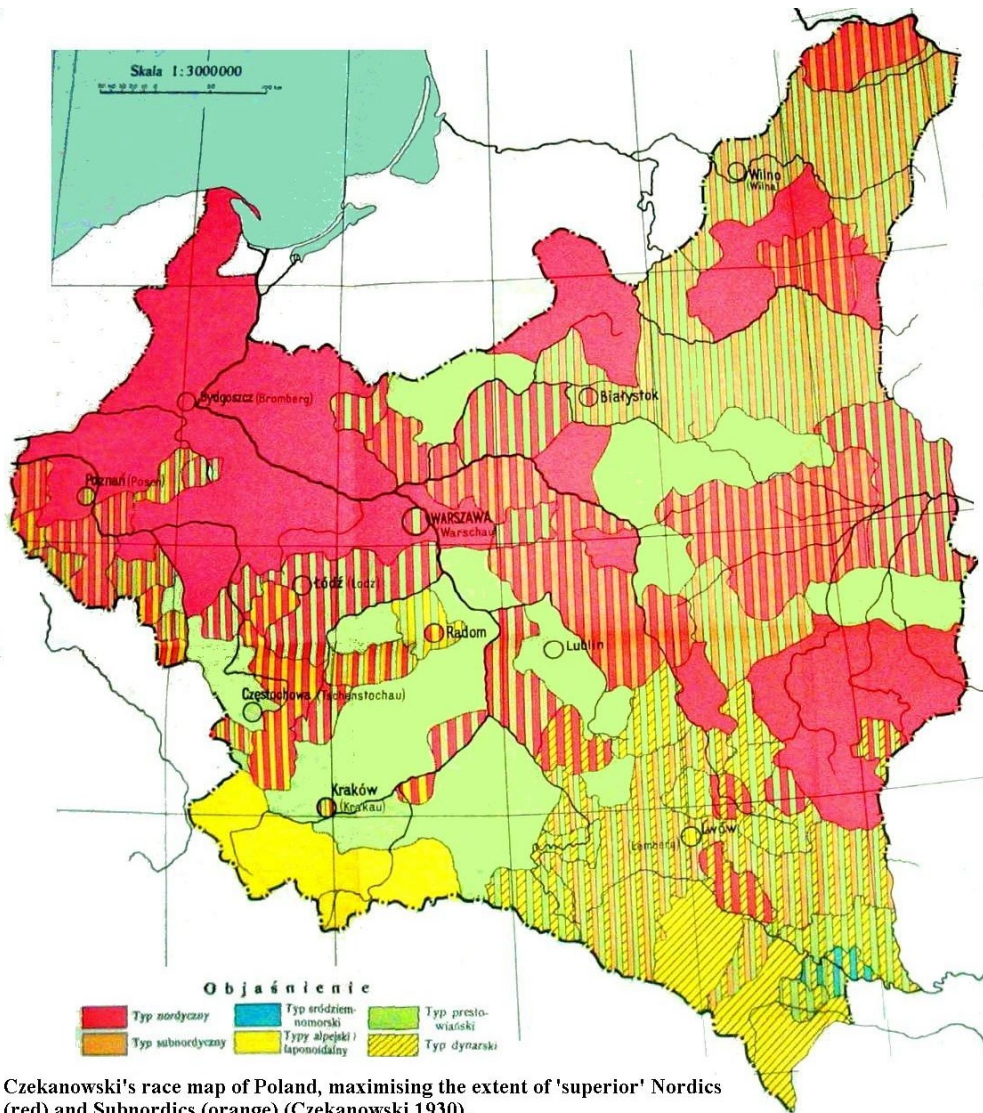


Fig. 5.2



Temple or hooked rings (Schläfenring/Hackenring) (Buschan 1890: 18).

Fig. 5.3



Czekanowski's race map of Poland, maximising the extent of 'superior' Nordics (red) and Subnordics (orange) (Czekanowski 1930).

Fig. 5.4



Fig. 6.1

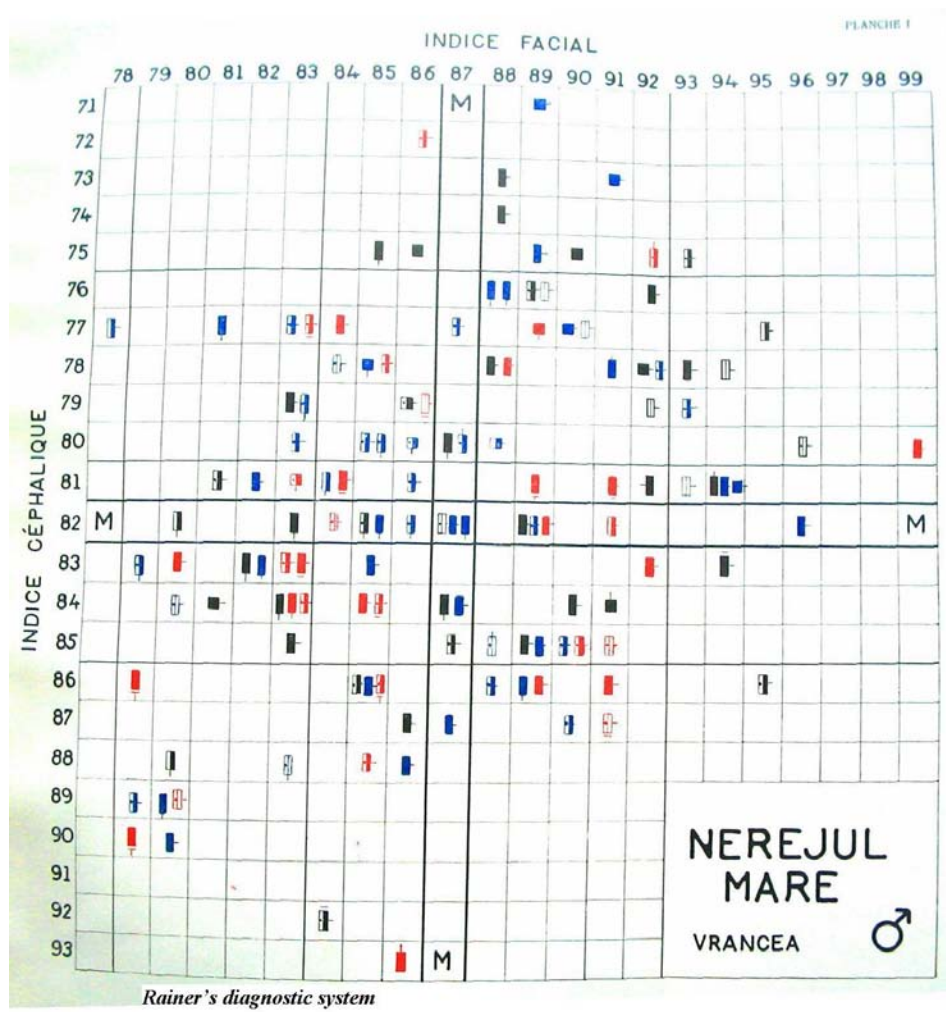


Fig. 6.2

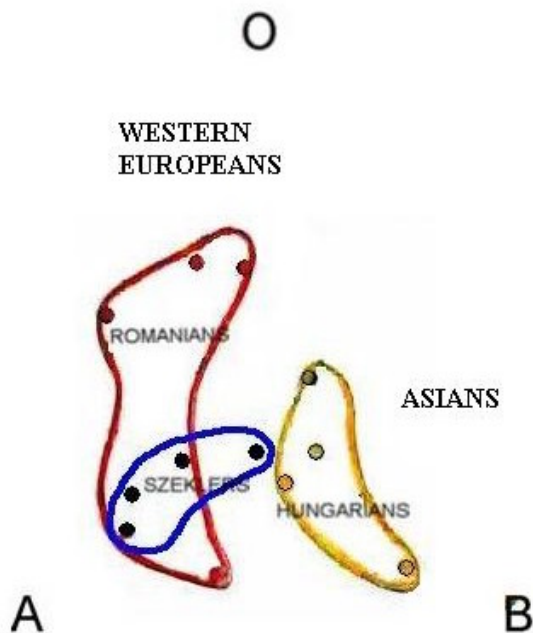
1. Bulgari: $M_{41} D-A_{24} A_{15} PAs-Mo_{12} N_8$;
2. Casari: $A-Mo_{52} Ar_{30} M_{15} N_3$;
3. Cehi: $A_{33} D_{20} E_{20} N_7 M_1 L_1 Mo_1$;
4. Danezi: $N_{68} A_{20} E_{12}$;
5. Englezi: $N_{60} M_{30} A_{10}$;
6. Evrei (Polonezi): $A_{15} Sn_{13} M_{12} Ar_9 L_6 Mo_6 N_4 D_3 E_3$;
7. Francezi: $A_{45} N_{25} M_{15} Ex_8 D_5 L_2$;
8. Germani: $N_{50} A_{20} D_{15} E_6 O_5 M_2 L_1 Mo_3$;
9. Italiani: $A_{35} D_{30} N_{20} M_{15}$;
10. Jugoslavi: $D_{22} A-Ar_{18} S_{16} Ce_{12} X_9 No_7 E_6 M_5 N_3$;
11. Macedoneni: $M_{37} Ar-D_{31} PAs-Mo_{15} N_9 A_8$;
12. Muntenegreni: $D-Ar_{65} A_{14} M_{10} E_6 N_5$;
13. Polonezi: $N_{32} E_{27} Sn_{21} A_{15} L_2 Mo_2 M_3$;
14. Români²⁾: $A_{29} M_{19} N_{14} E_{12} D_{11} X_{10} O_3 Da_2$;
15. Sârbi: $D-Ar_{47} M_{20} N_{15} A_{10} E_6 PAs-Mo_2$;
16. Sloveni: $D_{19} S_{16} A-Ar_{13} Ce_{13} No_{12} X_8 E_7 N_5 M_1$;
17. Suabi: $N_{50} A_{25} D_{25}$;
18. Suedezi: $N_{80} A_{20}$;

³⁾ Prescurtarea tuturor termenilor rasiali folosiți de diverși antropologi:

A = Alpină	Da = Dalică	No = Noridă
Ar = Armenidă	E = Esteuropidă	O = Orientalidă
A-Ar = Alpină-Armenidă	Ex = Extracurop. (Mongolidă, negroidă, etc.)	P = Preasiatică
CAs = Central-Asiatică	I = Indică	PAs = Paleoasiatică
Ce = Centralidă	L = Laponoidă	Prs = Preslavă
C-Mo = Caucaziană-Mongolidă	M = Mediterană	S = Savidă
D = Dinarică	Mo = Mongolidă	Sb = Sibiridă
	N = Nordică	Sp = Subnordică
		T = Turanică
		X = Atlantidă

Făcătoaru's race notation system.

Fig. 6.3



From Râmneanțu and David's Streng diagram, showing how they Asiaticised Hungarians and claimed Szecklers (Râmneanțu & David 1935a).

Fig. 6.4

Genografia Sanghină O a Grupelor de Rasă. Triunghiul lui Streng

Indieni americani.....

Eschimoși.....

Englezi
Spanoli
Francezi
Italiani
Germani de D.
Cehi
Poloni
Români
Bulgari
Fini
Turci
Unguri din T. d. Mureș
Unguri

Negri
Bantu
Micronezieni

Filipini
Ruși
Dojaci

Japonezi
Tigani
Chinezi
Ciuvaci
Manciurieni
Urbeci
Indieni
Aino
Coreani

A

B

Râmneanțu and David's Streng triangle.

Fig. 6.5

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