

# EVOLUTION LECTURE

## I. DARWIN AND NATURAL SELECTION

### A. The Controversy

1. Gradualism
2. Punctualism
3. "Creationism"

### B. Historical Background

1. Discovery of new life forms
2. Discovery of fossils
3. Need to explain the discoveries

### C. The Role of Darwin

1. Beagle voyage from age 22-27
2. The diversity and distribution of life forms
3. Evidence of variation from a common ancestor

### D. Natural Selection

1. Mechanism for variation
2. Malthus and "Survival of the Fittest"
3. Artificial selection

### E. Acceptance of Evolution by Natural Selection

1. Victorian Society
2. Explanatory power

## II. THREE CENTRAL QUESTIONS

### A. The Fossil Record and Transitional Types

### B. Mechanism for Speciation (Beyond Variation)

### C. The Origin and Development of Adaptations, Integration and Complexity

### III. GRADUALISM VS PUNCTUALISM

#### A) The Fossil Record

- 1) The nature of the fossil record
  - a) The only objective source of evidence
  - b) Quick burial in water-borne sediments.
  - c) Catastrophic events and extinctions.

#### B) Speciation by Mutation

- 1) Gradualism and micro-mutations
- 2) Punctualism and macro-mutations
  - a) Severe environmental crisis
  - b) Chance macro-mutations.
  - c) Isolated sub-groups
  - d) Rapid rise of new kinds
  - e) Suspension of natural selection

#### C) The Origin and Development of Adaptations, Integration and Complexity

- 1) Gradualism rejects macro-mutations
- 2) Gradualism accepts the slow accumulation of random micro-mutations
- 3) Requirements of Gradualism
  - a) Neutral mutations in redundant D.N.A.
  - b) Unlimited time
  - c) Multiple adaptations for successive functions.
  - d) Mutations of Regulatory D.N.A.

### IV. HEREDITY AND GENETICS

#### A) Laws of Heredity

- 1) Discovered by Mendel
- 2) The role of Genes

B) The Structure and Function of D.N.A.

- 1) Chromosomes, genes and nucleic acids
- 2) Built-in limited variation due to various combinations of genes
- 3) Source of Stability
  - a) Perfect reproduction is controlled by the Genetic System
    - 1) Structural D.N.A.
    - 2) Regulatory D.N.A.
  - b) Harmful mutations prevented by natural selection

V. VARIATION; NOT SPECIATION

A) The Fossil Record Disproves Gradualism

- 1) There are no transitional forms
- 2) Only the sudden appearance and disappearance of unchanging kinds

B) Limited Variation

- 1) The Genetic System disproves Punctualism
- 2) Macro-mutations prevented by Natural Selection

C) Examples

- 1) The eye
  - a) Complexity
  - b) Improbability
- 2) Whales
  - a) Rapid change?
  - b) Radical change?

VI. THE NATURE OF EVIDENCE

A) Evolutionary Theory is Primarily Subjective

B) Little Objective Evidence Exists

C) Theory of the Origin of Life

- 1) No objective evidence at all for the presumed conditions nor the presumed processes
- 2) Infinitely improbable
- 3) Accepted completely on faith

VII. THE FAILURE OF SO CALLED SCIENTIFIC CREATIONISM

A. The So Called Scientific Creationists Argument

1. Literal biblical interpretation?
2. Subjective evidence
3. Scientific evidence
4. Creationism based on faith and dogma

B. Problems of So Called Scientific Creationism

1. Dogmatic and dishonest
2. Unscientific and illogical

VIII. THE MISSING DIMENSION

A. The Truth About Origins Cannot be Discovered Scientifically

B. The Truth About Origins Can Only be Known by Revelation

C. Man is Physical but the Spirit in Man Imparts Mind

D. Modern Education Accepts Scientific Knowledge as the Only Serious Source of Truth

E. The Role of Science

1. Investigate the physical universe

F. The Limits of Science and Reason

1. Is there a purpose?
2. What is the origin of life? Of man?
3. Evolution and "Creationism" are both beyond the limits of human reason.