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An Exciting Preview of

AGRICULTURE IN TOMORROW'S WORLD

Read the exciting details about the agricultural wealth and prosperity of Tomorrow's World as revealed in the pages of your Bible.

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DRAMATIC revolution in agriculture is just around the corner!

It will produce far-reaching breakthroughs in food production and prosperity that will stagger the imagination. It will deeply and directly affect the life of every living person in every country on earth.

Here is an exciting glimpse into some of the tremendous — and wonderful — changes that will occur.

Agriculture's Fantastic Future

Vast new acreages of fertile, well-watered land will become available for growing crops and raising livestock.

Perfect weather and bumper crops will be the rule — not the exception.

Hunger and malnutrition will be a thing of the past. Everyone in every land will be able to enjoy fresh, clean, wholesome, tasty, nutritious food — grain and nuts, meat and dairy products, and fruits and vegetables in unbelievable variety and abundance.

A large percentage of the world's populace will live on very prosperous family-sized farms. Millions of well-kept farms with spacious, beautiful homes will dot the landscape. Farm families will enjoy stable economic prosperity, radiant health, and a sense

© 1970, 1971 Ambassador College All Rights Reserved of satisfaction, accomplishment and fulfillment from their work.

They will strive to work in harmony with nature and the laws of God in every aspect of their farm operation. Farming will be a respected occupation and farmers will take pride in what they produce. Their goal will be to produce food that is high in true quality—not just a lot of bulk.

This means that careful attention and hard work will be given to building up the land. Natural methods of composting and fertilizing will be used to produce a healthy soil rich in humus and soil life—a soil whose produce will be practically impervious to insect plagues and disease. This fertile soil will be protected and further built up by proper tillage methods, diversification, crop rotation and other conservation practices. Such carefully man-

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aged soil will make maximum use of available moisture. It will not be plagued with erosion and a troublesome amount of weeds.

Instead of soil-depleting one-crop farming — with its corresponding price-depressing surpluses — farmers in Tomorrow's World will raise a large variety of crops. These crops will be carefully planted at the right time on the right soil.

Pesticides and other harmful chemicals will, of course, be totally unnecessary. Forcing the soil by means of artificial fertilizers, which produce yields of inferior quality, will simply not be permitted.

Healthy Livestock and Poultry

Since animals play an important part in the ecology of the life cycle, tomorrow's farms will have a *variety* of poultry and livestock. Most of these farm animals will be allowed to roam freely over rich pastures. Animal wastes will be properly used to make an important contribution to soil fertility.

Though livestock may be temporarily penned up for fattening purposes, they will not spend most of their lives confined in crowded feedlots. Neither will chickens spend their lives cooped up in cages so small that they can barely turn around.

These farm animals will not be given a host of drugs and shots, and feeds of unnatural, unbalanced highly concentrated mixtures that cannot possibly produce high-quality meat. Rather, poultry and livestock will be given feed and forage that is clean, balanced and high in natural nutritional value. This wholesome feed will produce strong and healthy stock that will reproduce robust offspring of the same high caliber.

Selective breeding of both plants and animals will be practiced — but only to build up factors of true quality. Development and use of inferior hybrid strains will not be permitted. Neither will there be such practices as artificial insemination.

Gracious Living for the Farmer

The high quality evident in the farm produce will also be reflected in the per-

sonal life of the farmer and his family. There will be hard work, but it will be challenging and rewarding. And farm life will not be a humdrum existence of toil and sweat from dawn to dusk with no time out for culture, relaxation and enjoyment of life.

In Tomorrow's World the farm family will have better opportunity for personal improvement, education, recreation, travel and socializing. Then all farmers will be intelligent, educated, cultured individuals — in a profession looked up to by the rest of society. They will have a goal in life other than seeking how they can squeeze another dollar's or pound's worth of produce out of the land.

Nearby cities will offer a rich variety of cultural, recreational, educational and social activities for the farm family. And scenic areas and parks of natural beauty will be available for hiking, boating, camping, fishing, etc., just a few miles away.

Society will be agriculturally oriented in Tomorrow's World. Farming will be so popular that even city dwellers will want to take part in it. But not in the way so many do today when they "play at" farming to gain tax benefits.

Rather, people in tomorrow's cities will want to have their own gardens and small orchards just for the pleasure of working with the soil, of being close to nature and of growing a part of their own food. Because of changes in tomorrow's urban areas (as explained in "An Exciting Preview of Tomorrow's Cities" — write for a free reprint of this article), many people in towns and cities will have room for small-scale agricultural activities. Some will even keep a few chickens, cows, sheep or goats!

But how will this wonderful world of agriculture come about? Will it be by man's achievements in agricultural science and technology? Let's look and see what man has planned for the future of agriculture — and see how it compares with the future just described.

Agriculture 2000 A.D.?

"The efficient farmer of the year 2000," says an impressive study entitled Agriculture 2000, "is a super breed of

farmer, with super skills and super tools. The heart of his operation will be a control center equipped with a wide array of electronic wizardry to help him produce crops two to five times as abundant as today."

The report describes unmanned tractors that are controlled by computer tape, buried wires or sensing devices. The courses of these tractors would be plotted on headquarter units similar to radar sets which follow today's airplane flights.

Other new machinery projected by the report are huge four- or six-wheeldrive tractors powered by electric drive, fuel cells or efficient storage batteries. Cabs would include air conditioning, food warmer, coffee maker, refrigerator, television, and even a sink.

Plant growth is expected to be automatically recorded, and simply by turning a dial the farmer will provide proper light, water and nutrients.

Production of cows' milk is predicted to quadruple. Man even plans to manufacture "identical" milk from carrot tops and pea pods. New varieties of corn will produce plants that look more like small pine trees! Fertile ova will be transplanted from superior cows into common incubator cows, allowing a superior cow to mother as many as 1000 calves in her lifetime.

The report foresees staggering production figures. It predicts yields of 300 bushels of wheat per acre, compared with today's 27; 175 bushels of soybeans, compared with 25; 30 tons of forage, compared with three; 30,000 pounds of milk per cow, as compared with 8,000; and 1000 pounds of beef at 10 months of age, compared with 750 today!

And how are these staggering production figures to be achieved? By the three magic wonders of modern agriculture: greater mechanization and automation, greater use of chemistry, and man-manipulated genetics.

Chemical Care From "Cradle to the Grave"

Today many farmers feel they could not survive without chemical pesticides and fertilizers. But we are told that the use of chemicals in agriculture is just beginning. Not only will chemical pesticides be used with greater efficiency and precision in eliminating pests, and not only will chemical fertilizers become more refined and powerful, but scientists now envision "cradle-to-thegrave" chemical regulation of plant growth, development, yield and quality! It may surprise you to learn that the following plant processes are either presently under control or are being experimented with to come under such control:

Root initiation and development, speeding up or slowing down germination, whichever is desirable; control of vegetative growth and form of the plant so it can be accommodated by "once-over" mechanical harvesting.

This control involves regulating the branching and leaf orientation, the time of flowering and fruit set, the color and nlargement of the fruit and the control of fruit ripening. It includes abscission control, which prevents the premature dropping of fruit yet loosens the fruit to make mechanical harvesting easy.

Artificial lighting and automatic feeding have already become widespread in livestock and poultry operations. Experiments with controlled environments show that all animals have a "comfort zone" and that temperature and humidty exert a marked influence on performance. Man hopes to raise livestock of the future in controlled environments (some even predict in high-rise, apartment-like dwellings!) and feeding is planned to be computer-programmed to meet specific needs. Estrus (sexual excitement) will be synchronized, and vulatory rates regulated with the ova oeing fertilized artificially with sperm of known genetic material.

With chickens, an effort is being made to break through the egg-a-day barrier. It is reasoned that the hen should not have to act as a packaging machine and be required to produce a limestone container for each egg. If the shell could be discarded and if only the "membrane envelope" were produced, much of the time and energy now used in egg production could be eliminated. Such shell-less eggs already constitute more than 5 percent of the market!

Hogs that will be marketed in 100 days from birth and beef animals that

will be marketed in six months are other predictions. The goal here is to get as much gain from every pound of food being fed as possible. One experiment with caged piglets produced close to one pound of gain for one pound of food!

As of last year *plastic* roughage went on the market for cattle! This product stays in the rumen and provides a "scratch factor" needed for efficient digestion of grain and supplement. It eliminates the need for natural roughage and has even increased feed conversion by 10 percent!

The recycling of animal wastes as reconstituted foods for livestock and poultry is another trend that is catching on fast. This accomplishes two purposes: it gets rid of the waste and provides cheap feed.

This is the kind of agriculture man has planned for the coming years. But something is *terribly* wrong with this projected picture overall.

Modern Agriculture Is Failing!

The biggest problem in the glowing predictions we have just read is that there is NOTHING which can quickly, practically, cheaply and effectively be put to work in solving our race with worldwide famine!

Projections may *sound* good. Some may even come to pass in carefully controlled experiments or on small acreages in rich countries like the U.S. But this is a far cry from having the capital and skilled manpower to be useful on a large scale.

Besides, too often the glamorous-sounding projects deal with relatively minor factors as far as food production is concerned. The really BIG problems of shrinking available arable land through erosion, salt destruction and urban development, a sinking water table, and the continuing general worldwide decline in soil fertility are almost totally ignored. Little or nothing is being done to solve these *major* problems. In fact, the modern practices mentioned previously are all too often *bastening* the destruction of these priceless resources.

Just look at the *end result* of many of the "successful" practices of modern farming, such as chemical pesticides and fertilizers, drugs, antibiotics in feeds, hybrids, etc.

The truth is that every one of these practices is largely at odds with nature. Thus they are breaking laws which exact penalties. Because the penalty does not always immediately appear — at least not in its fullness — it is too often assumed that a penalty does not exist. But a delayed penalty simply means that the disastrous effects are accumulating and will in due time be released in full fury. Some of these unnatural practices may appear to be successful — until we start to reap the penalty.

Pesticides and fertilizers, for example, have been hailed for contributing to greater yields and an increased food supply. But they also have been quietly and steadily killing soil life (earthworms, beneficial bacteria, fungi, and other organisms), causing erosion and pollution, and producing inferior food that is bringing sickness and suffering to mankind. The widespread evils of DDT, as only *one* example, are just beginning to be recognized by governments around the world.

When soil begins to show signs of depletion, it ought to be rested and carefully built up. Chemicals just *mask* the problem while they continue to further deplete the land.

Inferior quality is also evident in many new strains of plants. The widely hailed varieties of rice such as IR-8, for example, not only need huge amounts of chemical fertilizers and water, but they are also very highly susceptible to disease. For further understanding about chemical farming, request our free reprint "The Growing Crisis of Pesticides in Agriculture."

Our stock is likewise in a very precarious position. Feeds containing antibiotics have taken away from the animals their *natural* capacity to resist disease. Veterinarians warn we are "flirting with a tragedy" in this area. Now it is feared this lack of resistance may be transmissible to humans via the meat we cat.

We know of feedlots where the animals have been so doped with drugs and concentrated feeds that the *manure* of these animals will not even decompose! The producers try to solve this

problem by feeding the manure back to the animals!

Money-Motivated

An estimated 85 percent of American cattle are given stilbestrol —"Queen of the Hormones." It has been known to cause lower carcass quality, prolapse of the rectum and blockage of the urinary tract in cows. It lowers the grade of the carcass and gives the meat a watery, mushy appearance. It is *suspected* of being a causative factor in cancer and the appearance of female characteristics in men who consume the beef so treated. Why is it used? Because 16 cents worth of stilbestrol can bring up to twelve dollars worth of profit!

Even mechanization and automation can be bad when taken to an extreme or improperly used. Mechanization has greatly speeded up man's ability to abuse the earth. The moldboard plow, for example, has helped convert far larger acreages into deserts than man has managed to transform into productive farmlands.

Heavy farm machinery that packs the soil and destroys soil life is not good.

Neither is it good to coop up thousands of chickens in small cages so they can be automatically fed and watered at the expense of the birds' health and where disease could quickly wipe out the entire flock.

A disease of epidemic proportion in many areas not long ago killed tens of thousands of laying hens in just such poultry operations. The resulting egg shortage and increased expense in securing eggs from greater distances was reflected in higher prices to the consumer. These money-motivated practices often *cost* money!

And then there are the social and economic consequences of modern agriculture. The cost-price squeeze drives many small farmers off the land into already-overcrowded cities to try to eke out an existence there. While the big farmers squeeze all they can out of the land, the cost-price squeeze is also slowly but surely closing in on them.

In utter incongruity, the government pays for taking some cropland out of production to relieve the surplus, meanwhile the farmer tries as hard as he can to create a surplus by forcing as much



as possible from his remaining land so he can make a living!

And all the while agri-business debts pile higher and higher. Farmers are forced to take out ever-bigger loans until they owe the bank or other lending agencies their entire assets.

And in the underdeveloped, hungry countries? There the limited agricultural resources (and almost all fertilizer) are used to grow cash crops such as coffee, peanuts, etc. These products are then exported to get foreign currency. Meanwhile the local people suffer from malnutrition and hunger.

The Overview

Not all of the particular conveniences and practices of modern agriculture are bad by any means. But looking at the whole picture in overview, any way you want to evaluate it— nutritionally, economically, socially, politically — the practices and methods of modern agriculture are failing miserably. A drastic earthshaking CHANGE is urgently needed.

We bring to you the good news that that change is coming!

Changing the Earth's Face

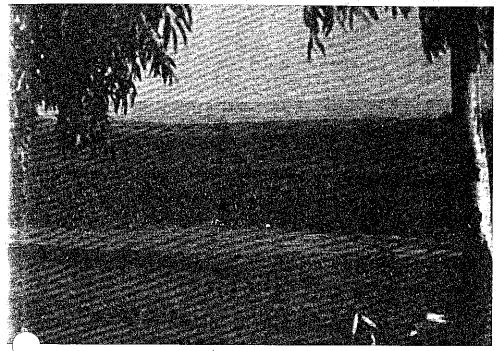
Today there is great difficulty in growing food for the earth's inhabitants. Why? Because in addition to upset weather and wrong agricultural practices much of the land area of the

earth is desert, mountainous, jungle — unusable for food production. To man, a solution to this problem looks impossible. But God has the solution!

Simply make most of the earth cultivatable! Reduce the bare, snow-swept and craggy mountains, raise up some of the deep, arid desert valleys, CHANGE the world weather patterns. Make the deserts green and fertile! Open up huge areas of the earth such as the Kalahari Desert in Bechuanaland, the Lake Chad basin in French Equatorial Africa, the world-known Sahara, Gobi and great American deserts. Make verdant the vast wastes of Mongolia, Siberia, Saudi Arabia and many of the Western United States.

Uncover the deep ice packs and snowdrifts, the permafrost and tundra from the vast, almost limitless, expanses of Antarctica, North America, Greenland, Northern Europe and Siberia. Make LEVEL the awesome Pamir Knot, the huge giants of the Himalayas, the Atlas, Taurus, Pyrenees, Rockies, Sierras and Hindu Kush — reshape the immense sweep of the Andes, and all the other forbidding, towering, virtually uninhabitable mountains of the earth.

The God of ALL power, who FORMED the hills and mountains (Amos 4:13; Psalm 90:2), will RE-form them — will RE-shape the surface of this earth! This does not mean that there will be



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A visitor to Israel today can view this startling contrast near Beersheba. The fertile field (above) lies only a few miles away from vast stretches of dry, wasted desert sands (left). This is just a minute example of what tomorrow's world will be like — when all barren lands will "blossom as the rose."

no mountains or hills in Tomorrow's World. Isaiah 55:12 and other scriptures show there will be. Not only do mountains and hills give beauty and variety, but they are also necessary for a balanced ecological system. For example, many plants and animals do better on sloping terrain than on a completely level landscape.

Read of the huge EARTHQUAKES yet to come which will directly accomplish much of the rehabilitation of the land surfaces (see Rev. 16:18; Zech. 14:4). (For further information send for our FREE booklet *Earthquakes* and our free reprint article "Earthquakes — and the Bible!")

Yes, multiple millions of acres of unbelievably fertile, productive, wonderful farmland will suddenly become available — just waiting to be pioneered and rightly developed and used. Impossible?

In the hands of man — certainly! But not in the hands of God.

Fresh Water and Verdant Deserts

"I will open up rivers for them on high plateaus! I will give them fountains of water in the valleys! In the deserts will be pools of water, and rivers fed by springs shall flow across the dry, parched ground.

"I will plant trees — cedars, myrtle, olive trees, the cypress, fir and pine — on barren land.

"Everyone will see this miracle and understand that it is God who did it, Israel's Holy One" (Isa. 41:14-20, all quotes from Living Psalms and Proverbs With the Major Prophets Paraphrased translation unless stated otherwise).

Can you imagine such a fabulous scene? Deserts becoming green, fertile garden lands of trees, shrubs, bubbling springs and brooks; mountains brought low and made inhabitable.

Deserts often begin and grow because man destroys woodlands, grasslands and meadows. God is going to rehabilitate the desert wastelands by planting trees, thus correcting the *cause* of so many deserts on earth today.

Other passages in Isaiah describe this same miracle:

"You will live in joy and peace. The mountains and hills, the trees of the field — all the world around you — will rejoice.

"Where once were thorns, fir trees

will grow; where briers grew, the myrtle trees will sprout up. This miracle will make the Lord's Name very great and be an everlasting sign [of God's power and love]" (Isa. 55:12-13).

"And the Lord shall bless Israel again, and make her deserts blossom, her barren wilderness shall become as beautiful as the Garden of Eden" (Isa. 51:3).

The entire 35th chapter of Isaiah is devoted to this same theme:

"Even the wilderness and desert will rejoice in those days, the desert will blossom with flowers.

"Yes, there will be an abundance of flowers and singing and joy! The deserts will become as green as the Lebanon mountains, as lovely as Mount Carmel's pastures, and Sharon's meadows, for the Lord will display His glory there, the excellency of our God....

"Springs will burst forth in the wilderness, and streams in the desert.

"The parched ground will become a pool, with springs of water in the thirsty land. Where desert jackals lived, there will be reeds and rushes!" (Isa. 35:1-2, 6-7.)

Some years ago, in a dry, parched canyon deep in the profusion of hills between Bakersfield and Los Angeles, California, a minor earthquake rippled through the arid hills. Not long after the earth rocked and groaned beneath their feet, the proprietors of a nearby small resort heard a faint gurgling sound. They ran to the dry, dusty creek bed that coursed through their property and were utterly amazed to see water flowing swiftly along. As the creek gradually cleared up, they found the water to be crystal-clear and pure sweet and refreshing to drink. Somehow, the earthquake had broken open an underground water source, sending it cascading through their property.

It is known that large underground reservoirs of water exist under many desert areas — just waiting to be released. In Tomorrow's World, God will open up these water sources and make them available to man.

Perfect Weather

Nothing affects agriculture more than the weather. But today the weather is often the farmer's greatest worry — his enemy instead of his ally. Rain too often comes at the wrong time — too early, too late or during harvest. Or it comes in the wrong manner — accompanied by violent, destructive winds. And sometimes it doesn't come at all.

In Tomorrow's World, this will all be different for everyone living in accord with the established government.

God promises: "I will make My people and their homes around My hill a blessing. And there shall be showers, showers of blessing, for I will not shut off the rains but send them in their seasons. Their fruit trees and fields will yield bumper crops, and everyone will live in safety" (Ezek. 34:26-27).

The only way the weather will be against man in Tomorrow's World will be when individuals or nations refuse to obey God and His laws. You can read what will happen to those who refuse to worship God properly in Zechariah 14:9-17.

Human Nature Changed

Throughout history, man has cut down the forests, overgrazed the grasslands and mined the earth's croplands — with hardly a thought given to replacing, rebuilding and restoring. With very few exceptions, land use has been synonymous with land abuse.

And what has been at the root of this abuse? Human nature! An attitude of getting! Man's nature of vanity, jealousy, lust and greed manifests itself in every one of his activities — and agriculture is no exception.

The obvious problems of agriculture today cannot be solved unless and until nan's nature of getting can be replaced by a nature of giving. As long as human nature with its tendencies to tear down, exploit and destroy is allowed to dominate, there is no hope for agriculture.

But God has the answer to human nature. That answer is His Holy Spirit. When added to the human mind, this Spirit imparts God's outgoing, loving, giving nature to man.

In Tomorrow's World the Holy Spirit will be available to all mankind!

"And I will give you a new heart — I will give you new and right desires — and put a new spirit within you. I will

take out your stony hearts of sin and give you new hearts of love.

"And I will put My Spirit within you so that you will obey My laws and do whatever I command....

"I will cleanse away your sins. I will abolish crop failures and famine.

"I will give you huge harvests from your fruit trees and fields....

"Then you will remember your past sins and loathe yourselves for all the evils you did" (Ezek. 36:26-31).

When people turn to God and receive His Spirit, agriculture will be blessed!

God will even cause a change in the nature of animals!

"In that day the wolf and the lamb will lie down together, and the leopard and goats will be at peace. Calves and fat cattle will be safe among lions, and a little child shall lead them all.

"The cows will graze among bears; cubs and calves will lie down together, and lions will eat grass like the cows.

"Babies will crawl safely among poisonous snakes, and a little child who puts his hand in a nest of deadly adders will pull it out unharmed.

"Nothing will hurt or destroy in all My holy mountain, for as the waters fill the sea, so shall the earth be full of the knowledge of the Lord" (Isa. 11:6-9; see also chapter 65:25).

Pollution Eliminated

Today man is polluting the earth terribly through wrong agricultural and industrial practices. By the time the World Tomorrow begins, the land and water will have been so badly polluted by man that it will take a great miracle from God to rectify the damage.

God declares in Ezekiel 47:8-12 that there will be a river that flows out from Jerusalem. It will have miraculous purifying and healing powers. As its waters flow to all parts of the earth, they will clean up the filth and pollution caused by man. They will cause fruit trees to produce wholesome, nutritious food that will give health and strength to those who eat it.

Not only will the earth be restored by this healing water flowing out from Jerusalem, but men will follow laws of farming which eliminate pollution. No longer will cattle and other livestock be confined to crowded feedlots where they are fed an unbalanced diet of highly concentrated feeds that, chances are, may even include mixtures containing their own dung.

Instead, "In that day shall thy cattle feed in large [ample and lush] pastures. The oxen likewise and the young asses that ear the ground shall eat clean provender, which hath been winnowed with the shovel and with the fan" (Isa. 30:23-24, this and remaining quotes from King James Version).

Poison sprays and artificial fertilizers — and anything else that pollutes — will not be tolerated in Tomorrow's World. God says: "I will also save you from *all* your uncleannesses [physical as well as spiritual]: and I will call for the corn, and will increase it and lay no famine upon you" (Ezek. 36:29).

Entire Society Agriculturally Oriented

In Tomorrow's World the nations "shall beat their swords into plow-shares, and their spears into pruning-hooks: nation shall not lift up sword against nation, neither shall they learn war any more" (Micah 4:3).

Instead of making instruments of destruction and being a war-oriented society, men will make instruments of peace, and society will become agriculturally oriented. Agriculture will be a respected profession, and many, many people will be engaged in it.

"But they shall sit every man under his vine and under his fig tree; and none shall make them afraid: for the mouth of the Lord of hosts hath spoken it" (Micah 4:4).

This verse emphatically states that there will be private ownership of property. So does Jeremiah 32:43-44, which tells of buying and selling land.

God believes in private ownership. He also expects man to maintain and improve what he owns — especially in regards to property (Gen. 2:15).

Because proper care of the land involves work which can often be done only with human hands, the farms in Tomorrow's World will probably be relatively small. Each farm will need to provide for only 1-3 families, as opposed to about 20 families today in the U.S. Also, the earth will yield so abundantly that it will not be necessary to own large tracts of land in order for the farmer to be prosperous.

Can you imagine what it will be like when man wholeheartedly works in harmony with all of God's physical and spiritual laws? The results will be breathtaking. The Bible describes it like this:

"Therefore they shall come and sing in the height of Zion, and shall flow together to the goodness of the Lord, for wheat, and for wine, and for oil, and for the young of the flock and of the herd: and their soul shall be as a watered garden; and they shall not sorrow any more at all" (Jer. 31:12).

"Behold, the days come, saith the Lord, that the plowman shall overtake the reaper, and the treader of grapes him that soweth seed, and the mountains shall drop sweet wine, and all the hills shall melt... and they shall plant vineyards, and drink the wine thereof; they shall also make gardens, and eat the fruit of them" (Amos 9:13-14).

Agriculture in Tomorrow's World --

this is a *glimpse* of what it will be like!

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