

Chapter 10

The Coming Civilization

Nature has clearly indicated the direction in which civilization is moving. Following the broad pattern taken in the evolution of life forms in general, it is moving in the direction of a world organism in which certain groups of people will perform the function of one organ in the human body, and other groups of people each will perform the functions of other organs in the human body, and all will be working together for the benefit of the whole.

Nations possessing certain natural aptitudes and raw materials will use these for the benefit of all the people of the world, and nations possessing other natural aptitudes and raw materials will use these for the benefit of all the people of the world. And people within a nation will cease their hitormiss method of selecting a vocation. Instead they will be specially educated from early years to enable them to develop to the highest degree of efficiency, and use for the benefit of all the people in the world, the natural aptitudes shown by their planetary charts of birth.

Even with energies which already have been brought under control, and present technical skill, present machinery, present raw material, and present manpower, a world thus organized would free every man, woman and child from want. But already on the horizon there are both new energies of incalculable power, and new controls of infinite delicacy, which presently will be used for the benefit of mankind.

People are merely beginning to understand how electronics may be employed to direct and control more ponderous energies. But the time will come when they will be used not merely to manipulate various types of physical power, but also freely to communicate between those who have lost their physical bodies through so-called death, and those still residing on the physical plane. Electronics, in due time, will make conversation, by purely mechanical means, between those on the spirit side of life with those on the earth side of life, as common and as easy as it is now common and easy for those in different cities to converse with each other over the telephone.

Relative to the effect the new energies now on the horizon will be likely to have, history indicates that wherever the arts, science, literature, philosophy, and even religion have shown commendable development, there have been men with leisure to develop them, a leisure made possible through utilizing energies other than their own. Even Christianity made slight progress until espoused by the accumulated wealth and surplus force of Rome. Historians believe that Rome, Egypt, Babylon and Greece advanced to the civilizations for which they are noted because each at times had available for every free man the energy of one human slave plus another slave's energy from mechanical and animal sources.

Without citing still earlier cultures built on the average freeman having at his command the energy of one slave, or the development of feudalism and the commencement of our

own era, both made possible by an increasing energy surplus, a census of 1869 informs us that after the abolition of slavery the combined power of draft animals and machines gave to each man, woman and child in the United States an additional energy the equivalent of 12 slaves. That is, the energy available for productive purposes was six times as great as that of the ancient civilizations at their height.

Yet the 1930 census, at the commencement of the Pluto Period, indicates at that time the average person in the United States had available, in the form of automobiles, locomotives, manufacturing plants, power stations, horses, etc., the equivalent of 177 slaves. Let us therefore, with a view to possible future changes when the new powers now on the horizon are developed, scan one or two of the more important modifications this increase of energy has already brought to our civilization.

Primitive man, no doubt, was more or less nomadic, and a hunter. But with the development of agriculture, life became more secure, and many institutions were developed which have persisted almost to our day. The hunter needed strength, agility, bravery and cunning; but with the more settled routine of the quiet farm, thrift and industriousness became qualities of greater need; the woman became more valuable than heretofore, because of the innumerable tasks she could perform.

Likewise, because children could be compelled to work for their keep, and their labor capitalized, large families were encouraged. Even with the beginning of industrial pursuits, because these were still carried out in the home largely by women and children, there continued to be taught the doctrine that women should be meek, should bear as many children as possible, should dress and act in a manner more constrained than men, and that their place was exclusively in the home.

This time-honored conception of the sheltered and subservient position of woman, and the view that any attempt to limit the number of children to the physical strength of the mother and the possibility of their adequate support was a cardinal sin, persisted century after century, until new energy supplies made radical changes in family life imperative.

The development of machinery drove industrial activity from the country and home to the city, the office and the factory. The demand for female workers made them economically independent, but it also made impractical the old order of home life. Children, because their labor no longer could be capitalized, and because of the loss of work to the mother while bearing and caring for them, became a luxury. Under the agricultural regime the man of 18 to 21 had sufficient knowledge to support himself, and the addition of a wife and numerous children were aids to the acquisition of a competence. But the skill now required for a young man to handle the intricate machines, or the business responsibility of industry, with sufficient adequacy to support a wife in the standards to which she has become accustomed in the parental home is seldom reached before thirty.

In the United States, 1930—the commencement of the Pluto Period—found eleven million women gainfully employed. Doing the same work as men, they have tended to adopt the same dress as men, to wear their hair like men, to smoke and drink and swear as their male companions do, and to ask for a single standard in moral conduct. Men and women now reach physical maturity and are beset with the same biological urges as previously; yet marriage of necessity is delayed an extra ten years. Meantime, the movies, the radio and cheap magazines are financially successful in proportion as they stimulate amorous desires. Children are a luxury, marriage is postponed and increasingly avoided, unconventional attachments flourish, and the home frequently is but a few cells in the honeycomb of some concrete structure; all due to the development of energies that make of this a machine age. It is not to criticize this state of affairs, which is but the natural outcome of compelling environmental forces, that this is mentioned; but to point out the cause, and to indicate it is but a transitory level in far greater changes now at hand.

There can be no doubt, in spite of crimewave and gang warfare, also made possible and encouraged by easily accessible energy supplies, as well as by the violation of the fundamen-

tals of psychology, that present day advantages are more numerous than its drawbacks. Under such rapid change it is difficult to determine what is wrong and what for the best. The shorter hours of labor give more opportunity for personal development. The movie, the newspaper, the radio and the automobile are each vast engines of education. People live fuller lives now than ever before. But new energies have brought with them a change in the setup of civilization. And still other energies which can be used to build an environment of human happiness also can construct engines of terrible destruction to enslave the people and make more horrible the conduct of war. Although they have not as yet been utilized, such other energies are known to exist.

In addition to the astrological energies which so profoundly affect human life, and new energies already known, there may be still others at present unrecognized by science. This presumption is based upon the fact that the most potent energies now known were not discovered until 1925, yet these cosmic rays afford energies a thousandfold greater than are available from any other source. They afford energies surely as high as 6 billion electron volts, and probably higher than 10 billion electron volts. By way of comparison, the "light bullets" (photons) emitted from an electric lamp represent energies of about 2 electron volts; Xrays may develop from 20 thousand to 100 thousand electron volts; and gamma rays from radium about 2½ million electron volts. The most probable source of new power, however, is the binding energy of the atom.

Early in 1939 the artificial fission of uranium was discovered. Painstaking work revealed that it was not the common form of uranium which was split into two other elements, but the isotope U235. Large deposits of Uranium are found in Germany, Canada, the Belgian Congo and Colorado. U235 occurs in the ore in about the proportion of 1 part to 139 parts of the common U238.

On the fifth of May, 1940, Dr. Alfred O. C. Nier, of the University of Minnesota, announced a method, since corroborated in other universities, of isolating U235. And as this is written scientists the world over are working on the problem of extracting it from uranium ores in commercial quantities.

When neutrons are slowed down by passing through hydrogenous matter such as water and paraffin, these slow neutrons are readily captured by the nucleus of atoms. This results in the formation of an isotope which is heavier than the stable form. The instability then may result in the emission of gamma rays or the emission of an electron. But in the case of U235, instead of gaining stability through the ordinary processes of radioactivity, the capture of a slow neutron by the nucleus results in the uranium atom, which has 92 protons, splitting into the atoms of two other elements, barium, having 56 protons, and krypton, having 36 protons.

Such a complete fission of an atom is something quite new to science. Yet associated with it are two other amazing features. One is that in the splitting, neutrons are released to bombard other nuclei, so that a chain reaction results. Once the process is started in a given mass of U235 it continues until all is broken into the two mentioned elements. The other is that in the process matter is converted into energy; that is, atomic binding energy is released due to the disparity between the weights of the separated groups of particles and the weight of the nucleus just previous to breaking up after capturing a neutron.

Naturally radioactive elements may produce 14 million electron volt alpha particles, but fission of U235 produces 100 million electron volt barium particles. Dr. Nier estimates that one pound of U235 would generate as much force as the combustion of 2 million pounds of coal, and that its explosive energy is equivalent to that of 20 million pounds of high explosives.

Others have pointed out that a small amount, a pound or two, if its energy could be completely utilized, would drive an oceanliner for months. They have asserted that all that would be required to keep releasing its energies would be to place it in water. The water would be converted into steam, and the steam could be used to run turbines. When

the water was used up the process would stop, and start up again only when new water was added.

All of which sounds entirely too easy and simple. There are difficult problems awaiting those who attempt to harness U235. Nevertheless the energy is there, and on a small scale even at present can be released. Furthermore, the binding energy released in this fission is only a small fraction of the total energy which would develop if one unit of atomic weight could be converted into energy. Such conversion, if possible, would yield about a billion electron volts.

It was a method to release and use this energy within the atom that Hitler's scientists were so feverishly trying to discover during World War II; and had they been successful before the end of the war (as this is written World War II is still in progress and Germany as yet undefeated) the whole world would come under the cruel heel of Nazi tyranny.

And this thought emphasizes the most significant factor of all relative to the coming civilization. That factor is not whether new energies of tremendous power are going to be discovered—for such discoveries are on the way—but whether the new energies made available will be used by special privilege to exploit the masses and keep them subservient, or will be used to benefit the people as a whole. Already I have indicated that in 1930 the energy of 177 slave power was available for the use of the average man. But did that additional energy bring freedom from want? It certainly did not; because it became concentrated in the hands of a few families. It became the tool of special privilege. People could neither acquire the raw materials nor the machines of production; for these were owned by those who were interested, not in supplying people with the things the machines could produce from the raw materials, but with the profit they could make. As a consequence, by 1933 there were ten million unemployed in the U.S., and a year or two later over fourteen million people in the U.S. desiring employment who could not get it.

We have seen the changes wrought when man had at his command energies the equivalent of 177 slaves. What changes will be induced when, as soon will be the case, the average individual has at his command 1,000 slavepower? With the sensitive controls the science of electronics gives over such tremendous energies, we cannot envision the facilities man will be able to utilize. But we may be sure that, as in the past, so in the future, there will be those who will try to use these energies to benefit themselves at the expense of the rest of mankind.

Against such brutal, selfish men mankind has but one protection: to increase in knowledge and spirituality. Increase in spirituality increases the desire that all shall prosper, and motivates work to that end. Increase in knowledge enables these desires to be implemented by effective methods of thwarting those who would exploit and oppress others, and by methods of action by which the ideals may be made into realities. Increased spirituality united to increased knowledge alone will abolish special privilege and give to all the people of the world Freedom from Want, Freedom from Fear, Freedom of Expression and Freedom of Worship.

Appendix

The Forgotten Rites of Stonehenge

In the County of Wiltshire, England, still may be seen the ruins of what is probably the most perfect example of its kind of an ancient temple of the Religion of the Stars. Stonehenge has been reconstructed as a model; and the archaeologists are able to furnish a detailed description of its original appearance and structure. Their opinion is that it was built about four thousand years ago.

The history of the region goes back about half that far—only to the time of the Roman conquest. At this much later date, Roman history records that the Druid priests taught many things about the size and dimensions of the heavens and the various motions of the stars; that they believed the soul of man had previously occupied lower forms of life; and that after death man lives, much as he lives on earth, in some superior region.

With this account of the beliefs of those still inhabiting the vicinity at the time of the Roman invasion, let us read Stonehenge in terms of its own language, the language of universal symbolism. The long avenue of stones leading from the northeast indicates the path of evolution leading through lower forms of life up to the state of human birth. The direction of approach is from the northeast, because it is from the northeast that the soul is born; that is, the house of birth, the first house of a birth chart, is in the northeast part of the map.

The outside of this temple consists of a circular earthwork three hundred feet in diameter. Because the constellations surrounding the zodiac, and picturing its influence, are composed of an infinite number of stars, such a mound, not distinguished by wellmarked divisions, well represents the surrounding starry firmaments.

Immediately within this earthwork originally was a circle of small "foreign stones," the foundations of which only now remain. These "foreign stones" represent the influence of the zodiac and its divisions.

Then, interior to these, comes a complete ring of hewn stones with lintels mortised to their tops, making a series of doorways. These doorways, extending completely around the circle, are not made of "foreign stones," because the houses of a birth chart are not dependent upon stellar influences, but upon the position on the earth where such influences fall. Inside this ring of stone doorways is another ring of "foreign stones," indicating the motion of the planets in their orbits.

Within these is a horseshoe of five dolmens. The number five is the symbol of man, and was so considered in all the ancient schools. A dolmen, consisting of two upright stones with a horizontal stone on top, is a doorway; the horizontal stone conveys the idea of a higher plane. The five dolmens signify the belief that man passes through the doorway of physical dissolution to continue life and effort in a higher realm.

Within the five dolmens is a horseshoe of "foreign stones." The horseshoe form is the

symbol of the feminine in nature, even as the single upright stone is the symbol of the masculine. The crescent is also the symbol of the Moon. Within the curve of this horseshoe is a flat, horizontal slab of stone serving as an altar.

In this temple many different ceremonies were performed, but only one will be mentioned here. The neophyte to be initiated, standing on this slab of stone within the horseshoe at sunrise on the day of the summer solstice, portrayed the ageold mystery of the immaculate conception. In the center of the avenue of approach, and so located that the rising Sun on the longest day of the year sheds its rays directly over it into the horseshoe and upon the altar, is a large, unworked, upright stone, representing the Sun and the masculine in nature.

In nature there is a constructive principle and a destructive principle. Light is the universal symbol of the constructive attribute, while darkness is representative of that which is destructive. At the time of the summer solstice the day is longest, the Sun highest in the heavens. Symbolically, the power of light then reaches its maximum. The neophyte, standing on the altar as the rising Sun that day sheds its light over the Sun stone, represents the soul within the womb of matter, reunited to its divine source by a spiritual ray.

The avenue and its stones indicate the steps he has taken to reach his present illumination. His position reveals his knowledge that physical life is merely a period of gestation, from which he will be born into the life of a more glorious existence. He is surrounded by symbols that represent the mundane houses, the zodiac and the planets, indicating that he recognizes their influence both upon his life here and upon his life on the higher plane, signified by the dolmens.

The "foreign stones" which represent the influence of the zodiac, the circling planets and the crescent Moon, have not been quarried, like the other stones, in the near vicinity; but to represent their influence as coming from afar, have been brought from some distant place.

The neophyte, with the light of the rising Sun shining upon him this longest day of the year, has come into a realization of the meaning of life; that life below is a preparatory school in which the soul is trained according to the function it is to perform in the universal organization. His soul entered matter to gain this training, and now, as indicated by the rays of the rising Sun reaching him, it is once more consciously united to its ego, to the sun of its divine source.

Now and hereafter, astrological forces will play their part. But having arrived at the state of true illumination, he is no longer a neophyte, for he is conscious of his cosmic work.
