PART TEN: THE ASSUMPTIONS OF SCIENTISM

The word "science" is from the Latin *scientia,* which means "knowledge"; the Greek equivalent is *episteme,* hence epistemology, the study of the ways of knowing, of the criteria of truth. I have already made it clear in this text that I have only profound respect for true science and its achievements, the blessings it has conferred on mankind. I would be the last to seek to deter in any way the progress of the human race in the understanding of its environment and in the task of overcoming those factors which prevent adaptation to this environment. But let me emphasize the fact anew that in making these statements I have in mind *true* science—the science, especially the scientific attitude, that is seasoned with a proper measure of both humility and faith: that is, with the awareness of man's creaturehood and his necessity of depending on faith, in the main, to guide his activity and his progress, rather than on absolute certitude. For absolute certitude man does not have in any great measure: even the "laws" of the physical, chemical, biological, psychological, and sociological sciences are, after all, but statements of *very great probability.* For example, two atoms of hydrogen unite with one atom of oxygen to form a molecule of water: thus far no exception to this "law" has ever been noted. But this does not mean there never will be an exception: and for any man to put forward such a claim is to arrogate unto himself *omniscience*; and omniscience, or the potentiality of omniscience, man does not have. We think we live in this present world by *sight,* but careful analysis of human experience will soon make it obvious to all "honest and good hearts" that we live, for the most part, by *faith.* Very great probability is itself a measure of faith. What is usually designated knowledge is simply inference. But—is this inference *necessary* inference? (Necessary inference is rightly defined as that view, the opposite of which is inconceivable.)

THE ASSUMPTIONS OF SCIENTISM

1. *Science versus "Scientism."* While I have all the respect in the world for true science and the scientists who pursue it, I have none whatever for what has come to be called "scientism." By "scientism" we mean the deification of science, and, naturally, of man himself as the originator of science. (Devotees of scientism are prone to forget that their science is purely descriptive of what lies "out there"; that truth is written into the structure of the universe, and that all they can do is to *discover it.*) "Scientism," writes Trueblood, "is so naive as to be almost unbelievable . . . God is a fiction because He cannot be discovered by laboratory technique. Prayer is futile because it cannot be proved by scientific method. Religion is unworthy of serious attention because it arose in the prescientific age." He concludes: "What we have here, of course, is not merely *science,* but a particularly unsophisticated philosophy of science, which deserves the epithet *scientism.*"[1] Scientism is, of course, the product of a closed mind, or in the final analysis, a form of wilful ignorance. It feeds on assumptions (as premises) which cannot be proved to be valid.

This distinction between science and scientism must certainly be kept in mind in the study of the book of Genesis. It is in this area especially, in which we deal with such problems as those of the Creation, of the beginnings of human society, of the origin of evil, of the institution of religion, that "discrepancies" between Biblical teaching and scientific thinking have been alleged by extremists on both sides of the controversy. It is our purpose, in this resume, to show that these alleged "discrepancies" or "contradictions" are in the main "straw men" which have been set up by the zealots of these conflicting "schools" of thought with their contrary methodologies.

On the one side of this controversy, we have the "die-hard" preachers who refuse to entertain anything but an ultra-literal interpretation of Scripture, whether it makes

sense or not (that is, in the relation of the particular text to its context, and to *the context of the Bible as a whole*), and who flatly reject all possible alternatives which do make sense. We still have these gentlemen with us, and in this writer's opinion they often contribute to the destruction of faith, on the part of young people of high school and college age, as truly as do their ultra-"scientific" antagonists. This should not be. God knows that the one excellence needed perhaps more than any other by the confused youth of our time is *faith*, especially faith in the integrity of Scripture as the record of God's revelation to man. They need to realize, once and for all, that nothing, absolutely nothing, has been discovered by the so-called "modern mind" that downgrades in any way this integrity and reliability. As a matter of fact the "modern mind" is itself pretty largely a myth of the so-called "modern mind."

However, in my opinion, the worst offenders are the materialistic "scientists" and "philosophers": those who, in their desire to exclude God from the cosmos and to reduce what they call "religion" to an innocuous, indefinable "convictionless religiosity," deliberately seek out alleged discrepancies between Biblical and scientific teaching, and seem bent on conjuring up discrepancies where they do not exist at all. These "seminarians" never seek harmonies; they are out looking only for contradictions; they cannot see the forest for the trees. Believe me, the will *not* to believe motivates many of the intellectuals of our modern world. I have encountered students, from time to time, who have been "sold" on the claims of "positivism," "naturalism," "humanism," "existentialism" (the contemporary fad among the ultra-sophisticates), and in most cases I have found them utterly impervious to any view which may be in conflict with their pet notions. It is this class of collegians who have completely closed minds: they will not even give an honest hearing to contrary views. They are right, and anyone who suggests the con-

trary is an "old fogy." These persons—both instructors and students—who take advantage of every opportunity to throw paper-wads at the Almighty simply demonstrate their utter ignorance of much of Biblical teaching. Unfortunately there are so many young people who do not know that these are just paper-wads and not golden nuggets of truth, paper-wads saturated with human speculative saliva (if a mixed metaphor be permitted), because these are young people who have never had any opportunity to hear the other side of the case. And unfortunately young men and women are too prone to take as "law and gospel" what their instructors hand out, no matter how fallacious, and oftentimes utterly absurd, these professorial pronouncements may be. (I am willing, of course, for any man to be "sure," so long as he is not "cocksure," about what he believes.) The result of much of this confusion, not only in state institutions of learning, but in "theological" seminaries as well, is what the humorist Mr. Dooley must have had in mind when he remarked that the trouble with so many people is that "they know so many things that aint so."

I want not to be misunderstood here. College instructors who manifest this bias, and who go out of their way to cast innuendo on Biblical teaching and on anyone so "credulous" as to accept it at face value, and on religion in general, are the exception and not the rule. At least I have found it to be so. Unfortunately, however, only three or four professors committed to this type of thinking, are sufficient to confuse young impressionable minds and to brainwash them into a kind of skepticism (which is rooted in pessimism at its worst) that has but one thesis, namely, the meaninglessness of life and utter futility of living. Naturally there would be little point in living in the here and now, in a world, supposedly, of sheer chance (instead of choice), much less would there be any ground for hope of amelioration in a future life of any kind.

The tragedy of all this is that it need not be. It is the by-product of ignorance of the teaching of the Bible, and the immediate product largely of over-specialization so characteristic of modern education, that is, of specialization in a particular area of knowledge attended by misinformation or gross ignorance of what is to be accepted as valid in other areas of life and knowledge, and in particular of the area commonly described as "religious," the area of the Spiritual Life. Someone has said that "man is the only joker in the deck of nature," and the pitiful aspect of this fact is that he persists in playing his most tragic jokes on himself.

2. *Harmonies of Science with Biblical Teaching.* Let us now recapitulate what we have learned up to this point of the harmonies which prevail in our day between scientific theory and Biblical teaching, especially concerning matters introduced in the book of Genesis, as follows:

(1) According to the Bible, the first form of "matter-in-motion" was some kind of radiant energy (light: Gen. 1:3). This is a commonplace of present-day nuclear physics. Moreover, in our day, the line between the "non-material" ("ideal," "mental," "spiritual") and the "material" is so thinly drawn as to be practically non-existent. As a matter of fact, energy-matter has become *metaphysical,* apprehensible in its primal forms by mathematical calculations only, and not by sense-perception. It is interesting to note that, according to the testimony of "top-flight" physicists, the as-yet-undiscovered elementary forces in "matter" may turn out to be "new and sensational sources of energy vastly more powerful than that loosed by hydrogen bombs." No one knows what the future has in store for man's understanding of the Mystery of Being.

(2) According to the Bible, animal life had its beginning in the water (Gen. 1:20-21). This is a commonplace of present-day biological science.

(3) According to the Hebrew Cosmogony, the order of Creation was as follows: light, atmosphere, lands and seas, plant life, water species, birds of the heavens, beasts of the field, and finally man and woman. This is precisely the order envisioned by the science of our own time. That the order (sequence) pictured in Genesis—in an account known to have been written in prescientific times—should be in exact accord with twentieth-century science, is amazing, to say the least. There is but one logical conclusion that can be derived from the fact of this correspondence, namely, that Moses was writing by inspiration of the Spirit of God. (We all know today that light and atmosphere (nitrogen, hydrogen, oxygen, carbon dioxide, etc.) had to exist before any living thing could exist, that the process of plant photosynthesis had to be in operation to support both animal and human life. But who knew anything about hydrogen, oxygen, nitrogen, carbon dioxide, chlorophyll, photosynthesis, etc., at the time Genesis was written? We simply cannot invoke human experience to account for these facts recorded in Genesis centuries ago, facts that have become known only as a result of the progress of science in modern times, indeed some of them as the product only of more recent discoveries.)

(4) It has been pointed out previously in this text that there is no necessity for assuming conflicts between the Genesis Cosmogony and present-day geological science. On the basis of the *reconstruction* theory of the Mosaic Narrative—that in Gen. 1:1 we have a general statement about the absolute beginning of the physical Creation, and in Gen. 1:2 the account of the beginning of what is called an *Adamic renovation,* following an alleged pre-Adamic reduction of the cosmos to a state of chaos—it is obvious that in the interim thus hypothesized there was ample time for all the periods envisioned by the modern earth sciences. Again, on the basis of the *panoramic* theory of the Hebrew Cosmogony, according to which the "days"

of the Creation Narrative are held to be aeonic days or periods of indefinite length (the interpretation which we have chosen in this text as the preferable one), certainly sufficient time could have elapsed between the moment when God decreed, "Light, Be!" and the moment when He said, later, "Let us make man in our image," to allow for all the terrestrial developments set forth in the text-books of geology and kindred sciences.

(5) The description of man—the human being—as a spirit-body or mind-body unity (Gen. 2:7) is in exact accord with the psychosomatic approach in medicine, and the organismic approach in psychology, to the study of man.

(6) According to the Genesis account, God decreed something at the beginning of each stage of the Creation, and that which He decreed "was so" (vv. 1, 7, 9, 11, 15). "He spake, and it was done; He commanded, and it stood fast" (Psa. 33:6,9; 148:5,6). We have already noted that recent studies in the area of the phenomena of the Subconscious support the phenomenon of psychokinesis, the power of thought energy in man to effect different kinds of "materializations" and to affect the movements of ponderable objects or things. Certainly such phenomena support the Biblical doctrine that man was created in the image (likeness) of God (Gen. 1:26-27). That is to say, as the image and likeness of God, man should have within him, infinitesimally of course, the power to transmute "thoughts into things," powers which the Creator exercised in bringing the cosmos into existence.

3. *The Blind Spots of the Materialists.* Materialists have ever been eager to seize upon theories which would reduce man—including the life processes and thought processes characteristic of man—ultimately to some kind of "physical" energy or "motion": that is, to an aggregate of protons and electrons. There are scientists and philosophers in our

day whose theories are materialistic, but who shy away from being labeled materialists, preferring to be known by more sophisticated terms, such as "humanists," "naturalists," etc. Nevertheless, they are one with the materialists in their efforts to discredit religion in general, and the fundamentals of the Christian faith in particular. These gentlemen repeatedly seize upon theories which they mistakenly interpret—largely because of their incomplete knowledge—as supporting materialistic predilections, but which in fact do not necessarily do so. This type of "half-baked" know-how ("scholarship"?) simply adds to the already existing confusion brought about by their own kind.

For example, materialists, holding as they do that when the body dies the person perishes *in toto*, assume that T. H. Huxley's theory of *epiphenomenalism* supports their view that all forms of being are reducible ultimately to energy-matter and so disproves any possibility of continued personal existence beyond the grave. (As stated heretofore, epiphenomenalism—the word means literally, "an accompanying phenomenon," that is, a phenomenon "upon a phenomenon"—is the theory that what is called "consciousness" or "mind" or "mental process" is a kind of aura (something like the electrical glow that may be seen hovering over a machine at work), a refined kind of neural energy that is thrown off by the activity of brain cells; hence, that all so-called "mental" events are merely incidental and cannot be causative, or cannot be thought of as having independent existence, in any sense whatever; that mind, rather, in whatever sense it may exist, is affected (determined) by body or brain, but in no way affects body or brain. Incidentally, I have already emphasized the fact that there is no correlate in the brain for meaning in thought; hence, that *meaning* cannot be reduced to "physical" energy or motion. This is the evidence

of common sense and experience and needs no other empirical verification.) As far as I know, it has never been denied by informed persons, either scientists or theologians, that there is some correlation between brain and mind in the human organism. *But correlation is not identity.* The fact that must be emphasized here, however, is that the theory of epiphenomenalism is not necessarily to be regarded as materialistic at all. In fact it is in accord with the Christian doctrine of immortality, that the person—and most assuredly the *redeemed* person—is a body-spirit or body-mind unity, both in the here and in the hereafter, the only difference being in the transmutation of the physical body adapted to its present environment, into an ethereal ("spiritual," 1 Cor. 15:44) body adapted to the needs of the saint in his heavenly environment. Certainly, present-day physics has nothing to say against this teaching, this doctrine of the redemption of the body, or personal immortality, promised to all of God's elect (Rom. 8:18-23, Phil. 3:20-21, 1 Cor. 15:35-58, 2 Cor. 5:1-10). Physicists are still seeking the ultimates, the irreducibles of energy-matter. (These as yet unisolated irreducibles of physical energy are now known as *quarks* in the vocabulary of physics, and are thought to be even more powerful than those which have been discovered.) It is a commonplace of physical science in our day that matter can, and does, function in such attenuated forms that the possibility of an ethereal body, to replace the present earthly body, is no less scientific than it is Scriptural. For all we know, every person may be carrying around with him, while in this terrestrial body, the elements essential to the structure of the body he will need in the next world; that death, in short, is just such a metamorphosis as is taking place throughout nature all the time. (Of course, we are not told in Scripture just what kind of bodies the wicked will inhabit in their state of separation from God.)

Unfortunately, many who have written on this subject seem to have been unaware of, or misinformed about, the Christian doctrine of immortality. For example, the late C. E. M. Joad, a distinguished teacher of philosophy and author of books on various phases of the subject, a truly scholarly gentleman whose writings are characterized by a sane and sensible approach to philosophical problems, seems to have been beset by this confusion. According to Thomas Aquinas (writes Joad), "man is a combination of soul and body, the body being the substance, which owes its qualities to the imposition of the various forms upon the *materia prima*, and the soul being the substantial form. Conformably with his doctrine of matter and form, St. Thomas insists upon the necessity of the body to the soul, in order that there may be a soul at all. Hence, the soul could not survive the death of the mortal body, unless it were provided with a new and glorified body. But it is with precisely such a body that, he teaches, it *is* provided at death."[2] Evidently the scholarly Joad was not aware of the fact that Aquinas was, in substance, simply repeating the doctrine which had already been clearly stated in the New Testament Scriptures by Jesus Himself and by the Apostle Paul. (John 6:38-40, 2:19-22, 12:24, 11:23-26; 1 Cor. 6:19; Rom. 8:11, etc.).

The same facts apply generally to the arbitrary absorption by materialists into their cult, of the theory known as that of "emergent evolution." There are various ramifications of this theory, but in the main it is the theory that in the progressive development of the cosmos with its many and varied forms of being, both non-living and living, new forms with new properties appeared from time to time, which cannot be accounted for in terms of the powers characteristic of the entities existing on lower levels, *e.g.*, energy-matter (sometimes dealt with as space-time), life, consciousness, self-consciousness (personality), etc., in the order named. These apparently original and unpredictable

realities common to human experience are called "emergents" by the proponents of the theory (Samuel Alexander, C. Lloyd Morgan, R. W. Sellars, et al). If one asks, What causes these "emergents" to "emerge"? the answer is that a *nisus* (a pull) of some kind does it. (See *infra* for a further critique of this theory, also the Tables at the end of this Part). However, the point with which we are concerned here is not the validity of the theory (in the view of the present writer, it is certainly questionable), but *the fact that the theory is not necessarily to be regarded as grossly materialistic. Obviously, if mind or soul (self, person) is an "emergent," it certainly exists in its own right* (just as water exists in its own right, and continues to do so, as a result of the fusion of hydrogen and oxygen atoms in right proportions); hence, despite the rejection, by advocates of the theory, of what they call "an alien influx into nature" (a special Divine act?), it seems evident that the theory does not completely close the door to the possibility of the continued existence of the mind or soul (the person) beyond the grave, that is, the possibility of personal immortality. Moreover, "emergence," especially in the form of what is called a "mutation," certainly bears a striking resemblance to a special creation, that is, to a Divine "influx" into nature, regardless of what the evolutionists may say about it.

4. *The Ambiguity of the Word "Evolution."* We come now, in this text, to the study of the word (and its referent) which has been the cause of the most intense and sustained controversy in the entire area of the agreement (or the lack of it) between Biblical teaching and scientific thinking in our time. That word is "evolution." With the publication of Darwin's *Origin of Species* in 1859 (his contemporary, Alfred Russel Wallace, had already arrived at the same general theory), this word has been seized upon, on the one hand, as a forensic watchword, by all those thinkers who would like to destroy Biblical religion;

and on the other hand, as a kind of diabolical device to be resisted at all costs, by churchmen who unyieldingly adhere to the most literal interpretations of certain sections of Genesis largely because of their fear of the effect of the theory on young impressionable minds. They honestly fear the theory itself, and more particularly the doctrinaire manner in which it is often presented by its over-zealous advocates. And indeed they have real grounds for these fears: for without justification the theory has been blown up into a full-fledged dogma. *It is my conviction, however, that Christians need have no fear of the truth.* I propose, therefore, that we try to sift out as carefully as we can whatever measure of truth is embodied in the evolution theory, and ascertain as best we can the extent to which it is actually in conflict, if in conflict at all, with the Genesis Cosmogony. *I think I should state here that my own criticism of the theory is based, not so much on theological, as on scientific and philosophical considerations.*

The word "evolution" is one of the most ambiguous words in our language. It means literally "an unrolling," "an unfolding," etc. As used originally, the term had reference only to the *origin of species*: its use was confined to biological science. Since Darwin's time, however, it has become a yardstick for analyzing and tracing chonologically every cosmical, biological, sociological, and even theological, development in the history of humankind. Hence we have books with such titles, as *Stellar Evolution, From Atoms to Stars, Biography of the Earth,* etc., and innumerable published articles of the same general trend of thought. (Nowhere, perhaps, is this attempted universal application of the term made more obvious than in the title of a book recently published, *From Molecules to Man.*) Implicit in the meaning of the word "evolution," as used generally, is the idea of progression or *progressive development;* and the basis of this idea is the *a priori* concept that the historical order must coincide with a certain

logical order in each case; that is to say, as applied by evolutionists, all change necessarily takes place from the simple to the more and more complex. In logic textbooks, this idea is now designated "the genetic fallacy." As stated in one such textbook: "It is an inexcusable error to identify the temporal order in which events have actually occurred, with the logical order in which elements may be put together to constitute existing institutions. Actual recorded history shows growth in simplicity as well as in complexity."[3] The fact is that in some areas change is not from the simple to the complex, but just the reverse—from complexity to greater simplicity. This is true, for example, in the field of linguistics especially: the history of language is the story of a continuous process of simplification. The same is true in the area of social organization: all one has to do to realize this fact is to contrast the long tortuous genealogical tables of the most primitive peoples with the tendency to minimize, even to disregard, genealogies altogether (cf. 1 Tim. 1:4, Tit. 3:9). To quote again: "Science, as well as art and certain social organizations, is sometimes deliberately changed according to some idea or pattern to which previous existence is not relevant."[4]

I am reminded here of Herbert Spencer's theory of "cultural evolution," namely, that all cultures have moved "forward" from savagery through barbarism to civilization. This idea has long been abandoned by anthropologists and sociologists alike. The evolution yardstick was, for a long time, applied to the history of religion: it was contended that animism (the belief that everything is "ensouled") was the first form of "religion"; that in time, animism gave way generally to polytheism; that polytheism was succeeded by henotheism (a pantheon with a single sovereign deity); and then henotheism was succeeded by *monotheism* (these systems all having been inventions of the human imagination). It is held further that monotheism will ultimately give way to *pantheism*, a

sophisticated religion, hence the only system which is acceptable to the intelligentsia. Again, it is doubtful that this general theory is seriously entertained in our day: there is too much evidence that monotheism has existed along these other views, somewhere and in some form, from earliest times. Moreover, a dry-as-dust intellectualized cult, such as pure pantheism, or any other cult which ignores the personal and living God will never appeal generally to the aspirations or needs of the human soul.

In common parlance, the word "evolution" means simply development, progression, in terms of a sequence. But progression is not always easy to define. I might line up a wheelbarrow, a gig, a buggy, a wagon, an automobile, and even an airplane, in a single row. There would be some structural resemblance, of course. But we know, in this case, that one of these vehicles is not the outgrowth ("emergent") of that type which preceded it; we know, rather, that all of them were products alike of human technology, inventions of the human mind. We know also that as a sequence they spell progression; this progression, obviously, is distinct from that kind of progression which is brought about by the operation of *resident* forces characteristic of different levels of being. However, "evolution" is often used to signify a going forward, a development, a progression, that is not "emergent" in any sense of the term. Hence we speak of the evolution of political systems, of social organization, of the science of medicine, of technology, of ethics and law, etc.

This, however, is not what the term "evolution" means in biology. Here, it means, according to a well-known definition, by LeConte, *continuous progressive change, according to fixed laws, by means of resident forces.* (Note the full import here of the word "resident.") The full-fledged—and rather pompous—definition of biological evolution was given us in the Spencerian formula: Evolution, said Herbert Spencer, is "an integration of matter and

concomitant dissipation of motion, during which the matter passes from an indefinite incoherent homogeneity to a definite coherent heterogeneity," that is, of structure and function, "and during which the retained motion goes through a parallel transformation." (It should be noted that Spencer's use of the word "motion" here leaves a great deal to be explained.) Obvious theories of this type are based on the assumption that all so-called progressive change (evolution) is fortuitous, that is, occurring by accident or chance (purposelessness); hence they are commonly designated "mechanistic" or "materialistic" theories. This writer finds it difficult to accept the notion that a movement can be "progressive" and at the same time "fortuitous": surely we have here a semantic paradox, to say the least! (The same is true of the phrase, "natural selection." Selectivity, in all human experience, presupposes deliberation and choice: how, then, can impersonal nature be rightly said to "select" anything? Thus we seem to have another semantic paradox.) However, it is an outstanding characteristic of the devotees of evolutionism to indulge equivocation, perhaps unwittingly, in their use of language.

Theories of what is called *emergent evolution* tend to the *organismic,* rather than the mechanistic, explanation of the various facets of the life process. Emergentism, as stated above, is the theory that in general evolution is a naturalistic process proceeding from the operation of resident, yet essentially vitalistic, force or forces; that each "emergent" has a different structure with additional properties, and its own different behavior patterns; that each emergent not only has subsistence *per se* (that is, after emerging), but also acts as a causal agency, a transmitter of effects. Moreover, it is said to be beyond the ability of human intelligence to know how many levels of emergence there may be or yet come to be. If one should ask, what is it that causes these "emergents" to "emerge," the

answer is that a *nisus* or pull does it. The theory of some members of this school is that the pull is exerted by "whatever lies ahead." But it is difficult to understand just how "whatever lies ahead" actually exists in order to exert a pull, when according to the theory it is in the process of being actualized (or should we say, of actualizing itself?). If "God" is envisioned as the Ultimate Emergent—the Goal of the Process—then God is, in terms of the theory, in the indeterminable process of becoming God. Hence, other advocates of the theory identify the nisus with a push—an impulsion—from within. Be that as it may, in either case, God is presented to us as engaged in the age-long business of Becoming not Himself, but Itself. Emergentism is pantheistic: its "God" is either "nature" as a whole, or an impersonal process operating in nature. (Cf. the philosophical system know as "Holism." According to this system, the Creative Process (Evolution) stabilized being in successively more complex *wholes* (the atom, the cell, etc.), of which the most advanced and most complex is the person or personality.[5] Holism is a form of Emergentism.)

On the basis of the inclusion of human intelligence in evolution, as playing, perhaps, the most important role in the process, advocates of the theory in our day take the position generally that *societal* (or psychological) evolution has superseded in large measure what has heretofore been known as organic (biological) evolution. (For a clear presentation of this view, see the book, *Human Destiny*, by Lecomte du Nouy, published in 1947 by Longmans, Green. See also the concluding chapters of the Mentor books, *The Meaning of Evolution*, by George G. Simpson, and *Evolution in Action*, by Julian Huxley.) In line with this general idea, the academic world has been thoroughly stirred in recent years by the serious and profound view of human evolution put forward by the late French priest-scientist, Pierre Teilhard de Chardin. In his

principal works, *The Phenomenon of Man* (1959) and *The Future of Man* (1964), Teilhard envisions evolution through a gradation of forms from atomic particles to human beings, in ever increasing complexity of structure, and along with it, development of consciousness. Man is the focal point in whom all facets of the evolutionary process converge, and in man reflective thought finally emerges. The unique idea in Teilhard's system is his view that the ultimate reality of this cosmic development (that is, of Evolution) is the incarnate Christ (not the "superman" of Nietzsche, nor that of Samuel Butler, nor that of G. B. Shaw's *Man and Superman* and his *Back to Methuselah*), but the God-man. Two quotations from this writer are pertinent: "The only universe capable of containing the human person is an irrevocably 'personalizing' universe." Again, "In one manner or the other, it still remains true that, even in the view of the mere biologist, the human epic resembles nothing so much as a way of the Cross."[6] This, to be sure, is another—and more profound—theory of emergentism. Like that of Bergson's *creative evolution* (described below), this is an honest effort to describe the *modus operandi* of the evolutionary process, which in the last analysis becomes an effort to describe the indescribable—the ineffable. *The mystery of the life movement itself is too profound to yield its secrets to the mere human intellect.*

5. *Evolution and Evolutionism.* One fact should be emphasized before we proceed further with this study, namely, that evolution must not be confused with evolutionism. The word "evolution" designates only the process itself, the process of continuous progressive change; the word "evolutionism," however, designates how the process "proceeds," that is, the phenomena that are said to actualize it. (Evolutionism is also properly designated the *theory of evolution.*) These phenomena are usually listed as follows: (1) Lamarck (1744-1829): *the transmission of char-*

acteristics (modifications) acquired through the interaction of the organism and its environment. This theory is now generally rejected, except by the Russian biologist, Lysenko, who has been all but canonized by the Kremlin oligarchy for his revival of it. (2) Charles Darwin (1809-1882), getting his cue from Malthus's *Essay on Population* (the thesis of which was that because population increases in geometrical proportion, whereas the earth's resources multiply only in arithmetical proportion, the time will come when the earth will not be able to provide food for its population, unless some selective process removes the surplus), advanced the theory of evolution by *natural selection.* The process of struggle for existence, Darwin held, selects out and preserves only those organisms which prove to be the most capable of adapting to environment (the doctrine of *the survival of the fittest,* that is, the fittest to demonstrate survival quality by adaptation). Darwin's contemporary, Alfred Russel Wallace (1823-1913) had arrived at the natural selection theory even before Darwin, but Darwin happened to beat him into print. (They were always good friends, however.) Wallace pointed out the fact to Darwin that while natural selection might account for the survival of an existing species, *it did not account for the arrival of a new species.* (3) August Weismann (1844-1914) contended that the explanation of evolution lies in *the continuity of the germ-plasm.* It seems obvious, however, that only process and form (the form being that which specifies man as man) can be transmitted from generation to generation through the germ plasm. Germ-cells are affected only by variations or mutations in themselves, and not by what goes on in the life of the parent. (Still and all, it seems incontrovertible that any modification in the parent organism is transmissible only through the chromosomes and genes. Moreover, genes are but hypothetical "determiners" of heredity operating beyond

the world of sense-perception.) (4) Mutations, discovered by the Dutch botanist De Vries (1848-1935), are sudden big leaps to new species which *per se* breed true. It is commonly held that evolution might have proceeded by these abrupt and relatively permanent germinal changes. rather than by slight variations. (There are some, however, who contend that mutations might have come about through slowly accumulating changes in the genes.) To this writer's thinking mutations are indispensable to any possible validation of the evolution theory. Moreover, mutations certainly have all the appearance of special creations. (The German philosopher Lotze, and others, have taken the position that at different stages in the Creative Process, God infused into it new increments of force, that is, new and distinct powers, by direct action, thus bringing into existence the successively higher levels characterized by matter-energy, life, consciousness, and self-consciousness, in the order named. According to this view, Creation involved *new increments of power plus continuity of plan.* (Cf. the title of the book by Hoernle, *Matter, Life, Mind, and God.*) It should be noted too that this theory accords in the main with Aristotle's Hierarchy of Being, according to which Being is organized on successively higher levels of matter-in-motion, the vegetative psyche, the animal psyche, the rational psyche, with God over all as Pure Self-thinking Thought. (5) The "laws" of heredity as first formulated by the Austrian monk and botanist, Gregor Mendel (1824-1884) are believed to play a significant role also in the evolutionary process. (6) Protagonists of the theory in our day are inclined to agree that evolution may have proceeded in all these ways, with the sole exception of the Lamarckian notion of the inheritance of acquired characteristics. *However, the phenomena characterizing this life movement leave the movement itself unexplained.*

The following excellent summation by Patrick is in order here: "When the doctrine of evolution was brought prominently before the world by Darwin in the middle of the last century, two misconceptions arose, which in our time have been largely corrected. The first was that there is some kind of *conflict* between evolution and religion, and the second was that evolution has explained the world. As regards the first, we have come to learn that the religious attitude has been greatly strengthened by the enlarged vision which evolution has brought us. We have become accustomed now to the idea of development, and we understand its immeasurable superiority over the old spasmodic theory of creation . . . The other misunderstanding that arose about evolution was almost the opposite of the first. It was that evolution had explained the world, and that no other philosophy or religion was necessary. This curious error probably came about because of a confusion between evolution as a method or law of change, and evolution as a force or power. There is a popular belief that evolution is a kind of creative force, something that can do things. On the contrary, it is a mere description of nature's method. We see in evolution that nature behaves in a certain uniform way, or, if you choose, that God creates by a certain uniform method. The student of philosophy, who has already learned that natural laws are not forces or powers, but merely observed uniformities, is not likely to fall into the mistake of making a God of evolution."[7]

6. *The Movement of Evolution.* Under this caption, we call attention to two significant views, as follows: (1) What is called *orthogenesis,* that is, "straight line" evolution. This is the view that variation in successive generations of a succession of parents and offspring follows a specific line of development, finally undeviatingly evolving a new type. The classic example usually cited is that of the very ancient and tiny "eohippus" which by gradual,

step-by-step change is said to have evolved into the horse that we know today. This is called the theory of "determinate variation." (2) *Fountainlike evolution.* This is the doctrine of the late French philosopher, Henri Bergson (1859-1941).[8] Bergson's main thesis was that the phenomena envisioned by evolutionism do not explain evolution, that is, the life movement itself; that this surge upward of what might be called the core of the Creative Process is explainable only as the Elan Vital (Life Force). In Bergson's thought, this Elan Vital is the primordial cosmic principle, the ground of all being, that is at the very root of evolution, a vital push or impulsion "pervading matter, insinuating itself into it, overcoming its inertia and resistance, determining the direction of evolution as well as evolution itself."[9] This never-ceasing free activity is Life itself. Indeed Bergson speaks of it as "Spirit," as a directing Consciousness as well as an actualizing Power. The unique aspect of this view is Bergson's picture of Life Force operating like a fountain, so to speak, with a center "from which worlds shoot out like rockets in a fireworks display," "as a series of jets gushing out from the immense reservoir of life."[10] We must be careful, however, not to think of this center or core as a "thing"—we must think of it only as a process. Moreover, as the core-movement pushes upward, according to Bergson's theory, the push encounters resistance by the matter on which it works; hence there is a falling back toward gross matter by the residue that is left behind by the progressive push of Life toward fulness of being. According to this theory, the Elan Vital manifested itself in the lower animals in the form of *instinct*; in man, it manifests itself in the form of *intelligence* (intellection), the power that enables him to surge upward through learning by trial-and-error; it will ultimately push on to what Bergson calls *intuition* in man, which will be immediacy in man's apprehension of truth, corresponding in a way, but on a much higher level, to

the immediacy of the brute's response to sensory stimuli. Bergson envisions nothing beyond this power of intuition. Of course, his fountainlike description of evolution, allowing for both progression and retrogression, is another theory of emergentism. (One of my science professors remarked to me once that to him "evolution" meant variation, and variation either upward (progression) or downward (retrogression). This is approximately Bergson's view.)

7. *Evidence for Evolutionism.* The evidence usually cited to support the evolution theory includes the following factors: (1) *Comparative anatomy,* or structural resemblance among species. (But, to what extent does structural resemblance necessarily prove emergence? Could it not be interpreted as supporting the view that a Creative Intelligence simply used the same general pattern in creating the living species?) (2) *Embryology*: the embryos of different animal species tend to similar development in early stages. Those of lower animals are said to cease developing at certain points; those of higher animals move upward through additional stages of development. It has long been contended that ontogeny recapitulates phylogeny; that is, that each individual organism of a certain phylum tends to recapitulate the principal stages through which its ancestors have passed in their racial history. (This idea is seriously questioned today by many biologists.) (3) *Serology*: the blood composition of higher animals is the same. Samples of blood from closely related higher animals can be mixed, whereas an antagonistic reaction sets in if there is wide separation between the species. (4) *Vestigial remains*: the presence of unused organs. Usually cited in this category are the appendix in man, degenerate eyes in cave animals, wings of the female gypsy moth, etc. (5) *Geographical distribution of animals:* arrested development of flora and fauna in areas cut off in prehistoric times from continental land masses. The

classic example of this are the marsupials of Australia. (Yet the opossum, whose only natural habitat is America, is a marsupial.) (6) *Paleontology*: correlation of the ascending scale of the simple to the more complex fossil forms with successively earlier to later geological strata. (Thus geologists rely on the evidence of paleontology to support historical geology, and the paleontologists cite the evidence of geology to support their chronology of fossil remains. This, some wag, has remarked, borrowing from the comic strips of the nineteen-twenties, is a kind of Alphonse-and-Gaston act.) (7) *Artificial selection.* That is, changes brought about by selective breeding, by the application of human intelligence; for example, by Mendel, Burbank, and others. This, it is claimed, adds momentum to the whole process. (8) *Classification* of animals in phyla, classes, genera, species, orders, families, etc., in ascending order of complexity, from unicellular organisms up to man. This, it is held, gives evidence of an over-all relationship among all living organisms.

8. *The Evolutionism Dogma.* The chief protest by Christians with respect to evolutionism is a protest against the blowing up of the theory into a dogma. A dogma is a proposition to be accepted on the ground that it has been proclaimed by the proper authority; in this case, of course, the "proper authority" is human science. Evolution is presented in many high school and college textbooks as an *established fact;* and in others, the inference that it is factual is expressed by innuendo, with the accompanying inference that persons who refuse to accept it are naive, childish, or just plain ignoramuses. It seems to be assumed by these devotees of the cult that they have a monopoly on the knowledge of this particular subject. The fact is that much of the material appearing in these textbooks is simply parroted by teachers who are so ignorant of Biblical teaching they are not even remotely qualified to pass judgment on the matter. Unfortunately, too, many

persons of eminence in certain highly specialized fields are prone to break into print on various aspects of Biblical doctrine only to prove by their statements that they are completely uninformed on the subjects on which they choose to expatiate. Pernicious fallacies, based on the authority of a great name, thus have a way of persisting from generation to generation even though they have been shown to be fallacies many times: it is the prestige of the "great name" or "names" with which they are associated which gives them apparent deathlessness. I want to make it clear at this point that whatever objections I have to evolutionism are not based so much on the view that, in certain forms, it is anti-Biblical or irreligious, but on the conviction that it is based all too frequently, not on established *fact*—that is, by the testimony of eye-witnesses—but on *inference*. The important question, therefore, is this: Is the inference drawn from alleged phenomena in this field *necessary inference*?—inference, that is, the opposite of which is inconceivable? Or does much of it savor of little more than conjecture?

Dr. James Jauncey states the case clearly in these words: "Of course you will often hear from some enthusiastic evolutionists that evolution is now indisputable, that it has been proved beyond doubt, and that anyone who disputes this is an ignoramus or a fanatic. This is jumping the gun, to say the least. The vehemence of such statements makes one suspect that the speakers are trying to convince themselves. When a scientific theory crystallizes into law, such as that of relativity, it speaks for itself. All we can say at the moment is that evolution is generally accepted, possibly because of the lack of any scientific alternative, but with serious misgivings on the adequacy of some aspects of it. As for the kind of rigorous proof that science generally demands, it still isn't there. Indeed, some say that because of the philosophical aspects of the theory, that proof will never be possible."[11]

A clear example of the blind spots which seem to characterize the devotees of evolutionism is the title of an article appearing recently in *Reader's Digest* that reads "Can Science Produce Life?" This title is misleading, to say the least: life never was produced (created) by human agency. This fact, the author of the article in question, seems to realize. Toward the end, he writes, with reference to *microspheres* (proteinoids formed by the fusion of amino acids): "Although these spheres are not true cells—they have no DNA genes and they are simpler than any contemporary life—they do possess many cellular properties. They have stability; they keep their shapes indefinitely. They stain in the same way as the present-day protein in cells, an important chemical test. But the real significance of these microspheres is that scientists do not *synthesize* them piece by piece; they simply set up the right *conditions*—and microspheres produce themselves." Thus it will be noted that the eminent scientist-author of this article flatly contradicts the import of the title, by stating that man can only set up the conditions necessary to the production of microspheres but cannot do the "producing." (The title is, in fact, an excellent example of the manner in which careless use of language can spread confusion.) Man indeed sets the stage, but the God of nature alone, as the cosmic Efficient Causality, can actualize the life process.

I recommend that every reader of this textbook procure a copy of the latest issue of Everyman's Library Edition (published by E. P. Dutton, New York) of Darwin's *Origin of Species,* and read the Preface written by W. R. Thompson, F.R.S., and Director of the Commonwealth Institute of Biological Control, Ottawa, Canada. Thompson states expressly that the content of his Preface will not follow the tenor of previous introductions to Darwin's work, those written by other scientists, in particular that of Sir Arthur Keith. "I could not content myself," Thomp-

son writes, "with mere variations on the hymn to Darwin and Darwinism that introduces so many textbooks on biology and evolution . . . I am of course well aware that my views will be regarded by many biologists as heretical and reactionary. However, I happen to believe that in science heresy is a virtue and reaction often a necessity, and that in no field of science are heresy and reaction more desirable than in evolutionary theory." After stating in no uncertain terms what he considers to be the weaknesses of the Darwinian theory (which he describes as a theory of the "origin of living forms by descent with modifications"), Thompson goes on to point out the fallacies involved in the argumentation used by the evolutionists. This, he declares, "makes the discussion of their ideas extremely difficult." In what way? Because "personal convictions, simple possibilities, are presented as if they were proofs, or at least valid arguments in favor of the theory" (repeating an evaluation made by De Quatrefages). Thompson adds: "As an example De Quatrefages cited Darwin's explanation of the manner in which the titmouse might become transformed into the nutcracker, by the accumulation of small changes in structure and instinct owing to the effect of natural selection; and then proceeded to show that it is just as easy to transform the nutcracker into the titmouse. The demonstration can be modified without difficulty to fit any conceivable case. It is without scientific value since it cannot be verified; but since the imagination has free rein, it is easy to convey the impression that a concrete example of real transmutation has been given. This is the more appealing because of the extreme fundamental simplicity of the Darwinian explanation . . . This was certainly a major reason for the success of the *Origin*. Another is the elusive character of the Darwinian argument. Every characteristic of organisms is maintained in existence because it has survival

value. But this value relates to the struggle for existence. Therefore we are not obliged to commit ourselves in regard to the meaning of differences between individuals or species since the possessor of a particular modification may be, in the race for life, moving up or falling behind. On the other hand, we can commit ourselves if we like, since it is impossible to disprove our statement. The plausibility of the argument eliminates the need for proof and its very nature gives it a kind of immunity to disproof. Darwin did not show in the *Origin* that species had originated by natural selection; he merely showed, on the basis of certain facts and assumptions, how this might have happened, and as he had convinced himself he was able to convince others." (We are reminded here of Mark Twain's evaluation: "There is something so fascinating about science: one gets such wholesale returns of conjecture out of such trifling investments of fact.")

On the subject of mutations, Thompson writes as follows: "As Emile Guyenot has said, mutations are powerless to explain the general adaptation which is the basis of organization. 'It is impossible to produce the world of life where the dominant note is functional organization, correlated variation and progression, from a series of random events.' "

Again, from the same author: "An important point in Darwin's doctrine, as set out in the *Origin*, was the conviction that evolution is a progressive process . . . The Victorians accepted this idea with enthusiasm. Here I need only say on this point Darwin was inconsistent since, in his view, natural selection acts not only by the survival of the fittest but also by the extermination of the less fit and may produce anatomical degradation as well as improvement." "Darwin himself considered that the idea of evolution is unsatisfactory unless its mechanism can be explained. I agree, but since no one has explained to my

satisfaction how evolution could happen I do not feel impelled to say that it has happened. I prefer to say that on this matter our information is inadequate."

(I should like to interpolate here a few personal statements as follows: An outstanding example of the downright fanatical zeal with which early exponents seized upon Darwin's theory and blowed it up to such fantastic extremes (notably, by means of the intellectual vacillations of the erratic T. H. Huxley, the semantic pomposity of the agnostic Herbert Spencer, etc.) is the "tree of life" as hypothesized by the arrogant German, Haeckel (1834-1919). Haeckel presumed to arrange existing forms in an ascending scale from the simple to the complex, by arbitrarily inserting imaginary names to identify all the necessarily numerous "missing links." Today Haeckel's famous "tree" is largely famous, even in the scientific world, for its absurdities.)

Dr. Thompson concludes his Preface with what is obviously the most telling objection of all to evolutionism. "A long-enduring and regrettable effect of the *Origin*," he writes, "was the addiction of biologists to unverifiable speculation," the net result of which was that "the success of Darwinism was accompanied by a decline in scientific integrity. This," he adds, "is already evident in the reckless statements of Haeckel, and in the shifting, devious, and histrionic argumentation of T. H. Huxley." Finally, his conclusion: "It may be said, and the most orthodox theologians indeed hold, that God controls and guides even the events due to chance; but this proposition the Darwinians emphatically reject, and it is clear that in the *Origin* evolution is presented as an essentially undirected process. For the majority of readers, therefore, the *Origin* effectively dissipated the evidence of providential control. It might be said that this was their own fault. Nevertheless, the failure of Darwin and his successors to attempt an equitable assessment of the religious issues at stake indi-

cates a regrettable obtuseness and lack of responsibility. Furthermore, on the purely philosophical plane, the Darwinian doctrine of evolution involves some difficulties which Darwin and Huxley were unable to appreciate." (I might well add that their devoted disciples in our day seem to have closed minds on the same matters). "Between the organism that simply lives, the organism that lives and feels, and the organism that lives, feels, and reasons, there are, in the opinion of respectable philosophers, abrupt transitions corresponding to an ascent in the scale of being, and they hold that the agencies of the material world cannot produce transitions of this kind." Again, "Biologists still agree on the separation of plants and animals, but the idea that man and animals differ only in degree is now so general among them, that even psychologists no longer attempt to use words like 'reason' or 'intelligence' in an exact sense. This general tendency to eliminate, by means of unverifiable speculations, the limits of the categories Nature presents to us, is an inheritance of biology from the *Origin of Species*."

(I urge every student to procure a copy of this book and read Dr. Thompson's Preface in its entirety. Another book I recommend, one which deals with the evolution theory in terms of biology itself, is that by Douglas Dewar, entitled *The Transformist Illusion;* this book may be purchased from DeHoff Publications, 749 N.W. Broad Street, Murfreesboro, Tennessee.)

Space is not available here for a review of the conjectural absurdities which have been put forward at different times by over-zealous evolutionists: they are far too numerous to be catalogued anyway. Darwin himself set the fashion of conjecture. It is amazing to note the number of times such words as "apparently" and "probably" occur in his writings. One reliable authority may be quoted for the information that the phrase, "we may well suppose," occurs over eight hundred times in his two principal works,

The Origin of Species, and *The Descent of Man.*[12] This would seem to indicate that in all such instances the eminent scientist was guessing. Indeed, is not "hypothesis" after all the academic term for what is to be taken only as a fairly good guess?

(For a review of some of the absurdities advanced by evolutionists in days gone by, the student is referred to the little book, *In His Image,* a collection of lectures and addresses by William Jennings Bryan, published by Revell, New York, in 1922. Mr. Bryan's name recalls, of course, the role which he played in the widely publicized Scopes trial in Tennessee, at which his antagonist was the Chicago attorney, Clarence Darrow. The underlying issue in this trial was the contention of the prosecution that money contributed by taxpayers for the support of public schools could not be used legitimately by teachers to destroy the faith of young people in their classes, and that the teaching of evolution was in a special sense destructive of Christian faith. Hence evolutionism, by indirection, became the real issue that was debated by the two antagonists. I know of no event in my lifetime about which more sheer nonsense has appeared in magazines and newspapers than in the publicity which has been given the Scopes trial, in particular the Bryan-Darrow debate over the theory of evolution. I doubt that any debate was ever held in which both antagonists were as incompletely informed on the subject they were debating as were Bryan and Darrow in this particular case. Darrow's questions were for the most part puerile and irrelevant in the manner in which they were stated: he simply rehashed questions which have been heard again and again in the history of Christianity, from as far back as the time of Celsus and Porphyry. Bryan's answers were often childish, largely because he allowed himself to be on the defensive; he should have kept the offensive, which he could have done easily, which any informed Christian can do in exposing

the shallowness of atheism or agnosticism. The fact is, however, that Bryan was not the nit-wit that uninformed science teachers and popular writers have tried to make him appear to be. And I know of no more interesting collection of the genuine absurdities which have been advanced by over-zealous evolutionists than those which are presented in Bryan's book, *In His Image*. It is interesting to note, too, that Darrow was flabbergasted in two debates with the late P. H. Welshimer (for some fifty-five years Minister of the First Christian Church, Canton, Ohio), the first at Canton, the second at Akron, Ohio. In the Canton debate Welshimer stressed the marvelous unity of the Bible, dwelling especially on the Messianic prophecies and their fulfilment; and just before the debate at Akron, Darrow sought him out privately and asked for the source of his information, admitting that he himself had never encountered such arguments. Welshimer gave him the titles of some important books of Biblical prophecy. But Darrow died just two weeks after the Akron debate. Of course, these facts never get into print in popular news media[13]).

9. *A Critique of Evolutionism.* I shall now list the more common, and what I consider to be the most valid criticisms of, and objections to, the evolution theory in general, as follows:

(1) Mention has already been made of the attempt to extend the general concept of *continuous progressive change* (the fundamental thesis of evolutionism) to every aspect of the world man lives in and of his life in it. As Patrick has written: "The fact is that evolution is a very much overworked word. As the close of the last century and in the beginning of this one, the idea of evolution held almost undisputed sway. It was extended far beyond its original application and applied quite universally. We began to hear of inorganic, cosmic, astral, geologic and atomic evolution. Even the 'delirious electrons' evolved

into atoms and matter itself was the product of a process of development. Social evolution had already made its appearance . . . nothing is fixed or final; nothing is created; everything just grew and is growing,"[14] This, as has been stated previously, is what is now recognized as the *genetic fallacy.* There are areas in which this notion of continuous progressive change simply is not in accord with the facts.

(2) In addition to the *genetic* fallacy, evolutionists commit another common fallacy of the inductive method, namely, that of *over-simplification,* also known as the "nothing but" fallacy. This they do in making no effort to account for the *modus operandi* of the many leaps occurring in the alleged evolutionary process (as Thompson has stated it, leaps from "the organism that simply lives" to "the organism that lives and feels" to "the organism that lives and feels and reasons"). They simply take it for granted that these are only matters of *degree.* (Even in one's personal life, one simply cannot explain how the psychical takes hold of and moves the physical: how a person moves his body if and when he "makes up his mind" to do so.) In simple truth, they have no explanation of the leap from an existing species to a new species, except by mutations, and these, of course, themselves need to be explained. As Chesterton writes: "Far away in some strange constellation in skies infinitely remote, there is a small star, which astronomers may some day discover . . . It is a star that brings forth out of itself very strange plants and very strange animals and none stranger than the men of science." Again: "Most modern histories of mankind begin with the word evolution, and with a rather wordy exposition of evolution . . . There is something slow and soothing and gradual about the word and even about the idea. As a matter of fact, it is not, touching primary things, a very practical word or a very profitable idea. Nobody can imagine how nothing could

turn into something. Nobody can get an inch nearer to it by explaining how something could turn into something else. It is really far more logical to start by saying, 'In the beginning God created heaven and earth' even if you only mean 'In the beginning some unthinkable power began some unthinkable process.' For God is by its nature a name of mystery, and nobody ever supposed that man could imagine how a world was created any more than he could create one. But evolution really is mistaken for explanation. It has the fatal quality of leaving on many minds the impression that they do understand it and everything else; just as many of them live under a sort of illusion that they have read the *Origin of Species* . . . . What we know, in a sense in which we know nothing else, is that the trees and the grass did grow and that a number of other extraordinary things do in fact happen; that queer creatures support themselves in the empty air by beating it with fans of various fantastic shapes; that other queer creatures steer themselves about alive under a load of mighty waters; that other queer creatures walk about on four legs, and that the queerest creature of all walks about on two. These are things and not theories; and compared with them evolution and the atom and even the solar system are merely theories. The matter here is one of history and not of philosophy; so that it need only be noted that no philosopher denies that a mystery still attaches to the two great transitions: the origin of the universe itself and the origin of the principle of life itself. Most philosophers have the enlightenment to add that a third mystery attaches to the origin of man himself. In other words, a third bridge was built across a third abyss of the unthinkable when there came into the world what we call reason and what we call will. Man is not merely an evolution but rather a revolution . . . the more we look at man as an animal, the less he will look like one."[15]

(3) Evolutionism has no adequate explanation of the process by which a variation in a parent organism becomes embodied in the parental reproductive cells (the fertilized ovum), obviously a change necessary to the transmission of the variation to the offspring. (4) Evolutionism does not give us any satisfactory account of the origin of the life process itself. (Spontaneous generation is now *theoretically* considered to have been a possibility, but as yet no direct evidence of its actual occurrence in nature has been brought to light.) (5) Evolutionism does not afford any explanation of the life process itself, that is, of the mysterious movement of life; rather, it simply starts with this movement as a fact, apparently indifferent to the importance of the *how* and *why* of it. One may watch the division of a single cell into two cells (as, *e.g.*, again the fertilized ovum), but no one understands why the cell divides and the process continues in geometrical proportion (one into two, two into four, four into eight, etc.), or how the daughter cell inherits the particular forms and functions of the parent cell. Why does this movement of life push upward, by differentiation of structure and specialization of function, into the vastly more and more complex forms and finally into the most complex form of all,—man. There is no evidence that a potency can actualize itself. What then is the Efficient Causality which actualizes all these changes which are supposed to become stabilized into the multifarious forms that make up the living world? ("Protoplasmic irritability" is a high-sounding phrase which reminds us of John Locke's definition of matter as "something-I-know-not-what").

(6) Evolutionism requires an almost unlimited stretch of time to account for all the changes envisioned by its advocates. Apparently they expect us to accept without question the necessity of such an extent of time to any adequate explanation of the process; and at the same time they arbitrarily use this hypothetical extent of time to

support their theory of the process. Is not this a form of begging the question? Is it not true that the stretch of time required by the theory puts it beyond any possibility of clear proof or disproof empirically, that is, by the testimony of eye-witnesses? One is reminded here of a stanza of Hilaire Belloc's "Ode to a Microbe"—

The Microbe is so very small
You cannot make him out at all,
But many sanguine people hope
To see him through a microscope.
His jointed tongue that lies beneath
A hundred curious rows of teeth;
His seven tufted tails with lots
Of lovely pink and purple spots,
On each of which a pattern stands,
Composed of forty separate bands;
His eyebrows of a tender green;
All these have never yet been seen—
But Scientists, who ought to know,
Assure us that they must be so . . .
Oh! let us never, never doubt
What nobody is sure about!

—From Belloc's *More Beasts for Worse Children,* in Belloc's *Cautionary Verses.* (Knopf, 1951).

(7) That the gap between the intelligence potential of man and that of any known animal species existent or extinct is inconceivably vast, is conceded by evolutionists today. Indeed, many eminent men in biological science are prone to accept the view that man's appearance on the scene is explainable only in terms of a mutation. (Incidentally, it should be made clear that evolutionists do not take the view that man is "nothing but" an animal. On the contrary, they hold that he has "evolved" beyond the brute stage; that, in short, he is *animal plus.* However, they insist that the difference is only one of *degree,* not one of *kind.*)

(8) The theory of mutations is that new forms come into being as wholes, as the result of sudden jumps in the process, and continue to "breed true" from the time of their "emergence." Do biologists have any explanation of the mysterious process by which a mutation is brought about? Obviously they do not. They seem to take it for granted that resident forces of some kind, or of various kinds, work effectively, either singly or collectively, to produce the mutation. Why this process occurs, or just how it occurs, no one knows. (Cosmic rays have been found to produce mutations in fruit flies, we are told). Yet it is inconceivable that evolution could ever have taken place unless the fact of mutations is granted. Many biologists, however, frown on the theory of mutations simply because they find it difficult to harmonize the theory with the mechanism of natural selection which they seek to establish. It is obvious that mutations have all the appearance of special creations.

(9) Despite positive assertions in which, as a rule, the theory to be proved is taken for granted, *the simple truth is that as yet no one knows just how a new species emerges or could emerge.*

(10) Evolutionism is unable as yet to give us a satisfactory account of the origin of sex differences. (It is interesting to note here that the Genesis Cosmogony is silent regarding the origin of females among subhuman orders, with the sole exception of the implication in Gen. 1:22. It is the human female, Woman, to whom our attention is especially directed in Scripture: Gen. 1:27-31). (11) Evolutionism has no adequate explanation of the fact of *instinct*, of the almost inconceivable manifoldness of instinctive responses among subhuman creatures. Instinct has rightly been called "the Great Sphinx of Nature." If complexity of instinct were to be made the criterion of the classification of living forms in ascending order, it is obvious that the lowly Insecta would stand at the head

of the list, and man, poor man, would be somewhere near the bottom. Are not instinctive responses the media by means of which Divine Intelligence ensures the preservation of non-intelligent species? (12) It is doubtful that evolutionism could ever adequately account for the great variety of special organs in different species (characteristic of the entire complex of nature's adaptation to the needs of living creatures), organs such as wings, feathers, eyes, ears; fins and electric organs of fishes, poison glands and fangs of snakes, the "radar" system of bats, migratory powers of homing pigeons, and many others too numerous to mention. (13) As stated heretofore, structural resemblance does not necessarily prove emergence of the higher form from the lower. It may be the product of the activity of the Divine Mind creating according to an archetypal pattern (as in the instance of man's invention of the wheelbarrow, buggy, wagon, chariot, automobile, airplane, all of which manifest some structural resemblance). (14) Ordinarily, nature, when left to its own resources, seems to deteriorate rather than to advance. Any gardener knows that tomatoes produced by properly cultivated plants are always superior to those which are produced by seed or plant in what is called "volunteer" fashion. (15) The apparent non-fertility of hybrids would seem to militate against the evolution theory. (16) Apparently useless organs are not necessarily reduced or rudimentary, in many cases. Ignorance of the use or purpose of an organ is not in itself a proof that the organ has no necessary function at all. (17) Neither similarity nor gradation (nor both together) can prove emergence, that is, "continuous progressive change, according to fixed laws, by means of resident forces" (LeConte).

(18) Man has no known existing animal ancestors: those alleged humanoidal forms which are supposed to have existed prehistorically are now extinct, hence hypothetically identifiable only by isolated sparse skeletal remains

which have been found in different parts of the world. These remains of prehistoric man—prior to Cro-Magnon—are too fragmentary to allow for any reliable reconstruction of man's ancestry from the so-called *hominidae*. Nor do these widely scattered skeletal remains necessarily indicate that there were different "centers" of the origin of *homo sapiens*. What Dr. Bloom has said about such finds in Southern Africa is equally applicable to all other such discoveries: "When we speak of Plesianthropus as a found 'missing link,' this does not mean that man came from even that species. We mean only that we have a member of the family from one of whom man arose."[16] As far as I know, no real evidence has ever been found that would discredit the generally accepted view that the cradle of the human race was where the Bible pictures it to have been, that is, in Southwest Asia. Moreover, evolutionists must accept the fact *that there had to be a space-time locus* at which the transition from *hominidae* to *homo sapiens* actually occurred; and that with the appearance of *homo sapiens*, reason also appeared (as indicated by the Latin *sapiens* or *sapientia*), and along with reason, conscience, which is the voice of practical reason. In view of these facts, it must also be recognized that all humanoidal forms existing prior to this transition were not forms of *homo sapiens*. The tendency of so many scientists to pontificate about these humanoidal finds makes it necessary for us to put their significance in proper perspective in order that we may not be led astray by exaggerations.

(19) The Mendelian laws of heredity have been generally accepted in biological science. However, it must be kept in mind that these "laws" are simply descriptions of what evidently takes place in transmission through the media of genes; they do not tell us why these transmissions take place as they do, nor do they give us any information as to the *modus operandi* of the transmissions themselves.

Even the genes themselves are only hypothetical "determiners" of heredity. This is true, of course, of practically all facets of the evolution theory: nearly all that the advocates have to tell us is *descriptive* in character, descriptive of *what* occurs, not of *why*, nor specifically of *how*, it occurs. Perhaps these are mysteries that lie beyond the scope of human comprehension.

(20) In the final analysis, *the arrival of a new species* is to be accounted for only on the ground of variations transmitted through the chromosomes and genes: as far as we know, inheritance in man takes place in no other way. If mutations be the final "explanation" of these genetic changes, then the mutations must have occurred in chronological sequence to have produced the continuous progressive changes (demanded by the theory) into more and more neurally complex organisms, culminating in the human organism. It is only a mark of sanity to conclude that there is reason and order back of this entire process, actualizing all such changes; and that the Cosmos is the handiwork of the Universal Mind and Will whom we call God (Psa. 19:1-6).

A word of clarification is needed at this point: I do not mean to assert that we are now in possession of all the information available with reference to the various aspects of evolutionism. Undoubtedly additional information will be coming to light, and, as is usually the case, the acquiring of this information will gain momentum, as time goes on, information tending either to refute the various criticisms of the evolution theory as presented in the foregoing paragraphs or to give added substantial support to the various facets of the over-all theory. We must await the discoveries that time may have in store for us in this particular area of knowledge, *always keeping in mind the firm conviction that truth never contradicts itself and that it will ultimately "out."*

10. *Materialistic evolutionism.* This is the doctrine that all things have evolved by accident or chance (that is, *purposelessness*). Devotees of this cult simply refuse to acknowledge Efficient Causality of any kind in the origin and preservation of the cosmos (with the possible exception of some form or forms of primal physical energy): they rest their case on the eternity of matter-in-motion. (Obviously this primal physical energy is their "god.") With disarming simplicity they proceed to describe all phenomena of the cosmos, including those of the life processes and of the thought processes, in terms of a "fortuitous concourse of atoms" (or sub-atomic forces). The creed of the materialistic evolutionists is bluntly stated in what may rightly be designated their "Bible," namely, the book by George Gaylord Simpson, *The Meaning of Evolution.* Simpson writes: "In preceding pages evidence was given, thoroughly conclusive, as I believe, that organic evolution is a process entirely materialistic in its origin and operation . . . It has also been shown that purpose and plan are not characteristic of organic evolution and are not a key to any of its operations . . . Man was certainly not the goal of evolution, which evidently had no goal," etc. He goes on to say, however, that with the entrance of the human mind into the process, purpose and plan did come into operation: this he designates "the new evolution." He writes: "But purpose and plan are characteristic in the new evolution, because man has purposes, and he makes plans. Here purpose and plan do definitely enter into evolution, as a result and not as a cause of the processes seen in the long history of life. The purposes and plans are ours, not those of the universe, which displays convincing evidence of their absence."[17]

Materialistic evolution is usually described as "mechanistic." The word "mechanism," however, has a question-begging aspect. Machines are contrivances, but as far as human experience goes, they are contrivances of some

intelligent agent to serve some function, to gain some end. Moreover, anyone who insists that the cosmos is just a great machine, is simply reading into his understanding of it the properties and powers *that he himself sees in a machine.* Now it seems obvious that in an organization of any kind an organizing agency is required: some power by which elements are organized into wholes of being; some power to marshal them into a cosmos or world order. This moreover, would have to be some kind of power that is entirely different from mechanical forces and the opposite of gravitational force; gravitational force tends to drag the physical world down to a "heat-death," which is technically defined as a state of "maximum entropy." (The physicists tell us that the cosmic clock, so to speak, is running down as matter continues to dissolve into radiation and energy continues to be dissipated into empty space.) However, the basic thesis of evolution is progression or progressive development: and progression is precisely the aspect that is of importance to it. But progression implies a goal to which the movement is directed, toward which someone or something is striving; and thus the idea of progression belies the concept of mechanism. Obviously, "mechanism" and "evolution" are irreconcilable terms. As Butler has written, in his famous *Analogy:* "The only distinct meaning of the word 'natural' is *stated, fixed,* or *settled:* since what is natural as much requires and presupposes an intelligent agent to render it so, *i.e.,* to effect it continually or at stated times, as what is supernatural or miraculous does to effect it for once." In a word, with respect to what are called "the laws of nature," we should not say, "the more law, the less God," but we should say, "the more law, the more God." LaPlace once declared that he had swept the heavens with his telescope and could not find a God anywhere. One of his contemporaries remarked that "he might just as well have swept his kitchen with a broom." Because God is not corporeal being in any

sense (John 4:24, Exo. 3:14), He is not to be apprehended by any physical or corporeal means (John 1:18). Hence the stupidity of the Russian cosmonaut who is reported to have said that in all his travels throughout the celestial realm he had searched the stratosphere in every direction to find God but had failed to do so. Of course he failed—the humblest, most uneducated student of the Bible knows why.

The Christian, of course, cannot possibly accept materialistic evolutionism, because it directly contradicts the Biblical doctrine of the sovereignty and eternal purpose of God (Isa. 46:9-11; Acts 15:18, 17:30-31; 1 Cor. 15:20-28; Eph. 3:8-12). Nor is there any special reason why any Christian, or any other intelligent person, should accept it, for several reasons. In the first place, any unbiased person can readily see that the phenomena of personality (perception, consciousness, and especially *meaning*) are not entirely reducible, if reducible at all, to "matter in motion" (brain cell activity). As the noted physicist, Arthur Eddington, has written: "Force, energy, dimensions belong to the world of symbols: it is out of such conceptions that we have built up the external world of physics . . . We have to build the spiritual world out of symbols taken from our own personality, as we build the scientific world out of the symbols of the mathematician."[18]

In the second place, materialistic evolutionism cannot be harmonized with the empirical fact of cosmic order. This order is clearly evident (a) from the mathematical relations characteristic of the processes of the physical world and the mathematical formulae by which they are amenable to precise description; (b) from the manifold interrelationships of ends and means, as empirically discerned, prevailing throughout the totality of being; (c) from the predetermined (planned) life cycles of all living species; and (d) from the over-all adaptation of nature

to human life and its needs. As stated often herein, the word *cosmos* means *order;* lacking this order, human science would not be possible, for the simple reason that science is man's discovery and description of the order prevailing in the various segments of the natural world. Surely this architectonic order presupposes a Supreme Orderer, a directing Mind and Will. *It is inconceivable that sheer chance could have produced the order we see all around us.*

To be sure, in our day evolutionists admit the introduction of purpose, now that—as they contend—psychological evolution has taken over from the biological. (We have noted this in the excerpt quoted above from Simpson's book.) Purpose entered the cosmic picture—we are told—along with the human intellect and its power of purposeful selection and striving. It strikes me, however, that by correlating purpose with *human mental activity,* by analogy we are bound to conclude that the design which prevails throughout the subhuman world points irrefutably to *another and superior kind of mental activity,* that of the Creative Intelligence and Will. Man obviously does not create; he simply uses the material he finds at hand to be used.

11. *Theistic evolutionism.* This is the view, stated in simplest terms, that evolution is God's method of creation. Under this view, the important question for us is this: Can theistic evolutionism be harmonized with Biblical teaching, in particular with the Genesis account of the Creation?

It should be emphasized here, first of all, I think, that Darwin never did deny God's Creatorship. In the closing paragraphs of his *Origin of Species* he wrote as follows: "Authors of the highest eminence seem to be fully satisfied with the view that each species has been independently created. To my mind it accords better with what we know of the laws impressed on matter by the Creator, that the

production and extinction of the past and present inhabitants of the world should have been due to secondary causes, like those determining the birth and death of the individual . . . There is grandeur in this view of life, with its several powers, having been originally breathed by the Creator into a few forms or into one; and that whilst this planet has gone cycling on according to the fixed law of gravity, from so simple a beginning endless forms most beautiful and most wonderful have been, and are being evolved." In the *Life* of Darwin, we find this statement: "In my most extreme fluctuations, I have never been an atheist, in the sense of denying the existence of a God."[19] Darwin was a very modest man, even to the extent of making an interesting "confession"; he described his own mind as having become a kind of machine for grinding general laws out of large collections of facts, with the result of producing "atrophy of that part of the brain on which the higher tastes depend."[20] This is a remarkable statement and one which scientists generally should treat seriously. Apparently T. H. Huxley had the same experience, albeit unwittingly; as stated in terms of May Kendall's parody:

"Primroses by the river's brim
Dicotyledons were to him,
And they were nothing more."

(We are reminded here of Lord Bacon's declaration that man cannot enter the kingdom of science, any more than he can enter the kingdom of heaven, without becoming as a little child.) It was not Darwin who developed evolutionism in such a form as to make a Creator superfluous (nor in truth was it either Huxley or Spencer); rather, it was Haeckel (whose fulminations became most embarrassing to Darwin at times) and his successors in the present century who are responsible for this development. Dr. Strong is right in saying that "an atheistic and un-

teleological evolution is a reversion to the savage view of animals as brethren, and to the heathen idea of a sphynx-man growing out of the brute."[21]

Theistic evolutionists, as stated above, hold that evolution was in all likelihood God's method of creation. There are many educated and sincerely religious persons who hold that theistic evolutionism if "properly stated" (that is, within certain limitations) is not necessarily in conflict with the teaching of Genesis, if the latter is also "constructively interpreted." In the exposition of this general view, the student should consider the following matters of importance:

(1) There is a clear correspondence between the Genesis Cosmogony and present-day scientific thought on many points. (These harmonies have been listed on preceding pages of this Part of our textbook.)

(2) It must always be kept in mind that the major aim of the Genesis Cosmogony, and indeed of the whole Bible, is to tell us *who* made the cosmos, and not *how* it was made. It was what *God* said that "was so," that is, that "was done" (Gen. 1:3,7,11,15,21,25; Psa. 33:6,9; Psa. 148:6), but the inspired writer makes no effort whatsoever to inform us as to how it was done. It is crystal clear that the narrative is intended to be a *religious*, and not a scientific, account of the Creation.

(3) There is nothing in the Genesis text that constrains us to accept the ultra-literal view that God spoke all living species into existence at one and the same time. On the contrary, according to the narrative itself, the activity of Creation was extended over six "days" and a fraction of the seventh. This is true, however we may see fit to interpret the word "day."

(4) Certainly the weight of all the evidence available, as explained in an earlier section of this textbook, is in support of the view that the "days" of the Genesis account were not solar days, but *aeonic* days; that is, indefinite

periods of time. *Thus the narrative allows for all the time the evolutionists may want to muster up theoretically in support of their theory.*

(5) Evidently infinity in God has no reference to any kind of magnitude because God is Spirit (John 4:24); rather, the term designates the inexhaustible Source of Power by which the cosmos was created and is sustained in its processes. Hence the problem before us is not one of *power,* but one of *method.* What method, then, did the Creator use? Was Creation a long-drawn-out process of progressive development, or was it a process of actualization in a very brief time-span? But, after all, what difference does it make, whether it was the one or the other? Whether the Creation extended over six or seven solar days, or over six or seven aeonic days, *the same measure of Creative Power would have been necessary in either case.*

> *Because this problem is one of method, and not one of power, why do not the textbooks writers on this subject make this clear, and by so doing remove much of the ground on which their texts are resentfully criticized by Christian leaders. All that would be required would be a simple statement of the fact that the time element involved has little or nothing to do with the expenditure of Energy necessary to effect the actualization of the process. The reason seems obvious, I should say: Many of them actually want to belittle Biblical teaching and to create a thoroughgoing "naturalism" which would rule the Creator out of the cosmic picture altogether. I have long been convinced that this is a case in which the wish is father to the thought; that the will not to believe is the primary motivation; and that the elimination of everything superhuman or supernatural is the ultimate objective of the "positivists," "naturalists," "humanists," and all those of like persuasion.*

(6) As a matter of fact, the language of the Genesis Cosmogony allows for Divinely directed progressive development through the media of secondary causes, throughout the Creation. This is clearly implicit in God's decrees, "Let the earth put forth grass," etc., "Let the waters swarm with swarms of living creatures," "Let the earth bring forth living creatures," etc.; and even in the earlier decrees with reference to non-living being, "Let there be a firmament in the midst of the waters," "Let the waters under the heavens be gathered together unto one place," "let the dry land appear," etc. The idea implicit in the original here is that of *causation,* as if to say, "let the earth *cause* . . . let the seas *cause,* it to be done," etc. We see no reason for rejecting the view that God, whose Will is the constitution of the cosmos and its processes, should operate through the majesty and the sovereign power of His own established decrees.

(7) There are philosophers and theologians who take the position that at certain stages in the Creation, God, by *direct* action (that is, *primary,* as distinguished from *secondary,* causation) inserted new and higher powers into the Cosmic Process, the first above the inanimate world (matter-in-motion) being the *life process* (cellular activity), then *consciousness* (the product of sensitivity), and finally *self-consciousness* (person and personality). Obviously, these are phenomena which mark off, and set apart, the successively more complex levels of being as we know these levels empirically. On the basis of this theory, it is held that even though variations—both upward (progressive) and downward (retrogressive)—by means of *resident* forces, may have occurred on the level of plant life and that of animal life, the actualization of the first form of *energy-matter,* first *life,* first *consciousness,* and first *personality* (homo sapiens) must have been of the character of special creations. It is interesting to recall the fact here that Wallace, the author with Darwin of the

theory of natural selection, held that there were three breaks in the progressive continuity, namely, with the appearance of life, with the appearance of sensation and consciousness, and finally with the appearance of spirit. These breaks seem to correspond in a general way to *vegetable*, *animal*, and *rational* (human) life, in the order named.[22]

(8) Finally, it must be admitted that one of man's most common fallacies is that of trying to project his own puny concepts of time into the sphere of God's *timelessness*. God does not hurry; His timelessness is Eternity. (2 Pet. 3:8, 2 Cor. 4:18).

12. *Theistic evolutionism and Gen. 2:7.* The crucial problem involved here, of course, is that of the origin of *homo sapiens;* as stated in a nutshell, can theistic evolutionism be harmonized with the teaching of Gen. 2:7? Can a Christian accept the view that man arrived on the scene through descent (or ascent?) from a brute animal species? Can such a view be harmonized in any way with the description of man as a body-spirit unity (or body-mind unity) that is explicitly given us in Gen. 2:7? Dr. A. H. Strong argues rather eloquently for an affirmative answer to these two questions, as follows: "Evolution does not make the idea of a Creator superfluous, because evolution is only the method of God. It is perfectly consistent with a Scriptural doctrine of Creation that man should emerge at the proper time, governed by different laws from the brute creation yet growing out of the brute, just as the foundation of a house built of stone is perfectly consistent with the wooden structure built upon it." (Is not this, however, an irrelevant analogy?) Again: "The Scriptures do not disclose the method of man's creation. Whether man's physical system is or is not derived by natural descent from the lower animals, the record of creation does not inform us . . . We are compelled, then, to believe that God's 'breathing into man's nostrils the

breath of life" (Gen. 2:7), though it was a mediate creation as presupposing existing material in the shape of animal forms, was yet an immediate creation in the sense that only a divine reinforcement of the process of life turned the animal into man. In other words, man came not *from* the brute, but *through* the brute, and the same immanent God who had previously created the brute created also the man."[23]

To me it is inconceivable that the inspired writer of Genesis 2:7 could have had any such idea in mind as that suggested by Dr. Strong in the statements quoted above. Of course, it is entirely possible that the Spirit of God deliberately caused the material of the Genesis Cosmogony to be presented in a form such as to make it adaptable to man's ever-increasing knowledge of his external environment (cf. Gen. 1:28). This seems to have been true of the over-all panoramic picture of the Creation given us in Gen. 1:1—2:3. That is, having sketched in broad outlines the religious truths of the Genesis narrative, He may well have left it to man himself to spell out as best he can the essentially scientific (empirical) evidence concerning the origin of the cosmos and its manifold forms.

In relation to evolutionism, the meaning of Gen. 2:7 is to be studied primarily in the light of the phrase, "the dust of the ground." Surely we have here, in the verse as a whole, a portrait in what we of the modern world would call *archaic* language. Yet the portrait turns out to be scientific in the sense of the now-recognized fact that man is in truth a *psychosomatic* unity. Obviously, in terms of modern scientific thought, the writer of Gen. 2:7 would have us to know that man in his present state is both *body* and *mind* (or *spirit*) and that he is immeasurably more than body alone; that his body—"the earthly house of our tabernacle" (2 Cor. 5:1, Wisdom 9:15)—like all things corporeal, shares the properties of what is commonly designated physical energy or matter; that in short he has

a body akin to all earthly living bodies. This is surely the import of the verse as a whole: as Murphy tersely puts it: Man "is a combination of matter and mind."[24] The narrative here, writes Whitelaw, "which, beginning with the construction of his body from the fine dust of the ground, designedly represents it as an evolution or development of the material universe."[25] Marcus Dods writes: "The discovery of the process by which the presently existing living forms have been evolved, and the perception that this process is governed by laws which have always been operating, do not make intelligence and design at all less necessary, but rather more so."[26] Obviously, the writer could not have presented this thought in present-day scientific terms: he did not have the language for such a communication, and even if he could have had the proper language at his disposal, no one could have understood it. It seems, therefore, that the Spirit has left it to man's intelligence to fathom the implications of this revelation. The passage, as it stands, appears to me to be irrelevant in respect to modern scientific explanations, even though possibly amenable to interpretation in modern scientific terms. Hence, it can hardly be said either to prove or to disprove them.

Is the "breathing into man's nostrils the breath of life" to be correctly explained (as in Strong's language) as a "reinforcement of the process of life" that "turned the animal into a man"? The word "reinforcement" as used here strikes me as being exceedingly vague. What kind of "reinforcement"? Or, just what did this "reinforcement" involve? Surely the text of Gen. 2:7 leaves us with only one valid interpretation, namely, that "the breath of God" carried with it a direct impartation from God Himself of those powers which specify man as man—his intellectual, moral and spiritual endowments, in fact the whole of his interior life: hence the declaration in Gen. 1:28 that he was created in the image of God. Surely this phrase,

"image of God," disallows the claim one frequently encounters that the "breath of God" of Gen. 2:7 designates the impartation to man of the vital principle only. Gen. 1:28, if it means anything, surely means that God breathed into him, not just the life principle, but the rational principle as well. (Cf. Gen. 6:17, Acts 17:25, Eccl. 12:7). These are the powers which separate man from the brute creation. Hence, because these powers are so far superior to any that are manifested by brutes, even by the highest primates, I find it impossible to accept the view that the difference of man from the brute is simply one of *degree.* My conviction is that the difference is, and will always be, one of *kind.* However Dr. Strong's theory of "reinforcement" is to be explained, whether anthropomorphically (which certainly is not to be ruled out) or by mutation (in some manner biologically) it certainly was of the character of a special creation. Even though evolutionistic progression may have occurred on the plant level, on the animal level, or on both, certainly in the vast leap from the brute to man, a special Divine operation of some kind affords the only satisfactory explanation of its occurrence. I am not convinced that the case for the evolution of man's interior mental, moral, and spiritual propensities—his essential being, *as man*—from hypothetical primate and humanoidal forms has ever been proved. In all likelihood this is a mystery which will never become fully known to man, either by divine revelation or by scientific discovery, simply because it lies beyond the scope of comprehension by the human intellect.

I therefore summarize as follows: I strenuously object to the manner in which the theory of evolution has been built up into what might be called a *dogma.* Many modern textbooks are replete with assertions of, and statements about, what is designated the "fact" of evolution. This usually occurs when, from an author's viewpoint, the wish is father to the thought. It is unfortunately true that when

certain of the intelligentsia lose their faith in God, they avidly seek every possible device to bolster their unbelief. To say that evolution is a "fact," however, is going entirely too far, especially in the attempt to establish a theory which is constructed for the most part on *inference.* Whether this inference is *necessary* inference or not, or just sheer conjecture, remains a moot question. Bold assertions do not cover lack of concrete evidence. Although I have never been able to bring myself to the point of accepting many of the exaggerated claims that are made by the evolutionists, yet after some fifteen years of dealing with college students, it has become my conviction that there is no real need for adding difficulties for them unnecessarily, or setting up and shooting at what may turn out to be straw men. Hence, the material of this section has been organized and presented with the end in view of helping the student to be strengthened in the most holy faith. If this can be accomplished without doing violence to the sacred text, *on any subject that has been more or less controversial,* I think it should be done. *I cannot convince myself that acceptance or rejection of any theory of the method of the Creation that recognizes and allows for the operation of Divine Intelligence and Power should ever be made a test of fellowship in a church of the New Testament order.* (See my *Survey Course in Christian Doctrine,* Vol. I, pp. 175-186. College Press, Joplin, Missouri, 1962.)

REVIEW QUESTIONS ON PART TEN

1. Define the word *science.* What is epistemology?
2. Why do we say that the "laws" of nature (of physics, chemistry, geology, biology, etc.) are statements of *very great probability?*

3. Distinguish between science and scientism.
4. Why do we affirm that much of the loose talk about alleged "conflicts" between Biblical teaching and scientific thinking in our day simply "need not be"?
5. List the harmonies between present-day science and the Genesis Cosmogony.
6. What is meant by the "blind spots" of materialists, naturalists, humanists, etc.?
7. Explain how the theory of *epiphenomenalism* is not necessarily to be regarded as antiBiblical.
8. Explain how present-day physics supports the Christian doctrine of immortality.
9. Explain how the theory of *emergent evolution* is not necessarily to be regarded as antiBiblical.
10. Explain the ambiguity of the word "evolution."
11. Explain what is meant by the *genetic fallacy.*
12. State LeConte's definition of evolution.
13. Explain the present-day theory of *societal* (or *psychological*) evolution as related to the biological.
14. What is the meaning of the word "organismic" in relation to theories of "emergent" evolution?
15. Explain the difference between *evolution* and *evolutionism.*
16. State the contributions of Lamarck, Darwin, Weismann, De Vries, and Mendel, respectively, to evolutionism.
17. What are mutations?
18. Explain what is meant by the movement of evolution.
19. Explain orthogenesis, also Bergson's fountainlike evolutionism.
20. List the kinds of evidence usually cited to support the theory of evolution.
21. Explain what is meant by the evolution *dogma.*

22. Explain the fallacy in the title, "Can Science Produce Life?"
23. Summarize Thompson's critique of evolutionism.
24. Explain how scientists have extended the notion of "continuous progressive change" to practically every aspect of the cosmos.
25. Explain what is meant by the fallacy of *over-simplification.*
26. Explain what is meant when we say that evolutionism has no adequate explanation of the transmission of variations from parents to offspring.
27. Does evolutionism give us any adequate explanation of the life movement itself? Explain your answer.
28. Explain how the unlimited stretch of time that is required by evolutionism is a form of *begging the question.*
29. How do mutations fit into the general theory of evolution? How are mutations to be accounted for?
30. Does structural resemblance necessarily prove emergence? Explain your answer.
31. List various facts of the world we live in, for which evolutionism can give no satisfactory explanation.
32. What is materialistic evolutionism? Explain why Christians cannot accept it, and why there is no real ground for any intelligent person to accept it.
33. What is the fallacy in the so-called "mechanistic" explanation of the origin of the cosmos?
34. Explain what is meant by theistic evolutionism?
35. What did Darwin have to say about the activity of the Creator in the origin of the biological world?
36. Summarize the arguments that may be offered in support of theistic evolutionism.
37. What is meant by the statement that the Creator may have operated through secondary causes in bringing the world into existence?

38. Summarize Dr. Strong's application of evolutionism to the account of the creation of man in Gen. 2:7. Do you consider the explanation valid? Explain your answer.

39. Discuss the likelihood of any correlation between the phrase, "the dust of the ground," as occurring in Gen. 2:7, and the theory of evolution.

40. What, obviously, is the full meaning of Genesis 2:7?

41. Summarize our general conclusions about evolutionism in relation to the Hebrew Cosmogony.

1) D. Elton Trueblood, *Philosophy of Religion,* p. 168. Harpers, 1957.
2) C. E. M. Joad, *Guide to Philosophy,* p. 309. Dover, 1936.
3) Cohen and Nagel, *An Introduction to Logic and Scientific Method,* p. 389. Harcourt, Brace, 1934.
4) *Ibid.,* p. 390.
5) See J. C. Smuts, *Holism and Evolution,* pp. 261-262. Macmillan, 1926.
6) Pierre Teilhard de Chardin, *The Phenomenon of Man,* pp. 290,311. Trans. from the French by Bernard Wall. Harper Torchbook, 1961.
7) G. T. W. Patrick, *Introduction to Philosophy,* Revised Edition, pp. 122-124. Houghton Mifflin, 1935.
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ADDENDA: COSMOLOGICAL THEORIES

(Theories of the Origin and Organization of the Cosmos)

EMANATIONISM: Unity is prior to plurality. Creation is conceived as a process of the "watering down" of perfection, as, for example, light, in moving away from its source and thus becoming diffused, is finally lost in darkness. Darkness is non-being, and non-being is usually identified with gross matter. The most thoroughgoing emanation cults were those of the Gnostics and especially that of Plotinus, which is known as Neoplatonism.