

FUNDAMENTALISM AND THE DOCTRINE OF EVOLUTION

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I.

FUNDAMENTALISM means to stay. Hardly more than a year ago Fundamentalism meant, to most men of science, little more than a temporary annoyance; and to enlightened Americans, whether scientists or not, it meant little more than a European disgrace. But today Fundamentalism is no longer merely a passing annoyance or European disgrace; it is a very real personal danger to the scientist and a live menace to the enlightened civilization of America.

Tennessee was only a beginning; the death of Bryan was far from being the end. The number of teachers dismissed or forced to resign because they taught Evolution and the number of legislative enactments prohibiting the teaching of Evolution or of using textbooks that even refer to it, constantly increases. And the States that have reverted to this elementary form of intellectual barbarism, are not by any means, all in the backward South. A state no less distant from the South than Wisconsin, and a State no less close to the Metropolis of the Nation than New Jersey have both anti-evolution legislation of which no doubt they feel proud and boast.

There is no knowing what Fundamentalism may not accomplish, if it is only allowed a few more years of successful activity. It may seem highly alarmist to see Fundamentalism in the dark but not distant future, adding another Amendment to the Constitution. But such vision may yet really be more clairvoyant than alarmist. Is it then much more than a step from a series of State laws to a comprehensive Federal law? The tactics, principles, purposes, and even people of the Anti-Evolution League are at least identical in

spirit with those of the Anti-Saloon League. And if the Anti-Saloon League could capture an Amendment why should not the Anti-Evolution League be able to capture one too? The necessary precedent has been established.

There is some reason to hope, however, that the worst may fail to come. Hope mainly springs from the fact that the Science League of America appreciates the dangerous character of the Fundamentalist movement. The Science League realizes that there is a real, not a sham battle on, and it is setting about in live earnest to mobilize the forces of those who are "Friends of Scientific Freedom." The Science League recognizes, as its secretary, Professor Woodbridge Riley puts it, that "The Philistines are upon us, and we need business methods and ample finances to check the rise of non-science." This understanding gives one great reason to hope for the Friends of Scientific Freedom will unquestionably respond to the call, and give the Science League all the support it asks for.

Money and business organization, especially in the America of today, are, without doubt, indispensable means for launching any effective campaign. But it is very difficult to believe that money and business organization will of themselves prove sufficient to check the sinister forces of Fundamentalism. Fundamentalism assuredly owes a great deal to the money and organization behind it; but it is seriously to misjudge and underestimate the powers of Fundamentalism to attribute its successes solely, or even chiefly, to its material resources. Fundamentalism has succeeded so far, and will continue to succeed because its purpose is sharply defined and easily intelligible; and the appeal of its purpose is almost universal and of tremendous emotional power. The purpose of Fundamentalism is to save mankind from the degradation of irreligion and immorality which, it maintains, is consequent upon rejecting the account of creation according to Genesis, and accepting in its stead the doctrine of Evolution. This is a purpose everyone can understand. And it is as powerful and universal in emotional appeal, as the purpose the Prohibitionist successfully espoused: the purpose of saving mankind from the ultimate sin and wretchedness brought on by the use of alcohol.

It is with this purpose of Fundamentalism that the Friends of Scientific Freedom have really to cope. And no amount of money, no matter how judiciously it is used, will of itself ensure them

victory. The only way Science can emerge victorious is by making its purpose as universally intelligible, and giving it, moreover, an emotional appeal exceeding in power the appeal of Fundamentalism. For the conflict is by no means just between the Fundamentalist and the Evolutionist. If it were, the outcome would be a draw because the confused rhetoric and unthinking authoritarianism of the Fundamentalist would have no effect on the Evolutionist—unless, perhaps to make him acutely subject to *taedium vitae*; and the scientific arguments and demonstrations of the Evolutionist would have no effect on the Fundamentalist (whose mind is adamant to reason)—unless, perhaps, to make him acutely conscious of the growing power of the Devil. The real struggle is not between the Fundamentalist and Evolutionist themselves, but between the Fundamentalist and Evolutionist for intellectual domination over the masses of the American people who, when left alone, are intellectually as indifferent to the Bible as they are to Science. The final outcome of such a struggle can hardly be a draw: one side or the other will score a victory.

Today, as matters are in the main, Fundamentalism occupies by far the superior position. In contrast to the simple and stirring purpose of the Fundamentalist the purpose of the Evolutionist is hopelessly vague, and to most people, of negligible importance. What does the Evolutionist want? Scientific freedom! How very feeble, to the great masses of people, must the abstract demand for scientific freedom appear beside the concrete demand for moral salvation and eternal redemption! Furthermore, just what does "scientific freedom" involve? Is it true that scientific freedom leads one hard and fast into the bottomless abyss of irreligion and immorality as the Fundamentalist claims? If so, wherein is such "freedom" different from "license"—one can almost hear the perfervid Crusaders jubilantly exclaim? For the Evolutionist simply to ask for "freedom" is, as far as the Fundamentalist is concerned, for the Evolutionist to be guilty of either evading the issue or of begging the question. To make his plea for freedom significant, the Evolutionist must first justify the nature and uses of the freedom he demands. But this he can do only by convincing the Fundamentalists that their literal faith in the Bible is misguided, and that their interpretations of the doctrine of Evolution and the constructions they put upon it, are altogether wrong.

It is not in the least likely that the Evolutionist will succeed in confuting the Fundamentalist and winning his case unless he radically changes his tactics and method of approach. The aim should be indirectly to circumvent the Fundamentalist rather than to annihilate him directly by frontal attack.

If the Fundamentalist is allowed to maintain that the issue at stake between Fundamentalism and Science is whether one shall accept the book of Genesis or the doctrine of Evolution, one may safely wager one's fortune in the next world as well as in this, that Fundamentalism will win. The reason is simple: Fundamentalism, in seeking to take Evolution away from the masses of people is not seeking to take away something that is seriously involved in their lives, something the people have become strongly attached to and care much about. But Science, in seeking to take away Genesis from the masses of people, is seeking to take away something which is intimately interwoven in the emotional lives of the people; not because Genesis itself is something that intrinsically interests or emotionally affects the people, but because it is part of the sanctified compendium or canon which is the ostensible basis of their religious beliefs and practices.

It bears emphatic repetition that the masses accept Genesis and can be made to feel terribly concerned about it, only because it belongs to the Bible and, in their unsophistication, they can be made to believe that to reject any part of the Bible is equivalent to electing to go to Hell. The real indifference of the masses to cosmological or theological stories is adequately testified to by the widespread disregard of, for example, Greek mythology—which is inherently more entertaining and attractive than Jewish mythology. Popular interest in Genesis is accidental, not essential, and it would be idle to expect popular interest in Evolution to be otherwise. As long therefore as the defenders of Science carry on their controversy on the high plea of disinterested scientific enquiry, and restrict their attention to Evolution itself, the popular ear will be ever more willing to listen to the insistent clamor of those who make the story of Genesis a necessary part of the key to moral salvation and eternal bliss.

Evolution cannot, of course, be entirely eliminated from the current controversy. There is no need that it should be. But Evolution must be made an element in a larger issue in the same way that Genesis has been made an element in a larger issue, if Science

is to wage a winning and not a losing battle. To make the choice between Evolution and Genesis a real one for the masses and not a foregone conclusion in favor of Genesis, scientists will have to tie Evolution up to things actually vital in the lives of the people they are trying to reach and upon whom their fate in so large measure now depends. They will have to make, in some way, the loss of Evolution a loss significant to the masses of people appealed to, and not merely a loss significant to scientists and students of science as is the case today.

II.

Evolutionists have tried, since the Scopes trial, to popularize the doctrine of Evolution. But it is becoming increasingly obvious that seriously to accept the Fundamentalist challenge on the isolated question of Evolution is to give the Fundamentalist an enormous advantage. Just because Evolution is a highly complicated doctrine, depending for its evidences upon many abstrusely technical sciences, and just because it is, in its present stage, in a highly qualified and tentative formulation, it is a fine target for its Biblical opponents. The Evolutionist is firmly convinced, and has ample evidence to support his conviction, that evolution does take place, that the present forms of things are developments from earlier and widely differing forms; but the Evolutionist freely admits that he does not as yet know the laws governing the processes of evolutionary transformations in the manifold realms of Nature. The Evolutionist freely admits that his doctrine is still in the stage of being an hypothesis.

It is unnecessary to enter into a lengthy examination of the kinds of arguments the Fundamentalist uses in his intended refutations of Evolution. It will be sufficiently instructive to consider one such argument by way of illustration. The Evolutionist, it has been said, freely admits that his doctrine is still in a hypothetical stage. Such an admission is, to the scientist, quite innocent of all harm. But, in the eyes of the Fundamentalist it is very incriminating indeed. For an hypothesis does not mean to the Fundamentalist what it means to the scientist. To the trained scientific mind, the fact that a doctrine is formulated as an hypothesis is no sort of objection to it. It does not mean that the doctrine has no evidence in its support; it simply means that the doctrine has no evidence of

the kind that justifies and makes possible the precise and final formulation known as a scientific law. The scientist knows that hypotheses play a central role in scientific procedure. They function both as tentative conclusions and as programs for further action. They sum up the meaning of observations already made, and give direction to subsequent investigation. Without hypotheses the scientist would be lost in a mad sea of mere data. And besides their technical significance in scientific procedure, hypotheses embody, for the scientist, the general spirit and character of his method of inquiry; they represent, for him, scientific caution and open-mindedness—the traits of mind the scientist prides himself on most.

To the Fundamentalist hypotheses mean none of these creditable and valuable things. And the Fundamentalist knows that he can range on his side, the great masses of people. For the common people do not possess the strength of mind and training required to appreciate the technical significance and great human value of hypotheses. The general run of people do not like uncertainties, tentative results, generalizations which are qualified; they want things to be plain, definite and certain because they can understand only what is plain, definite and certain. Even the common run of graduating college student vastly prefers and feels much more at home with things he can take hold of, that are concrete. The desire for brass tacks, irrespective of considerations of their importance or ultimate usefulness, is very pervasive among mankind and is extremely difficult, if not impossible, to overcome.

It is, consequently, quite easy for a clever orator, like the late Mr. Bryan, to make the masses he addresses, quite suspicious, even afraid of Evolution, merely on the ground that it is an "hypothesis;" for anything that people are unequal to, or even unaccustomed to, they are naturally afraid or suspicious of.

In one of the chapters of his Fundamentalist volume *In His Image* Mr. Bryan gives the stock kind of forensic analysis and discussion of the doctrine of Evolution; with great parade of scholarly research and industrious precision, Mr. Bryan unhesitatingly goes to the very origin of evil in modern life—the early editions of the *Origin of Species* and the *Descent of Man*. After pointing out that in those iniquitous volumes Darwin, instead of making dogmatic assertions, very frequently makes instead highly qualified statements using such terms as "apparently" "probably" "we may well

suppose" which latter phrase Mr. Bryan tells us "occurs over eight hundred times in his (Darwin's) two principal works"—necessarily forcing one to the conclusion that "the eminent scientist is guessing") Mr. Bryan goes on fearlessly to show that the essence of scientific method involved in proceeding by means of hypotheses is really nothing more than a thinly disguised fraud. "The word hypothesis is a synonym used by scientists for the word guess; it is more dignified in sound and more imposing to the sight, but it has the same meaning as the old-fashioned, every-day word guess." Wherefore, Mr. Bryan retrospectively prophesies "If Darwin had described his doctrine as a guess instead of calling it an hypothesis, it would not have lived a year."

In contrast to the guesses of Darwin and his like, there is the certainty the Bible affords us. The vast mass of data Darwin collected—data which the *Origin of Species* and the *Descent of Man* only summarized—meant nothing whatsoever to Bryan; and that Darwin, with the magnificent intellectual restraint of the great scientist, did not take even his stupendous accumulation of data as conclusive proof, but preferred to consider it merely as probable evidence, mean to Bryan even less. Bryan—in more senses than one the Great Commoner—wanted certainty. And if sheer, unintelligent dogmatism was the only way to get certainty, then dogmatism was necessarily superior to all careful, tentative, scientific investigation. Genesis was necessarily superior to Evolution.

"If we accept the Bible as true, we have no difficulty in determining the origin of man," says Mr. Bryan, with truly touching simplicity. And no doubt we have no difficulty in determining the origin and nature of anything else. For, as Mr. Bryan points out on another page, "the Bible does not say" for example" that reproduction shall be *nearly* according to kind, or *seemingly* according to kind. The statement is positive that it is *according to kind*." And a positive statement obviously leaves no room for doubt. Hence when Mr. Bryan asks the rhetorical question "Why should the Bible, which the centuries have not been able to shake, be discarded for scientific works that have to be revised and corrected every few years?" he knows that the masses of people he is addressing will recognize as just and true his own rhetorical answer: "The preference should be given to the Bible."

The *preference* should be given to the Bible! Mr. Bryan knew

his audience. The statement of his preference is not vain, it finds a responsive echo in the minds of most people. For most people, especially for Fundamentalists, knowledge is not something that grows, something that itself is in process of development, of evolution, something that must be constantly pursued and is only with great difficulty ever caught. Knowledge for the masses is something that is inherited, something that is handed down and is to be passively accepted. For them knowledge is not a living function of the human mind; it is something dead and mummified. And, naturally enough, that knowledge is of greater excellence (and should be therefore given the preference!) which has been in its mummified state for a greater number of generations. What could be a better instance of knowledge when thus conceived, than the Bible? Its statements remain unaltered (though—not unchallenged) from age to age. Within the circle of believers, its statements are never questioned, never subjected to criticism; they are blindly, abjectly, received. Beside so venerable and austere a volume as the Bible, what sort of figure does Evolution cut—a mere “hypothesis,” an item of knowledge still in its early and rapidly changing stages of growth? And when we further realize that “the hypothesis to which the name of Darwin has been given. . . is obscuring God and weakening all the virtues that rest upon the religious tie between God and man” can we doubt for a moment longer that the preference *should* be given to the Bible?

III.

The objection against letting the doctrine of Evolution remain the controversial issue, is not merely the opportunist one that the Evolutionist is seriously handicapped in defending it forensically (though such an objection is valid and strong enough); it is that the polemical discussions of Evolution obscure rather than clarify the fundamental issue involved. The fundamental issue is not—Shall we accept Genesis or Evolution? It is—Shall we follow the methods of science or the method of the believers in the Bible? Shall we use our reason, or shall we blindly accept things on faith? The real war is between Science and the Bible—sometimes with incredible inaccuracy called the war between Science and Religion.

One of the ways to make the real issue clear is for the Evolutionist to recall attention, for instance, to the earlier controversy

between the Bible and Science over certain doctrines advanced by astronomers. As the Fundamentalist knows, or else can easily find out, certain doctrines in astronomy were as strenuously opposed by earlier believers in the Bible as the doctrine of Evolution is now being opposed by the Fundamentalist himself. And for precisely the same (supposedly) moral and religious reasons. Let the old controversy, therefore, between the Bible and Astronomy be revived in all its original force. The Fundamentalist surely can have no more objection to turning history back 360 than he has to turning it back 60 years. If the Fundamentalist wants to dispute matters of science, let him dispute with the astronomer rather than with the biologist. Astronomy is so much more exact and mathematical than biology. And the Fundamentalist will find sufficient justification for dispute since astronomy as flatly controverts the statements in the Bible pertaining to the nature of the earth and stars and their relations to one another, as Evolution controverts the statements in the Bible pertaining to man and the rest of the animal kingdom and their relations to one another. Indeed, astronomy goes further in its heresy than Evolution for astronomy maintains that its findings are conclusively established; they aren't mere hypotheses—mere "guesses." The astronomer maintains that he has actually "proven" that the earth is round and not flat, that the earth is one of a number of the sun's satellites, that the sun is not a luminary expressly hung in its peculiar place for the benefit of the inhabitants of the earth. If Darwin destroyed "the faith of millions" (Mr. Bryan's estimate) Copernicus certainly destroyed the faith of at least hundreds of thousands. Do these hundreds of thousands then mean nothing to the ardent salvational soul of the Fundamentalist?

The scientist should insist upon the fact that any specific doctrine in science does not mean anywhere near as much to the scientist as the methods and principles of science. It is really an accident of history that first astronomy and then some three centuries later biology came to disturb the faith of the believers in the Bible. Scientific interest happened as a matter of historical fact to center with great effect first in physics and astronomy; but it is precisely the same spirit and method which resulted in the abandonment of Biblical astronomy which, when applied to the study of biology, necessitated abandoning Biblical doctrines concerning the origin of animal species.

Indeed, it would be eminently advisable for the Evolutionist to take another step and direct the attention of the Fundamentalist to the future. He should point out to the Fundamentalist that the very same spirit and method of enquiry which led to the discovery of heretical astronomy and biology has already led to the establishment of even more vitally heretical doctrines concerning the soul of man. Astronomy and biology do not after all necessarily deny that man has a soul; it is outside their province to pronounce upon that momentous aspect of human nature. But to deny that man has a soul is just what, for the most part, modern psychology does. How much greater must be the inevitable moral degradation and irreligion of those who are taught behavioristic psychology than is the eventual degradation of those who are taught astronomy and evolutionary biology! If man has no soul, how false is the Bible when it says that his soul is what God gave him, in a manner more intimate and more expressive of God's inner self than the body God gave man by kneading him out of mud! Is it not the soul of man that makes him truly In His Image? If man has no soul, what force remains to the whole theological doctrine of human immortality, and the doctrine of punishments and rewards in Heaven and Hell? Let the Fundamentalist open his eyes, and, with the distinctive prerogative of man, look both before and after. Evolution is really only a symptom; the real menace is the general procedure, method, presuppositions of science. As long as science is allowed to exist at all, there will never be any peace for the believers in the Bible. Where Fundamentalism will lop off one limb from the scientific body, many will grow. Let the Fundamentalist therefore legislate wisely if he is going to legislate at all. Let the law be so phrased that the public teaching of any science is a capital offense against the young; and the private pursuit of any science a criminal offense against society!

IV.

It is the custom of all crusading, evangelical movements to seize upon some one thing that has advantageous forensic possibilities, no matter how incidental to the real issue those possibilities are. But scientists should not, at this late date, be victimized by a strategy so transparent. In so far as the struggle remains on what one might with some generosity call the intellectual plan, it would greatly help the cause of science and American civilization to make prominent

the basic disagreement between the upholders of Science and the upholders of the Bible.

The general run of people do not stop to question their beliefs. For them, their beliefs are final, ultimate, fundamental. The Fundamentalists, as Professor Dewey pointed out, have very astutely capitalized this general human failing. Their name is their slogan. Unfortunately, however, it is no weapon against Fundamentalism to point out that what is fundamental for one class of people may not be fundamental for another; and that what may be fundamental to one set of beliefs, may not be at all fundamental to the nature of the universe those beliefs are about. Beliefs may quite well be fundamental in the lives of a given people and yet for all that also be utterly false—as happens to be the case with the belief that the Bible is literally and uniformly infallibly true. It is important, however, as indicating what must be done, to point out that for the masses of people, that is fundamental which is accepted, and that what is accepted, is deemed by them to be necessarily and eternally true. With most people, that is to say, tradition is absolutely fundamental, and for no other better reason than the mere fact that it is tradition. It is this that the Fundamentalist exploits to the uttermost, and has incorporated into his name.

Fundamentalism is riding on the great wave of intolerance and bigotry which was violently aroused during the war, and revived after the war—an intolerance and bigotry which is ever latent in the masses of people who do not think, and hence inevitably consider their own inherited ideas and customs as being the only proper, if not the only possible, ones. The tradition of scientific freedom may have appeared to be strong in recent years when it was left unchallenged; but for the tradition of scientific freedom even to stand its own ground in America now by its own efforts is, as contemporary events have sufficiently demonstrated, impossible.

To contend against the force of a militant tradition by arguments of reason, is as effective as to argue with the rising tide. The only way of successfully overcoming an active tradition is to set into operation a more powerful counteracting tradition.

Such a tradition scientists can set working by making perfectly clear and inescapable the recognition that all sciences are essentially the same by virtue of their method and ideal, and that scientific method breeds heresy in all fields—including the historical. With

this clearly advanced, the Fundamentalist will be forced to contend not merely against the newest scientific doctrine which is also weakest in general social prestige; he will have to contend against scientific doctrines like astronomy, for example, which are quite firmly entrenched in the educational tradition—doctrines moreover which unlike Evolution do not afford the sly public debater much opportunity for displaying his talents. Fundamentalists can, without fear of incurring general social disapproval, seek to force Evolution out of the curricula of school and college. But is it likely they would run no risk of defeat if they had the hardihood (and consistency) to do the same to elementary astronomy?

But scientists need not and should not rest their hopes upon merely introducing, say, astronomy into the controversy. All theoretical sciences should be involved. If perchance, the conflicts between some theoretical sciences and the Bible are as yet not known, it would be eminently advisable to endow research workers to discover them. . . . Scientists should not let Fundamentalism remain a nasty, quarrelsome affair. They should make the contemporary controversy the occasion for a real war between Science and the Bible. The scientist should take the offensive, not the defensive. Let it be a war to end all war between the Bible and Science! Such a war must rage on as many fronts as possible.

V.

In furtherance of this sublime end, the battle should be taken as much as possible out of the theoretical into the practical sphere. As long as the controversy rests in the theoretical sphere, it is very likely to become, on the part of the scientists—no matter how good their attentions—an entirely academic discussion, with no power at all to check the very decidedly practical activity of the Fundamentalists. It is so all too likely that the controversy will be siezed upon more as an opportunity for displaying erudite, professional wisdom—a little popularized of course—than as an opportunity for directing social opinion into enlightened channels of thought. The latter can be accomplished, not by bountifully allowing the public to have a distant peep at the sacred arcana of Science, but by making the public realize in a vivid way, to what extent their fundamental everyday interests and ordinary lives are interwoven with the vital interests and methods of science. The public must be made to

realize not that Science is something remote and foreign, something that they may, at best, abjectly look up to, but can never really know; they must be made to understand that science is a quite human affair, and that it affects their lives in a constant and intimate way.

The appeal to the public must be based primarily on the emotions of the public. The public must first be aroused before it can be instructed. In this the public is no different from the individual human being. Fortunately Science can arouse the American public if it only wants to; and it can arouse it in a very powerful way. For it is not only the theoretical sciences which are closely allied: the theoretical are closely allied to the practical sciences as well. Practical inventions are very intimately dependent upon theoretical methods and discoveries.

Without the practical inventions which constitute the modern industrial system, the physical aspect of contemporary American civilization would be inconceivable. And American prosperity, as it is known today, would be non-existent. Could Science ever dream of a more powerful weapon of persuasion than prosperity? Has the American public today, towards anything, sentiments more powerful than it has towards wealth? Could any blow strike at the heart of the American People with more terrifying force than a blow directed at America's industrial success? What is the President of the United States, today, if not the duly elected High Priest of the new national religion of Prosperity?

The foundation of American prosperity is American industry; and modern industry is nothing other than highly technical science. If scientists would only emphasize this fact and make it plain to the American public, what an enormous advantage they would have over the Fundamentalists—instead of the Fundamentalists having an enormous advantage over them. People are of all things least prone to forsake their material belongings. Human emotions always have been, and always will be more firmly and deeply rooted in material than in spiritual goods. What would be the attitude of the public towards the Fundamentalist if they were made to realize that the Fundamentalist, to be honest and consistent, must finally strive to deprive them of, not merely some theory of Evolution they vaguely heard of and care less about, but of their actual, tangible possessions which they so thoroughly appreciate and so violently prize?

But furthermore! Not only is the material life and wealth of the

American public absolutely dependent upon technical science; their spiritual life is similarly dependent today. Without the movie, phonograph, radio, tabloid, Ford car, and now latest of all, airplane—without all these creations of Science—what would the spiritual life of the American people degenerate to? The housewife out in the depths of Arizona, or in the wilds of Massachusetts is, today, as spiritually dependent upon the radio (to consider only one example) as she was a decade ago—upon the party telephone wire. And the miracles the people once demanded from the religious practitioner, they now confidently expect from the scientific “wizard.” If science does not enable man to walk, it enables him to fly over the face of the waters. And who shall say that flying is a lesser miracle than walking? Even if it is a lesser miracle, certainly for the people, it is miracle enough.

Can anyone for one moment soberly think that the American people would supinely allow any group—even of bigots—to take from them all the indispensable instruments of their material spiritual life?

VI.

Even Mr. Bryan himself has to admit that “Science has rendered invaluable service to society.” But with Mr. Bryan and his co-Fundamentalists such admission can be little more than lip-service. If they really appreciated the service science has done, they would not be quite so ready to choke the living breath out of science with their clumsy fingers. Perhaps though, activity is not due to lack of appreciation, really, but to lack of real understanding. If this be the case, then it is all the more incumbent upon the scientist to enlighten them, and with them the population of the United States. Let the people be informed in what deep and all-pervasive sense it is true that we live in an age of science; and in what deep sense it is true that science is a single thing. And let the Fundamentalists be informed that if they want to keep the Bible intact, then they must ostracize all theoretical and all practical sciences: the ostracism of Evolution is by no means enough.

Such counsel of war could not very safely be given a few centuries ago. Then organized science played practically no part in the lives of the people; and it would be just as easy for an intolerant movement to banish all sciences as any one science from society.

Today, happily, such is not the case. The practical achievements of science have seriously modified the lives of all the people; and the loss of such things as science has given them would be to them far more significant than losing the book of Genesis—or even several Mosaic books.

If the American people were offered the choice between Science (practical as well as theoretical) and, say, the whole Pentateuch, their decision would by no means be a foregone conclusion in favor of the Pentateuch. And this is just the kind of choice the American people should be confronted with. If the Fundamentalists maintain that the Bible must be accepted in its entirety if it is accepted at all, surely the scientists have the right to maintain that science must be accepted in its entirety, if it is accepted at all. The doctrine of Evolution is merely an incident in science and the scientist should insist that it be considered as such. Let the masses be made familiar with the unity of science, even if they are not immediately made to understand all of the detailed reasons why it is unified. And then we may feel certain that vastly increasing numbers will gradually perceive, for instance, the howling absurdity of the Fundamentalist preaching against the doctrine of Evolution through a microphone!

Science is faced with a golden opportunity today. Superstitious institutions which were complacently thought to be moribund, are now seen to be rapidly spreading, virulent national diseases. Fundamentalism is a gigantic national menace; but just because it is such a gigantic menace, it can become—if scientists and the friends of science will only rise to the occasion—a marvellous opportunity for launching a vigorous and telling campaign in the interests of science and human enlightenment. The malignant growth of superstition can become the opportunity for the wide diffusion of the healing light of human intelligence. What vast and salutary changes will result to American civilization if scientists and the friends of science make the most of the combat they are challenged to engage in, one can only hope for and at best dimly prevision, not prophesy. But even if only some of the possible advantageous transformations should be the consequences of triumphant battle, then Fundamentalism would indeed be an unexampled boon to American civilization—all the more to be cherished for coming so disguised!