SCIENTISTS' UNSCIENTIFIC NOTIONS ON RELIGION

BY VICTOR S. YARROS

FUNDAMENTALISTS and conventionally religious people are always glad to welcome a confession of religious faith, or a tribute to religion generally, from a man of science who is distinguished in his own field. Of course, a physicist, or mathematician, or chemist, or astronomer, or biologist may talk the wildest nonsense about religion, or utter the most glaring fallacies and question-begging or empty phrases in his disquisition on that subject, but, as is well known, thousands of uncritical persons tacitly assume that he who is an authority on one set of problems is also an authority on other sets of problems in no wise related to the former, or that a true and learned savant is necessarily sound, careful and scientific in any and all of his pronouncements.

Henry Ford, a genius in his own narrow province, is interviewed on all manner of political, social, economic, moral and artistic matters! He is asked questions concerning history, philosophy, finance, education, character-building, the future of the family! Multitudes doubtless accept his half-baked notions as gospel, since he has made several hundred millions by making and selling cheap motor cars! The logic is bizarre, but quite human.

From Ford to Professor Robert Andrew Millikan, physicist and winner of one of the Nobel prizes, the cry is far, but Professor Millikan, eminent and brilliant as he is, in his own words, is in no position "to speak with knowledge or authority in matters of either religion or philosophy," and yet he does speak on such matters and by many is regarded as a very great authority on them! The fault is not his, to be sure, but it is rather remarkable that he should be totally unaware of the fact that in setting forth in lectures and magazine articles what he describes as his own "individual experi-

ence and point of view" in connection with religious issues and doctrines, he is quite as arbitrary, superficial and unscientific as the average theologian or preacher!

How can a man of science, who thinks exactly and insists upon exactitude when dealing with his own special subject, permit himself to write or talk loosely, vaguely, incorrectly or even meaninglessly on such subjects as religion, philosophy and ethics? This question is as old as history, but in the interest of clear and honest thinking it is necessary to put it every time a man of science lapses into mere rhetoric, or cant, or pseudo-science, and, to expose the erring scientist's assumptions and perversions.

There are, however, paragraphs in the little volume of Professor Millikan in which he professes to speak in the name of science. Here is one:

"The practical preaching of modern science—and it is the most insistent and effective preacher in the world today—is extraordinarily like the preaching of Jesus. Its key-note is service—the subordination of the individual to the good of the whole. Jesus preached it as a duty—for the sake of world salvation. Science preaches it as a duty—for the sake of world progress."

In the foregoing short paragraph we have two very positive statements—first, that Jesus preached the subordination of the individual to the good of the whole, and second, that modern science teaches the same duty for the sake of world progress. To what science or sciences is Professor Millikan referring? Some modern sciences, including psychology, teach and preach the fullest respect for human personality and ample opportunity for the development of individual faculties and potentialities, and they preach this for the sake of world progress. We are not all socialists and paternalists and some contemporary economists and political thinkers are pronounced individualists. Prohibition of murder, burglary, arson and theft involve no subordination of the sane, rational individual. Such an individual wants a fair field and no favors, and he knows that in a fair field men respect one another's essential rights. The rational man believes in plenty of voluntary co-operation, but he does not believe in the absolute state, in sacrificing the individual to an abstraction called Society. He believes in an exchange of services, in reciprocity, not in charity. Modern science when really scientific, is not sentimental or sloppy. It is not true that science

teaches the subordination of the individual to the welfare of the whole. What it teaches is the maximum of freedom for the normal individual in a community that thinks in terms of healthy competition, reasonable mutualism, association for desirable common ends.

As for Jesus, no doubt certain isolated sayings attributed to him may be quoted in support of the assertion that he preached individual subordination to the whole, just as isolated sentences may be, and have been, quoted to prove many other false propositions concerning the spirit and tenor of his philosophy. But how about the following sayings:

"Resist not evil."

"Judge not, and ye shall not be judged."

"If thou wouldst be perfect, go, sell that which thou hast, and give to the poor."

"Be content with your wages."

"Love your enemies, and do them good."

"Give to every one that asketh thee."

"Be not anxious for your life."

"Think ye that I am come to give peace to the earth? I tell you Nay, but rather division."

Where in the foregoing sayings is there an expression of the doctrine of individual subordination to the common good? How can a rational social order be based on such injunction? The teachings may be "sublime," but they are anarchical. They are mtensely individualistic. They were obviously prompted by the belief that the end of the world was near and that nothing mattered save salvation of the soul. Jesus preached no principles of social ethics, and that is why, according to Dr. Joseph Klausner, the broad minded Jews who accept Jesus as one of the great figures in history, as a fascinating idealist and visionary, cannot accept him as a guide to practical conduct in a modern industrial society.

Dr. Millikan may talk about science and Jesus having arrived independently at the same ethical conclusions, but what nation thinks of living up to the conclusions of Jesus? Is there a single *Christian* community in the world today? Is there any sign of the advent of such a community? Only beggars and hermits can practice the teachings of Jesus. Those who call themselves Christians may practice a little charity, but that makes them about one per cent Christian! What would Jesus have said to such "followers?"

It is pious nonsense, not science, to pretend that the world, under the guidance of reason, or experience, or philosophy, or religion, is realizing at last the significance of Christian ethics politically and socially applied. There is no such thing.

Furthermore, Professor Millikan is guilty of confusion of thought when be implies that ethics and religion are organically connected. Ethics commonplace or high, is not religion. There is no need of religion in an ethical system. Utility, habit, interest, common sense, public sentiment account for ethical systems. Religion has to do with the relations between men and the supernatural, the so-called divine beings or being, in which humanity has believed and still largely believes. Spinoza built up an ethical system without the faintest reference to religion, as have other philosophers who were deeply religious.

Professor Millikan does not seem to have read the contributions of Professor A. N. Whitehead to the literature of religion. That other famous scientist believes that life is utterly meaningless without certain fundamental religious beliefs, but here is his definition of religion: "Religion is the reaction of human nature to its search for God. The immediate reaction is worship, and worship is a surrender to the claim for assimilation, urged with the motive force of mutual love. That religion is strong which in its ritual and its modes of thought evokes an apprehension of the commanding vision."

And what is Professor Whitehead's definition of God? He objects to what the theologians and ordinary metaphysicians have had to say about God. He objects to "metaphysical compliments" paid to God. If, he says, God be the source and creator of the good, he must also be the source and creator of the evil. No: God, says Dr. Whitehead, "is the ultimate irrationalty," the "ultimate limitation." God is the ground for our concrete actualities, for our moral values; the nature of God is the ground for our rational conceptions and our distinctions between good and evil.

It is within the nature of God, continues Professor Whitehead, to establish reason within her proper dominions. Further knowledge of God, we are informed, must be sought in the region of particular and individual experiences. Presumably, in analyzing such particular experiences science is useful even to metaphysicians.

Now the men of science who prefer this sort of chatter to

Agnosticism are doubtless sincere, and they may attach some meaning to their weird terms, but they are not using the methods of science when they use those terms. They cannot expect the masses of humanity to embrace their metaphysical religions; to those masses religion is what it always has been-man-made, anthropomorphic, naive and child-like. They believe in what is called "revelation," and they do not stop to ask themselves how the genuineness of an alleged revelation is to be determined. The man of science knows that revelation is probably self-delusion or pious fraud. They know that God, if he exists, does not talk to the petty creatures called men, and cannot be conceived of as entering into communications with any finite being. Science has not concerned itself with revelation; it would not know what to do with the subject except to psychoanalyze the persons who claim direct inspiration from Heaven—and of course, there is no Heaven in the superstitious sense of the term.

It is true that science has profoundly influenced religion in that it has forced the abandonment of one fallacy, one empty statement, one error, after another. But science has not modified and cannot modily what is *essential* in religion. That consists of a set of propositions that are not subject to verification, demonstration, clear formulation. At such propositions science can but shrug its shoulders and smile. It does not know the language of those propositions. It has no notion how to deal with them rationally. It can trace the evolution of the ideas of God, the Devil, ghosts, angels, seraphim, cherubim and fairies, and it can see just what evidence was deemed sufficient to justify this or that religious belief. But there it stops.

Of course, the man of science does not for a moment admit the fantastic theory that religion has its own logic, its own methods of proof, its own special corner in the mind or elsewhere in the organism. Those who reason at all, reason in the same way about all things—about the truth of history, the soundness of the Relativity theory, the evidence for natural selection, the foundation for the claims of the State, the effects of the Protective system or the 18th amendment. We have but one mind, and if there are water tight compartments in that mind, and in some of them reason does not govern, that is a fact to be dealt with by science and reckoned with in estimating human intelligence or the power of reason.

Another distinguished scientist who not infrequently discusses religion is Sir Oliver Lodge. In a recent "Citizens' Lecture" on Energy, Sir Oliver expressed the following tentative beliefs:

That life was not merely "one of the forms of energy," but

That life was not merely "one of the forms of energy," but rather "a guiding and directing principle from outside which interacted with the physical and material universe, but was not of it."

That the universe has always existed, was still a going concern, and perhaps would never run down.

That while the universe might be compared to a clock, it was a clock that could be wound up again and again by intelligence.

That a true philosophy must be complete and cover life and mind as well as physical and material phenomena, and that when such a philosophy emerges, we shall be able to answer questions which today we can only frame and put.

There is obviously little to criticize in the foregoing statement of mere conjectures and beliefs admittedly unscientific. It is, however, necessary to point out that such phrases as "a guiding principle from the *outside*," intelligence winding up the Universe, and the like, convey absolutely no meaning to anyone. We can form no notion of an intelligence *outside* the universe directing and winding up that going concern. The only reason we use such metaphors at all is simply this—that even men of science cannot quite rid themselves of the old and naive anthropomorphism of the Bible and similar accounts of the Creation and of the relation between the Creator and the Universe. Drop this childish anthropomorphism, and nothing remains save Agnosticism.

So far, at any rate, no man of science has had anything scientific to say about the questions we can only put. Of course, men of science may take holidays, or half holidays, from rigorous thinking and self-discipline, but they must not mislead the general public into imagining that their guesses about religion have any value.

Let us glance at the utterances on religion of another man of science—Professor Michael Pupin, the inventor and physicist. Professor Pupin, in a magazine essay, traces the processes of what he calls creative co-ordination. He says much that is true and sound as well as elevating, but we also find in the essay a lot of sentimental assumptions, arbitrary assertions, Panglosion complacencies. These were penned in an utterly unscientific spirit.

We may also profitably glance at Professor Julian Huxley's

book entitled Religion Without Revelation. The grandson of the great Professor T. H. Huxley may be presumed to be familiar with the logic and the philosophy of Agnosticism, and if he rejects that modest negative doctrine, one would expect him to give strong and solid reasons for that attitude. Oddly enough, he fails to do so. A searching examination by him of his grandfather's writings on the subject and a frank discussion of their weaknesses and inadequacies, "if any," would be most instructive, but that we are not vouchsafed. Instead we have an exposition of a new sort of religion, with a new set of definitions for old and accepted terms. The result, one must own, is not at all satisfactory.

Professor Julian Huxley is a Monist, but he goes too far when he frowns upon any form of limited dualism. He will have no distinction between life and matter, or between life and God. He denies the super-natural or the externality of God. But he does not object to the use of the term God, provided we mean by it "the Universe as it impinges on our lives and makes part of our thought." This definition is obviously arbitrary and futile, as arbitrary and futile as that attributed to an American thinker—namely, that God "is a name for the good in the world."

Why cling to a term so meaningless? The Agnostic refuses to trifle with language. He rejects the old conceptions and definitions of God, and there he stops. He feels no need or possibility of a substitute in the present state of scientific knowledge.

Professor Huxley says that there is nothing for religion to reveal, but he must admit that there is much for *science* to explain, interpret, subsume and trace to beginnings or first principles.

Even the Trinity finds a place in the Huxley scheme. But his trinity consists of the forces of the physical universe, the realm of ideals, of beauty and of truth, and of human beings, who are called upon to realize their own ideals and make the world lovely, pure and good. This is literature, not thought, rhetoric, nor science; man has evolved his own ideals, and they are as much part of him as are his moral faults and shortcomings. The hypothesis of the unity and uniformity of Nature is very serviceable, but is remains a hypothesis. It is not scientific to be dogmatic about it. As William James said, God is "one of the claimants" in any theory of the Universe, and the hypothesis of a force or intelligence controlling

the Universe cannot be dismissed with a contemptuous shrug, but must be met with a demand for clear definitions.

Professor Michael Pupin speaks in Scribner's magazine with warm admiration of Tyndall, who first told him "the story of the transformation of the primordial chaos into a cosmos, a universe of beautiful law and order," and continues as follows:

This is also the story of the universe of organic life. The truth which this story reveals was recognized intuitively by man since the very beginning of civilization and, guided by the power of his creative soul, he began to dream of a social cosmos which makes life worth living. The awakening from this beautiful dream is the birth of church and state; guided by the love of God and of fellow man these social co-ordinators will certainly give us a social cosmos, the realization of the highest aspiration of the human soul.

From this point of view science, religion, and the fine arts, as expressions of the intellectual, spiritual, and æsthetic co-ordination of the creative power of the human soul, are three inseparable parts of a single science, the Science of Creative Co-ordination.

Professor Pupin has not learned from Tyndall where to stop, and that is a great pity. Even Sir Oliver Lodge is not as cheerful, as confident, as mushy and as sweeping as the American physicist and inventor. What the former hopes for, the latter dogmatically asserts to have been established. The great, baffling problems of life and mind, of evil and ugliness, do not exist for him. He talks of God as if he knew what the term meant, and he talks of Jesus and his divine mission as if every sane and thoughtful person in the world accepted the historicity of Jesus, the divinity of the founder of Christianity, and all the teachings and injunctions of that religion. Where has Professor Pupin lived all these years, and what is his idea of scientific accuracy? Take him away from his laboratory and he becomes strangely superficial and credulous.

Now, religion will never be advanced by sentimentality, superficiality and empty jargon, even when men of science descend to these means of defending it. If there are religious problems and religious phenomena, they are subject to the canons and rules of science. In dealing with them we must be honest, lucid, candid, precise. We must beg no question, use no old term in a peculiar and arbitrary meaning, talk no nonsense about religion haviing its own logic and its own kind of proof. We have one mind, not two,

and we reason about all things in the same way. Evidence is evidence, method is method, whatever the field or the subject matter.

Religion is not ethics and ethics is not religion. God is not another name for goodness or for love. Such special pleading is quackery, unworthy of men and women trained in science and anxious to promote intelligence and reactitude.