## Is Science Really Compatible with Religion? By E. Maynard Adams

Ithough many people over the past several centuries have felt a logical tension between religion and modern science and students of Let the culture have concluded that as science has progressed religions has lost ground in modern Western civilization, a number of recent cultural critics have contended that there is really no conflict after all. Some agree with Ian Barbour (Issues in Science and Religion, Prentice Hall, 1966) that science and religion are "complementary languages" representing alternative types of analysis from different perspectives of the same reality, not exclusive competitors. Indeed, Barbour received the "Nobel prize" in religion, the coveted Templeton award, for this as a major contribution toward the advancement of religion. Others agree with John Polkinghorne. "Reality," he says, "is a multi-layered unity. I can perceive another person as an aggregation of atoms, an open biochemical system in interaction with its environment, a specimen of *homo sapiens*, someone whose needs deserve my respect and compassion, a brother for whom Christ died. All are true, ... and all mysteriously cohere in that one person." "Part of the case for theism," he contends, "is that in God the creator, the ground of all that is, these different levels find their lodging and their guarantee." (One World: The Interaction of Science and Theology, Princeton, 1986, p. 97).

Science and particular religions obviously disagree on many factual matters. The Judeo-Christian religion, for instance, has its six-day creation story, which if taken literally, is inconsistent on many points with the scientific account of the origin and development of the universe. It seems clear to me that, where science and religion give inconsistent accounts of contingent factual matters, a rational person has no choice but to accept the findings of science and to reject the conflicting account in one's religion, for science is very careful about collection evidence and in holding its beliefs accountable to the relevant data and proceeds with a standing invitation for anyone to prove its truth-claims false; but, where the conflict is in categorical beliefs, it isn't clear that science has the advantage. And the most serious conflicts between science and religion are over their categorical views of the world.

In our empirical, anti-metaphysical age, we don't give much attention to categorical concepts and beliefs. Yet we deal with them all the time. For



instance, the concept of causation is not an empirical concept. It is part of the conceptual framework that makes empirical investigations possible. We could not empirically discover that there are no causes, not even that there was an event without any connections, for we would not consider something to be real that had no causal relationships. If I should "see" a cat sitting on the table before me that had no effect on my hand when extended to the area or no effect on other things in its vicinity, I would not take my visual experience of a cat on the table to be veridical. In other words, causation is part of my conception of reality. Much the same is true of the concept of a physical object. We could not empirically discover that there are no physical objects. We have to take the semantic content of a visual or tactile experience, for instance, to have independent spatial location and to have causal connections with other independent spatial objects in order for us to count the sensory experience as veridical. And of course being a spatial

The significant challenge of modern science to religion is not in the empirical findings of science, but in the presuppositions of its methodology. object in causal relationships that is independent of our experience of it is our concept of a physical object. Our concepts of space, time, substance, person, fact, property, existence, possibility, normativity, value, meaning, consistency, truth, self, world, and on and on are categorical. They are foundational concepts. They are not formed to help us make sense of the items, features, and structures we encounter in the world. They are involved in being a self and in having a world with items and features in it

and in having knowledge of them. And so categorical concepts are true of or have application to any world we could encounter.

Some categorical concepts may take on different forms. For instance, there is a teleological and a naturalistic form of the concept of causation. Which of these two forms we accept is not an empirical matter. The teleological concept of causation, that is, for something to happen for the realization of an end or for what ought to be, had to be abandoned when normativity or value-requiredness and the concept of inherent structures of meaning were eliminated from our ontological categories. This left the cause of an event or state of affairs to be found among the environmental, elemental, or antecedent factual conditions that necessitated it. That is what the naturalistic concept of causation amounts to. So the reduction of the teleological concept of causation to the naturalistic concept was not for empirical reasons. It was part of the overhaul of our ontological categories made necessary by the modern revision of our view of the knowledgeyielding powers of the human mind. This revision was not based on empirical discoveries. It occurred primarily because of a shift in the purposes for which people sought knowledge; that is, because of a change in the dominant conception of the human enterprise. The modes of experience in which normative, value, and meaning concepts are grounded do not yield the kind of knowledge that is useful in our materialistic pursuits. And so they were discredited as knowledge-yielding modes of experience.

In giving a scientific descriptive/explanatory account of an event, we place it in the world not only as delineated in the concepts and laws of a scientific theory, but also in terms of the categories of the worldview presupposed by the scientific method; that is, we assign the event a place in the scientific worldview as well as in a scientific theory. We locate it both in the world as delineated in categorical structures and in a particular segment or dimension of the world as delineated in terms of a scientific theory. Only the latter account is subject to empirical confirmation or refutation. The view or the assumption about the categorical structure of the world is constant across scientific theories. It is the metaphysical view of the world presupposed by modern science.

Consider the case of a fine man who died suddenly in his fifties. He had accomplished much in his field and was admired and respected by all who knew him both professionally and as a human being. The autopsy showed that he had extensive previously undetected coronary artery disease and had had a sudden fatal coronary occlusion. After having the medical report carefully explained to his grieving widow, she said, "I just can't understand why such a brilliant man had to die so young when he had so much to offer." It became clear in talking with her that her "Why?" about his death was asking for an explanation in terms of reasons that would justify his death, reasons that would show that his death was a good thing. In other words, she wanted an explanation of her husband's death that would place it in a world in which things work together for the realization of what is good – for the fulfillment of what ought to be. In her worldview, the only explanation that would satisfy her "Why?" would be one that would show that her husband's death was a good thing.

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There are those who say that the scientific theory of biological evolution is compatible with the Judeo-Christian religion, for it does not really matter to the Judeo-Christian religion whether creation took six days as in the

It is not only religion with which the worldview presupposed by modern science is incompatible; it is incompatible with morality, normative social and political thought, indeed, the whole humanistic universe of discourse. biblical story or the millions or billions of years that science talks about for the development of the universe. But what does matter is that according to the scientific account of biological evolution and of the development of the physical universe in general is that it is a blind process, with no ends involved; it is not a becoming, not a process fulfilling or realizing an ought. The causality in the process is not teleological. The dynamics of the universe does not work toward the realization of an order of goodness. In other words, the scientific account of the origin and development of the universe is cast in terms of a worldview in which there are no ends, normative laws, or values structures in nature. Whatever happens is the consequence of elemental, environmental, or antecedent factual conditions,

without the pull or constraint of an end in view or a normative requirement.

The significant challenge of modern science to religion is not in the empirical findings of science, but in the presuppositions of its methodology. Modern science restricts itself to sensory observation for data-gathering and theory confirmation. This worked a transformation in the descriptive/explanatory conceptual system of science. Science not only excluded statements that could not be confirmed or falsified by sensory data but eliminated concepts from its conceptual system that could not be grounded in or validated by sensory experience. It was on this basis that value concepts, the concept of normativity, and the concept of inherent structures of meaning, the key concepts of lived experience and the humanities, were eleminated from the descriptive/explanatory conceptual system of science. This is what gave rise to the naturalistic worldview of modern science, not the empirical findings of science.

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The justification for the reformation in the methodology of modern science and thus for the transformation in its conceptual system and worldview is the claim that we have no knowledge-yielding powers in which we can ground and validate these concepts. This is a philosophical claim, not a scientific finding. Given that the concepts of value and normativity are tied somehow to our emotive or non-indifferent experience and that the concepts of meaning are grounded in our reflective awareness of our own subjectivity and perceptual understanding of the expressions and behavior of others, the

justification of the elimination of these humanistic concepts from our descriptive/explanatory conceptual system and thus from our ontological categories turns on whether these modes of experience have the appropriate categorical structure to be knowledge-yielding. This is a matter we determine by a philosophical examination of the grammar of the language we use in reporting and describing such experiences and a consideration of what it makes sense to say and what it does not make sense to say about them.

Without going into a detailed analysis here,<sup>1</sup> it seems clear that emotive experiences, reflective awareness, and expression perception or perceptual understanding, the experiences in which value and meaning concepts are grounded, have their identity and unity in terms of their semantic content and We must either reinstate the humanistic categories in our scientific descriptive/explanatory conceptual system, or accept science as a limited perspective that gives us useful practical knowledge while we live our lives and run our institutions within a humanistic view of self and the world.

logical form, that is, in terms of what is semantically in them as distinct from what is existentially in them and in terms of the grammatical form of the language in which they are expressible. Furthermore, it makes sense to speak of such experiences as translatable into sentences and it makes sense to say they mean what the sentences that articulate them mean and they have the logical form these sentences have. And it makes sense to speak of them as having logical relationships, as making truth-claims, and as veridical illusory,

<sup>&</sup>lt;sup>1</sup> For a detailed analysis, see E. M. Adams, *Philosophy and the Modern Mind* (1975), pp. 77-201; and *The Metaphysics of Self and World* (1991), pp. 34-91.

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or hallucinatory. All of this indicates that these experiences are knowledgeyielding, and it follows from these considerations that our value, normative, and meaning concepts that are grounded in these knowledge-yielding modes of experience have ontological significance and should be included in our descriptive/explanatory conceptual systems and thus in our metaphysical view of the world.

It is not only religion with which the worldview presupposed by modern science is incompatible; it is incompatible with morality, normative social and political thought, indeed, the whole humanistic universe of discourse. The world defined by the categorical presuppositions of modern science is a world in which human beings could not live; it is a world in which knowledge would not be possible, including science itself.

Philosophers have made heroic efforts to reduce the humanistic universe of discourse to the scientific or to explain away all apparent humanistic truthclaims that would be a logical challenge to the scientific worldview, but the logical difficulties persist. After a lifetime of struggle with these problems, I have concluded that only two courses are open to us. We must either reinstate the humanistic categories in our scientific descriptive/explanatory conceptual system, or accept science as a limited perspective that gives us useful practical knowledge while we live our lives and run our institutions within a humanistic view of self and the world.

