PAUL TILLICH'S PERSPECTIVES ON WAYS OF RELATING SCIENCE AND RELIGION

by Donald E. Arther

Abstract. Where do Paul Tillich's views of the relationship between religion and science fit in Ian Barbour's four classifications of conflict, independence, dialogue, and integration? At different levels of analysis, he fits in all of them. In concrete religions and sciences, some conflict is evident, but religion and science can be thought of as having parallel perspectives, languages, and objectives. Tillich's method of correlation itself is a form of dialogue. His theology of nature in "Life and the Spirit" (Part 4 of his Systematic Theology) fits the integration type. His strong "Two Types of Philosophy of Religion" (in Theology of Culture) is a latent natural theology. His system of the sciences is a form of synthesis, a type of integration.

Keywords: conflict; correlation; dialogue; independence; integration; system of the sciences; theology of nature; ultimate concern.

Where does Paul Tillich fit in Ian Barbour's typology of ways of relating science and religion? Barbour's types, which have become fairly standard in the current discussion on science and religion, include *conflict, independence, dialogue,* and *integration* (Barbour 1990, 3–30). The general tendency has been to place Tillich in the independence type along with neoorthodox theologians such as Karl Barth and existential theologians such as Rudolph Bultmann. Barbour himself does not locate Tillich directly, although indirectly he alludes to Langdon Gilkey's later use of Tillich's definition of religion ("ultimate concern") as placing both of them in the dialogue type instead of the conflict type (Barbour 1990, 13).

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Holmes Rolston, III describes Tillich's position as "existential-scientific theism" (Rolston 1987, 345)—although in contrast with Barth and Bultmann, whom he also characterizes thus, Rolston qualifies Tillich's view as a "mixed one." He does not explain what he means by this, but presumably it is that Tillich has several perspectives on the relationship of science and religion, depending on the level and aspect of the analysis. (This is true of others as well, of course.) This paper examines some of those perspectives.

Tillich generally was more interested in the impact of technology on Western culture's spiritual and ethical situation (Tillich 1988, 159f.). Nevertheless, he addressed issues related to the theoretical relation between science and religion/theology more than is often known.

BASIC PERSPECTIVE

Tillich's fundamental position on the relation between science and religion is based on two concepts of religion. It is stated in different forms in a series of addresses he presented on science and religion in the early sixties (Tillich 1958, 159f.).

The first concept of religion, which for Tillich is the more fundamental and universal, is that religion is an "encounter with the holy," which is experienced as "ultimate concern." He states that if religion is understood in this way, in principle, no conflict with science is possible. This is true because the two are different dimensions of the cognitive encounter with reality. Tillich generalizes this contrast in summary form by stating that science is primarily concerned with facts or finite relations and that religion in the fundamental sense is primarily concerned with the meaning of being.

The second concept of religion is that of a "social group with symbols of thought and action," such as "myths, liturgical words, theological formulation, and even metaphysical conceptualizations" (Tillich 1988, 160). These are all concrete expressions of the embodiment and direction of our ultimate concern. He argues that "all conflicts between religion and culture generally (including philosophy and science) or religion and its special cultural function, are dependent upon the reduction of religion to the narrower concept of religion" (p. 160).

In addition, Tillich makes a distinction between scientific and religious language: "Scientific language is predominantly calculating and detached and religious language is predominately existential or involved" (1988, 162). He notes that this traditional contrast has been modified in recent years by changes in analytical philosophy. Religious language is essentially symbolic, and its references to ultimacy are not to be taken literally as in scientific discursive language. "These two types of statements belong to different dimensions. The dimension of finite interrelations, that is science, and the dimension of the meaning of being or of infinite concern, that is

religion. And speaking in the one dimension is different from speaking in the other dimension" (1988, 161). This, however, does not mean that the two dimensions are unrelated.

CORRELATION AS DIALOGUE

The method of correlation itself implies a relationship of dialogue between science and religion. In the method of correlation, the questions implied in a philosophical analysis of existence are correlated with the answers of theological affirmation. This correlation is neither a mere juxtaposition nor a model of absolute independence of philosophy, science, and religion. There is a "mutual interdependence between existential questions and theological answers" (Tillich 1951, 60). This he understood to be a relation of mutual "interdependence of two independent factors" (1951, 13). This means at minimum that there is a convergence between the questions of philosophy (which includes science) and the theological answers. That correlation itself implies a type of dialogue, or "conversation" (to use Jack Haught's term), between science and religion regarding "boundary questions" (Barbour 1990, 17).

THEOLOGY OF NATURE

Tillich also developed a partial theology of nature, "Life and the Spirit," Part 4 of his *Systematic Theology* (Tillich 1963b, 11–294).² Wolfhart Pannenberg refers to it as one of the "two outstanding examples of an attempt to break through spiritual subjectivism and to develop a conception of the spirit within the broad interpretation of life" (Pannenberg 1993, 128).³

Tillich describes the "multi-dimensional unity of life," the "inorganic, organic, psychological, the personal-communal (Spirit) and the historical dimensions." Each dimension, and life as a whole, is actualized through a process of self-integration, self-creation, and self-transcendence. Because life is the actualization of essential being in existence, its actualization entails ambiguities as a result of the estrangement and conflicts of existence. Life quests for the "Spiritual Presence" ("Divine Spirit") to overcome the ambiguities by reuniting existence and essence.

In "Life and the Spirit," the correlation of philosophical questions (including science) to theological answers is close—"Spirit testifying to Spirit." The relation between the two is that of "mutual immanence" (Tillich 1963b, 111–14). The Spirit is effective both directly in the formation of human spirit (morality, culture, and religion) and indirectly through all of the dimensions of life, including the inorganic and the organic.

This is at least a partial theology of nature, a level of analysis that would fit Barbour's fourth type, *integration*, in that Barbour includes theology of nature as one of three kinds of integration of science and religion, the other two being natural theology and synthesis (Barbour 1990, 24–28).

I think a weakness in Tillich's analysis is his "indirectness" of the work of Spirit in nature. He states that "the symbol 'Spiritual Presence' uses the dimension of spirit the bearer of which is man, but in order to be present in the human spirit, the Divine Spirit must be present in all the dimensions which are actual in man, and this means, in the universe" (Tillich 1963b, 108). The "in the universe" needs to be further clarified and developed. He does say earlier, for example, that there is a serious need for a "Theology of the inorganic" (1963b, 14). A theology of cosmic Spirit is also needed, as Pannenberg suggests. This is especially important in these days of environmental degradation and the serious need of a theology of "deep ecology." Tillich's "Life and the Spirit" could be revised in that direction without violence to its integrity, and it then would be a valuable resource for ecological theology (Drummy 1997).

NATURAL THEOLOGY

An often overlooked and sometimes misunderstood fact of Tillich's thought was his perspective on natural theology. In this regard he clearly was a post-Kantian—meaning that he did not think natural theology in its classical form with its goal of proving the existence of a highest being called God was viable. Nevertheless, in a revised form as a "strong" philosophy of religion, his concept of natural theology was of considerable value. In fact, in contrast to that of Barth and others, Tillich's was a latent, modest, but significant, natural theology. Its two most important principles were that (1) the importance of the so-called cosmological arguments was that they were an excellent expression of the analysis of the finitude of existence and the quest for an "unconditional ground," and (2) the validity and value that the cosmological arguments have is dependent on the ontological argument.

These principles were stated in Tillich's classic essay on "The Two Types of Philosophy of Religion" (1959, 10–20). He restated the ontological argument in a way that is closer to Augustine than to Anselm or Descartes: "Man is immediately aware of something unconditional which is the 'primus' of the appearance and interaction of subject and object, theoretically as well as practically" (1959, 22). But this "Unconditioned" is not a being. It is Being-itself, even transcending the idea of God, because God as an idea is expressed in conditioned concepts and symbols, although they are required for any particular concrete expression of the "Unconditioned."

In the context of the ontological argument as so stated, the cosmological arguments are valid as principles of finitude and are extremely productive in meaning. "The Unconditioned of which we have an immediate awareness, without interference, can be recognized in the cultural and the natural universe" (Tillich 1959, 26). This is particularly true of the cosmological and the teleological arguments.

The cosmological argument is an "analysis of the finitude of the light of the Unconditioned" in terms of contingency, transitoriness, anxiety, etc." (1959,16).

The teleological argument, in unity with the ontological, sees traces of the "unconditional element in the creativity of nature and culture" (Tillich 1959, 27). (It would be interesting to know what Tillich would think of the anthropic principle in this respect.)

For Tillich, all of this is primarily a philosophy of religion and not a natural theology as such. As a philosophy of religion, it is closer to the dialogue type than the integration type, where Barbour places natural theology; but certainly Tillich's is at least a "weak" form of natural theology, so maybe it fits "on the boundary" between dialogue and integration.

THE SYSTEM OF THE SCIENCES

In Tillich's first book after his two dissertations, *The System of the Sciences According to Objects and Methods* in 1923,⁴ he attempted a comprehensive classification of all the sciences. Its purpose was to affirm the place of theology as a science within a whole system of knowledge—to give it credibility, but also to show how it relates to the other sciences and to knowledge as a whole. For Tillich there are three kinds of sciences:

- 1. The *sciences of thought*, which include logic and mathematics, focus on the forms of thinking without concern for objects of thought (being). Thinking focuses on itself as object. It considers the categories and structure of knowing (idealism), which organize the material of being in actual categories (Stenger 1994, 127).
- 2. The sciences of being, or the empirical sciences, include what he called (1) the physical sciences (the mechanical, dynamic, and chemical sciences), (2) the organic-technical, or "gestalt," sciences (such as biology, psychology, and sociology), and (3) the sequential sciences (the historical, political, biographical, cultural, etc.) (Reimer 1994, 118). The sciences of being focus on the empirically "real" objects that give direction and content to the structures and categories of thought. The content, substance, or import, however, is a given in the presentation of being expressed in the data and objects of science. This expression is a form of realism, but it is a self-transcendent or "belief-full" realism.
- 3. The *human sciences*, or the *sciences of spirit*, are the normative sciences—the sciences of meaning, purpose and validity, including philosophy, art, religion, and theology. They focus on the questions of truth, "but truth as dynamic, creative and meaningfulfilling. It is in relation to validity and intentionality toward meaning that the human sciences can be said to be 'norming' sciences. Norms are the creative acts of individual spirit-bearing 'Gestalts'" (Reimer 1994, 120).

Theology finds its place within the sciences of spirit because it is the science of "theonomous systematics" (Tillich 1981, 206–8)—that is, the

science of the source and norm of the whole system of knowledge and being. It is an attitude of "immediate awareness of the unconditioned" within all of the spheres of science. It is "the theonomous doctrine of the norms of meaning" (1981, 207).

Theology still has a confessional element in Tillich because that is its concrete, particular form of expression in life and history. It thus must subject itself to its own norm ("the Unconditioned").

Thus theology is related to both the sciences of thought and the sciences of being (empirical sciences) as pointing to their meaning, ground, and ultimate significance. (It would be interesting to know what a "theonomous science" would look like.)⁵

As James Reimer says, "Tillich saw theology as dealing with the depth and meaning question behind every discipline. . . . In this way theology and the sciences were both interdependent and independent from each other, speaking to different aspects or dimension of the same reality" (Reimer 1994, 123).

Tillich's *System of the Sciences*, then, could even be considered a kind of synthesis between science and religion/theology, although a modest one. This would place it in Barbour's integration type—or perhaps the "confirmation" category of Haught (Haught 1995, 21–25).

CONCLUSION

Tillich's focus on ontological relations instead of "ontic" (finite) relations probably weakens his thought somewhat for concrete dialogue between science and religion in the narrower sense. Nevertheless, Tillich's focus and emphasis on the ontological ("in-depth," "unconditioned") level of the science/religion relation is needed in the current dialogue. Tillich also urged that the connection move beyond the mere tolerance stage.

Tillich expressed this conviction at the University of California, Berkeley, in 1963:

The period of conflict is in principle over between science and religion. The period of tolerance is present, but it is not altogether satisfactory because it easily leads to split-consciousness. The period of cooperation has now become a possibility: it has started in many places and I want to express . . . my hope that it will become a reality ever increasingly in the following decades." (Tillich 1963a)

Tillich's perspectives on the relationship between science and religion, critiqued and modified, can certainly be a helpful resource for that cooperation and dialogue.

NOTES

1. William Craut, a student during Tillich's Harvard years, states that in some versions of this talk Tillich added Niels Bohr's idea of "complementarity" to the two-dimensions and two-languages theory, wherein the conflict between science and religion was in principle resolved (conversation with Craut at New Harmony, Indiana.)

- 2. One could also describe Tillich's theology of the sacraments as a partial theology of nature. See the essays on this in Hummel 1994 and in Tillich 1948, 94–112. Since this paper was presented, Dr. Michael F. Drummy has published an excellent book on Tillich's theology of nature (Drummy 2000).
- 3. The other was Pierre Teilhard de Chardin's vision of the evolutionary process by a "spiritual power."
- 4. According to Wilhelm Pauck, Tillich's *System of the Sciences* was a factor in Richard Kroner's recommendation that Tillich be appointed Professor of Philosophy and Religious Studies at the Dresden Institute of Technology in 1926 (Pauck 1989, 99). Tillich, however, seems not to have had much contact with natural scientists until his appointment at the University of Frankfort from 1929 to 1933. There he worked closely with the biological and neurological scientist Kurt Goldstein, whose insights in inorganic and organic biology greatly influenced Tillich. This influence showed up directly in "Life and the Spirit," Part 4 of his *Systematic Theology* (Pauck 1989, 118). William Craut says that Tillich's contacts with natural scientists greatly expanded during his Harvard years, even though the scientists' reception of him had an uneven beginning.
- 5. Arnold Wettstein, in his response to Roy Morrison's paper "Tillich and Heisenberg" (papers from the annual meeting of the North American Paul Tillich Society in Chicago, November 1988) states, "It can be interesting to speculate about the shape of a Tillichian theonomous science whose ultimate context would be mystery."

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