FOWLER'S STAGES OF FAITH DEVELOPMENT IN AN HONORS SCIENCE-AND-RELIGION SEMINAR

by Allen C. Gathman and Craig L. Nessan

Abstract.   According to Paul Tillich's understanding of religion as "ultimate concern," a religious dimension is implicit in all university curricula. A science-and-religion course, such as one taught at Southeast Missouri State University, can offer students the opportunity to integrate their worldview, taking seriously both religious ideas and scientific information. Assignments based on A. E. Lawson's model of a learning cycle provide a vehicle for evaluating significant student learning leading toward fuller integration. The stages of faith developed by James W. Fowler serve as a fruitful framework for interpreting changes in student viewpoints. Fowler's six stages of faith are characterized. Examples from student writing assignments demonstrate shifts in the cognitive understanding of faith that coincide with Fowler's stages.

Keywords: curriculum; faith development; faith stages; James W. Fowler; integration; A. E. Lawson; learning cycle; Paul Tillich; ultimate concern.

The course Science and Religion was developed by the authors and has been taught twice, at Southeast Missouri State University, in the fall of 1991 and the spring of 1993. Both times the course was designated as an honors section fulfilling a requirement of the University Studies curriculum. The University Studies Program was initiated in 1988 in an attempt to meet certain core objectives while allowing considerable freedom of choice in course work. In our conversations while developing this course, the authors came to the shared conclusion that a religious dimension is implicit in the nine objectives of the program. For example, one objective is to "demonstrate the ability to make informed,

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intelligent value decisions." Clearly, a student's religious worldview plays a major role in shaping which values he or she sees as ultimate. This course was designed to confront explicitly students' efforts to develop a worldview integrating their scientific and religious ideas.

It is important to make clear what is meant by *religion* in this context. For the purposes of this course, we take our orientation from the work of theologian Paul Tillich, who defines faith as "ultimate concern" (Tillich 1957, 1–4). By this he means that in all of life there exists a depth dimension. Any discussion of ethics, aesthetics, or meaning leads to a consideration of ultimate values, which are by Tillich's definition religious: "Religion is the substance of culture, and culture is the form of religion" (Tillich 1990, 2:110).

AREAS OF ENCOUNTER

The course was designed to focus on four areas of encounter between religion and science:

1. *Epistemology.*   What role do reason, revelation, and authority play in scientific and religious knowing?
2. *Origins.*   Is it possible to reconcile creation myths with evolutionary theory?
3. *Process.*   What role is left for God in a world governed by natural laws?
4. *Ethics.*   According to what values does one act (sociobiology, situation ethics, eschatology)?

THE LEARNING CYCLE

Each topic in the course is structured as a learning cycle based loosely on Lawson's model (Lawson 1988, 266). In each cycle, each student first writes a short paper expressing his or her initial view. The students discuss their ideas in class and examine their presuppositions. These activities parallel Lawson's "exploration" phase, as the students attempt to formulate and articulate their views. Meanwhile, the students broaden their understanding through assigned readings. This process corresponds to Lawson's "term introduction" phase, in which students are exposed to established terminology and published ideas that relate to their own concepts. Further discussion follows, in which students compare their ideas on the topic to those expressed in the readings. Finally they write longer papers explaining how their ideas have been affected by their reading and the various ideas to which they have been exposed; this step is analogous to Lawson's "concept application" phase.

It is not necessary, or even expected, that all students will substantially change their views during the learning cycle. They should, however,

change the way they perceive the question, and their views should gain depth as they see them in relation to other perspectives.

For example, in the section on origins, students are first asked to write a two-page paper describing how they view the relationship between scientific and religious accounts of both the origins of the universe and the development of life. Students are then presented with some hands-on experiences with evidence for evolutionary theory. From the religious side, students compare various creation myths. Significant attention is given to the study of the two Genesis creation narratives under the guidance of Conrad N. Hyers's book, *The Meaning of Creation* (Hyers 1984). Students also view a video on the meaning of myth with Joseph Campbell and the Smithsonian-produced film *Tales of the Human Dawn.* At the conclusion of this four-week cycle, students write a ten-page paper reevaluating and substantiating their present views.

FOWLER'S FAITH DEVELOPMENT THEORY

In interpreting the reasoning of students with regard to developing an integrated worldview, we have found the faith-development theory of James W. Fowler (1981) to be insightful. Fowler proposes a six-stage interpretation of religious faith. These stages are parallel to the cognitive-development stages of Jean Piaget (1965) and the moral-development stages of Lawrence Kohlberg (1981), in that they are structural rather than content specific. Fowler argues that his six stages can be found among believers from every religious tradition. Each stage represents a way of believing and reasoning rather than any particular tenets of faith. The six stages are sequential as well; according to Fowler, one can only proceed through the stages in order. One cannot skip over a stage in the process of faith development. One can, however, fail to progress beyond one of the early stages.

Fowler's stages can be characterized as follows. Of particular interest for our purposes are his insights into the transitions between stages.

1.   Intuitive-Projective Faith.   Typical of age three to seven years, intuitive-projective faith comes alive in the imagination and fantasy-filled inner life of the child. It is unfettered by logic, and reflects early awareness of the mysteries of life, death, sex, and cultural taboos. The emergence of concrete operational thinking is instrumental in bringing this stage to a close.

2.   Mythic-Literal Faith.   In this stage beliefs are interpreted literally. Religious truth is communicated through stories, in which morality is legalistic and symbols are permitted only a single meaning. In contrast

to the fluidity of stage 1, this stage is marked by adherence to core beliefs defined by the primary social group.

The reflection made possible by the transition to formal operational thought disrupts stage 2. Conflicts between authorities lead to disillusionment with literal interpretation, which gives way to an attempt to broaden one's perspective.

3. Synthetic-Conventional Faith.   The individual's world expands beyond the immediate family to encompass the influence of school, work, media, and friends. A synthesis is reached in which one seeks to balance these influences. There is a strong element of conformism to the views of "society." Beliefs and values function as an ideology that is held implicitly, without engagement in critical examination.

Stage 3 comes to an end when one begins to become disillusioned with traditional authorities and established beliefs. One begins to see how values are relative to one's upbringing and social status. Critical thinking begins.

4. Individuative-Reflective Faith.   This stage is marked by the development of a carefully nurtured idiosyncratic worldview. The opinions of others decline in importance or are tailored to fit one's own views. Symbols are analyzed according to their meaning and are "demythologized." This stage is a highly intellectual one, characterized by extreme confidence in the power of critical reasoning.

When disillusionment with the essential narcissism of this stage sets in, one yearns for a new integration of the stories, symbols, and myths that one has cast off. Stage 4 breaks down as the individual enters into a conscious awareness of the complexity of life. The disillusionment can only be assuaged by a more-dialectical approach to truth.

5. Conjunctive Faith.   This stage moves beyond the idiosyncrasy of the previous one toward integration of what earlier appeared to be irreconcilable views. This integration involves a new appreciation of the power of myth and symbol (a "second naïveté"). The reasoning of earlier stages merges into a new synthesis. One learns to affirm the difference of the "other," while remaining grounded in one's own tradition. While avoiding relativism, this stage anticipates the attainment of universal values.

The rare case of transition from this stage to the next occurs in response to the tension between universal ideals and life in an imperfect world. Fowler holds that only a few individuals ever move beyond this stage—and if so, rather late in life.

6. Universalizing Faith.   This stage is characterized, not only by a consciousness of universal values such as justice, peace, and selfless concern, but also by a life lived in commitment to these ideals. Fowler uses

as examples such figures as Mahatma Gandhi, Martin Luther King, Jr., Mother Teresa, Dietrich Bonhoeffer, Abraham Heschel, Dag Hammarskjöld, and Thomas Merton. While not free from human failings, these individuals serve as models for society.

STUDENTS AND STAGES

Following our second offering of the course, we analyzed some student writings and tentatively identified characteristics representative of Fowler's stages. Although Fowler's ideas were discussed in the class, we did not attempt explicitly to relate them to the views of individual students at that time. Upon examination of their writings, however, we find some striking correspondences with attitudes described by Fowler. In the following excerpts from student writings, names have been omitted to preserve anonymity.

STUDENT A

Before.   "Others say [the biblical account of creation is] just a story. But all the theories in the world and all the explanations you can offer cannot change my belief in the Biblical creation."

"In my own life, there was a time when my body temperature rose to 106 degrees. The doctors told my mom that they couldn't do anything else for me. My pastor and church prayed, and my fever broke."

After.   "In the Bible, Joshua prayed, and the sun stood still. Science now tells us that, for that to have happened, the earth would have had to stop rotating for a time. Through my faith in God, there is no doubt in my mind that it happened."

Comment.   This student demonstrates the magical thinking that typifies stage 2, mythic-literal faith. Note the literal approach to Scripture and the inability (or unwillingness) to apply scientific reasoning to religious subject matter.

STUDENT B

Before.   "The theory of evolution . . . states that man evolved from a series of lower creatures. I cannot accept this view of the origin of the world because it puts no spiritual value on humans. . . . I simply find it absurd to imagine that we are nothing more than the product of billions of years of evolving species, living on earth without a purpose."

After.   "In the past, I have always just brushed these inconsistencies aside. But now, as I am forced to grapple with scientific evidence, I am

also forced to seriously contemplate what I believe and why I believe the way I do.

"In essence, I can believe God was responsible for the formation of the elements that comprise the world while at the same time allowing scientific discoveries and evidence to explain the specifics of how He created the world."

Comment.   This student initially exhibits the conventional thinking of a particular religious upbringing, including the type of stock arguments typical of stage 3, synthetic-conventional faith. In the course of the learning cycle, the student was challenged to incorporate elements of evolutionary thinking into the final paper. The resulting disequilibrium is apparent and seems to correspond to the transitional phase between stages 3 and 4.

STUDENT C

Before.   "Since I do not believe in religion, I do not have any problems relating it to science . . . Yahweh commands the massacre of whole towns. This is not the kind of god I would want to believe in. . . . Another problem I have with religion is the way it is used to 'explain' the 'inferiority' of women."

After.   "I really enjoyed reading Hyers' book. His interpretation of Genesis made me see the reasons behind what is written and made it seem much more worthy of respect."

Comment.   This student also displays characteristics of stage 3; however, the content of these views is not based on religion, as customarily viewed, but on a conventional scientific materialism. In this case, it was exposure to more sophisticated religious reasoning that provoked the student to begin to appreciate the value of symbolic religious thinking.

STUDENT D

Before.   "I believe God exists as the totality of all other existence. . . . I also believe that God, as this totality, existed independently [before] this version of totality we see as our universe. . . . I think that existence could have taken many forms, and that some actions of this transcendent property of everything influenced the way things took shape."

After.   "Christianity can be interpreted as a system of memes that promote altruistic behavior. . . . I can't conceptualize any ultimate end to cultural evolution. Instead, I see Christ as embodying the memes of Christianity."

Comment. This student demonstrates a unique synthesis of scientific and religious worldviews. Such an idiosyncratic approach typifies Fowler's stage 4, individuative-reflective faith. Symbols are demythologized and incorporated into a highly creative intellectual system.

STUDENT E

Before. "While this [evolutionary] theory makes sense and has compelling evidence to support its claims, it cannot be validated empirically. After all, no one was around to record events as they actually happened. Nor can this theory be subject to falsification.

"Science and religion address two different kinds of truth. The plan of evolution is of God's design; however, the Genesis accounts of creation were not intended to prove (or disprove) evolutionary theory."

After. "During this past month, class lectures . . . have convinced me of the credibility of evolutionary theory and the need to accept a scientific understanding of human origins. . . . Is the development of the universe and of human life random or purposeful? I believe this question calls for integration of science and religion. . . . I would argue that design and chance are not antithetical, and find Hyers' model of God as 'controlled accident' artist to be useful in understanding the interplay of the two.

"The view I hold is that God influences events without controlling them. . . . Theological implications are of a God of persuasive love (vs. a God of coercive power); a God who is responsive to creation, and who is intimately involved in the world and its growth."

Comment. This student, while rooted in a particular tradition, reveals the capacity to value a variety of alternative viewpoints. A serious attempt is made to integrate scientific conclusions and religious faith, especially by means of symbolic thought. It is at stage 5, conjunctive faith, that one begins to appreciate anew the meaning of myth through what Ricouer calls a "second naïveté" (Ricoeur 1967, 351). The age of this student, thirty-seven, also follows Fowler's dictum that one rarely arrives at this stage before the approach of midlife.

CONCLUSIONS

After teaching this course twice, we have found Fowler's model of faith development to be a useful hermeneutical device for understanding student viewpoints. The purpose of the course is not to provoke faith development. However, what we have observed is that when we present the subject matter from our respective disciplines, biology and religious studies, the students' responses often correspond to the stages described by Fowler.

Insofar as we have only offered the course as an honors section, we have been able to require much from the students in terms of reading and writing assignments. A recent study of university interdisciplinary courses showed that this course involved a greater number of written pages than any other. Although students recognize that much is expected of them, evaluations have been overwhelmingly positive. In the absence of a basis for comparison, it is difficult to judge whether this course could be taught successfully outside the honors curriculum. It seems probable that honors students are more interested than others in developing an integrated worldview and that they are more willing to invest the substantial academic effort that such a course requires. It would be instructive to teach a nonhonors section of the course for purposes of comparison.

The basis for grading included thesis statements from the readings, three position papers, three major papers, class participation, and a final essay examination. We observed a high level of performance and awarded grades correspondingly. We also see no correlation between assigned grades and our perception of a student's level of faith development. Nevertheless, Fowler's stages warrant further consideration and research as means of interpreting student learning in a course involving an explicit examination of religion.

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