

# *Fides Quaerens Intellectum:* The Soul of a Christian University

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## Introduction

The Taylor University Catalog for 1996-1998 describes the institution as “an evangelical, independent, interdenominational Christian liberal arts college where faith, living and learning are integrated.” It goes on to affirm that “Taylor is distinctive in its commitment to both spiritual and intellectual development as symbolized by the twin spires of the Rice Bell Tower.”<sup>1</sup> The university’s motto, “*lux et fides*,”<sup>2</sup> likewise sets forth Taylor’s stated goal to integrate faith and learning.

This essay sets forth an alternative paradigm for the integration of faith and learning which more closely reflects both the historic Christian faith and modern insights into the relationship between faith and knowledge than does the motto “*lux et fides*.” Its purpose is not to single out the institution where I teach; indeed, I believe that the paradigm I perceive behind “*lux* and *fides*” characterizes most Christian institutions of higher learning. But I prefer that those who teach at other institutions speak to their own situations, as I have attempted to address mine.

The purpose of this essay is to propose that Taylor University change its motto from *lux et fides* (“light and faith”) to *fides quaerens intellectum* (“faith seeking understanding”).

I shall begin by explaining why I believe the motto *lux et fides* is both theologically and philosophically problematic. I shall then set forth my case as to why the notion of *fides quaerens intellectum*, “faith seeking understanding,” is superior for historical, theological, and philosophi-

cal reasons. I hope to demonstrate that this is not merely an exercise in Latin 101A, but rather goes to the heart of what Taylor University is called to be as a Christian institution.

## The Present Problem

*Lux et fides*, the motto of Taylor University, presents at least two problems to the Christian frame of mind:

(1) It places the word “light” before the word “faith,” whereas Scripture always sees “light” (i.e. wisdom, understanding, knowledge) as a function of faith. “The fear of the Lord is the beginning of knowledge” (Pr 1:7). “We have believed and know that you [Jesus] are the son of God” (Jn 6:69).

(2) More to our point here, the present motto tends to depict knowledge and Christian faith as merely parallel categories. The twin towers of *lux* and *fides* in front of the Zondervan library reflect this paradigm of parallel lines; they are joined only at the top.

But what does this signify? Will knowledge and faith be joined only at the end of the process of pursuing each avenue of inquiry separately—hopefully, some time before the Second Coming? Or are knowledge and faith joined together only in the mind of God, while we finite humans must operate on separate tracks? If so, why do we at Taylor speak of “integrating” faith and knowledge?

As I have noted elsewhere, this modern dichotomy between faith and knowledge is a post-Enlightenment phenomenon.<sup>3</sup> It is

the generating principle behind the secularization of the American Academy in the twentieth century.<sup>4</sup> It finds expression on more mundane levels as well, such as the following (apocryphal?) exchange between little Johnny and his Sunday School teacher:

“Johnny, what is faith?”

“Faith is . . . believing something you know isn’t true!”

The story is humorous precisely because it rings true. Christians as well as unbelievers tend to place faith and knowledge into separate compartments.

### **The Historic Christian Solution**

This faith/knowledge dichotomy is a relatively recent development within the stream of Christian history, however.<sup>5</sup> Throughout most of Church history Christian faith has been viewed as an expression of knowledge, not merely of subjective feeling. Furthermore, faith in God has been viewed as the necessary precondition to all true knowledge.<sup>6</sup>

The necessary link between faith and knowledge is true even in the so-called “hard sciences,” as demonstrated by Professor Stanley Jaki, winner of the 1987 Templeton Prize in Religion. His thesis is that the foundations of modern science were laid not by Copernicus, Galileo, or Francis Bacon, but rather much earlier during the High Middle Ages, when natural theology had become steeped in Christian faith. This Christian philosophical theology proclaimed the rationality and contingency of the universe, thereby helping to form the cultural conditions wherein science could rise and prosper. By way of contrast, the history of science prior to the Middle Ages exhibits

a pattern which shows science finding in all ancient cultures a blind alley for its promising starts. A principal element of that pattern is the hold which the distinctly theological tenet of eternal cycles had on ancient cultures. It is well known that a very different theological tenet [i.e., Christianity], which implied the linear process from an absolute beginning, or the creation of all, to an absolute end, was the broadly shared view when science at long last found its road to unlimited advances.<sup>7</sup>

In other words, *faith* in a particular world view (the Christian world view), rather than a knowledge of new data, is what opened the door to modern science.

So when in 1995 Dallas Willard challenged the Taylor University faculty to view faith as a form of knowledge,<sup>8</sup> he was not merely trying to make religion intellectually respectable. Rather, his call echoed the words of such intellectual giants as Augustine of Hippo, Anselm of Canterbury, and John Calvin. Augustine, for example, predicated understanding upon faith when he said *credo ut intelligam* (“I believe in order that I may understand”).<sup>9</sup> Anselm followed the same approach, *fides quaerens intellectum* (“faith seeking understanding”).<sup>10</sup> And Calvin insisted that we can have no understanding of the human predicament unless we first know who God is.<sup>11</sup> A firm conviction of the existence and nature of God, in other words, is the foundation of all other knowledge. Such is the consensus of historic Christian belief.

### **A Postmodern Vote of Confidence**

The *lux et fides* paradigm, which views “light” and “faith” as twin towers in a parallel relationship of mutual autonomy, is unsound not only from the standpoint of historic Christian belief, but also from the standpoint of (believe it or not)

postmodern philosophy. Specifically, Christianity and Postmodernism, for all their serious differences,<sup>12</sup> share the conviction that all knowledge is *relational* as opposed to merely observational. That is to say, we come to know things not merely through dispassionate observation of neutral data, but through active participation wherein our personal convictions help shape our understanding of the world around us. Absolutely objective, impersonal knowledge does not exist; all knowledge, to use Michael Polanyi's expression, is "personal knowledge,"<sup>13</sup> which includes prior commitments on the part of the knower which are not subject to direct empirical verification or falsification, but without which the process of knowing could not even begin.

The resemblance between Polanyi's paradigm and that of the historic Christian affirmation *fides quaerens intellectum* places both perspectives over against the modern "observationalist" mentality of critical philosophy, which Jerry Gill has described as follows:

*Experience* is viewed as essentially a passive encounter with discrete "objects" of physical reality. *Meaning* is defined in terms of a static, one-to-one relationship between objects and linguistic signs. *Knowledge* is based exclusively on an explicit process of inference from evidence to conclusion.<sup>14</sup>

By way of contrast, the Augustinian/Anselmian notion of "faith seeking understanding" affirms that experience, meaning, and knowledge depend upon a prior commitment on the part of the knower to certain convictions (open to ongoing revision) concerning the subject matter under inquiry. The subject matter of that faith which seeks understanding includes not

only God (theology) but also God's creation, including ourselves (science, including anthropology). As the Apostle Paul said to the philosophers of Athens, "In [God] we live and move and have our being" (Ac 17:28). Indeed, Paul's pagan audience knew this as well as he did; he was even quoting one of their own poets (Epimenides the Cretan) to that effect! At this point (though hardly on all points!) the premodern and postmodern come together to squeeze modernity out of the picture.

The history of modernity, of course, has been one of attempting to squeeze premodernity out of the picture. Specifically, modernity has assumed that human reason is the measure of all things, including the question of whether or not God exists. The notion of Truth with a capital "T" has been abstracted from the One who claimed to be the Truth, and placed within the realm of Reason with a capital "R." Harvard College became a harbinger of things to come when it abandoned its early motto *Christo et Ecclesiae* for the Christless, vapid *Veritas* which presently adorns its seal. Yale and Princeton, originally founded to counter Harvard's abandonment of historic Christianity, eventually went the same direction, as did most of the Christian colleges founded in the eighteenth and nineteenth centuries. Taylor University, founded in 1846, reportedly remains the oldest Christian college in the United States which has not abandoned its evangelical distinctives.

### **Faith Consigned to the Ghetto**

The cultural *Zeitgeist* of North American academia presents challenges which make Taylor's (or any other Christian college's) continued commitment to the historic Christian faith by no means a certainty. For while the insights of post-criti-

cal philosophy have successfully rebutted the reductionist epistemology of critical observationalism, religion in general and Christianity in particular continue to be relegated to an academic ghetto called "Faith," created by a wall which separates it from the neighborhood called "Reason." At times the two neighborhoods are allowed to coexist, but only on terms dictated by Reason.<sup>15</sup> Should the citizens of Faith attempt to scale the wall and escape the ghetto, they are promptly sent packing by the inhabitants of Reason.

Consider, for example, the recent debate precipitated by Phillip Johnson's bestseller *Darwin on Trial*.<sup>16</sup> Johnson dared to challenge not only Darwinian evolutionary theory, but the entire naturalistic methodological approach of modern science. The book received a number of sympathetic reviews from scientists, philosophers, and theologians, as well as garnering predictably sharp critiques from many biologists in the realm of secular academia. What was somewhat surprising, however, was that several of Johnson's sharpest critics were fellow Christians who objected to his opposition to methodological naturalism.

For example, Nancey Murphy, who teaches philosophy at Fuller Theological Seminary, criticized *Darwin on Trial* for failing to observe the scientific guild's crucial distinction between science and religion. She objected to Johnson's suggestion that scientists should consider the possibility that "life is what it so evidently seems to be, the product of creative intelligence." Her rationale was that "for better or worse, we have inherited a view of science as *methodologically* atheistic" and that therefore "anyone who attributes the characteristics of living things to creative intelligence has by definition stepped into

the arena of metaphysics or theology."<sup>17</sup>

Biologist Raymond Grizzle, who teaches at Taylor University, went one step further than Murphy and labeled Johnson's scientific methodology "flawed." Whereas Murphy's main point was that the modern scientific guild will not at the present time accept Johnson's call for science to open itself to the possibility of "creative intelligence" (though there is an unlikely prospect that it might do so in the future), Grizzle claimed that Johnson "seriously misunderstands the nature and practice of both science and science education."

Grizzle describes his view of science education as follows:

I view the world dualistically, with the two major forms of inquiry being science and theology . . . theology deals mainly with ultimate causes that typically involve God as an explanation, but science can only deal with naturalistic secondary causes which explicitly exclude God. The two together can potentially provide a complete explanation, as well as offer useful insights for modifications of both theological and scientific views.<sup>18</sup>

I find myself in general agreement with Grizzle's last sentence. The overall content and tone of his remarks, however, give me the impression that he believes most if not all of the "modifications" need to be done in the area of theology. So here again, Reason calls the shots for Faith. The ghetto wall remains intact. *Lux* and *fides* live largely parallel lives. This comes perilously close to the "double theory of truth" which Thomas Aquinas fought against in the culture of thirteenth-century academia.<sup>19</sup>

There are, as I see it, at least two major difficulties with the approach taken by Grizzle and Murphy. They have to do with

the nature of science on the one hand, and the nature of theology on the other.

Modern science cannot be understood without discussing the philosophical matrix out of which it grew, a matrix that was distinctly Christian in its view of the relationship between God and the world.<sup>20</sup> But Grizzle never acknowledges that his work as a scientist is ultimately indebted to a Christian world-view. Nor is he willing to acknowledge that Darwinism in all its forms is first and foremost a *philosophy* based on *materialistic*, and therefore anti-Christian, principles, a fact well documented in the historical literature.<sup>21</sup> Finally, Grizzle seems to equate “science” with “biology,” failing to note that biology’s neo-Darwinian paradigm is quite different from that of, say, modern physics, which has moved beyond the so-called Newtonian paradigm of a mechanistic universe<sup>22</sup> into the realm of relativity and field theory, while biology remains largely ensconced in a mechanistic world-view.<sup>23</sup>

With regard to theology, both Grizzle and Murphy seem reluctant to give it priority in the shaping of a Christian world-view as it pertains to matters of “science.” Murphy expresses concern that any attempt to interject a theistic perspective into the scientific enterprise could bring back the old “God of the gaps” problem: “Many Christians are wary of invoking divine action in any way in science, especially in biology, fearing that science will advance, providing the naturalistic explanations that will make God appear once again to have been an unnecessary hypothesis.”<sup>24</sup> Grizzle, on the other hand, indicates at the end of his essay that theology can contribute positively to science. At the same time, however, his view of theology seems to be that it is a problem-

atic enterprise because the Bible can be difficult to interpret:

... we also need to abandon . . . using interpretations of Scripture to judge the validity of scientific theories. The Scriptures do not ‘plainly teach’ so much as some would think. I believe the Scriptures are infallible, but theologians (both professional and nonprofessional) are not.

To which I would add: nor are scientists. My own experience is that, by and large, theologians, due in large part to the overwhelmingly secularized spirit of our times, tend to be more cautious than their counterparts in biology on matters of science and faith. Grizzle, for example, characterizes evolutionary theory as “one of the most fact-based scientific theories in existence,” a proposition both debatable and misleading.<sup>25</sup> Evolutionary theory is based on data, to be sure, but data *interpreted in a certain way* in line with *prior* philosophical assumptions. Such data, many of us believe, do not (to borrow Grizzle’s words) “plainly teach as much as some people think.” Rather, it is the biologist’s *faith in the evolutionary paradigm* which does the lion’s share of the teaching.

### **Out of the Ghetto and Into the World**

The tension between “reason and faith” will always exist, but that does not mean that a Christian institution should try to avoid conflict between Christ and the academy by placing them on parallel tracks such as “head and heart” or “how and why.” The word “and” in each case tends to compartmentalize. We have seen, however, that not only in matters of theology but also in matters of philosophy and science, personal faith-commitments play a crucial role in generating the out-

comes of one's use of reason.

Take for example the question posed in Psalm 8:4: "What is Man?" Christian faith answers this question by directing its eyes upwards to God the Creator and forward to human destiny as revealed in Scripture. Neo-Darwinian faith answers the same question by directing its eyes downwards to materialistic processes and backwards to purported prehistoric animal ancestors. Christian faith, taking its cue from Psalm 8, looks at humanity and says "How like a god!" Neo-Darwinian faith, taking its cue from the animal kingdom, says "How like a dog!"

Christians, however, must take care not to allow a faith which seeks understanding to run roughshod over the empirical findings of scientific investigation, thereby repeating sad episodes of Church history such as the Galileo fiasco.<sup>26</sup> The Christian doctrine of creation, with its emphasis on both the inherent rationality and contingency of God's creation, not only permits but also mandates that scientists pursue their investigations in an unfettered *a posteriori* fashion. At the same time, Christians must remind both themselves and the scientific guild at large that such investigation is possible precisely because the world is the kind of world which Christian theology says it is, as opposed to being the kind of world depicted in Greek philosophy<sup>27</sup> or Hinduism.

The issue at hand, in other words, is not so much one of empirical findings as it is the philosophical model, or worldview, within which those findings are to be interpreted. Abraham Kuyper understood this a hundred years ago. The great Dutch theologian, who in 1901 became his country's prime minister, noted in his 1898 lectures at Princeton University: "I do not speak of a conflict between faith and sci-

ence. Such a conflict does not exist. Every science in a certain degree starts *from faith*...."<sup>28</sup>

## Conclusion

The Augustinian-Anselmian principle of "faith seeking understanding" provides a model more in keeping with the historic Christian tradition (as well as the original design of the late medieval universities) than does the Enlightenment principle which marginalizes Christian faith as merely one appendage of the humanities and which treats Christianity in a purely descriptive fashion, as opposed to acknowledging the prescriptive role it must have if the university is to be truly Christian. Such a prescriptive role will by no means threaten true academic freedom, though it might shatter some sacred cows which people worship under that banner.<sup>29</sup> For Jesus said, "You shall know the truth, and the truth shall set you free." Freedom comes from knowing Jesus Christ, not *vice versa*. *Fides quaerens intellectum!*

## ENDNOTES

<sup>1</sup> Taylor University Catalog 1996-1998, p. 5.

<sup>2</sup> See e.g. the back cover of the Taylor University Catalog 1996-1998, where the motto "*lux et fides*" is printed on the seal of the university.

<sup>3</sup> Ted M. Dorman, *A Faith for All Seasons: Historic Christian Belief in Its Classical Expression* (Nashville: Broadman, 1995) 11f. Wolfhart Pannenberg makes the same point in "How to Think about Secularism," *First Things* 64 (June/July 1996) 27.

<sup>4</sup> See e.g. George Marsden, *The Soul of the American University: From Protestant Establishment to Established Unbelief* (New York: Oxford Univ. Press, 1994); Marsden and Bradley J. Longfield, ed. *The Secu-*

larization of the Academy (New York: Oxford Univ. Press, 1992).

<sup>5</sup> The modern notion that Christian faith and modern science have always been at odds with one another has been thoroughly analyzed and refuted by, among others, Nancy R. Pearcey and Charles B. Thaxton, *The Soul of Science* (Wheaton: Crossway, 1994).

<sup>6</sup> See e.g. Win Corduan's comments in *Handmaid to Theology: An Essay in Philosophical Prolegomena* (Grand Rapids: Baker, 1981) 72: "'Faith *that*' is the intellectual category... [by which] we mean an immediate assent to the truth of a proposition without any epistemological tests... 'Faith *that*' is an important facet of human knowledge. We believe many things to be true on just that basis... no one's beliefs are completely based on rational grounds." Blaise Pascal made the same point three centuries earlier: "We know the truth, not only through our reason, but also through the heart. It is through this latter that we know first principles; the reason, which has nothing to do with this, vainly tries to refute them." *Pensées* 110; trans. Alister McGrath, in *The Christian Theology Reader* (Oxford: Blackwell, 1995) 18.

<sup>7</sup> Stanley Jaki, *The Road of Science and the Ways to God* (Chicago: Univ. of Chicago Press, 1978) 18.

<sup>8</sup> Dallas Willard's remarks were delivered during a plenary session of the August 1995 "Colleagues' College," Taylor University's annual faculty retreat.

<sup>9</sup> See e.g. Augustine's *On the Trinity* 1.1, *On Free Will* 1.2.4 ("Unless you

believe, you will not understand"), and *On the Gospel of John* 27.9 where he quotes the words of Peter to Jesus (John 6:69): "We have come to believe and know that you are the Holy One of God." "For we believed in order to know" the Bishop of Hippo emphasizes, adding that if we sought to know God first, we could never believe in Him. See also Jack B. Rogers and Donald K. McKim, *The Authority and Interpretation of the Bible* (San Francisco: Harper and Row, 1979) 22ff. for a discussion of Augustine's view of the relationship between faith and understanding.

<sup>10</sup> See e.g. Anselm's *Proslogium* chapter one.

<sup>11</sup> John Calvin, *Institutes of the Christian Religion* 1.1.1-5. See also Blaise Pascal's *Pensées* #449, as well as #110 on the relationship between what he calls the "heart" and reason. For Pascal, the "first principles" which make all knowledge possible come from the "heart," not from reason.

<sup>12</sup> The nature of the serious differences between Christian and postmodern perspectives has been brilliantly summarized by Alvin Platinga in his essay "On Christian Scholarship," in *The Challenge and Promise of a Catholic University*, ed. Theodore M. Hesburgh (South Bend, IN: Univ. of Notre Dame Press, 1994) 267-295. Platinga contrasts Christianity's realist epistemology with the antirealist tradition of which Postmodernism is a part, and which can be traced to Immanuel Kant. He does not, however, discuss those modern thinkers such as Polanyi who are both realists (in line with Christian theism) and post-critical (in line with

Postmodernism). For a valuable popular discussion of the difference between a Kantian postmodern perspective and that of Michael Polanyi see Mike Regele, *Death of the Church* (Grand Rapids: Zondervan, 1995) 71-80, where he contrasts "postmodern constructivists" (Kantians) with "postmodern objectivists" (Polanyi *et al.*).

<sup>13</sup> See Michael Polanyi, *Personal Knowledge* (Chicago: Univ. of Chicago Press, 1958). See also Polanyi and Harry Prosch, *Meaning* (Univ. of Chicago Press, 1975), especially chapter 2, where Polanyi seeks to "displace quite generally the current ideal of detached observation by a conception of *personal* knowledge" (29). Note especially the role of what Polanyi calls the inquirer's "tacit knowledge" of the subject matter, which must always precede further investigation. Such tacit knowledge is remarkably analogous to the sort of prior understanding which Calvin maintained all human beings have of God, simply by virtue of our own existence; see e.g. *Institutes* 1.1.1. The modern existential theologian Rudolf Bultmann was well aware of the role of prior understanding (*Vorverständnis*) in human knowledge; see e.g. Bultmann, "Is Exegesis without Presuppositions Possible?" in *Existence and Faith*, ed. and trans. by Schubert M. Ogden (London: Meridian Books, 1960) 289ff. Ironically, Bultmann applied post-critical insights to his *philosophy* of hermeneutics, but not to the naturalistic assumptions of modern science, which he then employed in his actual *practice* of interpreting the New Testament with an anti-super-

natural bias (“demythologizing”).

<sup>14</sup> Jerry Gill, *On Knowing God* (Philadelphia: Westminster, 1981).

<sup>15</sup> This is true not only in academia, as noted by George Marsden, *The Soul of the American University*, but also in the institutions of American culture at large. See e.g. Richard John Neuhaus, *The Naked Public Square* (Grand Rapids: Eerdmans, 1984).

<sup>16</sup> Phillip E. Johnson, *Darwin on Trial* (Washington, D.C.: Regnery Gateway, 1991).

<sup>17</sup> See Nancey Murphy, “Phillip Johnson on Trial: A Critique of His Critique of Darwin,” in *Perspectives on Science and Christian Faith* 45 (March 1993) 26ff. Johnson’s reply may be found in Phillip Johnson, *Reason in the Balance: The Case Against Naturalism in Science, Law and Education* (Downers Grove: InterVarsity Press, 1995).

<sup>18</sup> Raymond E. Grizzle, “Johnson’s Scientific Method Flawed,” *Touchstone: A Journal of Ecumenical Orthodoxy* 8/1 (Winter 1995) 5ff. Subsequent quotations from Grizzle are from this article. A reply from Phillip Johnson is found on page 7 of the same issue.

<sup>19</sup> See e.g. R. C. Sproul, “Thomas Aquinas,” in *Meet the Men and Women We Call Heroes*, ed. Ann Spangler and Charles Turner (Ann Arbor: Servant Publications, 1990) 253-268. See also Win Corduan, *Reasonable Faith* (Nashville: Broadman & Holman, 1994) 21 fn. 4. Basically, the “double theory of truth” held that certain propositions could be deemed false by reason but true by faith, and vice-versa. Aquinas, following the lead of Augustine, de-

nied this possibility.

<sup>20</sup> See e.g. Stanley Jaki’s observations cited above, 4f., as well as Pearcey and Thaxton, *The Soul of Science*, 17-78.

<sup>21</sup> See e.g. Robert E. D. Clark, *Darwin: Before and After* (Chicago: Moody Press, 1966), chapters 3 and 4; Bolton Davidheiser, *Evolution and Christian Faith* (Grand Rapids: Baker, 1969), chapter II; Pearcey and Thaxton, *The Soul of Science*, chapter 5.

<sup>22</sup> I say “so-called” because Newton himself did not hold to the mechanistic world-view usually ascribed to him by history books, i.e. Newton was not a “Newtonian”! See Edward B. Davis, “Newton’s Rejection of the ‘Newtonian World View’: The Role of Divine Will in Newton’s Natural Philosophy” in *Fides et Historia* 22:2 (Summer 1990) 6-20.

<sup>23</sup> See e.g. Thomas F. Torrance, *God and Rationality* (New York: Oxford Univ. Press, 1971) 14: “Biology, on the other hand [in contrast to physics], has not yet found its Einstein or perhaps even its Maxwell. Although the direction in which it ought to travel has been pointed out by some of the greatest physicists and chemists of our day (such as Bohr and Polanyi), biology is still largely stuck in the attempt to interpret the field of living structures in mechanistic terms....”

In 1971 I was privileged to sit under Dr. Torrance for a month of lectures he gave at Fuller Seminary on “Scientific Theology.” During one of our classes a student asked him what he thought of Darwin’s theory of evolution. His answer was very brief, but the one thing I recall is his statement that biology’s tenacious

adherence to Darwin had set the discipline back a hundred years!

Biology’s captivity to a nineteenth-century mechanistic paradigm likewise has implications for the now-antiquated notion that science asks the question of “how” things came into being, while theology asks the questions of “why” things are. Observes Torrance: “We have now moved beyond the old idea that natural science is concerned only with the *how* and not with the *why*: that is, with mechanical processes and not with ends, whereas theology is concerned only with *why-questions*: that is, questions about beginnings and ends. That sharp distinction had the effect of importing a deep split between science and theology. . . . It is now evident, however, that the *how* questions and the *why* questions cannot be finally separated and that they appear different when they are found linked together.” See Torrance, *The Christian Frame of Mind: Reason, Order, and Openness in Theology and Natural Science* (Colorado Springs: Helmer and Howard, 1989) 24f.

<sup>24</sup> Cited in Phillip Johnson, *Reason in the Balance*, 98. With regard to the “God of the gaps” problem, recent advances in molecular biology indicate that the remaining “gaps” in evolutionary theory, particularly with regard to the information codes of DNA, are of such an irreducibly complex nature that the standard evolutionary paradigm of slow incremental change simply cannot explain them, even on a theoretical basis. See e.g. Michael Denton, *Evo-*



lution: *A Theory in Crisis* (London: Adler and Adler, 1986); Stephen C. Meyer, "The Origin of Life and the Death of Materialism," *The Intercollegiate Review* 31/2 (Spring 1996) 24-43; Bill Dembski, "The Explanatory Filter: A three-part filter for understanding how to separate and identify cause from intelligent design," *The Real Issue* 15/2 (November/December 1996); and especially Michael Behe, *Darwin's Black Box* (New York: Free Press, 1996).

<sup>25</sup> Louis Agassiz, the famous nineteenth-century Swiss naturalist widely regarded as the top scientist in his field (and who rejected Darwinian evolutionary theory), was quoted by one of his pupils, Samuel H. Scudder, as saying: "Facts are stupid things until brought into connection with some general law." See Howard T. Kuist, *These Words Upon Thy Heart* (Richmond: John Knox Press, 1947) 77f.

In other words, the "general law" or philosophical paradigm interprets the facts, not *vice versa*. Of course, new facts which fail to fit into the prevailing paradigm can result in what scientists refer to as a "paradigm shift," to use the language of Thomas Kuhn, *The Structure of Scientific Revolutions* (Chicago: Univ. of Chicago Press, 1962). The new paradigm is not a self-evident result of the new facts, however, but rather the result of hard theoretical work which seeks to explain how the facts observed by the scientist cohere within the framework of some general law. Einstein's theories of relativity are the outstanding example of such a

"paradigm shift" in the twentieth century; previous paradigm shifts included the Copernican revolution, which overthrew the Ptolemaic paradigm of a geocentric universe in favor of a heliocentric solar system. Such shifts do not come easily, however, as prevailing paradigms tend to have significant intellectual inertia which keeps them established long after serious questions have been raised as to their viability.

<sup>26</sup> Seldom mentioned, but worthy of note here, is that Aristotelian geocentric cosmology, not biblical revelation, was the basis of the sixteenth-century Catholic Church's opposition to Galileo's heliocentric solar system. In addition, the principal impetus for the censure of Galileo came not from the Church but from the guild of university scientists of his day, which was overwhelmingly Aristotelian (as opposed to Galileo, who was a neo-Platonist). The fact that Aristotelian thought had also deeply influenced Church dogma via the writings of Thomas Aquinas created the unusual and unfortunate spectacle of the scientific and theological guilds uniting themselves against Galileo's empirical findings. See e.g. Mark A. Kalthoff, "God and Creation: An Historical Look at Encounters between Christianity and Science," in Michael Bauman, ed., *Man and Creation: Perspectives on Science and Theology* (Hillsdale, MI: Hillsdale College Press, 1993) 17ff., and Pearcey and Thaxton, *The Soul of Science* 38-41.

<sup>27</sup> Even Aristotle, who is best known

as a proponent of empirical *a posteriori* reasoning, began his work with prior assumptions. Stanley Jaki comments on Aristotle's discourse *On the Heavens*: "[It] was as *a priori* as it could be...[Aristotle's] starting point is the activity of a god...." *The Road of Science and the Ways to God*, 21f. See also Pearcey and Thaxton, *The Soul of Science*, 39, 51f. for a brief discussion of how Aristotle's philosophy of Form affected his interpretation of his own empirical observations.

<sup>28</sup> Kuyper, *Lectures on Calvinism* (Grand Rapids: Eerdmans, 1931) 131. But if every science or worldview starts from faith, one might reasonably ask whether or not conflicting worldviews, or paradigms, are merely *a priori* choices which lack any common ground and are therefore chosen for reasons which *a posteriori* reasoning would find arbitrary. We have already stated in endnote 25 that scientific paradigms are subject to modification based on *a posteriori* considerations. But what of Christian faith?

At first glance religious paradigms appear to be of an *a priori* nature, since they deal with a transcendent and therefore non-empirical subject matter. Christian faith, however, claims that the Word of God did not remain merely transcendent, but "became flesh and dwelt among us" (Jn 1:14). The resurrection of Jesus Christ forms the point of intersection between the transcendent and the immanent. An empty tomb and numerous eyewitnesses thus give *a posteriori* witness to Jesus' claim to divine authority.

At the same time, this evidence is not “empirical” in a strictly scientific sense in that it is *sui generis*, and thus breaks historiography’s principle of analogy and empirical science’s criteria of verification and falsification. As Wolfhart Pannenberg has noted, however, the uniqueness of the resurrection of Jesus should not be considered a sufficient rationale for rejecting the biblical witness out of hand. For the very nature of the event makes it a unique subject matter, which is at once subject to historical research and yet not bound by the strictly immanent cause-effect nexus of modern historiography.

Detailed historical arguments for the bodily resurrection of Jesus may be found in Pannenberg, *Jesus - God and Man*, trans. Lewis L. Wilkins and Duane A. Priebe (Philadelphia: Westminster, 1968) 88-106, and in Daniel P. Fuller, *Easter Faith and History* (Grand Rapids: Eerdmans, 1965) 188-261. See also Fuller, “A New German Theological Movement,” *Scottish Journal of Theology* 19/2 (June 1966) 160-175 for an evaluation of Pannenberg’s approach. For an analysis of modern historical methodology see Marc Bloch, *The Historian’s Craft*, trans. Peter Putnam (New York: Random House, 1953).

<sup>29</sup> Regarding academic freedom see Samuel T. Logan, Jr., “Academic Freedom at Christian Institutions;” Eugene B. Habecker, “Academic Freedom in the Context of Mission;” and Edward E. Erickson, Jr., “Academic Freedom: Keeping it Complex, A Response to Samuel Logan,” in *Christian Scholar’s Review* XXI:2

(December 1991) 164-190. The definition of “academic freedom” favored by the present writer is one which would place the mission of the institution prior to the individual convictions of its professors. In other words, a Christian institution must be free to pursue its Christ-centered educational goals by ensuring that its faculty members profess clearly defined Christian convictions and publicly support the goals of the institution. In so doing it will be in a strong position to maintain its Christian freedom against the secularizing forces of the surrounding culture.