

AN “INFORMATION LITERACY” PERSPECTIVE OF THE CREATION/EVOLUTION DEBATE

TERRY D. ROBERTSON
Andrews University

Introduction

The pedagogical mission of my profession as a librarian is to train in “information literacy.” Within the context of higher education that is conceived of generally as instructing a student in using library resources to complete an academic writing assignment. The Association of College Research Libraries has identified the broad set of competencies required for this task, summarized as the ability to define an information need, and find, evaluate, and then use it ethically.¹ Of particular interest is how we mentor the effective evaluation of information in an information-saturated culture.²

The creation/evolution debate provides an intriguing case study on the process of evaluating information for the following reason: The two accounts are mutually exclusive. The information seeker cannot accept both as true. Often this results in accepting one as true and the other as false.³ And the distinctive accounts highlight the function of standard criteria generally presented in information literacy training: authority, independent corroboration, plausibility and support, and presentation.⁴

This essay will discuss the creation/evolution debate from the perspective of the novice information seeker, discussing and applying the principles of

¹Patricia Iannuzzi et al., *Information Literacy Competency Standards for Higher Education* (Chicago: Association of College and Research Libraries, 2000).

²The professional literature on information literacy is vast. Some good overviews include: John Budd, *Framing Library Instruction* (Chicago: Association of College and Research Libraries, 2009); Michael Eisenberg, Carrie A. Lowe, and Kathleen L. Spitzer, *Information Literacy: Essential Skills for the Information Age*, 2d ed. (Westport, CT: Libraries Unlimited, 2004); Ann Grafstein, “A Discipline-Based Approach to Information Literacy,” *Journal of Academic Librarianship* 28/4 (2002): 197-204.

³Delimiting this discussion to the biblical-creation account and the standard evolutionary account is arbitrary in that virtually all religions and cultures have unique creation accounts, e.g., each of the ancient cultures of Babylon, Greece, and Egypt had well-articulated accounts; Native American cultures have their accounts; and so forth. However, unlike most creation accounts, the two under consideration in this discussion both make a scientific claim to reality.

⁴Don Fallis, “On Verifying the Accuracy of Information: Philosophical Perspectives,” *Library Trends* 52/3 (2004): 464-465. This article focuses on the evaluation of information found on internet web sites, more particularly on the accuracy of information, e.g., in the case of medical information.

information literacy. Ultimately, it will be suggested that these strategies can go only so far, and that criteria for accepting one account over the other will be based on subjective metaphysical presuppositions which find grounds formed through faith in an authority. It can also be assumed that, given the social context of this journal, I will argue for the biblical-creation account.

Working Definition of Information

Defining the term “information” has always been problematic because both the word and concept are used in many ways and in so many different contexts.⁵ Thus, for the purposes of this essay, the term will be delimited to the semantic vehicle by which knowledge is exchanged between two minds. This supposes a commodified form of communication medium using symbols that record the knowledge of an informer which can then be accessed independently by any number of informees.⁶ The most common information vehicles pertinent to the religion-and-science debate in the academic context are books and journals, whether analog or digital.⁷

A further distinction needs to be made.⁸ Some information (the knowledge obtained by an author expressed in a semantically commodified form) is descriptive. This class of information applies to those facts which can be verified independently in real time. I as an individual may not be able to visit the pyramids of Giza, so for information about the pyramids I rely on pictures and on what other competent authors have written. I am certain that if I were to travel to Egypt, I would find the pyramids as they have described them. The location on the map would correspond, as well as any measurements I might make.

A second class of information (knowledge of an author expressed in a semantically commodified form) incorporates the further analysis and interpretation of verifiable descriptive information by the author. In the case

⁵Dan Schiller, *How to Think About Information* (Urbana: University of Illinois Press, 2007). Schiller’s discussion of the capitalistic commodification of information in a global context highlights many of the challenges the novice information seeker must take into account, including but not limited to the economic infrastructure that delivered the information.

⁶Albert Bormann, *Holding on to Reality: The Nature of Information at the Turn of the Millennium* (Chicago: University of Chicago Press, 1999), 22. His definition for information is also multifaceted: “INTELLIGENCE provided, a PERSON is informed by a SIGN about some THING within a certain CONTEXT.”

⁷For a helpful distinction between knowledge and information, see Peter Suber, “Knowledge as a Public Good,” *SPARC Open Access Newsletter*, 2 November 2009, n. 130 (<http://www.earlham.edu/~peters/fos/newsletter/11-02-09.htm#publicgood>).

⁸These distinctions reflect the discussion by Luciano Floridi, “Semantic Conceptions of Information,” *Stanford Encyclopedia of Philosophy* (<http://plato.stanford.edu/entries/information-semantic>).

of the pyramids of Giza, this class of information is illustrated by discussions of their history, methods of construction, religious significance for the builders, and so forth. Competent authorities have come to their conclusions on these matters, not because they were personally present and observed these events; but from their analysis of historical documents and their awareness of the social world of the builders, they have made logical inferences that they believe represent the way things happened. While I might be able to access some of the same historical documents and artifacts, I must accept their "interpretation" as simply that, and then decide whether or not they are justified in their conclusions. This is not a simple, straightforward matter of independent verification.

When evaluating the first class of information, the information seeker thinks in categories of accuracy and completeness, and believes it or not in terms of certainty. As for the second class, categories revolve around the reliability of the author, both in terms of method and bias, and the information seeker believes the information or not in terms of confidence. In other words, this is a theoretical expansion of the distinction between verifying facts and validating opinions.

While these kinds of distinctions are helpful in theory, actually confronting theological texts and scientific texts that give an account of human origins is much more complex. Whether supporting the biblical creation account or the standard evolutionary account, the authors are expressing their beliefs using the rhetoric of certainty and the language of factuality. Thus for the novice information seeker, the normal clues by which she categorizes fact and opinion may not be self-evident. Also, claims to authority not directly related to the content but present in the ambient culture may also prove influential in the evaluation process.⁹

In terms of the creation/evolution debate, my argument also assumes that the facts, those which can be observed and measured in real time by competent individuals, are not at issue.¹⁰ That there is a geologic column evident in the Grand Canyon is equally evident to all geologists, both creationist and evolutionist. That the fossilized bones found on a southwest Michigan farm and on display at Andrews University are from an extinct mammoth is uncontested knowledge for paleontologists. That species have adapted to their environment through an evolutionary process so that certain breeds of domesticated cattle that thrive in arid temperate climates do vary

⁹As lamented by Gilbert Keith Chesterton: "Modern intelligence won't accept anything on authority. But it will accept anything without authority" (*The Man Who Knew Too Much* [New York: Harper, 1922], 180).

¹⁰Steve Fuller, "Evidence? What Evidence?" *Philosophy of the Social Sciences* (<http://pos.sagepub.com/content/early/2011/03/10/0048393111402778.citation>).

significantly from those that thrive in humid tropical climates is common knowledge for biologists.

My argument is based, however, on the understanding that it is the inferences and interpretations of such generally accepted facts that has led to mutually exclusive accounts of human origins.¹¹ It is this phenomenon that poses a substantive problem for the novice information seeker. But we should not simply reduce what can be known to the immediately observable, particularly in the context of this debate. Doing so would leave us with nothing more than perhaps interesting but rather insignificant trivia. It is also appreciated that the overarching hope of this debate is that these inferences and interpretations that take us beyond the facts will contribute to the understanding of the meaning or purpose of human life.¹² And it is also that larger purpose that renders the epistemic choice between the biblical creation account and the standard evolutionary account so psychologically compelling.

The Evaluation of Information

In the previous section, I argued for a definition of information as knowledge of an author expressed in a semantically commodified form. Within this definition, I distinguished between information that is verifiable in real time and information that has the added value of authorial inference and interpretation. In this section, I will discuss the various facets that are incorporated into the information literacy evaluation process.

Most educated and socially aware persons are tacitly adept at evaluating everyday informational knowledge exchanges, and so are able, for example,

¹¹Ibid. “Scientists who wish to embed their findings in more explicitly theoretical agendas are limited by the peer-review process. This leads ID [Intelligent Design]/creationists to complain (rightly) of a ‘naturalistic’ philosophical bias that allows scientific authors to use their articles’ introductions and conclusions to articulate their findings in terms of broader Neo-Darwinian research themes but not those of ID/creationism, even though the same findings could be understood in those terms too. As a result of this asymmetrical treatment at the reviewer stage, ID/creationism is effectively censored before it can enter the scientific literature—unless ID/creationists manage to come up with testable hypotheses the success of which could not be explained equally well in Neo-Darwinian terms.”

¹²Roger Smith, *Being Human: Historical Knowledge and the Creation of Human Nature* (New York: Columbia University Press, 2007), 240-241. “No one will question the unparalleled precision of the natural sciences. But knowledge about what makes a person significant, or an institution just, or a claim to truth persuasive, or a moment of perception beautiful, has a different character. It requires knowledge of particulars set in a story. Historically deracinated abstract knowledge, exemplified in the physical sciences, establishes no meaning, differentiates no shades of significance and points in no direction relevant to knowing what to do. It is knowledge about particulars, the place of people and events in a story, which opens such possibilities.”

to recognize advertising hype or political propaganda for what it is, while also sifting out what is true and adding it to their own knowledge fund. However, academic-writing scenarios are not everyday knowledge exchanges, but rather a specialized and contextualized form. The challenge facing the information seeker in this setting is that not all information is created equal, and discretion is needed to select the most reliable sources.

That the engagement of such critical-thinking dispositions is necessary is based on the observed reality that the human minds that create the information are by nature limited and constrained in a number of significant ways, including space, time, language, and expertise. When the information is incomplete or inaccurate because of limitations imposed on the informer, it is described as misinformation. Cases are also plentiful in which the informer intentionally attempts to manipulate the informee for some personal gain; thus disinformation abounds.¹³ The burden of recognizing these counter-informing objects falls on the informee, who is also constrained by the same limitations. But it is the informee that bears the consequences of any misjudgment.¹⁴

Key criteria have been outlined for evaluating information and providing the novice with some initial guidance. These include verifying the authority of the source, seeking independent corroboration of factual claims, reviewing the plausibility and support for the propositions, and observing the clues embedded in the presentation of the information. It is also assumed that using these reliable methods to evaluate information will produce reliable results. A corollary to this thesis is that reliable sources are more likely to provide reliable information.¹⁵

However, in spite of the general success that these methods offer for recognizing good information, two cautions are in order. The first has been labeled the "information cascade."¹⁶ In this scenario, a proposition has been

¹³Bernd Carsten Stahl, "On the Difference or Equality of Information, Misinformation, and Disinformation: A Critical Research Perspective," *Informing Science Journal* 9 (2006): 83-96.

¹⁴Fallis, 464-466.

¹⁵John M. Budd, "Academic Libraries and Knowledge: A Social Epistemology Framework," *Journal of Academic Librarianship* 30/5 (2004): 365-366. Budd is arguing that the library should take an active role rather than a passive role in both their instructional and collection development capacities when helping information seekers find accurate and reliable information.

¹⁶Originally coined and described in Sushil Bikhchandani, David Hirshleifer, and Ivo Welch, "A Theory of Fads, Fashion, Custom, and Cultural Change as Informational Cascades," *Journal of Political Economy* 100/5 (1992): 992-1026. For summary and updated bibliography, see Sushil Bikhchandani, David Hirshleifer, and Ivo Welch, "Information Cascades and Rational Herding: An Annotated Bibliography and Resource Reference," Working Paper: UCLA/Anderson and Ohio State University and Yale/SOM (<http://www.info-cascades.info>).

accepted as true because it seems reliable, though it is false, and spreads throughout a generally reliable academic discipline through standard citation practices. Thus the false proposition appears to have authority, independent corroboration, and plenty of disciplinary support with what appears to be a competent presentation. One classic example is the claim that Eskimos have many words for snow, and the assertion coheres well with the general appreciation for the effect of environment on language. The assertion was accepted as true by many in academic circles until it was tested and proved false.¹⁷ Another long-accepted example is found in the claim that there are parallels to the story of Job in the Hindu literature. When the citation evidence was traced back to its source, the claim was proven unwarranted.¹⁸

A second caution concerns epistemic circularity, in which a claim is supported only by reference to authority, plausibility, or presentation, and not by mind-independent reference to fact. In the courtroom, this class of information is usually rejected as hearsay. In other words, "one seeks to defend or demonstrate the reliability of a source in ways that require relying on beliefs generated by that source."¹⁹ Critics of religion have long made this case for religious beliefs.²⁰

Epistemology of Testimony

Because there are no eyewitnesses of human origins, and because the origin event(s) cannot be replicated, we must infer how it happened based on possibly related real-time observations of phenomena and processes. Such inference leads a person to belief, and hence to knowledge. When that knowledge is communicated anew, the added content of interpretation and inference to the description of the original basic facts takes on the characteristics of testimony.

¹⁷Laura Martin, "Eskimo Words for Snow: A Case Study in the Genesis and Decay of an Anthropological Example," *American Anthropologist* 88/2 (1986): 418-423.

¹⁸D. J. A. Clines, "In Search of the Indian Job," *VT* 33/4 (1983): 398-418.

¹⁹Ralph Baergen, *Historical Dictionary of Epistemology*, Historical Dictionaries of Religions, Philosophies, and Movements, 70 (Lanham, MD: Scarecrow Press, 2006), 65.

²⁰William P. Alston, "Knowledge of God," in *Faith, Reason, and Skepticism: Essays*, ed. Marcus B. Hester (Philadelphia: Temple University Press, 1992), 43-44. The paper critiques an internalist version of epistemology in which a belief can supposedly be justified in a noncircular reflective fashion, in which Alston argues little if anything can then be known. The context of the article is a response to skeptics who claim knowledge of God cannot be justified. "Its externalist competitor has much more going for it as a general orientation in epistemology, and it opens up possibilities for knowledge of God that are closed to internalism. The price of this, however, is a renunciation of the aim at a noncircular demonstration of the reliability of our sources of knowledge and an abandonment of hopes for the autonomy of epistemology."

The evaluation of this enriched class of information can be instructed by recent work in the epistemology of testimony.²¹

That most of our knowledge has been gained from testimony is commonly noted. The simple human limitation of being able to inhabit only one unit of space and only one moment at a time in a linear sequence restricts our opportunities to form knowledge from only perception and memory. Relying on the testimony of others expands our intellectual horizons and empowers us to efficiently contribute to the collective knowledge of the community.

There are two main schools of thought as to the epistemic value of testimony in belief formation. Reductionists, following David Hume, require that testimony must have independent corroboration before it can be used to justify new belief. Antireductionists, following Thomas Reid, claim that testimony can be used to justify new belief without positive corroboration in the absence of evidence to the contrary.²² In the course of the debate between the two positions, many examples and counterexamples demonstrate the insufficiency of unilaterally adopting either position. Jennifer Lackey argues that the reductionist position best describes the epistemic duty of the hearer in that she must assess the reliability of the source, and that the antireductionist position describes the epistemic effort of the speaker, whose objective is to present a rational argument. Thus the communication exchange of information between two minds is a dualism. It follows that if the speaker is first successful in rationally justifying a claim through corroboration with factual knowledge, then the hearer can subsequently accept the claim as reliable without further epistemic work, since such further corroboration would be redundant.²³

Applied to academia, "information literacy" encompasses both the evaluation of information by an information seeker, which includes the epistemic task of incorporating new information into her knowledge base. The seeker is first a "hearer" and, by predetermining which are trustworthy sources, can accept the information provided as valid unless there are obvious reasons for rejecting the information as such. The informee/hearer in turn is expected to give expression to that newly acquired knowledge by authoring a new unique commodified information product. In authoring this new product, the informee/hearer becomes an informer/speaker and must adhere

²¹In addition to many articles, the following books provide a representative study of the epistemology of testimony: C. A. J. Coady, *Testimony: A Philosophical Study* (New York: Oxford University Press, 1992); S. Goldberg, *Anti-Individualism: Mind and Language, Knowledge and Justification* (New York: Cambridge University Press, 2007); A. I. Goldman, *Knowledge in a Social World* (New York: Oxford University Press, 2008); J. Lackey and E. Sosa, eds., *The Epistemology of Testimony* (New York: Oxford University Press, 2006); Nicholas Wolterstorff, *Thomas Reid and the Story of Epistemology*, *Modern European Philosophy* (New York: Cambridge University Press, 2001).

²²Baergen, 210-211.

²³Lackey, 177.

to the epistemic responsibility of providing validated information for the intended audience, a new information seeker. Lackey's dualism is pertinent for understanding the information-literacy cycle because the informee/informer incorporates both reductionist and antireductionist epistemic work in this new commodified information product. This line of argument highlights the social aspect of knowledge acquisition. Thus, the student author is expected to use trustworthy sources, and then provide trustworthy information in her written work, which, in turn, becomes an information source for a subsequent seeker.

Here is the crux of the problem facing a novice information seeker in a query about human origins. Both the biblical creation and the standard evolutionary accounts reflect interpretations of factual data, i.e., the objective, measurable phenomenon observed and recorded by multiple independent and competent persons in real time. Both accounts are supported by socially recognized and generally reliable communities following apparently sound methodological standards. Neither can claim the certainty of formal documented historical human eyewitnesses. Particularly in the case of geology, the inferences are drawn from relatively scanty and ambiguous data for which multiple plausible interpretations are inevitable.²⁴ Both could just as easily be cited by their critics as an example of information cascading, or could be demonstrated to be nothing more than a vicious testimonial circle. Scientists who hold to the biblical creation account are just as rigorous and thorough with the objective observable data as are scientists who hold to the standard evolutionary account. Criteria that normally would provide clues in the evaluation of this class of testimonial information do not provide conclusive answers.

One further contingency comes into play in the creation/evolution debate. Because of the socially constructed nature of the rhetoric, how a person evaluates a given proposition in the debate is based less on the potential truthfulness of the argument and more on what fits the worldview of the information seeker. Thus what generally happens is that a novice information seeker, who has been immersed in the standard evolutionary account throughout elementary and secondary education, and without social intervention from home and a faith community, will find the evidential claims supporting evolution more compelling. On the other hand, one who has been educated in a social context, whether family or church, that assumes the biblical creation account will find the evidence supporting that account more

²⁴Henry N. Pollack, *Uncertain Science . . . Uncertain World* (Cambridge: Cambridge University Press, 2003), 149. "Dealing with uncertainty about the past is a way of life with geologists, who in their work of reconstructing natural history are always working with half a deck or less. Nature is not a mindful conservator, and the inevitable consequence of time is that the record of what happened long ago becomes degraded and fragmentary. In their efforts to understand and interpret incomplete information, geologists always work with a handful of provisional scenarios relevant to explaining their observations."

compelling. This tendency reflects both the contextually formed worldview and prior knowledge of the informee.²⁵ How the informee then handles the ambiguities and knowledge gaps within the diverse accounts is indicative of her critical thinking dispositions, which are, again, open to critique and evaluation by observers who have their own commitments.

C. S. Lewis illustrated the interplay of worldview, prior knowledge, and logic in the task of evaluating testimony in *The Lion, the Witch, and the Wardrobe*. After Lucy's second visit to Narnia with her brother Edmund, their older siblings brought the younger two to discuss their tale with the old Professor. Lucy's claim did not fit their worldview, while Edmund's did, thus the concern. After reviewing the particulars, in which Lucy claimed the events as true, and Edmund claimed Lucy's account was false and that they were just pretending, the Professor asks the pertinent question:

"For instance—if you will excuse me for asking the question—does your experience lead you to regard your brother or your sister as the more reliable? I mean, which is the more truthful?"

"That's just the funny thing about it, sir," said Peter. "Up till now, I'd have said Lucy every time."

The anxiety they were feeling was created by the dissonance between their worldview and the cumulative prior knowledge based on experience. After some further discussion about another possibility, the Professor directs the conversation to critical-thinking dispositions for an answer.

"Logic!" said the Professor half to himself. "Why don't they teach logic at these schools? There are only three possibilities. Either your sister is telling lies, or she is mad, or she is telling the truth. You know she doesn't tell lies and it is obvious that she is not mad. For the moment then and unless any further evidence turns up, we must assume she is telling the truth."²⁶

²⁵Michael Polanyi states: "All practical teaching, the teaching of comprehension in all the senses of the term, is based on authority. The student must be confident that his master understands what he is trying to teach him and that he, the student, will eventually succeed in his turn to understand the meaning of the things which are being explained to him" ("Faith and Reason," *JR* 41/4 [1961]: 243). Lesslie Newbigin notes that "Reason is not an independent means for finding out what is the case. It is not a substitute for information. In order to be informed, we have to make acts of trust in the traditions we have inherited and in the evidence of our senses. Moreover, . . . all systematic reasoning has to begin by taking for granted certain things that are accepted without argument. There must be data without argument or, at least, without prior demonstration. . . . There exists no neutral reason that can decide impartially on the truth or falsehood of the Christian gospel. On the contrary, if it is true that Jesus is the Word made flesh, then to know Jesus must be the basis of all true knowledge" (*Proper Confidence: Faith, Doubt, and Certainty in Christian Discipleship* [Grand Rapids: Eerdmans, 1995], 96).

²⁶Clive Stapleton Lewis, *The Lion, the Witch, and the Wardrobe* (Grand Rapids: Zondervan, 2000), 47-48.

To summarize, the case study of applying information-literacy practices to the creation/evolution debate has not provided any decisive conclusions. The only difference between the two accounts seems to be the rhetoric of invention arising out of differing worldviews.²⁷ Unless there is a way to critique these distinctive worldviews, then the only conclusion is that the two accounts are equally valid. Except that intuitive logic cannot accept that being the case.²⁸ Whereas they may both be false, only one can be true.

	Biblical Creation Account	Standard Evolutionary Account
Authority	Eyewitness account of the Creator, as reported in texts and accepted for millennia as authoritative by Jews and Christians.	The general reputation of science, as defined by scientism, which purports to provide answers based on verifiable sense perception. Responsible for substantive progress in knowledge and evidenced in advances in technology and medicine. Accepted for a couple of centuries, but recently challenged.
Corroboration	Evidence of intelligent design and lack of evidence for evolutionary cross-speciation.	Geological and paleontological evidence for long ages. Computer models using measurable and verifiable variables.
Plausibility	So claimed by adherents.	So claimed by adherents.
Presentation	Testimonial. The original text provides a brief and limited description of how creation happened. This account is a prolegomena to a narrative of which the primary purpose was to establish the identity of the people of Israel.	Testimonial. The general theory emerged out of inferences drawn from new data using assumptions that questioned “religion” and the validity of ancient texts.

²⁷Fuller, 6. Fuller notes that “In short, debates over the scientific probity of ID/creationism and Neo-Darwinism have little to do with evidence per se but a lot to do with who speaks for the evidence, which in turn is a matter of permissible explanatory frameworks in science. In this context, the Popperian phrase, “metaphysical research program” comes in handy, since the closer one inspects the genuine points of disagreement between ID/creationism and Neo-Darwinism, the more metaphysical they become.”

²⁸Paul A. Boghossian, *Fear of Knowledge: Against Relativism and Constructivism* (Oxford: Clarendon Press, 2006), 1-7. He defines the problem of equal validity by popular media references to Lakota and Zuni human-origin myths, which are justified as “different ways of knowing.”

Hebrews 11 as a Biblical Response

Many of the key epistemological problems, as outlined above, were debated in the Hellenistic world of the first century. New Testament authors addressed these problems creatively in ways that affirmed the faith of the early church. For the purposes of this essay, one example will be discussed.

In the book of Hebrews, the author makes the claim: "Now faith is confidence in what we hope for and assurance about what we do not see"²⁹ (11:1). While the context of the book, and, more particularly, the argument that follows make clear that the "in what"—that which is outside the immediate field of sense perception and yet to take place—refers to the promises given by God through the Scriptures and through Jesus Christ,³⁰ I suggest that the principle invoked could apply to any belief formed on the basis of testimony apart from perception. Thus I argue that the epistemic status of a belief formed solely by reliance on testimony is an act of faith.³¹ In Hebrews, that act of faith is warranted by the reliability of God as revealed through Jesus Christ. When applied to the creation/evolution debate, it requires an act of faith to commit to either account. As further evidenced in Heb 11:3, "By faith we understand that the universe was formed at God's command, so that what is seen was not made out of what was visible." It is also an act of faith to claim that humanity evolved after a long process.

Exegetes and English-language translators have long struggled with whether Heb 11:1 should be interpreted as objective or subjective.³² The translation quoted in the previous paragraph represents the subjective interpretation.³³ A translation representative of the objective interpretation

²⁹Unless otherwise indicated, Scripture quotations are from the NIV.

³⁰R. L. Brawley, "Discursive Structure and the Unseen in Hebrews 2:8 and 11:1: A Neglected Aspect of the Context," *CBQ* 55/1 (1993): 97-98.

³¹Polanyi, 243. "But whether our confidence in the powers of our comprehension arises spontaneously from the depth of our inquiring mind or leans on our trust in the judgment of our teachers, it is always an act of hope akin to the dynamism of all human faith."

³²James D. Smith III, "Faith as Substance or Surety: Historical Perspectives on *Hypostasis* in Hebrews 11:1," in *The Challenge of Bible Translation: Communicating God's Word to the World: Essays in Honor of Ronald F. Youngblood*, ed. Glen G. Scorgie, Mark L. Strauss, and Steven M. Voth (Grand Rapids: Zondervan, 2003), 381-392. It has been argued that the objective/subjective distinction broadly conceived was first systematized during the Enlightenment, most notably by Descartes, and that this distinction so construed has created an unwarranted disconnect between faith and reason. See Newbiggin, 29-44; James R. Peters, *The Logic of the Heart: Augustine, Pascal, and the Rationality of Faith* (Grand Rapids: Baker Academic, 2009), 16-17; Dallas Willard, *Knowing Christ Today: Why We Can Trust Spiritual Knowledge*, 1st ed. (New York: HarperOne, 2009), 23-26.

³³William J. Abraham, "Faith, Assurance, and Conviction: An Epistemological

reads: "Faith is the reality of what we hope for, the proof of what we don't see" (CEB).³⁴ "Confidence" and "assurance" emphasize the knower's internal subjective response, while "reality" and "proof" emphasize the external-mind-independent status of the knowable object. Valid arguments are given for both interpretations, so let me suggest that because of the ambiguity of the original Greek in conjunction with the constraints of English as a language, our understanding of "faith" should expand to include both meanings. Thus faith brings together both objective reality and proof with subjective confidence and assurance.

Faith is not needed for beliefs formed through perception, but only for beliefs formed from testimony. From the perspective of the novice information seeker, when there are competing accounts, she must evaluate the authority, corroboration, plausibility, and presentation of the testimony received. On the creation/evolution question, I suggest that the issue of authority takes priority, and that it is a commitment on that question that determines the subsequent outcomes in belief formation. In other words, faith is prior to knowledge; commitment precedes knowing.³⁵

Conclusion

The standards for the evaluation of information (authority, independent corroboration, plausibility and support, and presentation, as conventionally conceived in higher education), thus prove inadequate in and of themselves to aid the novice information seeker to come to a personal conclusion on the creation/evolution debate. These standards thus applied do, however, challenge a naive certainty in either account of human origins because both accounts find support among credible scientific authorities who competently present their diverse interpretations of the same verifiable data that reasonably appear to corroborate and validate the preferred account.

Commentary on Hebrews 11:1," *Ex auditu* 19 (2003): 65-75.

³⁴This translation is argued for by Robert G. Hoerber, "On the Translation of Hebrews 11:1," *Concordia Journal* 21/1 (1995): 77-79.

³⁵Polanyi argued for this priority in *Personal Knowledge: Towards a Post-Critical Philosophy*, corrected ed. (Chicago: University of Chicago Press, 1962). He further applied the principle to religious knowing in idem, "Faith and Reason," 237-247. We come to know "only by relying on our awareness of numberless particulars, most of which we could never specify in themselves" (ibid., 245). He concludes his essay by stating, "Here we have a paradigm of the Pauline scheme of faith, works and grace. The discoverer works in the belief that his labors will prepare his mind for receiving a truth from sources over which he has no control. I regard the Pauline scheme therefore as the only adequate conception of scientific discovery" (ibid., 247). Building on Polanyi's work, Newbigin expands and more explicitly applies the priority of faith in Jesus to knowledge in *Proper Confidence*.

It is also within the scope of information-literacy-based critical-thinking dispositions for the novice information seeker to observe that both sets of interpretations are arguably derived from presuppositions grounded in a diverse socially constructed worldview, and thus each claim becomes in essence a "testimony" to perceived reality as experienced by the interpreter/interpretive community rather than an objective mind-independent reality. And so it might be assumed that the equal-validity doctrine inherent in much of the humanities and social-science discussions applies here. Yet admitting this is neither intuitive nor "realistic" nor ontologically satisfying.

From these observations, it is suggested that for the novice information seeker, accepting one account over the other be appreciated as an act of faith in a given testimony. Therefore, the seeker may need to move beyond the particulars of the information, and make further interpretive choices warranted by the credibility and authority of the interpretive community in its holistic engagement with reality.

It is the experience of many that God as revealed in the Judeo/Christian Scriptures corresponds to this holistic conception of reality and has been proven to their satisfaction to be a reliable authority. In a direct challenge to contemporary scientism, the Hebrew Scriptures reflect this appreciation of authority by giving voice to the Creator God, "Where were you when I laid the earth's foundation? Tell me, if you understand." (Job 38:4). And in the Christian Scriptures the Gospel of John affirms it: "In the beginning was the Word, and the Word was with God, and the Word was God. He was with God in the beginning. Through him all things were made; without him nothing was made that has been made. In him was life, and that life was the light of all mankind." (John 1:1-4). Given this acceptance of Scriptural testimony to divine authority for human origins, the appeal for faith enunciated by the author of Hebrews coherently follows, "And without faith it is impossible to please God, because anyone who comes to him must believe that he exists and that he rewards those who earnestly seek him." (vs. 6). From this admittedly subjective stance,³⁶ it could be argued that the best evidence for human origins might be found in the realities of "life" as now experienced rather than in the data gleaned from the "past," which usually proves sketchy, incomplete, and subject to diverse interpretations.

³⁶Though, I would suggest, no more subjective than the stance underlying the standard evolutionary account.