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The Relationship Between and Among Philosophy, Epistemology, Ontology, and Axiology: A Brief Overview

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For many graduate students, the terms, “philosophy,” “epistemology,” “ontology,” and “axiology,” are enigmas; however, upon closer examination, it is easy to unravel their mystery. As one moves deeper into each of these divisions of study, one finds branches with specific meanings. It is the purpose of this paper to present the basic definitions of each term and present the relationships between and among each.

As a graduate student, one might ask, “Why should I even care to know what these terms mean?” The answer is fairly simple. The understanding of these terms is basic to building research studies and evaluating published research. It can assist students in (a) making effective decisions for their own research studies in graduate school and (b) applying evidence-based practices in their workplaces.

Defining the Terms

Philosophy. Philosophy is the combination of two Greek words, *philein sophia*, meaning lover of wisdom. It is defined in the online Merriam-Webster Dictionary (2016) as: “the study of ideas about knowledge, truth, the nature and meaning of life, etc.” (para. 1). The origin of the term is credited to Pythagoras (c 570-c 495 BC) (Teichmann & Evans, 1999).

When considering cultures, one finds philosophy among them all within the traditions, norms, and values. For example, in western philosophy, which is based on Greek philosophers, e.g., Pythagoras, Socrates, Plato, and Aristotle, from the third to sixth century BC. Though philosophy has been considered since those ancient times as an intellectual engagement, it also has included considerations in mathematics, physics, and biology. For eastern philosophy, one finds the traditions in such locations as South and East Asia, Africa, and the Middle East. One might also find an eastern philosophy in some Native American, Jewish, and Christian traditions.

Epistemology. According to the Merriam-Webster Dictionary (2016), epistemology is “the study or a theory of the nature and grounds of knowledge, especially with reference to its limits and validity) (para 1.). This term also come from the Greeks and the words, *epistémé* or knowledge and *logos* or discourse. The term was first used by James Frederick Ferrier, a Scottish philosopher, in 1854 (Ferrier, 1854), but there is some controversy over that first use. Warren (2006) however claimed that the term had been personified by King James VI of Scotland in a philosophical manner in his character, Epistemon, in his dissertation, [Daemonologie](#) in 1591. Simply put, epistemology is the study of how we come to know, what knowledge is, and how we know if someone knows the information or not. Knowledge, in general, is the cogent consideration and understanding of particular facets of truth. There are numerous components or theories related to epistemology, such as: (a) constructivism, (b) deconstructivism, (c) empiricism, (c) externalism, (d) fallibilism, (e) foundationalism, (f) historicism, (g) holism, (i) internalism, (j) instrumentalism, (k) logical positivism, (l) phenomenism, (m) positivism, (n) pragmatism, (o) rationalism, (p) representationalism, (q) scientism, (r) skepticism, and (s) verificationism.

Obtaining knowledge may be from an external or internal perspective, and those may be noted in research as etic (external) or emic (internal) perspectives. Guba and Lincoln (1994) asserted that orthodox science, with a belief in a "real" world that can be known, requires the knower to adopt a posture of objective detachment in order "to discover how things really are" (p.108). Additionally, the epistemological paradigm may take on a positivist (observable social reality that if from an etic perspective that results in generalizable findings) or post-positivist (observable social reality from an emic perspective that places importance on human interpretations) position.

Ontology. According to the Merriam-Webster Dictionary (2016), ontology is defined as "a branch of metaphysics concerned with the nature and relations of being" (para. 1). Guba and Lincoln (1994) referred to ontology as the form and nature of reality and what can be known about it. It too is derived from Greek—onto meaning being and logia meaning written or spoken word. The relationship to metaphysics is that metaphysics is the study of the essence of things. Based on Greek philosopher, Aristotle's categories of how an individual may be addressed simply as a being are: (a) what it is, (b) how it is, (c) how much it is, and (d) where it is, its relatedness to other beings (Cooke, 1983).

Axiology. Axiology is defined by the Merriam-Webster Dictionary (2016) as the study of the nature, types, and criteria of values and of value judgments especially in ethics (para. 1). This term has its origins in the Greek with axiā meaning value or worth and logos meaning discourse; thus, it is the philosophical study and discussion of values. Typically, one would find axiology at the study of ethics or aesthetics. Heron and Reason (1997) suggested that axiology is a participatory research paradigm that "values of being, about what human states are to be valued simply because of what they are" (p. 287).

The Relationship of Philosophy, Epistemology, Ontology, and Axiology

When graduate students begin their research journey, they begin from their own worldview, or from a philosophical position—a view of knowledge, truth, the nature and meaning of life. Then they will typically determine how they can come "to know" something about the topic they wish to study—that is—they will develop a study from an epistemological stance, specifically from a positivist or post-positivist position. In considering ontology in the research, graduate students will position their epistemological paradigm deeper as ontological objectivism or the positioning their subjects/participants in an external reality of existence. Students may position their research as ontological subjectivism, which centers their subjects/participants within their own reality of existence and from which the subjects/participants create their own perceptions from their vantage personal points. In terms of axiology, Brown and Irby (2000) noted that humans act based on their own values and beliefs. Therefore, related to axiology, graduate students, as they begin their research, should know their own values and be able to share their researcher perspective—where they stand. This is not only appropriate at the beginning of the research, but also at the end of it. The students' value perspective may influence the interpretation of the data, whether it is quantitative or qualitative. So, in summary, first there is philosophy—then epistemology—then ontology—then axiology that make graduate students think about their own research actions and designs.

References

- Cooke, H.P. (1983). Aristotle. *Categories*, Vol. 1. Cambridge, MA: Harvard University Press.
- Brown, R. F. (2000). George Wilhelm Freidrich Hegel. *Lectures on the history of philosophy: Greek philosophy*. Clarendon Press.
- Ferrier, J. F. (1954). *Institutes of metaphysics: The theory of knowing and being*. Edinburgh, Scotland: W Blackwood.
- Guba E., & Lincoln, Y., (1994). Competing paradigms in qualitative research. In Denzin, N. & Lincoln, Y (Eds.) *Handbook on qualitative research*. Thousand Oaks, CA: Sage. 105-118.
- Heron, J., & Reason, P. (1997). A participatory inquiry paradigm. *Qualitative Inquiry*. 3(3) 274-294.
- Merriam-Webster Dictionary. (2016). Definitions. Retrieved from <http://www.merriam-webster.com/dictionary/epistemology>.
- Teichmann, J., & Evans, K. C. (1999). *Philosophy: A beginner's guide*. London, England: Blackwell Publishing.
- Warren, B. (2016). The annotated desmonologie. A critical edition. In *Modern English*.