Shelby D. Hunt Contribution to Management

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I first became aware of Shelby1 when I was a doctoral student in management at the university of Wisconsin. My friend Tony Pecotich, a doctoral student in Marketing, would talk about Shelby’s class in the Philosophy of Science. Because I was in Management, and not required to, Shelby was able to reach one of my fellow doctoral students in management, Ron Gribbins. Together, (Gribbins & Hunt, 1978) they extended Shelby’s ideas (Hunt, 1976), to management. However, it was not until many years later when we were both teaching at Texas Tech University, that I fell under Shelby’s influence by reading some of his classic articles on the philosophy of science (Hunt, 1983; Hunt, 1990). It was ten more years, when I, as Co-Editor-Chief of the Journal of Management Inquiry (Sage, Publications), first ask Shelby to review a manuscript for me, and then latter write some articles for me (Hunt, 1995; Hunt and Morgan, 1995; Hunt, 2005). I had written one article on the philosophy of science (Boal & Willis, 1983), but it was not until I co-authored a book chapter, (Boal, Hunt, & Jaros, 2003) did I realize how much I had been influenced by Shelby’s ideas. Now, I had known that Shelby and I worked in parallel universes. For example, Newman Perry and I (Boal & Peery, 1985) had written on corporate social responsibility; Gary Blau and I had written on organization commitment and job involvement (Blau & Boal, 1987; 1989); and Janice Black and I had written on the resource based view of the firm (1994), though none of them had the impact of Hunt and Vitell’s (2006) work on marketing ethics, or Morgan and Hunt’s (1994) commitment-trust theory or, finally, Hunt and Morgan’s (1995) work on comparative advantage. One might say, I am a poor cousin to Shelby Hunt. But, it was not until the Boal, et al. chapter that I came to specifically cite and rely on Shelby’s work. It is with respect to that chapter and the articles Shelby wrote for the Journal of Management Inquiry, specifically the 1994 and 2005 articles that I now turn to assess his impact on management and my thinking. It is right to do so, for while Shelby may have won the philosophy of science wars in marketing, management has proved to be a stubborn discipline with many still attacking a scientific realist perspective in management by mischaracterizing management as based upon the discredited philosophy of positivism, or defending relativist and subjectivist approaches such as narratives, post modern or post structuralist approaches (Hatch, 1996; Giogia, 2003; Lounsbury, 2003).

Management had been inflicted by all sorts of “isms:” Subjectivism (e.g., Kuhn, 1962, 1970; Lincoln and Guba, 1985), symbolic or interpretive interactionism, (e.g., Blumer, 1962), social constructionism, (e.g., Berger and Luckman, 1966) and especially what others label “post modernist” or “post positivistism” perspective (e.g., Alvesson and Deetz, 1996; Burrell, 1997; Clegg, 1990; Deetz, 2000). All of these “isms” have used positivism as the whipping boy, and equate positivism with contemporary social science as is practiced. In fact, several management scholars have commented on the fact that management has an antiquated view of the philosophy of science (McKelvey, 1997; Baum and Dobbin, 2000). But, it is left to Shelby to set the record straight about what positivism was and was not, and how it differs from modern scientific realism. Here I turn to the primarily to the article in the Journal of Management Inquiry (Hunt, 1994b) to lay out Shelby’s position, though I also draw on his book and the many articles he has written for marketing. To begin with, Shelby asserts a realist ontology. All forms of realism hold that the world exists independently from the observer. There really is something out there (Moore, 1903; Russell, 1929). This reality can be inferred by its consequences, much in the same way a physicist infers the existence of a black hole by the effect it has on surrounding gas clouds, stars, and so forth.

While most subjectivists are to some degree realists because they seek to transcend “mere” opinion and ultimately reveal some deeper social reality assumed to represent the “truth” or “truths” (Jacobson and Jacques, 1997), at the extreme, postmodernists/poststructuralists hold that attempts to discover the genuine order of things are naïve and mistaken and that the language produced by the empirical process does not equate with an increasingly accurate correspondence with reality (Hassard, 1993). Rather, collections of interrelated discourses and the associated practices of textual production make the world meaningful. That is, discourses, rather than revealing some pre-constituted reality, create the world (Lawrence and Phillips, 1998). Such perspectives reject the notion that searches for true theories by objective methods can exist. Objectivity is impossible (Mick, 1986) because observations are theory-laden (Kuhn, 1962).

As Shelby has noted, the positivist and logical positivist tradition that began in 1907 at the University of Vienna (often referred to as the Vienna circle) in an attempt to deal with quantum mechanic’s challenge to Newtonian physics, as well as logical empiricism that followed (e.g., Carnap, 1950; Hempel, 1965), is not the “received” wisdom of today’s contemporary social science (Hunt, 1990, 1993, 1994b). Indeed, Popper’s (1968) falsificationist philosophy; and the burgeoning literature in postmodernist and postmodernist-inflected feminist and “critical” organization studies belies the claims of positive /realist hegemony (Hunt, 1994b). (For example, see a special issue of the *Academy of Management Review* in 1992.) If anything, realistic perspectives are derided today as “received ignorance,” not received wisdom, within the field of organization studies. This received ignorance is perpetuated because positivism and contemporary social science are often (mis)characterized. In his 1994b article, Shelby sought to set the record straight. Below are some of his observations from that article and other articles he has written, coupled together with my understanding of those points.

# Tenets of Scientific Realism

Quantum mechanics destroyed the deterministic certainty of Newtonian physics. Logical positivists embraced “instrumentalism.” For positivists, the purpose of theory was to predict, not explain (Bynum, Browne and Porter, 1985). Furthermore, in keeping with quantum mechanics, the best that could be accomplished was “probabilistic” prediction. As Einstein (1923) said, “As far as the laws of mathematics refer to reality, they are not certain; and as far as they are certain, they do not refer to reality” (28). Hunt (1994b: 227) concludes, “to be positivist is not to be determinist.”

Do realist seek causal explanations? Contrary to positivism, which has its roots in Humean skepticism that rejects many forms of causality as an unobservable metaphysical concept, the answer is yes. However, scientific realism recognizes that most organizational phenomena are complex, in the sense of having multiple, interacting causes and that sometimes causation is difficult to determine. Here, the crucial distinction between realists and positivists lies in ontology--the researcher’s belief about whether anything exists other than directly observable entities (e.g., trees, rocks).

According to Manicas (1987), positivists adopted a minimal realism (i.e., tangible objects like trees and rocks exist independently of our perception and labeling). But drawing on Hume, positivists insist that theories contain only observables. In contrast, realism holds that unobservables (e.g., motivation, job attitudes, culture, cognitions- phenomena not directly apprehendable by human senses) can exist and are appropriate for theory construction. Thus, Shelby notes, unlike positivists, realists can fall victim to reification – the error of wrongly treating unobservables as if they are observables.

Were positivists “functionalists”? Functionalism (e.g., Parsons, 1937; Radcliffe-Brown, 1952) generally seeks to understand a behavior pattern or a sociocultural institution by determining the role it plays in keeping a given system in proper working order or maintaining it as a going concern. Burrel and Morgan (1979) argue that functionalism is characterized by a concern for providing explanations of the status quo, social order, consensus, social integration, and solidarity.

However, positivists were strongly critical of drawing parallels between biological and social systems, and of functionalism and functional explanations. Hempel (1959: 297) claimed that functional explanations are mere “covert tautologies,” and “devoid of objective empirical content” (330). Functionalism is not positivistic. Therefore, according to Shelby, if contemporary science or management theory is functionalist, it is not positivist.

Does positivism predispose the use of quantitative methods? Shelby points out that many of the members of the Vienna Circle were physicists and mathematicians (e.g., Phillipp Frank, Moritz Schlick, Herbert Feigl, and Hans Han, Fredrich Waismann, Karl Menger, Kurt Odel and Rudolph Carnap, respectively). Thus, they were sympathetic to quantification in science. However, as Shelby (Hunt, 1994b) notes, “equating positivism with quantitative methods is ahistorical”(226). According to Phillips, (1987), “There is nothing in the doctrine of positivism that necessitates a love of statistics or a distaste for case studies” (96). Likewise, Broadbeck (1968) states, “…quantification…is neither necessary nor a sufficient condition for science” (574). Shelby (Hunt, 1994b) calls for a rhetorical cease-fire on the qualitative-quantitative wars. As he notes, “most qualitative research is neither distinctively nonpositivist nor positivist. And much quantitative research is realist and not positivist” (227).

According to Suppe (1977: 649), “…it is a central aim of science to come to knowledge of how the world really is….” Thus for the scientific realist, the products of science are theories that seek to explain and predict. The arbiter of the adequateness of our explanations and predictions is truth (“genuine knowledge”), or “truthlikeness” (Popper’s, 1972, verisimilitude), and the degrees or probabilities of truthlikeness (De Regt, 1994). Any empirical test involves two high level theories: an *interpretive* theory to provide the facts and an *explanatory* theory to explain them (Boal and Willis, 1983; Lakatos, 1968). Inconsistencies between these two theories constitute the problem-fever of science.

Growth in science occurs in our attempts to repair these inconsistencies, first by replacing one theory, then the other, and then possibly both and opting for a new set-up, which represents the most progressive problem-shift, with the biggest increase in, corroborated content. Growth in science can occur without refutations, and need not be either evolutionary or linear. What is required, is that sufficiently many and sufficiently different theories are offered. According to McMullin (1984), scientific realism claims, “the long run success of a scientific theory gives reason to believe that something like the entities postulated by the theory actually exist” (26).

Are realists objectivists? Yes, according to Shelby. Realism holds that science should pursue objectivity in that its statements should be capable of public tests with results that do not vary essentially with the tester (Hempel, 1970). However, as Shelby (Hunt, 1994b) points out, this is not to be confused with a caricature of objectivism that implies that science has access to a “god’s-eye view” or a “unique privileged position” to reach an absolute truth. Realists recognize that any observations we make, and any evidence we claim to accumulate are inevitably filtered through and limited by the characteristics of our senses, our methods of measurement, and the social-cultural context in which our research is conducted. The purpose of the scientific method is to attempt to enable us to arrive at a defensible knowledge claim. However, these claims are based on the recognition that they are contingent--subject to future refutation or revision.

Scientific realism strives for objectivity. As Shelby (Hunt, 1976) states, “Scientific knowledge, in which theories, laws, and explanations are primal, must be objective in the sense that its truth content must be inter-subjectively certifiable.” This notion of objectivity is not to be confused with Lakoff and Johnson’s (1980) characterization of *objectivism* as the claim that there is an objectively reality, about which we can say things are objectively, absolutely, and unconditionally true and false about it.

But as Beach (1984) notes, objectivism is

the thesis that there exists a systematic method of reasoning and a coordinate set of beliefs embodying its principles….These principles may contain errors or half-truths, and yet may never attain a fixed and final form. Yet insofar as (a) their consistency is publicly verifiable, (b) their development is rational, and (c) their truth-content is demonstrably greater than that of rival contenders, they do constitute reliable criteria by which to evaluate subsidiary beliefs and hypothesis (159).

The above thesis is consistent with Popper’s (1959) notion that science is revolution in permanence. He suggested that the ontological status of a theory is better than its rival, “(a) if it has more empirical content, that is, if it forbids more ‘observable’ states of affairs, and (b) if some of this excess content is corroborated, that is, if the theory produces novel facts” (163).

**Scientific Realism Versus Its Critics**

Scientific realism acknowledges fallibilism and probabilism in its knowledge claims (Hunt, 1990, 1993). It rejects, however, arguments put forth by relativists (e.g., Fyerabend, 1975; Kuhn, 1962) that objectivity is impossible because: (a) language and culture determines reality (e.g., Sapir, 1949; Whorf, 1956); (b) paradigms that researchers hold are incommensurable (Feyerabend, 1975; Kuhn, 1962); facts undermine theories (Feyerabend, 1975; Kuhn, 1962); and (d) espistemically significant observations are theory-laden (Kuhn, 1962, 1970).

In terms of the first argument, linguistic relativism maintains that the language of culture determines reality that its members see. But as Shelby (Hunt, 1993) notes, “if the thesis of linguistic relativism were true, objective inquiry across cultures (languages) would indeed be problematic” (81). However, Steinfatt’s (1989: 63) extensive review of the literature on linguistic relativism leads him to conclude, “the differences between languages are not to be found in what *can* be said, but what it is relatively easy to *say*” (italics in original).

Postmodernists (e.g., Gergen and Whitney, 1996), argue that word meaning depends

primarily on its contextual embedding or its social use within a material context. Meanings are determined through the historical development of specific language games (Mauws and Phillips, 1995). Only through the rules and conventions established through social interaction is it possible to speak of the things that are in the world.

Postmodernists argue that since languages are representational they cannot perfectly capture the nature of that reality. However, we argue, a language’s ability to represent can itself be improved even though it may not be perfected. This is the goal of construct validity. Furthermore, it is one thing to point out that our medium(s) of communication influence our perception of reality, and another to claim (as does our counterpoint) that the “medium is the message,” implying there is little if any correspondence between language and reality.

I accept that specific letters and words used to label reality are arbitrary (e.g., that the English language uses the letters *t, r, e, e,* to identify a particular type of plant). This arbitrariness does not mean that there is not an object that exists in the world—an object with some kind of non-discursive existence—that humans understand discursively to be a “tree.” If all humans were suddenly to vanish, a “*tree*,” as we understand it by any language would cease to exist (i.e., the concept of “tree” that is a product of the imperfections of a language’s system of representation would cease to exist). However, does anyone think that “trees” as objects would cease to exist? Could squirrels no longer run up and down them?

To avoid the trap of solipsism, social constructionist would seem to argue that there is a fundamental ontological difference between physical objects, such as trees, which are “directly observable,” and what they call “social objects,” such as “organizations”, which are not. The former being real, while the latter are merely reifications created by language. But, as Shelby notes, this line of argument is incoherent because the concept of “direct observability” seems to imply that perceptions of physical objects are not filtered by language. Thus, physical objects can be perceived in an unmediated (non-discursive) way. But this view would be contrary to that held by many postmodernists (e.g., Lennon and Whitford, 1994) who argue that, “all our interactions with reality are mediated by conceptual frameworks or discourses which themselves are historically and socially situated” (4).

Thus, on what basis can a distinction be made between the effects of discourse and language on our perception of physical objects (i.e., objects with “thing like” properties) and what our counterpointers call social objects? If our perception of everything is discursively constructed, how can they even know that a tree is “thing like” and an organization is not? If language constructs the social world, it would seem to construct the physical world as well. If all reality is a “forest of signs,” how can we apprehend “thing-like” objects without the mediation of language any more than what they call “social objects”? What is the ontological basis for claiming trees are thing-like and organizations are not?

Based on the incommensurability argument, we ask, “Do Copernicus and Ptolemy see the same thing when the sun rises”? According to the view that objectivity is impossible because all knowledge claims are embedded in paradigms that are incommensurable, the answer is no! However, McKelvey (1999a) observed that if paradigms such as positivist, interpretist, and postmodernist were incommensurable, then the editors of such books as the *Handbook of Organization Studies*, (Clegg, Hardy and Nord, 1996), were put in the awkward position of editing a book, much of which they did not understand. Further, Shelby (1993) points out, the very claim that two paradigms are incommensurable must imply that one can compare them. “For incommensurability to pose a threat to objectivity, one would have to put forth a rival ‘paradigm’ that not only resulted in a conflicting conclusion, but a situation where the choice could not be made on objective evidence” (82).

In terms of the facts undermining theory contention, despite the fact that scientific realism accepts fallibilism and probabilism, critiques of objectivism continue to succumb to Humean skepticism and the “problem of induction”. According to this critique, since no conceivable number of facts conclusively proves a theory’s truth, any process that reasons to the truth of a theory is improperly inductive. Note, the claim is that only deductive, and not inductive, logic is permissible because “to know” is to know with the *certainty* of the deductive logic of mathematics.

Many (e.g., Gomez and Jones, 2000) continue to uncritically accept such a position, as did Popper (1968). Postmodernists also make this claim when they discuss the impossibility of knowing for sure whether our knowledge claims are free of cultural or linguistic or ideological bias. However, restricting “knowing” to “knowing with certainty” amounts to nothing less than nihilism. Scientific realism, in contrast, embraces fallibilism. As such, all knowledge claims are tentative, subject to revision on the basis of new evidence. The concept of “certainty” does not belong to science (Hunt, 1993).

The final, critique of the impossibility of objectivity is premised on the contention that all epistemically significant observations are theory-laden. The claim is that all observation is “interpreted” by theory, thus objectivity is impossible. However, Shalpere (1982) and Greenwood (1990) note that advocates of the theory-laden argument fail to distinguish between the two very different kinds of theories that are involved in empirical testing. On the one hand are the explanatory theories that we test empirically, and on the other hand are the interpretative theories that inform the data.

In addition, Boal and Willis (1983), note that there is an implicit “theory of testing” manifested in how we choose to analyze the data. Therefore, unquestionably, epistemically significant observations are not theory free—nor should they be. Indeed, the real question is whether they are theory neutral; that is, neutral with respect to the explanatory theory under investigation (Hunt, 1994a). What is required is that our measurement theories and our theories of testing must not presume the truth of our explanatory theory, that is, they must not beg the question.

Postmodernist critiques of realism typically juxtapose themselves against a form of “naïve realism” that assumes the ontological status of organizations as real, that posits deterministic and totalizing accounts of the causes of that reality, and that identifies such reality as some kind of essential (usually functionalist) social process. Yes, scientific realism purposes that organizations are real; but real in a fallible, probabilistic way--one that acknowledges that knowledge claims about their reality are contingent, and part of a never-ending, subject-to-revision process of discovery.

When compared to scientific realism, postmodernist claims that organizations are

“invoked texts” or “linguistic creations” fall short on the very criteria (determinism, totalization, and existentialism) that are invoked to attack such realism. Postmodernists tend to ascribe determinism to “hegemonic” social processes that inevitably result in functionalist, disciplinary organizational forms. At the same time, postmodernists tend to ascribe totalizing claims to the power of discourse and language. They also often argue that organizations are, in their essence, products of a functionalist, pro-capitalist society.

But how do the postmodern theorists escape discourse and culture to know all of this? What “god’s eye” power enables these theorists to see what the realist cannot? As Eagleton (1983) remarked, poststructualism “allows you to drive a coach and horses through everybody else’s beliefs while not saddling you with the inconvenience of having to adopt any yourself” (144). And is not the claim that organizations are not real--that they are reified artifacts of language--itself, essentially, a “truth claim”?

Crucially, whereas scientific realism argues for theory testing subject to verification that has proven fruitful in numerous areas of knowledge creation (medicine, physics, chemistry, mathematics), postmodernists have established no such standards for judging their knowledge claims other than the “trust” we have in those making them. Thus, Shelby argues that as of now, scientific realism holds the best prospects for knowledge claims and acquisition within the organization sciences which is the point Shelby started out to make.

In the 2005 article titled, “For truth and realism in management research,” Shelby again sets out to argue that realism is an appropriate philosophical foundation for management research, and that truth is a research goal and regulative ideal. Further, he argues that trust is the foundation undergirding truth and realism. To do so, he again must first dispose of false notions about what scientific realism is and is not perpetrated by not only those hostile to it (Giogia, 2003; Loundsbury, 2003), but those who seek to defend it as well (Meckler and Bailey, 2003). To do so, he provides “a ruthlessly brief overview of the historical development of scientific realism (p. 2) by taking the reader on a brief journey through scientific realism to counter what he views as a historically false view of scientific realism put forth by such as Godfrey and Hill (1995). Four theses serve as the fundamental tenets of scientific realism. They are: classical realism, fallibilistic realism, critical realism, and inductive realism.

Prior to the 19th century, science and philosophy were so closely related that scientist were referred to as natural philosophers. Hegel (1770-1883) and his idealism changed all that. As Shelby (Hunt, 2005) notes, Hegel was hostile to mathematics and unsympathetic to science. The central tenet of Hegelian idealism was that the external world does not exist unperceived. It was not until the beginning of the 20th century that arguments against idealism began to emerge through the efforts of G. E. Moore (1873-1958) and Bertrand Russell (1872-1970). Arguing from a classical or commonsense realism, they set forth three arguments. “First, idealism confuses the act of perception with the object being perceived….second, idealism uses the concept real in ways that violate principles of intelligible discourse….Third, idealism constitutes sophistry, for the behaviors of idealist are inconsistent with their stated beliefs” (p. 3).

The second crack in idealism hold appeared when the Vienna Circle sought to heal the rift between philosophy and science while at the same time provide a means for interpreting quantum mechanics. The philosophy they developed was logical positivism. Schlick’s (1932/1959) frames the idealism-realism question this way. “If the phrases ‘external world’ is taken with the signification it has in everyday life, …[then] are there in addition to memories, desirers, and ideas also starts, clouds, plants, animals, and my own body?” He concluded that logical positivism and realism are not in opposition. However, the logical positivist equated the meaningfulness of a proposition with the possibility of its verification, Thus, Schlick stated, “…the consistent empiricist does not deny the transcendent world, but shows that both its denial and affirmation are meaningless” (p. 107).

The rise of quantum mechanics gave rise to the great debate between Einstein, who argued for a realist interpretation, and Neils Bohr who argued for a positivist interpretation. Shelby notes, that since the famous EPR experiments (so named after the thought experiments of Einstein, Boris Podolsky, and Nathan Rosen), the positivist view has held sway among physicist. As Shelby notes, realism suffered a heavy blow in the quantum mechanics debate. However, since the 1960’s logical positivism began to lose ground to scientific realism. The absence of a scientific realist grand theory of science nothwithstanding, Shelby (Hunt, 1990, 2003), argued that four theses serve as the fundamental tenets of scientific realism: classical realism, fallibilitic realism, critical realism, and inductive realism. As noted above, classical realism holds that the world exists independently of its being perceived. However, scientific realism rejects direct realism which hold that knowledge about external objects can be known with certainty. Similarly, critical realism holds that science must critically evaluate and test its knowledge claims to determine their truth content. Finally, inductive realism holds that the “long-term success of a scientific theory gives reason to believe that something like the entities and structure postulated by the theory actually exist” (McMullin, 1984, p. 26).

Shelby notes (Hunt, 2005) that scientific realism, as a truth-seeking enterprise, conceptualizes truth not as an entity, but as an attribute. Therefore, truth is not an entity that researches do or can study. To treat truth as an entity is to engage in reification. The danger of treating truth, as if it referred to an observable tangible object leads us to inquire how we could recognize it with our own eyes. Shelby points out that only some version of realism can explain the actual working of science without reducing it to a charade because otherwise scientist would have to say to themselves, even though I do not believe the existence of X, I shall pretend that X exists and investigate whether or not it has a certain effect. Such as act is disingenuous at best.

Further, he goes on to explain why scientific realism is inconsistent with both logical positivism and logical empiricism because both refused to countenance the real existence of entities that were unobservable. Logical empiricist held that theoretical terms would have to be given meaning by being defined through correspondence rules with observation terms, but this posed the problem of theoretical dispensability, called the “theoretician’s dilemma” by Hempel (1965). But as Shelby points out, the theoretician’s dilemma is no dilemma at all for the scientific realist. Scientific realism acknowledges that all terms in a theory are, properly speaking, theoretical terms. As he notes, some terms may denote something more observable, more detectable, more easily measured that other terms. The key is whether the claim is legitimate. Legitimacy is based either on (a) the senses (classical realism) and/or (b) the success of a theory (inductive realism).

**For Truth and Scientific Realism**

In the final part of his paper, Shelby focuses on what I see as his major unique contribution: trust. “Trust, (for Shelby), exist when one has confidence in another’s reliability and integrity. In turn, the confidence of the trusting party in the trustworthy party’s reliability and integrity is associated with the belief that the trustworthy party has such attributes as being consistent, competent, honest, fair, helpful, and benevolent.” Trust underlies the dynamics between scientific disciples because scientific knowledge is a shared form of knowledge. All researchers who share their knowledge do so with the implicit understanding to “trust me.” Without trust, such sharing would ultimately be self defeating for whom could trust the output of such research. This is the problem Shelby’s sees in such philosophies as relativism, constructivism, and postmodernism when they deny the reality-theory connection. As Shelby states, “one consequence of the importance of trust in science concerns those whose research projects are guided by philosophies maintaining that no research touches base…with a reality external to the researcher’s own linguistically encapsulated theory, or paradigm or research tradition (p. 10).

Shelby cites Rom Harre (1986) as being on the forefront of those who advocate the importance of “moral order” in science. For Harre, scientific knowledge is “trustworthy knowledge” rather

than truth with certainty. “Scientist believe that things personally unknown to them are as another scientist says they are” (Harre, 1986, p. 12). Thus, science implies the avoidance of sophistry, deception, and fraud. For Harre, scientists are required by their peers and by the lay community to maintain this moral order is they are producing practically reliable scientific knowledge. Harre believes in what he call a referential realism. This realism holds that, “existence is prior to theory, that that while no ontologies for science could be absolute, nevertheless, ontologies (realized in referential practices) are always, at any moment, less revisable that their associated belief systems…On this view, truth and falsity migrate from the epistemology of science to the morality of its human community (Harre, 1986, p. 6). For Shelby, this means that researchers, and those that use their findings, may find comfort in scientific realism that is at a minimum not antithetical to truth and its surrogate, trustworthy knowledge, and at its maximum, may(fallibly) yield knowledge that is truly worth of other’s trust. Such has

been Shelby’s mission.

Notes

1. Through out this commentary, I refer to Professor Hunt as Shelby.

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