Empiricism

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When psychology instructors tell students that they've raised "an interesting empirical question," these instructors do not typically mean that students have engaged in an empirical *ideology*. Indeed, it is likely these instructors mean the *opposite* of engaging in an ideology; they consider empiricism a kind of scientific method for "mapping objective reality" and avoiding ideologies altogether. Often, in fact, the term "empirical" is used as a synonym for "scientific."

We describe this common student/instructor exchange in psychology, because it exemplifies a prominent misconception in the discipline—that empiricism is a kind of transparent window to the truth of the world. As we will explain, however, the philosophy or epistemology of empiricism is anything but transparent because it has its own values and assumptions. In fact, these values and assumptions could be viewed as a kind of "disguised ideology." According to Richard Bernstein, a disguised ideology occurs when "value biases have been confused with factual descriptions in explanatory social science" (Bernstein, 1976, p. 104). As we will see, empiricism has very clear "value biases" that provide a privileging of certain aspects of our experience over others, yet these values are often presented to students as the "facts" or "logic" of science.

From this perspective, an awareness of this ideology is vital to the province of a critical psychologist because empiricism is both a "dominant account of psychology" and

used in the "service of power" (Parker, 1999, p. 11). Few would question its dominance, as virtually all the prominent research methods texts evidence (Dyer, 2006; Mitchell & Jolley, 2007; Schweigert, 2006; Slife, Reber, & Faulconer, in press). But citing its power is provocative because methods are rarely viewed as having political or economic implications. Still, one only has to consider the central role of empiricism in "evidence-based practices" to realize the economic power of these therapeutic practices in insurance reimbursement. Clearly, the power implications of this disguised ideology could be mightily important to critical psychology specifically and the social sciences more generally.

History—The Conceptual Evolution of Empiricism

Perhaps the main reason for empiricism's "disguise" and dominance in psychology is historical. The term "empirical" has historically meant simply "experience-based." For example, one of the parents of psychology, William James, used the term more in this manner with his *radical empiricism* (James, 1996). James's empiricism was "radical" because it allowed a broad meaning that today's qualitative and quantitative researchers could both embrace. For example, many phenomenologists and hermeneuticists are qualitative researchers who are particularly interested in this broader understanding of empiricism, especially if empirical experience includes meanings (Packer, 2011).

Many mainstream psychologists, however, appear to use the term in a much narrower sense (Dyer, 2006; Mitchell & Jolley, 2007; Schweigert, 2006; Slife, Wiggins, & Graham, 2005), stemming primarily from some aspects of the British Empiricists, such as

John Locke and David Hume (Leahey, 2004; Rychlak, 1981; Viney & King, 2003). Here the term has come to mean that only sensory experience is eligible to become knowledge, especially scientific knowledge. This conception implies that only our senses are permitted to have knowledge, such as touching, smelling, and seeing.

Even so, much of psychology has narrowed this meaning even further by limiting knowledge to only one particular sensory experience, our sense of vision. This narrowed meaning is, of course, the vaunted notion in research methods texts that only the publicly observable, and thus publicly verifiable, is allowed as knowledge (Dyer, 2006; Mitchell & Jolley, 2007; Schweigert, 2006; Slife et al., 2005). As Schweigert (2006) put it in her research method text: "To avoid being swept away by either unfounded speculations or biased perceptions, scientists tie their beliefs to concrete, observable, physical evidence that both independent observers and skeptics can double-check" (p. 2). From this reading of empiricism, only that which "falls on our retinas" (in the sense of the retinas of our eyes) can be allowed as knowledge.

This conception of empiricism is dramatically narrower than that of many qualitative researchers in general and William James in particular, because these researchers would admit many *other* kinds of experience than merely visual or even broadly sensory experience as knowledge. Our emotional and spiritual experiences, for example, do not typically "fall on our retinas," nor are they usually touched or smelled (Slife & Melling, 2009). Yet this more inclusive sense of empiricism would allow us to have some knowledge of these experiences. James's (1982) classic book, *The Varieties*

of Religious Experience, is an example of a book that attempts to further knowledge about spiritual experiences in this more inclusive sense.

Indeed, the reading of books is an example of how meanings, such as the story line that one experiences with novels, do not fall on our retinas. Although the printed words on a page are clearly observable, and thus fall on our retinas, the relation among these printed words, which is required to understand the meaning of the story, is not strictly observable. In fact, the relations among almost any items or things, including interpersonal relations, are not strictly observable (Slife & Wiggins, 2009). They are experienced in the broad Jamesian sense of empiricism, but they are not publicly observable in the narrower sense advocated in most psychological methods texts.

Critical Debate—Operationalization in Psychological Methods

The realization that many important psychological phenomena are not strictly observable in the narrow sense—including not only emotions, spiritual experiences, relationships, and meanings, as we have just described, but also attitudes, memories, and motivations—has led historically to important method developments, perhaps most notably that of operationalization. Indeed, most psychological texts on research methods consider operationalization a *required* step in formulating studies in psychology, especially when the topic under investigation is not itself publicly observable (e.g., Dyer, 2006; Mitchell & Jolley, 2007; Schweigert, 2006). Psychological historians, such as Viney and King (2003) have credited the physicist Percy Bridgman with "set[ting] forth the principles of operationlism" (p. 302) in his classic book (1927) *The Logic of Modern Physics*. However, Bridgman was also one of the first to debate

operationalization's usefulness to psychology (Holton, 2005; Walter, 1990). We examine aspects of this debate after first describing operationism's connection to empiricism.

Operationalism's intimate relationship with the narrower sense of empiricism is probably best understood through a simple example. Although the authors of this essay can *claim* to love their partners, this love, whether an emotion or a relationship, is not strictly observable (see explanation above). This situation leads researchers who are interested in studying love to "operationalize" love in terms of observable behaviors. In an important sense, they are attempting to translate the unobservable into the observable so that the topic can be investigated empirically. Typically these researchers assume that the operationalization is a manifestation of the unobservable topic under consideration. With the example of love this translation might mean considering love to manifest hugs and/or kisses. In others words, if the present authors truly love their partners, hugs and kisses should be manifested accordingly. Indeed, an investigator could conceivably catalog all the various behavior patterns associated with love in this manner.

As logical as this method practice may seem, critics have noted several problems that directly involve the narrowed meaning of empiricism (cf. Chang, 2009). First, hugs and kisses are not necessarily connected to love. Hugs and kisses can occur without love, and love can occur without hugs and kisses. In this sense, knowledge of hugs and kisses, which could itself be valuable, should *not* be considered knowledge of love. The operationalization, for this reason, is not identical and may not be related *at all* to the

construct or topic being operationalized, even though this problem is rarely discussed in psychological research that uses operationalizations. Even biological operationalizations, such as fMRI scans of human brains, are not identical to the human brains they attempt to measure (Bub, 2000; Fenton, Meynell, & Baylis, 2009; Tovino, 2007). Like all operationalizations, these "scans" selectively attend to or emphasize some parts of the topic under investigation and ignore or deemphasize others.

Critics of the method practice of operationalization also point to a second problem: operationalization prevents us from knowing, at least in the narrow empirical sense, the relation between the unobservable topic of interest, love in this case, and the observable operationalization, hugs and kisses (cf. Slife et al., 2005). This lack of knowledge is because the relation between the two, the observable and unobservable, is not itself observable. In other words, we cannot empirically check the validity of operationalizations, such as how closely they represent or manifest the topic under investigation, because this relation is not itself knowable, at least from the narrow meaning of empiricism. The dominance of this narrow meaning, and thus the prominence of operationalization as a method practice, means that psychology could be filled with studies of operationalizations that have no necessary or knowable connections to the topics of original interest (cf., Slife & Melling, in press, 2009; Slife et al., 2005). **The Prejudices of Empiricism**

Perhaps more important, from the perspective of a critical psychologist, is the possibility of empiricism's ideological prejudices. As Gadamer has noted (e.g., 1993), all ideologies, including all the variations on empiricism, have implicit prejudices, i.e., ways

in which the ideologies reveal and conceal certain aspects of the experienced world. We mentioned at the outset the unfortunate myth in some parts of psychology that empiricism does not involve values and biases, and thus prejudices. Indeed, many empiricists would claim to strive to *eliminate* all biases, values, and prejudices. They would claim to find out about the objective world by clearing away, as much as possible, the subjectivity (and thus prejudices) of the researchers through the scientific method (e.g., control groups, experimental manipulation).

However, Gadamer (1993) and other critics of this claim view it as another manifestation of implicit prejudice, what he calls the "prejudice against prejudice" (p. 273). This is the prejudice that biases are bad, itself a type of value, i.e., the value of wanting to be value-free. These critics note that any epistemology or philosophy that guides knowledge advancement, such as empiricism, must guide that advancement by being "biased" in some sense about what matters and does not matter in science. Empirical researchers, however, rarely endorse these prejudices explicitly, nor are the prejudices always consciously held. Rather, researchers are taught these prejudices in their methods training often without the recognition that they are values or biases. What, then, are the biases of empiricism, and how might these biases affect the study of certain psychological phenomena?

Perhaps the most obvious "prejudice" in this regard is the simple empirical injunction that "only the observable can be properly known." As mentioned, this prejudice literally means that only that which comes through our eyes can be known and/or measured. This meaning is a prejudice because it is an unproven, value-laden

judgment about what has worth in science—the observable has worth. Moreover, this prejudice ignores the considerable practical evidence that humans have knowledge of many other forms, from their thoughts to their feelings to their relationships. Some empiricists might respond that these forms of knowledge are private, and thus not subject to public verification, which is surely true from an empiricist perspective. Still, this begs the question of whether there are forms of *non*observable knowledge that are publicly verifiable. As mentioned above, the meanings of a book, whether storyline or information, do not "come through the eyes," yet people can experience these meanings and come to similar conclusions about what books mean.

Our purpose in this section, however, is to point to the implications of the more popular notions of empiricism in psychology, as depicted in virtually every mainstream research text. These popular conceptions include not only the narrow brand of observable empiricism but also the notion that empirical evidence is somehow free of values and biases. The former is empiricism's most prominent "prejudice," while the latter is its "prejudice against prejudice." The latter is less about empiricism per se and more about how many psychologists *perceive* "empirical evidence" to be. We provide (below) an example of how each conception has important ideological implications for psychology.

Implications for Psychotherapy Research. If empiricism attends to only the observable, which is true even when operationalizations are used (see above), then only the observable portions of psychotherapies will be emphasized. This emphasis implies that some portions of psychotherapies will not be studied, the unobserved portions. An

example involves what some would call the "healing relationship" between the therapist and client. As important as this relationship is (Slife et al., 2005; Norcross, 2002), the "betweenness" of this relationship is not strictly observable. The therapist and client, as bodies and behaviors, clearly "fall on our retinas," but the interpersonal relationship between them does not.

This empirical situation also has important implications for what is considered "evidence-based practices" in psychology. Not only do important aspects of therapy remain unstudied, but also those therapies that emphasize observables are more *easily* studied. Behaviorism, for example, stresses observables almost exclusively. Indeed, behavioral accounts of therapy are routinely understood to have inherently empiricist theoretical foundations (Rychlak, 1981), making these therapeutic strategies more connected with and amenable to empirical scientific methods. As a result, those therapies that are more conceptually related to empiricism are those typically approved as evidence-based practices (Messer, 2001, 2004).

Existential therapy, as a counter-example, will likely never become an empirically based practice because existentialists contend that vital elements of their therapy are unobservable (Yalom, 1980). The therapist-client relationship is just one such element. If this contention is true, then existential therapy will be not only poorly investigated by empirical scientific methods but also likely omitted as an evidence-based practice. Those who advocate empirical scientific methods may contend that the observable aspects of existential therapy are the more important aspects, but this contention is the

method tail wagging the therapy dog. In other words, it is less about what existentialists consider existential therapy and more about what is in the service of the method.

If this is true, then the ideology of empiricism has rather dramatic economic implications because certain therapies, those that agree more with empiricism's prejudices, are more likely to be included on the list of evidence-based practices, regardless of investigation. Therapies that are omitted from this list might be considered not only less effective but also ineligible for reimbursement from health-care insurance companies. The point is that all these economic outcomes are driven not by the "data" of an objective world, but by the empiricist ideology.

Implications for Other Ideologies. Empiricism is also known to accompany and perhaps even complement other ideologies. Although empiricism is obviously not value- or bias-free, given our previous discussion, the widely held notion that empirical evidence is objective or relatively bias-free evidence may stem from its association with other ideologies, such as logical positivism or even liberal individualism. Liberal individualism, for example, has been defined as a relatively unimpeded pursuit of freely chosen ends in the promotion of *individual* autonomy (Fowers & Richardson; 1993; Richardson, Fowers, & Guignon; 1999; Taylor; 1985). This political ideology has been described as "fundamentally morally motivated" because it is "conceived as a means to free individuals from arbitrary authority and oppressive bonds" (Fowers & Richardson, 1993, p. 355). Arbitrary authority, in this sense, is the imposition of unjustified values or biases on an individual.

As dissimilar as empiricism and individualism may at first seem, with the former a philosophy of science and the latter a philosophy of politics, the two ideologies have a similar distrust of arbitrary values and biases. The individualist resists the imposition of arbitrary values to protect individual autonomy, and the empiricist resists the imposition of arbitrary values to protect the objectivity of knowledge. Arbitrary values are those that are merely personal or subjective, so both ideologies move generally toward a kind of objective understanding of the world.

Their relatively complementary relationship is also clarified in their shared "prejudice against prejudice." The liberal individualist seeks to prevent arbitrary forms of moral authority to protect individual rights, etc., and is thus prejudiced against arbitrary forms of moral prejudice. Similarly, the empiricist, seeks to prevent biases and subjectivities to protect more valid forms of evidence, such as sensory experiences, and is thus prejudiced against non-empirical forms of prejudice. Although the two ideologies do not logically necessitate one another, their seeming complementarity can lead them to be confounded in certain political or scientific arenas, such as the ethics of science (Abou, 1995; Haan, 1982).

Conclusion

The general point here is that empiricism is not a conception or method for mapping an objective reality; it is an ideology for illuminating various aspects of an *interpreted* reality. That this reality is interpreted is not necessarily negative. It is only negative if one accepts the prejudice against prejudice and then overlooks that this acceptance is itself a prejudice. All methods, in this sense, are interpretations of reality.

What is pivotal from this perspective is not only being aware of this interpretation but also taking it into account when considering method outcomes, especially power and economic relations.

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Online Resources

Stanford Encyclopedia of Philosophy – Operationalism

http://plato.stanford.edu/entries/operationalism/

Stanford Encyclopedia of Philosophy – Rationalism verses Empiricism

http://plato.stanford.edu/entries/rationalism-empiricism/

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