

## UNCOVERING “CULTURAL MEANING”: PROBLEMS AND SOLUTIONS

Todd Jones  
*University of Nevada, Las Vegas*

**ABSTRACT:** In his highly influential *The Interpretation of Cultures*, anthropologist Clifford Geertz argues that the study of culture ought to be “not an experimental science in search of law but an interpretive one in search of meaning.” I argue that the two need not be opposed. The best way of making sense of the social scientific practice of looking at meaning is to see interpretivists as looking at typical mental reactions that people in a given culture have to certain acts and artifacts. I argue that scientific theories of the mental—rather than minimalist—theories are needed for this practice to be successful.

*Key words:* culture, interpretation, meaning, cognition, science

From the earliest days of the social sciences, scholars have fought fierce battles about whether their endeavors should be thought of as being like those of natural scientists or more like those of literary critics. These skirmishes have become very intense over the last three decades, especially in disciplines such as anthropology, sociology, political science, and history, in which members of both camps exist in large numbers.<sup>1</sup> The two sides have used various terms and descriptions to characterize their respective views: scientific vs. humanistic, positivistic vs. hermeneutic, quantitative vs. qualitative, and *Naturwissenschaften* vs. *Geisteswissenschaften*. One very influential way of characterizing these differing views was put forth in anthropologist Clifford Geertz’s *The Interpretation of Cultures*. In this work Geertz argued that the study of culture ought to be “not an experimental science in search of law but an interpretive one in search of meaning” (1973, p. 5).<sup>2</sup> *The Interpretation of Cultures* helped fuel an upsurge of non-

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<sup>1</sup> The long-running battle between “positivists” and “humanists” in the social sciences also became, in the eighties and nineties, one battle front within a series of larger “science wars” that became especially intense in those decades. Throughout these decades, scholars in various disciplines argued vehemently about whether science should be thought of as an enterprise aimed at uncovering the objective truth about the world or as a project of pressuring people to accept a biased, authoritarian, and often oppressive world picture (see Segerstråle, 2000).

<sup>2</sup> Interpretivists often describe their approach as contrasting to that of the natural sciences (and “scientific” social sciences), where the focus is on looking for laws. It is true that natural scientists often look for laws, but it is important to be clear that they do much else

naturalistic science “humanistic” movements in numerous social sciences (see Walters, 1980). With Geertz, “interpretivists” in the social sciences held that the central quest of researchers in the social sciences should be uncovering the “meaning” of a society’s symbolic actions and artifacts.

The idea that “meaning” should be the central focus of the social sciences continues to have many influential adherents to this day. A central problem with this approach, however, is that the term “meaning” is vague and multifaceted. It is not completely clear what meaning amounts to even when we are talking about verbal utterances—the realm in which it seems least problematic. What, then, are Geertz and those like him looking for in seeking to uncover the meaning of a cockfight, a sheep theft, or an anti-colonial movement? In a number of places I have argued that the interpretivist movement has been beset by conceptual problems (Jones, 1997, 1998, 1999, 2000a, 2000b). In this paper, however, I will assume that the term “meaning” does capture one of the main realms we want to investigate in the social sciences. But what, precisely, are we looking for when we focus on uncovering “the meaning” of an artifact or an event? I will argue that the best conceptualization of the kind of meaning that interpretivists are interested in is not the sort of thing to be found by emulating literary critics, but something better uncovered by familiarizing oneself with findings from psychology. However interpretive social scientists themselves try to explicate the term “meaning,” I believe that the best way of making sense of their practice is to see them as looking for the *typical mental reactions* that people in a given culture have to certain acts and artifacts. Meaning-seeking interpretivists tend to see themselves as eschewing science in general and psychology in particular. I will argue, by contrast, that people interested in meaning should look to psychology for help in their endeavors. Indeed, it is precisely by eschewing psychological theories that people interested in uncovering meaning get into the most trouble. I claim that interpretivists and psychology-oriented social scientists can be allies in looking at meaning to understand culture.

### **What Are Interpretivists Looking For In Seeking Meaning?**

The term “meaning” has quite a variety of uses. We say, for example, “he meant to change that light bulb,” “that cloudy sky means rain tomorrow,” “‘histrionic’ means outgoing,” and “the meaning of life is serving the Lord.” What does “meaning” mean in the context of understanding cultural actions or artifacts? Interpretive social scientists themselves are of remarkably little help in making clear what sense of the term they have in mind. In *The Interpretation of Cultures* alone Geertz seems to endorse a view of meaning that encourages us to focus *externally* on both small scale-behaviors (e.g., those emphasized by psychologists like E. Galanter) and on giant macro-structural entities (e.g., those discussed by

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as well. For one, natural scientists do a lot of collecting of data about what is there and how it is distributed in space and time. Natural scientists are also interested in constructing explanatory narratives.

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sociologist Talcott Parsons). At the same time, his “interpretations” are full of the same familiar *internal* mentalistic terminology we usually take as describing internal mental states. If interpretivists are not very clear about what they mean by meaning, however, there are some things they clearly are not looking for. They are not looking for ultimate purpose as in “the meaning of life” or “the meaning of friendship.” They are not looking at Gricean “natural meaning” as in “smoke means fire” or “red spots mean the measles.” What they do seem to be continually talking about are native hopes and fears. They often talk about what kinds of images and stories native children grow up hearing. They often describe what items are associated with what other items via resemblance. Interpretivists maintain they are interested in understanding “the native’s point of view.” In the end, the only way that I can see the phrase “interpreting meaning” as describing what interpretivists do is to view them as trying to uncover the *beliefs and other mental states* typically engendered in individual natives by certain actions and artifacts.<sup>3</sup>

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<sup>3</sup> The mental reactions that people have to seeing certain actions or artifacts can certainly vary greatly from individual to individual, even within a culture. How, then, can I claim that interpretivists are looking for *typical* mental reactions? To begin with, I am making a claim about what interpretivists *are* doing, not what they should be doing or what they are justified in doing. Interpretivists generally *ignore* what some social scientists call “the subject variability problem.” When interpretivist social scientists like Geertz write that the Balinese see the fighting cock as a symbol of Balinese national pride, they generally say nothing whatsoever about which Balinese people see it this way and which don’t. They seldom talk about the fact that some Balinese likely see cocks radically differently, and some might never think about them at all. Indeed, in anthropology in general it has long been a common practice to make statements like “People in the Trobriand islands believe that sex has nothing to do with reproduction.” Such statements completely ignore the variability of beliefs Trobrianders likely have on this subject.

To be charitable to interpretivists, there may well be a lot of interesting things to be said about people’s beliefs without discussing subject variability. Linguists, for example, often speak about the meaning of a word in a certain language, while ignoring the fact that the word probably has a slightly different meaning in the idiolect of each speaker. Perhaps the “meaning” of artifacts and actions that are viewed as symbols in a culture is as robust as the meaning of words, with individual variation being unimportant for most purposes. In sociology and psychology, as well, scholars often discuss dispositions to act in a certain way “other things being equal” without paying much attention to individual differences. In these disciplines, however, scholars usually acknowledge variation somewhat by being careful to talk about “central tendencies” and distributions of actions that tend to cluster around these central tendencies in statistically predictable ways. Perhaps interpretivists could improve the accuracy of their claims by likewise talking about mental reactions probabilistically.

The fact that interpretivists generally ignore variability is somewhat paradoxical. Since they are seldom trying to make statements about groups as large as “human beings” or “Americans,” and since much of their methodology revolves around making large numbers of observations of small groups of people, interpretivists (unlike other social scientists) probably have the wherewithal to make more fine-grained claims about variability. If they wished, interpretivists could use put their usually intensive observations

Claiming that interpretivists who say they are interested in meaning are ultimately interested in uncovering mental states helps to clarify what it is that interpretivists are doing, but it raises questions of its own: What is meant by a *mental* state? This question can be divided into several sub-questions. One concerns which features are considered to be prototypical features of mental states in our *ordinary language* usage of mental terms. Another concerns what *particular* implicit or explicit theories of mental states interpretivists use in going about their work. Another concerns which philosophical or psychological theories of the mental are ultimately correct. All of these questions will be touched upon in this essay,<sup>4</sup> but we should start by saying something about the general features of the

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to use. They could look at differences in environmental exposure and behavior among different subgroups within a culture, or even among different individuals, to make inferences about different mental reactions. Actual interpretivists tend to pay too little attention to variability within a culture, but nothing precludes the interpretivist *approach* from making fine-grained studies of why typical individuals, different subgroups, or even very atypical individuals tend to view world as they do.

<sup>4</sup> For the record, my own view concerning what beliefs and desires really consist of goes something like this: Organisms develop specific goals in the course of evolution or learning when, through trial and error, they acquire sets of inner mechanisms that give them robust disposition to produce a similar range of end states (“a goal”) in a variety of environments. We colloquially refer to organisms’ goals as their “desires.” We talk about the “representations” organisms have when we want to give *further* information about the more *fine-grained* subgoals a creature has developed by becoming “tuned” to certain environments in a way that enables it to succeed in its goals and subgoals. Over time, then, along with developing goals, creatures come to have fine-grained internal dispositions that guide them through particular worlds in order to get their goals. There are various ways we could describe these dispositions. The most elaborate description would be to actually name the sets of physical mechanisms. We could, for example, describe the entire physiological process that enables, say, a fish to detect, track, and ingest its prey. A very minimalistic way of describing these conditionals, on the other hand, is to simply refer to them as those mechanisms disposed to achieve certain end states. Giving a minimalistic description saves us time, of course, but it gives us little information about the exact ways in which the organism will be interacting with the world or calculating how it will interact. The middle way is to give people a fair amount of information about the internal mechanisms indirectly *by describing the sort of world* with which the creatures are set up to make appropriate interactions. We call being set up to interact effectively with that kind of world “having a representation” of that world. When a thirsty creature has mechanisms that enable it to push a rock, gauge how far it has moved, dig under it, stick its tongue there, and move its throat muscles in a certain way, we describe this by saying that the creature believes or has the representation “water is under the rock.” We colloquially refer to such representations as “beliefs” (see Jones, 2001). I argue in the text that to give a good account of the beliefs, desires, or other mental states people have we need to utilize fairly substantive theories concerning how our mental states interface with the external world. Looking at an organism’s record of environmental exposure and at the behavior an organism produces gives us some evidence about the type of inner beliefs and desires an organism has, but only if one already assumes certain ideas about how an environment

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states we talk about as being “mental” in our ordinary language usage. A mental state, whatever else it is, is a state internal to the brain or mind of an organism. Mental states are typically thought to come to represent states in the external world, during and after the organism’s sensory apparatus interacts with features of the external environment. Mental states are also thought to help cause behavior when a mind sends signals to the motor system and causes certain movements to be initiated. Given that mental states are thought to interact with the world in these ways (on almost any view of the mental), scholars interested in attributing mental states to people usually take a history of exposure to certain environmental features as evidence that people have certain beliefs about those features. Scholars interested in attributing mental states also typically look at sets of behavior as evidence telling them something about the internal states that cause this behavior. Just how behavioral and environmental evidence can enable people to uncover mental states is something will be discussed in the next section.

There are numerous different terms that different theories use for the internal mental states that respond to the world and cause the production of certain movements. Such terms include “representations,” “points of view,” “assumptions,” “structures,” “information,” “affordances,” “goals,” “drives,” “dispositions,” “wants,” and “needs.” The generic terms most often used in ordinary language for such internal states are “belief” and “desire.” For our purposes it is sufficient to discuss interpretivists’ attributions of mental states to people by speaking of the beliefs and desires that interpretivists view people as having. In viewing the “meaning” that interpretivists are interested in as consisting in the beliefs typically engendered in individual natives in certain situations, I see them as focused on a type of meaning similar to the sort that psychologist Charles Osgood was interested in his monumental 1957 work.<sup>5</sup>

But there is a twist to the types of beliefs on which interpretivists seem to focus. The mental states that interpretive social scientists seem to have the most interest in are “hidden” ones—ones with a family resemblance to the states Freud sought to uncover (hence the title *The Interpretation of Cultures*). Perhaps this is why they are so fond of the term “meaning.” One of the times we are most inclined to use terms like “meaning” in ordinary language is when we can’t readily see a person’s underlying motivation for an action—“what did he mean by giving me a kiss on the cheek?”—or when we are unclear about what thoughts or associations someone has—“what does Christmas mean to you?” Thus, interpretive anthropologist Ohnuki-Tierney (1984) engages in the project of trying to get us to

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affects a mental state and how an inner mental state affect behavior. As I argue in the text, the best ideas regarding these relationships come from current experimental psychology.

<sup>5</sup> From their Durkheimian, anti-individualist rhetoric one might suppose that interpretivists were interested in uncovering some sort of *collective* group beliefs, but no interpretivist social scientist that I am aware of has ever made it remotely clear how this is a coherent metaphysical possibility. My own view is that collectivist group beliefs are actually a coherent possibility, but only for “goal-seeking” groups like Exxon, the PLO, or the U. K. Parliament, not “aggregate” groups often studied by interpretivists like “the Balinese” or “Japanese monkey performance audiences” (see Jones, 1999, 2001).

see the meaning of a Japanese monkey performance by showing us how, when the performances end, the audience “realizes that it was they who were the untamed nature to be culturalized by the monkey” (p. 304). Similarly, Feldman (1994) seeks to explicate the Rodney King police brutality case by showing us how, for Sergeant Stacey Koon,

The successful confinement of King—the symmetry of a body lying at attention with the face in the dirt—and the acquisition of linguistic reciprocity marked the neutering of the animalized body and its internalization of the will of the state. A “gorilla in the mist,” a black “bear” that was insistent on rising on its haunches was turned by violence into a speaking subject. (p. 410)

In what follows, I’ll assume that uncovering hidden mental states is the project that interpretive social scientists are really involved in. Let me describe the central difficulties of such projects.

### **Methods of Interpreting**

Informally, the beliefs, desires, and other mental states we can categorize as hidden states are those that tend *not* to be ascribable using whatever methods we typically use to ascribe everyday beliefs. Most of us endowed with functioning perceptual equipment and a basic knowledge of our cultural practices could easily infer that during the beating, Stacey Koon believed Rodney King was trying to get to his feet. But it is clear we have to make a special effort to learn that King was seen by Koon as a gorilla/bear that needed to be neutered and made to speak. What methods do interpretivists use to uncover these sorts of hidden beliefs?

Interpretivists themselves tend to be very unclear about how they know they’ve really located the hidden beliefs of an agent. Geertz himself once wrote, “You either grasp an interpretation or you do not, see the point of it or you do not, accept it or you do not” (1973, p. 16). Despite this (rather appalling) arrogance, I contend that there actually are systematic methods interpretivists tend to use. Unless interpretivists are just *divining* or *inventing* belief ascriptions, they must be ascribing beliefs based on some sort of *evidence* that those mental states are there. Since one can’t observe mental states directly, one has to rely on indirect evidence. Given the types of things that mental states are thought to be, there are two main types of indirect evidence people could use as their starting point for uncovering the existence of hidden mental states. One can start with the idea that certain mental states are *caused* to be there by exposure to certain features of the external environment. Trying to figure out what mental states are there by focusing on features of the environment that likely produce certain mental states can be termed the *environmental* strategy. One could also go in the other direction and reason that certain internal mental states tend to *cause* certain behaviors. When those resulting behaviors are observed, that’s taken to be good evidence that those purported mental states are, in fact, there. This method can be called the *behavioral* strategy. Whether or not they explicitly discuss it, the general environmental and behavioral strategies are likely to be the starting points for all interpretive hermeneutic

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methods aimed at uncovering meaning, for there aren't many other places scholars interested in looking at hidden mental structures *could* start.

However, environmental and behavioral evidence alone can't take one very far. As a point of logic, gathering behavioral or environmental *data* alone cannot enable one to infer a causing or resulting mental state without some kind of psychological *theory*. Before any observation of an environmental feature can count as evidence for the presence of a certain mental state, one has to have a theory about how certain types of mental states are caused by environmental exposure. Before any observation of behavior can count as evidence for the presence of a certain mental state, one has to have a theory about how certain kinds of mental states cause certain types of behavior. Freud, for example, once claimed that his patient's reciting a line from a poem mentioning flowing water counted as evidence that the patient was unconsciously worried about his lover's missed menstruation (Grunbaum, 1984). That piece of observable behavior could only be connected to an unconscious worry by relying on a massive amount of theory specifying just how that sort of external state was connected to that sort of internal state. To connect them, Freud had to have theories about internal mechanisms of concept association, theories about mechanisms of repression, and theories about mechanisms of sublimation. The abstract logic of the situation is that if we want to infer the presence of any unseen cause, C, from an observation, O, we have to also have a theory specifying the laws or processes by which O-effects are the result of C-causes. Similarly, if we want to infer the presence of an unseen effect, E, from some observed O suspected of causing it, we need to have a theory specifying the laws or processes by which E-effects are caused by O-causes. We use theories and models in this manner so routinely that we often *don't notice* that they are there. Still, it's only the combination of the observable evidence and some theory of the nature of the unobservable entities, and how they connect to the observable, that allows us to make these sorts of inferences.

All interpretive methods, then, must use some type of psychological theory to ascribe mental states to the people they study. Interpreters must combine the behavioral and environmental strategies of gathering *observable evidence* with some kinds of *theories* about how the external states observed cause and are caused by certain external states. They must do this if they want to use that observable evidence to infer that certain mental states are present. So which psychological theories do interpretivists tend to use in ascribing hidden mental states to people? Different interpretivists, of course, tend to use different theories. The theorist of the mental most commonly utilized by interpretivists is, of course, Freud himself. From time to time, however, numerous other thinkers in the psychoanalytic tradition (e.g., Jung, Erikson, Bettelheim, and Lacan) have been leaned on to provide the supplemental psychological theories necessary for enabling behavioral or environmental evidence to lead one to infer the presence of this or that hidden mental state. In the 1960s and 1970s, a major rival to psychoanalytic theories developed in the structuralist theories of Claude Levi-Strauss. These psychological theories would then be combined with basic evidence-gathering strategies to produce a hidden belief ascription.

Interpretivists would use the environmental strategy by seeing what environments their subjects were exposed to and ascribing to their subjects only those mental states that were consistent with this history of exposure. They would utilize the behavioral strategy to posit certain mental structures that were consistent with a large range of observed behavior. They would further narrow down their posits by making sure the ascribed mental structures were also consistent with their favored psychological theories concerning which mental structures tended to be present in which situations. Those with a psychoanalytic orientation would posit that various things were viewed as sexual stand-ins. Structuralists thought people were labeling things in the world as being instances of nature-type things that were opposing culture-type things. A “good interpretation” was one that was consistent with the favored psychological theory and a wide range of environmental and behavioral observations.

By the 1980s and 1990s, however, popular postmodern and deconstructionist literary criticism had made many scholars skeptical of “totalizing narratives” of any kind. All scientific theories, including psychological theories, came to be viewed with increasing suspicion by postmodernists. Scientific theories that made claims about what was true came to be seen as being an impediment to understanding things from multiple perspectives. As a result, in the 1980s and 1990s one found fewer and fewer interpretive social scientists making explicit reference to *any* kind of psychological theory. It got to the point that in the 1990s Brad Shore was able to write of his participation in a cognitive science conference:

My assignment at the conference was to try to characterize the implicit theory of mind that anthropologists employed in their cultural analyses. In such heady company, it soon became clear to me that most of our work in symbolic anthropology proceeded innocent of any well-formed theory of mind whatsoever. (1996, p. vii)

I’ve argued, however, that without *some* type of theory of mental processing, observing behaviors and environments can tell you *nothing whatsoever* about inner mental structures. This means that when interpretivists draw conclusions about what kinds of beliefs are present, they *must be* using some or other theory of how the mental works, whether or not they are aware of *which* ones they are using.<sup>6</sup>

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<sup>6</sup> An exception to the rule that one needs some sort of theory to understand what others are thinking is the possibility of uncovering others’ thoughts by doing some kind of *simulation*. One proposal found in the belief ascription literature is that simulation is our primary way of attributing beliefs. Ascribing beliefs in this way requires very little prior *knowledge* about how people’s minds work or about the various primary and surrounding beliefs and desires they hold. All one has to do to see what another believes is to physically put oneself in his or her position—or imagine oneself in the other’s position—then check to see what beliefs and desires pop into one’s own mind. If others’ minds indeed work like ours do and the simulation is a realistic one, this provides a pretty good indication that these thoughts are what appear in their minds in such situations (see Goldman, 1993; Gordon, 1986). However, the view that we use simulation rather than theory to ascribe thoughts to other people is highly contested by many theorists (see Stich & Nichols, 1997). Even if it is



Since interpretivists have continued to churn out ascriptions of mental states to people, I contend that they have been operating using (unacknowledged) psychological theories. My guess is that they are relying on what might be called “minimalist” theories of the mental. Minimalist theories are those that make such a small number of assumptions—or have such widely shared assumptions—that it is easy not to notice that one is making them. I suspect that the two minimalist theories that interpretivists make the most use of are associationism and rationality. Interpretivists assume that people behave in a rational manner that will get them what they desire according to the beliefs they have. They assume that when people see things, they are reminded of other things that are associated with them. As with the interpretations of the 1960s and 1970s, the interpretations that are seen as good ones are those mental structure posits that are consistent with the subjects’ history of environmental exposure, consistent with their behavior, and consistent with favored psychological theories—here, rationality and association. In the following section I will discuss in more detail how these minimalist theories can be used to ascribe interpretive meanings. I will also say why these theories are *too* minimal to give us ascriptions we should have any confidence in.

### **Problems with Interpretation with Minimalist Theories of Mind**

#### ***Rationality***

One very minimal theory of mind that enables a scholar to make inferences about beliefs on the basis of behavioral observations assumes that the person studied is a (mostly) rational agent.<sup>7</sup>

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correct, it is not likely to be that useful in the kind of situations that interpretive social scientists are most interested in, such as: 1) ascribing beliefs to people from other cultures who are most likely to be *unlike* us, and 2) uncovering *hidden* beliefs that are not likely to be ones that pop into our conscious minds during a simulation.

Some might argue that we can explain behavior without talking about mental structures at all. In this paper, however, I am concerned with discussing the strengths and weaknesses of the *interpretive* approach, in which it is *assumed* that we *are* trying to uncover hidden mental structures. One cannot do this well, I am arguing, unless one has some substantive theories about how the mind works. For the record, I agree with the approaches that, like the interpretive, try to explain behavior in terms of some inner mental structures. Some theorists, for example, might try to explain behaviors in terms of the evolutionary selection for certain behavioral traits (e.g., Trivers, 1974). As I argue in the text, I think evolutionary accounts like this are important, but I view such accounts as precursors to more complete explanations. We can certainly understand physical traits much better if we understand the *proximate genetic mechanisms that directly create them* in addition to knowing the evolutionary history that selected these traits. Similarly, we can have a much more fine-grained understanding of behaviors if we can understand the specific mental and brain mechanisms which directly produce them in addition to knowing how they were selected.

<sup>7</sup> Interpretivists often claim to be interested in nonrational thinking (see Skorupski, 1976; Wilson, 1986), yet this doesn’t mean that interpretivists can refrain from assuming that

The rationality assumption consists of positing that when a person has certain desires and certain beliefs about the way the world is, the behaviors he will engage in are the ones that would rationally enable him to meet those desires, if the world is as he believes. The behaviors one observes, then, are assumed to be *caused by* an agent rationally calculating that certain movements are the ones that have to be made in order to achieve his desires in a world he believes to be structured in a certain way. This means that one can reason backwards and use observations of behavior and the assumption of rational processing to make inferences about the belief–desire set that must be causing these behaviors. An interpretivist using the rationality assumption will ask, “which beliefs and desires would the behaviors I observe be the result of, assuming that person is rational?” This behavioral-strategy-plus-rationality approach to ascribing mental states is a species of a general method for uncovering unseen entities called “abductive” or “inference to the best explanation.”

An example of someone using abductive inference in this way can be seen in the work of social critic Warren Farrell. In his book *The Myth of Male Power* (1993) one of the things Farrell is interested in is the attitudes that lie behind the way Americans treat women and the way they treat men. In this work Farrell assembles a large set of observations of behavior toward men. Among his observations are:

- The military does not give combat assignments to women.
- Twenty-four of the twenty-five professions rated as most hazardous are virtually all male.
- The more hazardous the job, the higher percentage of men it has.
- Men are twice as likely to be victims of violent crimes than women and three times more likely to be murder victims.

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*most* actions are rational ones. If one did not assume that an action was likely rational, then *any* act could be evidence of the presence of *any* mental state. Seeing someone washing the dishes might indicate that a totally irrational person was trying to be a better trapeze artist, since wanting to be a trapeze artist might cause one to wash dishes, if actions need have no rational connection with the beliefs or desires causing them. Because of this, numerous philosophers have argued that the presumption of some degree of rationality is a necessary condition for ever positing beliefs and desires at all (see Cherniak, 1986; Davidson, 1984; Stich, 1983). A somewhat similar view was held by Karl Popper, who thought that we should try to explain human actions by assuming that actors were perfectly rational agents (1960). This “rationality principle,” for Popper, was an idealized psychology rather than an actual one. Popper believed this assumption was so essential for understanding human action that many scholars worried that he was willing to modify his usual “falsifiability” principle in order to maintain it (Popper, 1994).

Interpretivists, then, are likely to be assuming rationality constraints most of the time, just as anyone making belief/desire ascriptions must. I argue in this text that rationality is too minimal a constraint, so to the degree that interpretivists sometimes relax this constraint, their already insufficiently constrained ascriptions become even more problematic.

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- The suicide rate among men in their early twenties is six times higher than that of women the same age, and the suicide rate of men over age 85 is 1350 times higher.
- Breast cancer receives 600% more funding than prostate cancer, even though death rates from each are equal.

Which rational beliefs and desires could create these sorts of behaviors towards men? For Farrell (rightly or wrongly), the only belief/desire set in which such behaviors are rational is the belief that *women* are actually perceived as the valuable gender (especially in evolutionary terms) who need to be protected and preserved at all cost, while men (a dime a dozen in evolutionary terms) are thought of as essentially disposable. Farrell clearly comes to this conclusion by assuming rationality then trying to infer the presence of certain beliefs and desires by asking *which* beliefs and desires could produce these observable behaviors in beings that were rational.

As many philosophers of science have documented, abductive inference is one of the central strategies used throughout successful sciences. While interpretivist social scientists may not have direct evidence for the belief states they postulate, they seem to be trying to use abductive inference plus assumptions about rationality to uncover the hidden structure of the mind in the same way that theoretical physicists have always used experimental evidence plus physical theories to postulate the underlying atomic structures that would be able to produce the evidence observed.

In interpretive social science, as in other areas of inquiry, one proceeds by accumulating observations, coming up with causal mechanisms that (according to prior theory) could best generate these observations, and inferring that such mechanisms must be present. Observing further behavior that would be predicted by such an inner structure is thought to help confirm that one has “hit upon” the correct view of the inner structure.

But this strategy tends to be problematic when used to try to uncover *beliefs*—even garden-variety ones. It is a point of elementary logic that merely showing that one can confirm a prediction entailed by a hypothesis isn’t enough to show that that hypothesis is true. If there are viable alternative hypotheses that could generate the observed prediction, then observing that prediction doesn’t give you *any* evidence that the hypothesis in question, rather than its equally well-predicting rivals, is true (see Laudan, 1996 for an articulation of this point). If different beliefs and desires could rationally have produced the same behavior, then observing that behavior provides no evidence for the existence of any particular beliefs or desires. One of the root difficulties of belief ascription is that, unlike the sparse fundamental building blocks of some other sciences, there exist not merely a few dozen—or even a few thousand—different possible beliefs and desires, but an infinite number of them. We must begin, then, by selecting from an unlimited number of potential belief posits. The only beliefs we can properly ascribe using the behavioral strategy and a “minimalist rationality” theory of mind are those that could rationally cause the behavior we observe. This, however, is a

very weak restriction. We can think of beliefs as something like maps used for getting around the world. A central problem is that many different sorts of maps could usefully lead you to the same destination. Any given behavior is, thus, consistent with positing numerous different core beliefs and desires. To adapt Quine's example (1960), when Malinowski's Trobrianders initially pointed to an outrigger canoe and said "Kewo'u," he initially had no firm way of telling whether they were thinking "there's a boat," "there's a group of undetached boat parts," or "there's a stage in a boat's existence."

There are still further difficulties. Beliefs do not cause behavior by themselves, but do so in conjunction with desires and, often, with other beliefs. A selection of vanilla over chocolate may be based on the belief that vanilla is tastier and a desire for the tastiest ice cream. It may also, however, stem from the belief that chocolate is tastier but also more fattening, and a desire to lose weight. Selecting vanilla could also stem from a superstitious belief that chocolate should never be eaten on Wednesdays, and a desire not to offend the gods. The vanilla-choosing behavior alone will not tell you which of these beliefs and desires are behind it.<sup>8</sup> If one's task is to find a belief that, along with a string of auxiliary beliefs and desires, would lead to the production of a given behavior—with no prior restrictions on the number and type of such strings—then the task is analogous to guessing a number which, when added to some string of positive or negative numbers, yields the sum of five. If one makes the appropriate adjustment in the strings of added numbers then literally *every* number can qualify. Similarly, with the right adjustments in auxiliary beliefs and desires, it is logically possible for *any* belief to cause *any* behavior. Increasing the numbers of behaviors one observes can help rule out some possible belief/desire sets by showing that some of the predictions of that set are incompatible with the further observed behaviors. But even large sets of behaviors can be shown to be compatible with any given belief/desire set as long as one is willing to postulate the existence of enough additional (perhaps very odd) beliefs and desires that make all those behaviors rational. Simply observing behaviors and assuming that people are rational, then, cannot enable us to say what sorts of hidden beliefs are present in the people observed. What one needs are theories (and experiments) that can go further in constraining which, of the many possible mental structures that *could* generate the behaviors we observe, are likely to be the sets that actually *do* generate these behaviors.

### ***Associationism***

A different minimalist theory of mind that could be (and I believe is) used by interpretivists is one best used in conjunction with the environmental strategy. The environmental strategy seeks to infer the existence of mental states by going in the

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<sup>8</sup> This realization marked the downfall of the philosophical behaviorist view that a belief statement was merely a statement about a disposition to behave (see Churchland, 1988; Stich, 1983).

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opposite direction of the behavioral strategy. While the behavioral strategy looks at behavioral outputs, the environmental strategy looks at the environmental *inputs* that people in a particular culture tend to have. This strategy must, then, combine knowledge of these inputs with some sort of *theory of mental state formation processes* to infer what sorts of mental states these environmental inputs lead people to have. A family of minimalist theories of mind that has existed at least since Hume’s time is that the contents of mind, at any given time, arise due to certain features of environment or of another internal state “calling to mind” other features *associated* with these. For “ordinary” beliefs the clusters of features brought to mind at a given time are the ones that are most commonly perceived to be adjacent in space or time. The sight of a bat, thus, easily brings to mind thoughts of echolocation and night flight.

It might also, however, bring up thoughts of caves, Batman, or Dracula. I suggest that many of the mental states that seem especially “hidden” are thought to be so because they are the results of more peripheral associations that are far too numerous for us to make confident guesses about, merely by seeing what our compatriots see. Besides being numerous, each person’s associations are highly idiosyncratic due to his or her unique personal history. If we don’t know the details of these life histories (and even if we did know them), there are innumerable associations one might be making, looking at any given thing. The mental states people find themselves in through following chains of association are therefore likely to be quite “hidden” from third parties in a way that ordinary world-mapping beliefs are not. Such thoughts might also be hidden from the conscious view of the cognizer herself. The question, then, is how interpretivists could come to know these hidden associations are there. Observing that certain entities and events are frequently associated with others might tell us, for example, that the Swat of Pakistan believe that leather workers won’t discipline their patron’s children. But how could we infer, as Lindholm (1981) does, that these leather workers are seen as symbolic male mothers?

One thing interpretivists often do is look extensively at the cultural environments of the people studied to see what kinds of concrete or abstract features tend to be paired together in that culture. In the analysis of the Japanese monkey performance mentioned above, Ohnuki-Tierney (1984) comes to the conclusion that:

At the end of the performance, (the audience) realizes that it was they who were the untamed nature to be culturalized by the monkey. Put another way, the monkey and the outcast are the small eyes in yin and yang. For this reason, I think, even amidst the laughter at the monkey performance the audience is reminded, albeit vaguely, of their darker side, as represented by the monkey and the outcast trainer. (pp. 301-304)

Ohnuki-Tierney tries to convince us that this is so by describing in great detail the various ways in which monkeys are depicted in Japanese history and folk tales. Such exposure is supposed to show us the sorts of symbolic associations Japanese people might have with monkeys that we would not initially be able to see.

While it is certainly helpful to be made aware of possible associations that we wouldn't have thought of by learning about other people's history and culture, the degree to which we can rely on such a strategy for accurate hidden belief ascription is acutely limited. After all, even if we knew *all* of a person's environmental inputs, this, by itself, would tell us nothing about where that person's train of thought tended to go at any given time. Any seen feature has millions of other features potentially associated with it. To know which associations are more likely to arise at a given time than others requires additional knowledge of the internal mental mechanisms that specify which items are the ones most frequently called to mind by other items.

Along with looking at common cultural pairings, interpretivists using an associationist theory of mind could also look for associations by looking at which items are connected by resemblance and contiguity. When confronted with items thought to have a deeper symbolic meaning, interpretivist social scientists, much like psychoanalysts and literary critics, often suggest that observed surface features are mentally associated with some other features, in native minds, because of a vague resemblance or contiguity. Thus Wilson (1959) interprets the meaning of eating a banana in a ritual performed by the bride in Nyakyusa culture as a symbol of the sex she will have with her husband. Shells and coral have been said to be symbolically associated with the ocean by Levi-Strauss (1963) because of spatiotemporal contiguity. Interpretivists also posit that something can symbolize something else not merely by being mentally associated with it in some way but just by being associated with something else that is. Hence, something can be symbolically associated with something else through elaborate chains of association. Such a convoluted chain can be seen in Sapir's discussion of the symbolic association of lepers and hyenas among the Kujamaat Diola. Lepers, on Sapir's account, are thought to be burned by a magic fire associated with iron working forges. Leprosy is associated with the forge because the way that leprosy acts on the body is seen to be isomorphic to the way that forge fire works on iron. The forge is thought to send leprosy when someone attacks something that the forge, a source of spiritual power, is thought to protect (primarily cattle or children). If a cow is killed through witchcraft, it is thought likely to have been done by the person in the form of a were-hyena. "Hence," writes Sapir, "if you had leprosy, you were caught stealing something protected by the forge; and if you were stealing, you might have been stealing in the guise of a hyena" (1981, p. 533). Thus the symbolic connection between lepers and hyenas.

The basic problem with using association to find symbolic meaning is that, as Anderson and Bower (1973) demonstrated long ago (and players of the "six degrees of separation" or "Kevin Bacon" games have discovered more recently), virtually anything can be associated with anything else in the right circumstances. Bananas can serve as phallic symbols, but they could also possibly serve as symbols of the tropics, of monkeys, of banana bicycle seats, of the Velvet Underground, or of Bob Dole. Showing an interesting *possible* set of associations by itself does nothing to establish that such a set of reminders is *actually* present among the people studied. It's possible, as Feldman suggests, that Officer Koon

saw Rodney King as a wild bear that needed to be socialized by submitting to state authority. So is the idea that King was seen as a symbol of a black revolutionary movement, one that threatened the American government and way of life. But perhaps Koon saw King as a symbolic snake, and believed that it is proper for snakes to be lying on the ground. Maybe, in trying to put King down, Koon remembered a tree that he chopped and chopped at but couldn't fell as a child, and King became the symbol of Koon's continual failings. With only resemblance and contiguity as constraints, there is simply no telling a person's mental state at a given time. A minimalist theory of the mental that says that features in the environment call to mind features “associated” with them is no better at telling us what *specific* mental states are there than the minimalist rationality theory.

### **Better Ascriptions through Better Theories**

Environmental and behavioral strategies, combined with only minimalist theories of mind, then, are able to specify only that a given person *might possibly be* in any of a large number of different hidden mental states. The remedy, however, seems clear: Interpretive belief ascribers need to combine environmental and behavioral strategies with more substantive, less minimal theories of mind. To make it plausible that one hidden belief is active rather than any of an infinite set of alternatives, one needs to make use of *more constraining* theories about which symbols tend to be invoked when.

Now, some interpretivists do try to do just this when, in addition to the environmental and behavioral strategies, they try to make sure their ascriptions of mental states are also consistent with certain substantive (nonminimal) psychological theories. A Freudian theory, for example, will put some constraints on what a symbol means in light of its “sex drive/hydraulic” posits about which types of thought are the ones most commonly brought to mind. There are several problems, however, with the sorts of substantive psychological theories that interpretivists tend to use. Since coming up with good interpretations requires that our ascriptions be constrained by psychological theories that say which sorts of structures and mechanisms are possible, it's important that these constraining are ones we really have good reasons to believe are there. Unfortunately, the sorts of psychological theories that interpretivists tend to favor when they use psychological theories at all are the very ones whose proponents tend to eschew making systematic attempts to provide evidence for them (see Harris, 1979; Grunbaum, 1984). Worse, when attempts by independent researchers have been made to test the two most prominent theories, Freudian and Levi-Straussian, the results have consistently been stunning failures for both (see Harris, 1979; Erwin, 1993). Even more problematic, however, is that even if such theories were correct, the types of theories interpretivists tend to favor tend not to be constraining enough to narrow the field of plausible interpretations very far. Neither Freudian nor Levi-Straussian (or Jungian, etc.) theories provide enough constraints to keep dozens and dozens of different thoughts and associations as counting as potential states of mind at a given time, even within the constraints of the theory. All of the different

possible interpretations of King's attempt to rise to his feet that I suggested for Koon above, for example, are compatible with all of the theories of the unconscious just mentioned.

What interpretivist social scientists clearly need to do is use less minimal, more constraining, more well-supported psychological theories in coming up with the interpretations they do. Our best attributions of what mental states people in a group tend to have will be the ones that fit best with not only all the observations gathered using the environmental and behavioral strategies, but also the ones most consistent with our best psychological theories concerning which mental states appear when. The more an interpretation fits with all of these, the better it will be, and the closer the psychological theories used are to the ultimately correct ones, the more likely it is that we are actually able to see "the native's point of view." Other things equal, the better the psychological theories used, the better the interpretation.

Is there anything general we can say about where better psychological theories can be found? To begin with, interpretivists would certainly be better off using models of mind whose implications have been experimentally tested and refined in recent decades. There is no reason why interpretivists should be relying on the speculative theories of nineteenth- and early twentieth-century savants like Freud and Levi-Strauss. It is true that there have been many good criticisms of observations that are likely to have been artifacts of the artificial laboratory situations (see Agar, 1980), but that doesn't mean that we are better off using models that are never explicitly tested. What we want are theories and models whose implications are tested in as many ways as possible—in natural settings and in refined unnatural settings. Confirmations and failures in laboratory settings do provide a lot of evidence that we can use for refining and redeveloping models. There should be a presumption in favor of models of mind that have been developed and refined through years of clinical testing regardless of whether or not those tests were in laboratory or more naturalistic settings. Interpretivists, then, would make better ascriptions simply by looking at the psychological theories developed by recent researchers. Paying more attention to the work of recent research in psychology is one very straightforward way to get better psychological theories and therefore make better interpretations. Obvious as it is, however, it is a "radical" step that most interpretivists have yet to take.

There are other ways of trying to ensure that good theories of mind are used. The likely reasons that the behavioral and environmental strategies are so heavily relied on in interpretivist social science (and the likely reason that so little attention is paid to focusing on mental structures themselves) are that larger-scale mental structures of mind are not directly observable to us. There is, therefore, an inclination to treat the mind as a "black box" whose inner workings are best revealed by looking at the behaviors it emits—but there are other general ways to build theories about "black boxes" whose inner structure we can't directly observe. For any "black box," one way to come up with a model of its workings is to start with a theory of its *component parts* of which it is constructed and use theories of how such parts link together in space to create more complex constructions (as in



atomic theory or chemistry). Alternatively, for any black box mechanism at a given time, one might start with theories about *earlier initial* conditions then use dynamic law theories to talk about how forces from within and without will change this set to produce a resulting construction (as in predicting how a satellite will stabilize into an orbit). If one is lucky enough to have well-supported theories of components, combination rules, initial conditions, and modification rules, one has important additional ways to build models of black box mechanisms besides relying on observations of inputs and outputs. If the black box we are talking about here is the mind or brain, we have at least the skeletons of models constructed along these lines based on decades of research by teams of researchers from neurology, psychology, and computer science. However incomplete these models are, they are far more advanced than the non-experiment-based speculations about the mind made by Freud or Levi-Strauss. The “composite-construction” strategy is pursued by neurologists and connectionist modelers looking at how neurons and neuron clusters are linked together to create specific machines that tend to bring certain sorts of things to mind in certain situations (see, e.g., Clark, 1993; McClelland & Rumelhart, 1986; Morris, 1994; Squire, 1987). At a higher level, numerous cognitive modelers have investigated how various items of knowledge fit together to form mental models and theories (e.g., Bower & Glass, 1976; Johnson-Laird, 1993; Palmer, 1977). Versions of the initial-conditions-and-changes strategy can be looked at across both high and low levels and over large and small time scales. At smaller time scales various researchers have studied how initial mental states are changed by new perceptual information (Biederman, 1987; Marr & Nishihara, 1978), by operant conditioning (Honig & Staddon, 1977), and by learning to relax or tighten conditions under which certain behavioral or informational schemas are invoked (Holyoak & Koh, 1987). Over larger time scales biologists and evolutionary psychologists have studied how the process of natural selection has reshaped earlier mental structures (e.g., Barkow, Cosmides, & Tooby, 1992). Information from these realms promises to tell us much about which sorts of beliefs and desires people are predisposed to have and which they are likely to have developed at a given place and time. If we want to understand what Geertz and others call “the native point of view,” I believe it is by borrowing methods from cognitive science—not psychoanalysis or literary theory—that we are most likely to succeed. In general, if we want to know which sorts of associated items are brought to mind in certain situations, a model like John Anderson’s ACT\* system, supported by decades of clinical research and computer modeling, should surely be preferred to a Freudian’s armchair speculations about which associations people are making when.<sup>9</sup> Interpretive belief ascribers could surely improve their ability to narrow down the meanings that an artifact or event has for someone by combining behavioral and environmental observations with improved theories of mind.

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<sup>9</sup> For example, was Freud really in a position to know that a man’s reciting a line from a poem mentioning flowing water was an indication that he was unconsciously worried about his lover’s missed period (see Grunbaum, 1984)?

### Concluding Remarks

In the long-running battle between whether the social sciences ought to proceed as though they were social science or humanities disciplines, the idea that the social sciences ought to center around uncovering *meaning* became a central rallying point in the last several decades. One can find much that is laudable in this focus. Such an emphasis encourages researchers to look at things that were ignored during the years when various forms of crude environmental determinism dominated the social sciences.

At the same time there are problems with focusing on “meaning.” The term “meaning” is vague and multifaceted and does not, by itself, specify the areas of human activity on which it is profitable to focus. Despite this vagueness I have argued that the bulk of social science researchers who say they are interested in meaning actually tend to focus on uncovering *typical hidden mental states regarding* some cultural action or artifact.

If uncovering the hidden mental states is what social scientists who study meaning are really doing, then the central question becomes one about which sorts of interpretations are going to be the best ones. I have argued that the best mental state ascriptions are ones that satisfy three sorts of constraints: 1) they must be consistent with observed behavior; 2) they must be consistent with the subjects’ exposure to certain environments; and 3) they must be consistent with our best psychological theories regarding how mental states cause and are caused by things. The effort many interpretists of various sorts make in trying to ensure that their ascriptions are consistent with observed environmental histories and observed behaviors is certainly laudable, but almost all current interpretivist approaches are deficient in making sure their ascriptions are consistent with the third logical requirement for good ascriptions. The most currently fashionable interpretivists utilize *no explicit* psychological theories, but since *some* psychological theory is required to ascribe mental states at all, they are likely to be implicitly relying on vague general associationist and rationality theories of mind. For interpretivists using such minimal theories of mind, I have argued, almost anything goes. With rationality and associationism as the only internal constraints, *almost any belief ascription one can imagine* can be shown to be consistent with all the behaviors and environments observed. A consequence of using only the most minimal theories of mind is that there is just *no saying* which interpretive belief ascriptions are good ones and which aren’t, no matter how much environmental and behavioral evidence one cites. There is no way to tell which ascriptions are close to any *actual* hidden mental states operating and which ones are elaborate works of fiction, since an enormous array of ascriptions are *all* consistent with all the environmental and behavioral observations and the minimalist theories of mind used. There is nothing to keep postmodernist-inspired minimalist-theory-based ascriptions of mental states from being inventive unconstrained speculation. Minimalist hermeneutic approaches will not give those aiming at understanding meaning what they really want.

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In some respects older, less currently fashionable interpretivist approaches do a better job of telling us which particular mental states we should infer to be there. This is simply because the psychological theories used to make ascriptions that predominated interpretivism in the 1960s and 1970s were richer. A theory that gives explicit theories about various kinds of inferencing mechanisms is more constraining than one saying merely that inferencing is vaguely “rational.” A theory that provides detailed ideas about which kinds of associations are most likely to be called to mind in a given situation is more constraining than a theory that merely views the mind as working in an associationist manner. Psychoanalytic and structuralist theories of mind, with their richer ideas about association and inference, thus enable interpretive approaches using these theories to provide more definitive assertions. Interpretivists using these theories can say more about what hidden mental structures should be there than the theorists using the implicit “minimalist” theories of mind that most interpretivists currently favor.

I have argued, however, that these sorts of psychological theories—which are the ones that interpretivists tend to favor when they use psychological theories at all—are also deficient. While they are more constraining than minimalist theories, they still tend to allow a *large* number of different ascriptions that are all consistent not only with observations but also with these theories’ assumptions about which sorts of mental states tend to be present when. It’s not “anything goes” but it’s “an awful lot goes.” Even more damaging, however, is the fact that there is not much independent evidence for (and much evidence against) the existence of the constraining structures and mechanisms that these theories assume are there and are used to make inferences about mental states. The theories that interpretivists who use explicit theories of mind tend to favor (structuralist and psychoanalytic approaches) are the very theories of mind whose assumptions are poorly confirmed.<sup>10</sup> These sorts of approaches, then, can’t give us ascriptions that we should feel any certainty about either.

Most current interpretivist approaches, then, are not providing us with ascriptions of mental states that we should have much confidence in. However, that doesn’t mean that the task of interpretation itself—of finding the hidden mental states subjects have in their natural settings—is an impossible one. I have argued that interpretivists can go far in getting what they are looking for by using better psychological theories. I have outlined a number of ways that we can identify psychological theories that we can have more confidence in. There is little to be

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<sup>10</sup> It is unclear why interpretivists have tended to favor psychological theories that have been poorly tested experimentally, but there are many possible explanations. Perhaps the most plausible is that, for a time, the psychological theories that were the most carefully tested were examined by behaviorist psychologists who did not think it was proper to talk about mental states. Theorists who were interested in mental states, then, tended to rely on theories that were not the ones being carefully tested by psychology. Currently, however, with the tremendous amount of research in cognitive and evolutionary psychology that very explicitly discusses the structure of mental states, interpretivists cannot plausibly make the case that those interested in mental states cannot utilize ideas developed by careful experimental psychology.

said about which *specific* psychological theories of this sort will be most useful; that is likely to vary depending on which sorts of perception, memory, and behavior are involved and to the particular sorts of hidden beliefs an interpretivist is focusing on. Which specific psychological theories are most useful will also vary from year to year as various theories become better confirmed. What is clear is the *general type* of psychological theories interpretivists should rely on. They should rely on psychological theories supported by and initial-conditions-and-change theories, those supported by composite-construction theories, and those whose assumptions have been carefully examined and tested. They should not rely on minimalist psychological theories or general theories that lack corroborating evidence. Few current interpretive methods are very successful at ascribing hidden beliefs, but interpretive methods that use psychological theories developed in the ways I have been describing have the potential to enable us to ascribe hidden mental states with much greater accuracy.

Many scientifically oriented psychologists, then, need not present themselves as enemies of researchers who say they want to focus on meaning. Though interpretivist researchers may say they are interested in meaning rather than in uncovering laws (as natural scientists do), psychologists can point out that uncovering meaning actually *requires* a systematic understanding of the mechanisms of mental processing. By coming up with theories mental processing, scientifically-inclined psychologists are in a position to provide important assistance to those who say that they are focused on meaning. Psychologists can point out that their naturalistic work can complement “hermeneutic” work. Research on meaning can thus be an area where those who utilize humanities research methods can make use of the findings of those who utilize scientific research methods. Whatever other disagreements scientists and humanists in the social sciences may have, stating that a central mission of the social sciences should be to uncover meaning need not be a source of contention.

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