Chapter 9
The Linguistic Fore-Structure of Psychological Explanation

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We tend to view human beings as meaningful agents, with language serving as the vehicle for inter-subjective sharing. However, if our language is circumscribed by the rules of usage, we are introduced to the possibility that what we can say is not so much an expression of our subjective worlds as an outcome of linguistic convention. In turn, we may raise a more formidable question: to what extent are claims to knowledge determined not by the "world as it is," but by the structure or demands of language? Such a question has gained momentum within disparate enclaves of scholarship. Beginning with Saussure (1974), scholars have explored the character and significance of semiotic systems, including spoken and written language. To speak intelligibly essentially requires embracing a system of meaning already in place. Similarly, with Kuhn's (1970) account of scientific revolutions, we entertain the possibility that scientists function within paradigms of understanding—including both ontology and epistemology. In effect, the scientist enters into experimentation with assumptions already in hand, and these assumptions may guide both what is observed and how it is represented. And with Derrida (1976–1988) we are introduced to the interlocking character of words. In explicating the meaning of any word, we must always defer to other words. In the end, "*Il n'y a pas de hors texte*" (p. 144) ("There is nothing outside of text.") In psychology, inquiries have also been made into the way in which metaphors (Leary 1994) and narrative structures (Gergen and Gergen 1986) are essential to the coherence and intelligibility of psychological theory.

My aim in what follows is not to explore the degree to which knowledge in general is limited or governed by the "rules of the game." More pointedly, however, I

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wish to explore the linguistic limits of what can be intelligibly written or spoken about mental process. And more pointedly, can psychological research of any kind ever tell us anything that is not already contained within the existing conventions of language? Is empirical research in psychology redundant? What alternatives might we envision?

For me, it was Wittgenstein's writings (1953, 1992) that initially set the stage. As he asks, for example:

- "How did we ever come to use such an expression as 'I believe…' Did we at sometime become aware of a phenomenon (of belief)?" *PI* 190e
- "What is a *deep* feeling? Could someone have a feeling of ardent love or hope for the space of 1 s—*no matter what* preceded or followed this second.?" *PI* 583
- "Can I separate a visual experience from a *thought-experience*? (And what does that mean)." *LW,* 1, 564

In these simple questions, one begins to confront the limits of both common sense and science. How indeed did we come to make claims about beliefs and deep feelings? Through observation? And why don't we talk about thought-experiences? Because we don't have them? Such questions have long intrigued me and have been pivotal in my writings on social construction. Yet, I owe a major debt to the writings of Jan Smedslund in this case, for he has singularly spoken out to challenge the frameworks of understanding in psychology and the related potentials for empirical research. His work has ignited for me an extended intellectual adventure into the linguistic determinants of claims about mental process. In what follows, I will first recount what for me have been the most dramatic implications of Smedslund's work. This will serve as the springboard to describing three specific inquiries. In these inquiries I will both extend Smedslund's work and open further questions of broad significance.

The Smedslund Challenge

In what for me was a frontal challenge to the experimental tradition in psychology, Smedslund (1978) proposed that Bandura's (1977) highly acclaimed theory of self-efficacy essentially duplicates common sense cultural suppositions. Thus, he argued, the extensive experimental support for the theory was essentially pointless, as failures to support its hypotheses would be unintelligible to English speakers. To expand, Bandura's theory was concerned with people's coping behavior, how long it can be sustained, and whether they would press on in spite of obstacles. The determinants of such activity, Bandura reasoned, are primarily cognitive in nature, with self-expectations playing a critical role. Smedslund subjected the major explanatory propositions to careful conceptual analysis, demonstrating one by one, that not only are the suppositions derived from common sense, but because they cannot be falsified without violating common sense. In effect, they are empirically untestable.

To illustrate, Bandura proposes that a "person's convictions of their own effectiveness is likely to affect whether they will even try to cope with given situations" (p. 193). Smedslund then converts this proposal into a formal theorem: "If P wants to do T in S and if P believes with complete certainty that he can do T in S, and no other circumstances intervene, then P will try to do T in S." (p. 3). He then goes on to demonstrate the unintelligibility of this not being the case: "The alternative to P trying to do T in S is P not trying to do T in S. But P not trying to do T in S is not acceptably explained by P's wanting to do T in S and by P's certainty that he can do T in S. Hence some additional circumstances must be involved." (p. 3). Simply put, if a person is convinced they can do something they want to do, and no other circumstances prevail, then it will make no sense that they will not try to do it. To introduce evidence that they will try to do what they want, knowing they can, is pointless. The contrary would make no sense.

Such analyses are as intriguing as they are profound. Are all our mental explanations lurking within the rules of ordinary language? Can we never uncover the psychological origins of our actions, never find illumination through careful and systematic inquiry? Or more generally, has more than a century of empirical work in psychology been for naught? At times, Smedslund suggests such conclusions. In his 1972 book, he proposes that all psychological theory is derived from a conceptual network embedded in ordinary language. Surely such a proposal would meet with resistance in the discipline of psychology. Its theories often seem to cut against the grain of common sense. For decades, psychoanalytic theory was viewed by outsiders with suspicion, Jungian theory was regarded as a fairy tale, and Skinnerian theory was repugnant—while simultaneously embraced by cadres of serious and well-trained professionals. The most attractive feature of Festinger's (1957) cognitive dissonance theory, was its capacity to make counter-intuitive predictions. Clearly, there is more to be said on the issue of linguistic determination, and this issue cuts to the core of psychology.

From Common Sense to the Necessity of Circularity

For me, one of the most compelling questions triggered by Smedslund's (1978) challenge concerned the origins of logical necessity. Why, in the preceding example, does it make no sense to say that if a person wants to do something, and he can do it, that he won't do it? In this case and others, Smedslund argues that we are compelled by common sense understandings within the culture. Yet, how did these understandings come into being? How did we discover that people have mental processes and these processes influence their behavior? In later publications, Smedslund (2004) draws from the work of Anna Wierzbicka (1996) in proposing that our concept of human action rests on a series of "semantic primitives," amounting to a universal and "complete archetypical conception of human being." (Smedslund 2009, p. 781). As proposed, for example, it is simply axiomatic that people can "know, think, want, *and* feel…" (p. 782).

Although the idea of universally shared conceptions of the person is a fascinating possibility, it is not immediately compelling. There are simply too many historical and anthropological accounts of variations in people's constructions of the person to warrant such a sweeping generalization. Where, for example, in the semantic primitives would one place the soul, nirvana, repression, instinct, or a fractional anticipatory goal response? At the same time, within his various analyses of Bandura's theory, one of Smedslund's (1978) arguments for common sense assumptions struck me as beyond any particular conception of the person. In Theorem 5, he proposes: "If P believes he is capable of handling S and if not other circumstances intervene, then P will behave assuredly…" (p. 4). Smedslund's proof of common sense is that "it follows directly from the meaning of theorems involved. To 'behave assuredly' means to 'behave believing one is capable of handling the situation.'" To describe a person as behaving confidently is not fundamentally different from saying the person is confident. In effect, the explanation is tautological. Believing oneself to be capable is not *a cause* of behaving assuredly; it is essentially a definition of what it is to be assured. The relation between cause and effect is circular. With further effort, it also proved possible to convert virtually all the common sense theorems to a near-tautology. For example, in the earlier illustration, "belief" that one can succeed is part of what it means to "try" to succeed; trying to succeed is premised on the assumption that success is possible. With this move in place, the door is open to considering the more general possibility that most (if not all) psychological explanations are tautological.

Why should one suspect this might be the case? Primarily because there are no public observables to control what may be said about mental states or conditions. Most of us would accept with little question the social psychological proposal that "attitudes toward political candidates affect one's voting." But what precisely is an attitude; what are its properties? Observation provides no guidance. We are left, then, to speculate about its existence. And as well, all we have is speculation about how it affects our actions? Perhaps attitudes have nothing to do with what we vote for, what we eat, drink, etc. How would we know?

In this light, we may ask by what logic one can establish the relationship among mental states or between mental states and the world? Given "the fact of emotion" for example, how can we explain its relationship to other mental states; how it is affected by the outside world; and how does it influence behavior? We cannot derive these relationships from observation (what is an emotion, after all?), so how else can we make sense of such relations? There is no a priori logic that would demand any such connections. Is this not fertile soil, then, for tautological explanations. where plausibility is immediately apparent? In effect, x affects y by virtue of a commonly shared definition.

Consider, then, the possibility of a *principle of originary resemblance*. By this it is meant that *with no other information available, attempts to explain the causal source of A, will bear a likeness to A*. In this case, all propositions concerning the relationship among mental states owe their intelligibility to the degree to which they share definitional space. To illustrate, we have no specific referents for either "emotional arousal" or "rational thought." They are also mutually constitutive, as rational

thought is defined in terms of the absence of emotions, and vice versa.[1] As a result, we may plausibly say that "emotional arousal interferes with rational thought," and "by thinking clearly you can calm your anxiety." In effect, if you have *x*, you remove that which is defined as *not x*. Freud's (1933) famous account of the relationship between ego and id hinges on just this form of logic. His concluding statement in Lecture 31 about the effects of psychoanalysis—"where id was, there ego shall be" is essentially a tautology. Circularity also governs the relationship among particular kinds of emotion or thought. Thus, we may intelligibly say that "his grief overwhelmed his feelings of happiness," and "by engaging in mental association we improve our recall." Conversely, we might respond quizzically if someone announced "his thinking overwhelmed his intentions," "her anxiety brought forth rapture," or "his motivation to do it suppressed his desire." There is no immediate overlap in definition.

Dualism in Question

At this point, curiosity begins to kill the cat. The field of psychology essentially emerges from a mind–world dualism with deep roots in Western history. From the nineteenth century laboratories in Germany to the present focus on cognitive process, the vast share of psychological research is devoted to charting the relationship between mind and world. On the one side are longstanding programs of research concerned with the relationship between the external and mental events. Research in perception, information processing, learning, social inference, and motivated perception are illustrative. And on the other, we have equally ambitious programs of research on the relationship between psychological states and individual behavior. We focus, for example, on the effect of attitudes on behavior, mental disease on behavior disturbances, self-esteem on school performance, and so on. Can we not entertain the possibility that: *all propositions concerning the relationship between mental states and the physical world owe their intelligibility to the degree to which they share definitional space?*

To explore, let us first turn first to the relationship between the "stimulus world" and mental representation. The question of how these are related has been a longstanding challenge for both psychologists and philosophers. We ask, for example, how is the world registered in the mind; how is knowledge of the world built up from observation; how does individual mental functioning determine the way we see the world? While conflicting answers to such questions are longstanding in both psychology and philosophy, there are also scholars in both camps who have decried the very assumption of dualism. Following Wittgenstein, for example, J. L. Austin (1962) demonstrates a range of devilish problems created in the long-standing

[1] "Mental states…especially in contrast to reason" as the Farlex Free Dictionary—among others—describes.

presumption that objects in the world are registered in the mind as "sense data."—or in effect, we never see the world directly for what it is, but only have access to the way the world is registered in our senses. Rorty (1981) later goes on to argue that the entire epistemological project in philosophy does not derive from a challenge put to us by nature, but by linguistic traditions. In effect, we have a tradition of "real world discourse" on the one hand and "mental discourse" on the other. We have fallaciously objectified each discourse, and then worried ourselves with how the "real world" gets into the "mental world."

Following this line of reasoning, we may consider the proposition that *every object in what we call the environment or stimulus world can be defined by (or converted into) a mental term*. "*There is* a rabbit" can be restated as "*I see* a rabbit." Or to put it otherwise, there are not two different kinds of rabbit, one in the world and another in the head; there are simply two discourses for the same event. In the same way, the utterance "The ocean is *here before me*" might be reformulated as "*I spy* the ocean." In the late twentieth century, an entire paradigm shift in psychology occurred as psychologists converted "the stimulus situation," to "the perceived situation." Whether beauty is in the world or "in the mind of the beholder, then, is not a substantive question; we simply have two discourses in play.

With this proposition in place, we can then appreciate the potential for tautological understandings of the relationship of world to mind. For example, we cannot plausibly say, "there is a rabbit and I therefore see a duck," or "his intelligence makes me think he is stupid." But we can say without a batting eye, "she is so beautiful; no wonder I am attracted to her." Further, to say that someone has *misperceived* the situation requires that a claim is made to a real-world event, to which the other is responding incorrectly with a report on a mental condition. If one could not make a claim in real-world discourse, one could not justifiably say the other has misperceived. There would only be a contest between two subjectivities.

Turning to psychological research, classical studies on attitude change have demonstrated that characteristics of a communicator will affect attitude change. Thus, for example, if a communicator is an expert, is attractive, or trusted, the empirical evidence suggests that one is more likely to agree with him or her. Yet, in terms of definition, this is to say little more than we agree with what is agreeable, or are attracted to what attracts us. Or, in the case of Werthheimer's (1912) early Gestalt research on apparent motion, it was shown that a string of lights, rapidly illuminated in succession, is experienced by the observer as motion. As if by brain magic the one had been converted to the other. In fact, however, the same event is simply defined by the researchers as "a rapid succession of lights" and by the experimental subject as "motion." They could have both used the same terms, as they are mutually defining. The explanation is thus circular.

Let us turn, then, to the relationship between mental events and subsequent actions. In what degree are intelligible propositions relating the mental world to one's behavior tautological? Or in Descartes terms, how can mental events cause physical events? Here it is useful to consider one of Charles Taylor's (1964) early proposals, that most descriptive terms for human action carry with them an implicit assumption of intentionality. Thus, for example, we cannot say of an individual that

he was aggressive, loving, helpful, or devoted without presuming that he acted in these ways intentionally. If he "didn't mean" to be aggressive, for example, but was trying to be helpful, we lose our grounds for saying he was aggressive. If one intends through his helpfulness to exploit, then we can only say that the behavior "seems to be helpful, but it is not." On these grounds, we can see that behavioral descriptors are suffused with psychological content. Being angry, one might say, is no more a state of mind than it is a state of the body. It is indeed this argument that has invited many neuropsychologists to argue that mind and body are isomorphic; the more reductionistic critics have proposed to abandon mental discourse altogether. In any case, one can see here further support for many of Smedslund's (1978) original demonstrations of what he would view as common sense necessities in Bandura's accounts of the relationship between cognition and behavior.

I had initially termed this tautological explanatory relationship between mind and world as the *principle of functional circularity* (Gergen 1987). Such phrasing reflected my background in psychology, where experimentalists refer to casual connections between stimulus-organism-response in terms of functional relations (e.g., mental events are a function of stimulus inputs, and behavior is a function of mental events). At the same time, we can scarcely conclude that the principle of functional circularity has no exceptions. In a certain sense, the question here is empirical. If we survey the vast range of psychological explanations that appear in the research literature, to what extent do they rely on tautology? Here the most extensive work has been carried out by Wallach and Wallach (1994, 1998, 2001). As they find, the vast bulk of explanation in social psychology research relies on near-tautologies. The attendant research is unfalsifiable. And while controversial (Schaller et al. 1995), their conclusions remain robust.

The Extended Tautology: Language on Holiday

If tautological explanations were obvious, they would seldom be used in scientific psychology. It is neither interesting nor illuminating to explain, "he stole the car because he wanted to," or "because he was a thief." However, it does become interesting to say, "he stole the car because he was jealous." So, we ask, why would he do that? And one might explain, "he was jealous of Arthur because he was stealing the affection of his girl friend. So, he stole Arthur's car on the night Arthur was to go out with her." The explanation seems reasonable enough, but precisely because it is an *extended tautology*. The theft of the car was equivalent to an act of jealousy. The explanation acquires its interest by virtue of splitting the definition of the act into two, the jealousy and the theft of the car. The one serves as the cause, and the other as an effect. This potential for multiple definitions sparked a further line of inquiry. Here, it seemed, was an opening to significant plasticity in explanation.

I thus set out on a conceptual exploration into the linguistic limits to what may be said about behavior we index as *aggression* (Gergen 1984). Helpful here were the attempts of Ossorio (1978) and Davis and Todd (1982) to develop a *paradigm*

case method for determining the set of ordinary language criteria relevant to the use of a given concept. As I saw it, these were attempts to establish the broader array of assumptions by which an act might be defined as being of a certain kind. I thus proposed that we could take the common assumptions underlying our description of an act such as aggression as establishing what I called an *intelligibility nucleus*. That is, built into the definition of what it takes to call someone's behavior aggressive are assumptions that circumscribe what might meaningfully be said about it. For example, if we take a common definition of aggression as "hostile or violent behavior toward another" we establish at the outset a range of utterances that are irrelevant, congenial, or contrary. In terms of irrelevance, one cannot intelligibly say "violent behavior is green" or "hostility weights three ounces." Color and weight are not assumptions within the nucleus. In contrast, one can appropriately say "people with hostile personalities are more likely to be violent," as the utterance essentially restates the definition. One may also say of aggression that "she intended it, planned it, was conscious of it, felt hostile, tried to accomplish it, and so on.[2] Without further explanation, one cannot sensibly say, however, that "his desire to comfort her caused him to strike her."

However, the case rapidly becomes more complex when we begin to unpack the nucleus. That is, we explore the relationship of terms within the home nucleus to other nuclei. Let us call these *second-order nuclei*. For example, "hostility"—a component of the aggression nucleus—is often defined as an "emotional state." But an "emotional state " will also have within its nucleus a range of other assumptions. These assumptions may be related to the definitional nucleus of aggression, but they are not identical. Thus, by virtue of these common links, we can expand still further what may sensibly be said about aggression. We can see the plausibility in the comment that "emotional arousal can be channeled into aggression." And because emotion is the absence of thought, we would likely resist the comment that "thoughtful people are more aggressive." One may also expand the analysis to include for example, third- and fourth-order nuclei. If war is defined as combat and armies engage in combat, we can intelligibly say that "hostile people are more likely to volunteer for the armed services." The reverse of this proposal would be suspicious.

We can also see that because each nucleus is linked to others through definition, there can be felicitous utterances that do not directly feed from the initial nucleus. For example, if the term "aggression" is also one used to define certain business tactics, it would not be silly to say that "business is generally pro-war." In effect, we have a spreading array of common sense utterances generated by linked definitions. None of them depend on observation; at the same time, they are central ingredients in sustaining society.

Wittgenstein (1953) used the metaphor of language "going on holiday," by which he meant that the meaning of a term is not confined to its usage in a given context. The world may be used metaphorically in other contexts, and as the contexts become

[2] This form of definitional unpacking is an alternative to the Smedslund (1978) attempt to establish semantic primitives relevant to all action. At the same time, it accomplishes some of the same work.

diversified, so does the meaning become diffused. Its meaning is set loose from its moorings. I find it useful here to conceptualize this process as *semiotic slippage*.[3] As we have seen, such slippage can expand the range of what may be felicitously said. However, with sufficient slippage we also confront the possibility of impossibility. For example, love may be defined as intense attraction, attraction as intense desire, intense desire as a state of abject need, abject need as a helpless dependency, and helpless dependency as a state of slavery. We might thus conclude that we hate those we love, and love should be abolished.

As this analysis also suggests, while the logic of language may dictate what may plausibly be said about the to and fro of mental life, meaning is also elastic. With the indefinite extension of what a term may mean, so do the potentials for making sense of mental life expand.[4] Through the simple process of free association, we can create a world of intelligible—and even interesting—conversation. Community rides the back of tautology. It is this conclusion that sets the stage for a final adventure.

Escaping Linguistic Determinism?

If mental explanations are fundamentally tautological, then how are we to regard the vast industry of mental testing, assessment, and diagnosis? In all these cases, claims are made to scientific objectivity, based on systematic procedures for test design. With multiple, carefully screened, and inter-related test items, psychologists proceed to inform the world about an individual's level of intelligence, personality, prejudices, abilities, proclivities, state of mental well-being, and so on. Does the methodological rigor with which these tests are constructed thus escape the argument for tautology? It would not appear so.

For example, the popular Beck Depression Inventory features 21 items, asking the individual, whether he/she feels sad, is discouraged about the future, feels like a failure, and so on. Answers are summated, and conclusions are drawn on the level of mental depression. However, the concept of depression is a cultural construct of relatively recent invention. How can we be certain then, that answers to these questions are indicative of depression? Because we have no direct access to the mental state, we cannot. Inevitably, then, we are brought to the conclusion that the pattern of answers on these items is synonymous with what the psychologists calls depression. They do not *measure* depression; they *define what depression means* for the psychologist. By the same token, intelligence test scores do not measure an internal condition of intelligence, but are equivalent to what the investigator means by

[3] See also Derrida (1976–1988) on the concept of *difference*.

[4] In Shotter's (1999) terms, we are free to change the rules of the language games, and the shifting character of context will virtually demand an unpredictability in our forms of talk. This argument is set against Smedslund's (1988) attempt to establish a universal and historically stable definitional system.

intelligence. Whether the culture in general agrees to such interpretations is quite another matter.

But in light of the potentials for semiotic slippage, the plot thickens. How elastic is the relationship between the overt behavior and what we take to be its mental source? Tautologies may be obvious and compelling; few would doubt that an individual who declares he is depressed is feeling depressed. And yet, for psychoanalytic practitioners, such interpretations may be far from obvious. A declaration of depression may be indicative of repressed anger, a hidden but stifled desire to slay one's father. This conclusion does not save the inference from tautology. As in the preceding section, the conclusion is made possible through semiotic slippage. It plays on overlapping definitions. What is commonly called a "declaration of depression" on the one hand is ultimately redefined as "an expression of repressed desire." However, considerable semiotic work must be accomplished to create the intelligibility of this conclusion.

If a psychoanalyst can be successful in showing how an avowal of depression is an expression of hatred for one's father, a further question emerges: are there any constraints on what can intelligibly said about the psychological sources of a given action? Given the liquidity of extending the definition of terms, what I am calling semiotic slippage, could a sophisticated speaker demonstrate how *any psychological state can give rise to any behavior*? Or conversely, given someone's behavior, can it be explained in terms of virtually any psychological state? Turning then to psychological testing, for example, can we conclude that scores on any psychological test may be sensibly attributed to virtually any psychological state or condition? The implications are substantial.

To explore these possibilities, I set out with two of my students—Alexandra Hepburn and Debra Fisher—to examine the explanatory limits of scores on a popular personality trait test.[5] Numerous investigators had used the Rotter internal-external (I-E) control scale to assess the degree to which individuals see themselves as responsible for their actions and their consequences, as opposed to external world conditions. Agreement with an item such as "There is a direct connection between how hard I study and the grades I get," would be indicative of an internal locus of control. To agree that "Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries." would reveal a tendency to see one's outcomes as controlled by external circumstances.

The first step in the exploration was to determine the extent to which one could trace responses on these items to virtually any psychological trait. We thus enlisted a group of two dozen undergraduate students in a series of "interpretation puzzles." As one of their challenges, we asked if they could show how it would make sense for someone who had a given trait, to agree with a given item from the Rotter scale. The traits were randomly drawn from a list of some 500 common traits.

As we found, the participants rarely encountered difficulty. For example, it was explained that a *lonely* person would say that who gets to be boss is a matter of luck

[5] Gergen et al. (1986).

(external) because "A lonely person lacks self-confidence and thus believes his actions will make no difference in the outcome." A person who is *impulsive* would agree that an individual's worth passes unrecognized no matter how hard he tries because "he might very well need to justify his feelings of staying too short a time with one project or another by believing that no matter how persevering he remains, he won't be acknowledged anyway." An independent group of research participants also rated these explanations (along with others) as "plausible" to "highly plausible."

We then found that our participants could take the same trait and show how it could be expressed in two *opposing* items from the I-E scale. A *broad-minded* person could easily understand why "well-prepared students" would say "there are no unfair tests" (an Internal indicator). The broad-minded person would also say that we are "victims of forces out of our control" (External) because the "broad-minded person would not try to blame world events on a particular politician or groups." Further research revealed that the various rationales employed by participants seldom duplicated each other. In other words, there were multiple and intelligible ways in which a given response on the Rotter scale could be explained in terms of a given psychological trait. And further, participants had little difficulty in relating any given psychological trait to a group of multiple and contradictory items on the Rotter scale. Such alacrity in explanation, even among young college students, suggests that there is no decidable relationship between an action and our attributions to its psychological source. Claims that psychological testing (including psychodiagnostics) can illuminate the psychological sources of behavior are groundless.

However, there remains one further question concerning the character of the participants' explanations. Specifically, much has been said now about the dependency of psychological explanations on tautology—either direct, or extended through semiotic slippage. Do their explanations—with their enormous variations—depend on tautology? By and large the answer is yes. Consider, for example, the explanation that a *lonely* person would say that who gets to be boss is a matter of luck because "A lonely person lacks self-confidence and thus believes his actions will make no difference in the outcome. Thus, lonely is defined as low self-confidence and is defined by believing one's actions make no difference. The explanation is an *extended tautology*. In effect, through semiotic slippage, definitions can be extended in such a way that we may locate the tautological basis for the inteligibility of all psychologically based explanations.

Yet, there was one commonly used form of explanation that does expand our understanding of "making psychological sense." We may term this rhetorical maneuver *value reversal*, and its implications for the freedom of explanation are substantial. Simply put, value reversal is represented in redefining what is *bad* as *a good* (or the reverse), with the result that one opens new and often more plausible explanations. To illustrate, how could one explain why a lazy person takes up rock climbing. One can explain that the lazy person is distressed with his way of life, and thus takes up an active sport. In effect, the lazy state is redefined as a motivator for its negation (effectively: laziness is redefined as motivation to be active). This capacity for value reversal enabled research participants to inject plausibility into numerous cases of otherwise non-sensical connections between trait and behavior.

It is also by this means that Freud could suggest that moral people should not be trusted: the super-ego (moral control) represses one's instinctual energies. Through value reversal, the explanatory world is richly expanded.

Let us now draw together the implications of these excursions.

Collecting Threads for an Emerging Tapestry

In one of his most delightful short stories, *The library of Babel*, Jorge Luis Borges (1944) describes a library that contains all that may be sensibly expressed, in all languages. Anything that can plausibly be written—all combinations of words and sentences—can be found in its volumes. By implication, anyone could visit this library and locate the story of his or her life; no lives could be lived that were beyond the available descriptions. And, by implication, everything that could be said about the human mind would have a place in the library. In the present analysis, we have not quite approached this imaginary space, but we have come to grips with substantial ways in which the means of our making sense place a grip over the sense that we can mean.

Surveying the results of these explorations, what conclusions now seem warranted? How are we placed in the unfolding dialogue so powerfully stimulated by Jan Smedslund? What are the implications for the future of psychological inquiry—in theory, research, and practice? Let us first consider major conclusions that seem warranted by the preceding.

On the Linguistic Limits to Psychology

There is a preliminary sense in which Wittgenstein is correct in his proposal that the limits of our language are the limits of the world. At this point in Western history, what largely counts as knowledge is propositional. That is, we more or less presume that knowledge of the world can be represented in propositional form (possibly with graphic accompaniment). As we say, our libraries are repositories of knowledge. It follows that there is no knowledge outside that which can be articulated. Or to put it otherwise, if there are psychological processes that are not amenable to linguistic representation, we shall never know them.

There is also a more restricted sense in which the Wittgensteinian surmise is correct. To the extent that we employ language as a means of communicating about the nature of the world, we fall victim to its systemic constraints. These are first of all grammatical and syntactic constraints. But this is not insignificant. For example, a reliance on nouns and pronouns will commit us to an atomized account of the world (i.e., a world of independent entities). We also fall heir to various rhetorical and

literary traditions, and these traditions will also place significant demands over our theories and descriptions. Recall the earlier comment on the centrality of metaphor and narrative in psychology and other sciences as well.

However, when turning the specific case of the constraints on psychological explanation, the present explorations suggest the following:

- With limits yet to be established, Smedslund's initial contention that the Bandura explanations are both constrained by the everyday logics of language, and essentially untestable, remains in place.
- The linguistic demands on psychological explanations in the profession do not lie so much in their origins in common sense, as in their tautological character. Commonly shared assumptions within the culture certainly affect psychological theory, but simultaneously the understandings generated among professional psychologists affect the culture.
- Tautology stands as perhaps the chief means of explaining the relationship among mental states or entities (e.g., between reason and emotion).
- Tautology also stands as the chief means of explaining the relationship between the "external world" and "the mind." In forming explanations of how the mind and world are related, we approach a condition of *functional circularity,* with all causally related units owing their intelligibility to tautology. The extent to which explanations in psychological research are circular is open to continuing inquiry.
- The tautological character of such explanations is largely hidden because of the polysemous character of all terms within a given definition. That each term within a definition can be defined in multiple ways, and each term within these further definitions may be defined in still further ways, creates the conditions for *semiotic slippage*. The meaning of all terms is malleable. Owing to semiotic slippage, a vast and sensible world is made available to a culture, a world that does not depend on observation, and which may be crucial to our sense of coherence.
- Because of the unprincipled potential for redefinition, attempts to establish foundational logics governing the creation of meaning are unpromising.
- There is nothing to warrant claims that psychological testing and diagnostics tell us anything about the nature of a mental world. Owing to semiotic slippage, any test item can be explained in terms of virtually any psychological state or condition. Inferring psychological conditions from a public action is a rhetorical achievement and depends on the linguistic ability of the speaker.
- Attempts to explain a person's actions by virtue of its psychological underpinnings are redefinitions of the action. To say, for example, that a person's expressions of love are driven by sexual desire is to redefine his expressions. Explanations through extended tautologies thus serve a pivotal function in the pragmatics of social life.

Implications for Inquiry and Practice

There is much to be said about the implications of this discussion for the future of psychological science. The issues are both complex and substantial in significance. At this juncture, I shall simply focus on several critical points with the hope of seeding further dialogue.

With respect to psychological science, this essay both supports and expands on Smedslund's critique of hypothesis testing in psychological research. However, it is important to note that these arguments are not lodged against all empirical inquiry. Rather, the chief focus is on research that attempts to establish lawful explanations about the relationship of mind to world—relationships between what is in the world and what takes place in our heads, or what is in our heads and what we do. As we find, such explanations cannot fundamentally be falsified because they are tautologies.

While Smedslund has much to say about future directions of inquiry (see, for example, 2004, 2009), my constructionist leanings here are toward a pragmatic vision of future research (Gergen 2015). In this case, the general aim of psychological science to establish abstract, psychological laws of behavior should be abandoned in favor of working on concrete problems in society. Rather than warring encampments of theorists with allegiances to competing explanations (e.g., cognitive, psychodynamic, neurological, behaviorist, humanist), research would be stimulated by the major challenges of living together harmoniously with each other and the planet. Research that would enhance peace, reduce injustice, contribute to flourishing forms of life, for example, would replace the attempt to prove general laws of mental life. The natural sciences gain their importance in the world not primarily because of their general theories, but by virtue of accomplishments that matter to people. So it should be for psychology as well.

A commitment to a pragmatic vision is also a commitment to deliberation on "the good." To ask about what is useful, is simultaneously to raise such questions as, for whom is it beneficial and in what ways, and who or what may be harmed? It is here, for example, that questions may be raised about psychological testing and diagnostics. As we have seen, such tests tell us nothing about the mental conditions of those under examination. They tell us a great deal, however, about the assumptions of those who design or administer the tests. The question of who benefits and who suffers from these practices is of major social significance.

Finally, there is the more general question of linguistic constraints. To be sure, all that we can communicate in spoken and written language will be limited by this mode of representation. However, psychologists are not alone in their inattention to the demands of the modality over how we understand ourselves and our world. It is in this vein that psychologists should welcome the movement toward arts-based inquiry (Leavy 2015) emerging across the humanities and social sciences. Elsewhere we find researchers employing photography (Dikovitskaya 2006), film (Jones 2011), short stories (Diversi 1998), theatrical performance (Gray and Sindling 2002; Saldaña 2011), music (Barrett 2012), poetry (Neimeyer 2008), pastiche (Lather and

Smithies 1997; Spry 2016), and more.[6] With each new mode of representation, we expand our sensitivities and open new avenues of action. What might be written about drug addiction, for example, can be vitally enriched by photography, video, mime, and even music. Given the limits of the logocentric tradition of communication, new and exciting vistas are on the horizon.

These scarcely exhaust the issues of emerging from this discussion. Little has been said here on the attendant problems of dualism, the linguistic imposition of atomistic metaphysics, the pragmatics of psychological discourse, the potentials of differing linguistic traditions, the Western conception of knowledge, or the practical implications for therapists, educators, peace-builders, or policy makers. There may be exciting times ahead.

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[6]The specific application of arts-based inquiry to psychology is explored in Gergen and Gergen (2012).

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