Endless Incoherence— A Review of Shoemaker's Physical Realization (2009)

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ABSTRACT

Over 40 years ago I read a small grey book with metaphysics in the title which began with the words "Metaphysics is dead. Wittgenstein has killed it." I am one of many who agree but sadly the rest of the world has not gotten the message. Shoemaker's work is nonsense on stilts but is unusual only in that it never deviates into sense from the first paragraph to the last. At least with Dennett, Carruthers, Churchland etc. one gets a breath of fresh air when they discuss cognitive science (imagining they are still doing philosophy). As W showed so beautifully, the confusions that lead to metaphysics are universal and nearly inescapable aspects of our psychology. They occur not only in all thinking on behavior but throughout science as well. It's easy to find examples in Hawking, Weinberg, Penrose, Green, who of course have no idea they have left science and entered metaphysics, that the statement they just made is not a matter of fact at all but a matter of conceptual (linguistic) confusion. "Law, event, space, time, force, matter, proof, connection, cause, follows, physical", etc., all have clear uses in certain technical contexts, but these blend insensibly into quite different uses that have little in common but the spelling.

Since it is pointless to waste time deconstructing Shoemaker line by line, showing the same errors over and over, I will describe some facts about how our psychology (language) works and with this outline and the references I give it is quite straightforward to give a meaningful description of the world in place of the metaphysical fantasies. If I were to debate Shoemaker we would never get beyond the title.

Horwich gives one of the most beautiful summaries of where an understanding of Wittgenstein leaves us that I have ever seen.

"There must be no attempt to *explain* our linguistic/conceptual activity (PI 126) as in Frege's reduction of arithmetic to logic; no attempt to give it *epistemological foundations* (PI 124) as in meaning based accounts of *a priori* knowledge; no attempt to characterize *idealized* forms of it (PI 130) as in sense logics; no attempt to *reform* it (PI 124, 132) as in Mackie's error theory or Dummett's intuitionism; no attempt to *streamline* it (PI 133) as in Quine's account of existence; no attempt to make it more *consistent* (PI 132) as in Tarski's response to the liar paradoxes; and no attempt to make it more *complete* (PI 133) as in the settling of questions of personal identity for bizarre hypothetical 'teleportation' scenarios."

Those wishing a comprehensive up to date framework for human behavior from the modern two systems view may consult my article The Logical Structure of Philosophy, Psychology, Mind and Language as Revealed in Wittgenstein and Searle 59p(2016). For all my articles on Wittgenstein and Searle see my e-book 'The Logical Structure of Philosophy, Psychology, Mind and Language in Wittgenstein and Searle 367p (2016). Those interested in all my writings in their most recent versions may consult my e-book Philosophy, Human Nature and the Collapse of Civilization - Articles and Reviews 2006-2016' 662p (2016).

"Philosophers constantly see the method of science before their eyes and are irresistibly tempted to ask and answer questions in the way science does. This tendency is the real source of metaphysics and leads the philosopher into complete darkness." Blue Book p18 (1933)

“The decisive movement in the conjuring trick has been made, and it was the very one we thought quite innocent.” Wittgenstein, PI p308

"But I did not get my picture of the world by satisfying myself of its correctness: nor do I have it because I am satisfied of its correctness. No: it is the inherited background against which I distinguish between true and false." Wittgenstein OC 94

"Now if it is not the causal connections which we are concerned with, then the activities of the mind lie open before us." Wittgenstein "The Blue Book" p6 (1933)

"The aim of philosophy is to erect a wall at the point where language stops anyway." Wittgenstein Philosophical Occasions p187

"The limit of language is shown by its being impossible to describe a fact which corresponds to (is the translation of) a sentence without simply repeating the sentence ..." Wittgenstein CV p10 (1931)

"Some of the most important logical features of intentionality are beyond the reach of phenomenology because they have no immediate phenomenological reality... Because the creation of meaningfulness out of meaninglessness is not consciously experienced...it does not exist...This is... the phenomenological illusion." Searle PNC p115-117

"...the basic intentional relation between the mind and the world has to do with conditions of satisfaction. And a proposition is anything at all that can stand in an intentional relation to the world, and since those intentional relations always determine conditions of satisfaction, and a proposition is defined as anything sufficient to determine conditions of satisfaction, it turns out that all intentionality is a matter of propositions." Searle PNC p193

"But you cannot explain a physical system such as a typewriter or a brain by identifying a pattern which it shares with its computational simulation, because the existence of the pattern does not explain how the system actually works as a physical system. ...In sum, the fact that the attribution of syntax identifies no further causal powers is fatal to the claim that programs provide causal explanations of cognition... There is just a physical mechanism, the brain, with its various real physical and physical/mental causal levels of description." Searle Philosophy in a New Century(PNC) p101-103

"In short, the sense of `information processing' that is used in cognitive science is at much too high a level of abstraction to capture the concrete biological reality of intrinsic intentionality...We are blinded to this difference by the fact that the same sentence `I see a car coming toward me,' can be used to record both the visual intentionality and the output of the computational model of vision...in the sense of `information' used in cognitive science, it is simply false to say that the brain is an information processing device." Searle PNC p104-105

"The intentional state represents its conditions of satisfaction...people erroneously suppose that every mental representation must be consciously thought...but the notion of a representation as I am using it is a functional and not an ontological notion. Anything that has conditions of satisfaction, that can succeed or fail in a way that is characteristic of intentionality, is by definition a representation of its conditions of satisfaction...we can analyze the structure of the intentionality of social phenomena by analyzing their conditions of satisfaction." Searle MSW p28-32

"Here we come up against a remarkable and characteristic phenomenon in philosophical investigation: the difficulty---I might say---is not that of finding the solution but rather that of recognizing as the solution something that looks as if it were only a preliminary to it. We have already said everything.---Not anything that follows from this, no this itself is the solution!....This is connected, I believe, with our wrongly expecting an explanation,

whereas the solution of the difficulty is a description, if we give it the right place in our considerations. If we dwell upon it, and do not try to get beyond it." Zettel p312-314

"He who understands baboon would do more towards metaphysics than Locke" Darwin 1838: Notebook M

These quotes are not chosen at random but (along with the others in my reviews) are an outline of behavior (human nature) from our two greatest descriptive psychologists. In considering these matters we must keep in mind that philosophy (in this context) is descriptive psychology.

Over 40 years ago I read a small grey book with metaphysics in the title which began with the words "Metaphysics is dead. Wittgenstein has killed it." I am one of many who agree but sadly the rest of the world has not gotten the message. Shoemaker's work is nonsense on stilts but is unusual only in that it never deviates into sense from the first paragraph to the last. At least with Dennett, Carruthers, Churchland etc. one gets a breath of fresh air when they discuss cognitive science (imagining they are still doing philosophy). As W showed so beautifully, the confusions that lead to metaphysics are universal and nearly inescapable aspects of our psychology. They occur not only in all thinking on behavior but throughout science as well. It's easy to find examples in Hawking, Weinberg, Penrose, Green, who of course have no idea they have left science and entered metaphysics, that the statement they just made is not a matter of fact at all but a matter of conceptual (linguistic) confusion. "Law, event, space, time, force, matter, proof, connection, cause, follows, physical", etc., all have clear uses in certain technical contexts, but these blend insensibly into quite different uses that have little in common but the spelling.

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Here is how the leading Wittgenstein scholar summarized his work: "Wittgenstein resolved many of the deep problems that have dogged our subject for centuries, sometimes indeed for more than two millennia, problems about the nature of linguistic representation, about the relationship between thought and language, about solipsism and idealism, self-knowledge and knowledge of other minds, and about the nature of necessary truth and of mathematical propositions. He ploughed up the soil of European philosophy of logic and language. He gave us a novel and immensely fruitful array of insights into philosophy of psychology. He attempted to overturn centuries of reflection on the nature of mathematics and mathematical truth. He undermined foundationalist epistemology. And he bequeathed us a vision of philosophy as a contribution not to human knowledge, but to human understanding – understanding of the forms of our thought and of the conceptual confusions into which we are liable to fall."—Peter Hacker--'Gordon Baker's late interpretation of Wittgenstein'

To this I would add that W was the first to clearly and extensively describe the two systems of thought--fast automatic prelinguistic S1 and the slow reflective linguistic dispositional S2. He explained how behavior only is possible with a vast inherited background that is the axiomatic basis for judging and cannot be doubted or judged, so will (choice), consciousness self, time and space are innate true-only axioms. He noted in thousands of pages and hundreds of examples how our inner mental experiences are not directly describable in language, this being possible only with terms that substitute for public behavior (the impossibility of private language). He invented

truth tables and predicted the utility of paraconsistent logic. He patented helicopter designs which anticipated by three decades the use of blade-tip jets to drive the rotors and which had the seeds of the centrifugal-flow gas turbine engine, designed a heart-beat monitor, designed and supervised the building of a modernist house, and sketched a proof of Euler's Theorem, subsequently completed by others. He can be viewed as the first evolutionary psychologist since he constantly explained the necessity of the innate background and demonstrated how it generates behavior. He described the psychology behind the Wason test--a fundamental measure used in EP decades later. He noted the indeterminate nature of language and the game-like nature of social interaction. He described and refuted the notions of the mind as machine and the computational theory of mind, long before practical computers. He decisively laid to rest skepticism and metaphysics. He showed that, far from being inscrutable, the activities of the mind lie open before us, a lesson few have learned since.

In addition to failing to make it clear that what they are doing is descriptive psychology, philosophers rarely specify exactly what it is that they expect to contribute to this topic that other students of behavior (i.e., *scientists*) do not, so after noting W's above remark on science envy, I will quote again from Hacker who gives a good start on it.

"Traditional epistemologists want to know whether knowledge is true belief and a further condition …, or whether knowledge does not even imply belief ... We want to know when knowledge does and when it does not require justification. We need to be clear what is ascribed to a person when it is said that he knows something. Is it a distinctive mental state, an achievement, a performance, a disposition or an ability? Could knowing or believing that *p* be identical with a state of the brain? Why can one say 'he believes that *p*, but it is not the case that *p*', whereas one cannot say 'I believe that *p*, but it is not the case that *p*'? Why are there ways, methods and means of achieving, attaining or receiving knowledge, but not belief (as opposed to faith)? Why can one know, but not believe who, what, which, when, whether and how? Why can one believe, but not know, wholeheartedly, passionately, hesitantly, foolishly, thoughtlessly, fanatically, dogmatically or reasonably? Why can one know, but not believe, something perfectly well, thoroughly or in detail? And so on – through many hundreds of similar questions pertaining
not only to knowledge and belief, but also to doubt, certainty, remembering, forgetting, observing, noticing, recognising, attending, being aware of, being conscious of, not to mention the numerous verbs of perception and their cognates. What needs to be clarified if these questions are to be answered is *the web of our epistemic concepts*, the ways in which the various concepts hang together, the various forms of their compatibilities and incompatibilities, their point and purpose, their presuppositions and different forms of context dependency. To this venerable exercise in connective analysis, scientific knowledge, psychology, neuroscience and self-styled cognitive science can contribute nothing whatsoever." (Passing by the naturalistic turn: on Quine's *cul-de-sac*- p15-2005)

I will offer some comments on philosophy and its relationship to contemporary psychological research as exemplified in the works of Searle (S) and Wittgenstein (W). It will help to see my reviews of PNC (Philosophy in a New Century), TLP, PI, OC, Making the Social World (MSW) and other books by and about these two geniuses, who provide a clear description of higher order behavior, not found in psychology books, that I will refer to as the WS framework.

Now that we have a reasonable start on the Logical Structure of Rationality (the Descriptive Psychology of Higher Order Thought) laid out we can look at the table of Intentionality that results from this work, which I have constructed over the last few years. It is based on a much simpler one from Searle, which in turn owes much to Wittgenstein. I have also incorporated in modified form tables being used by current researchers in the psychology of thinking processes which are evidenced in the last 9 rows. It should prove interesting to compare it with those in Peter Hacker's 3 recent volumes on Human Nature. I offer this table as an heuristic for describing behavior that I find more complete and useful than any other framework I have seen and not as a final or complete analysis,

which would have to be three dimensional with hundreds (at least) of arrows going in many directions with many (perhaps all) pathways between S1 and S2 being bidirectional. Also, the very distinction between S1 and S2, cognition and willing, perception and memory, between feeling, knowing, believing and expecting etc. are arbitrary--that is, as W demonstrated, all words are contextually sensitive and most have several utterly different uses (meanings or COS). Many complex charts have been published by scientists but I find them of minimal utility when thinking about behavior (as opposed to thinking about brain function). Each level of description may be useful in certain contexts but I find that being coarser or finer limits usefulness.

The Logical Structure of Rationality (LSR), or the Logical Structure of Mind (LSM), the Logical Structure of Behavior (LSB), the Logical Structure of Thought (LST), the Logical Structure of Consciousness (LSC), the Logical Structure of Personality (LSP), the Descriptive Psychology of Consciousness (DSC), the Descriptive Psychology of Higher Order Thought (DPHOT), Intentionality-the classical philosophical term.

System 1 is involuntary, reflexive or automated "Rules" R1 while Thinking (Cognition) has no gaps and is voluntary or deliberative "Rules" R2 and Willing (Volition) has 3 gaps (see Searle)

	Disposition*	Emotion	Memory	Perception	Desire	PI**	IA***	Action/Word
Cause Originates From**	**World**	**World**	**World**	**World**	**Mind**	**Mind**	**Mind**	**Mind**
Causes Changes In***	**None**	**Mind**	**Mind**	**Mind**	**None**	**World**	**World**	**World**
Causally Self Reflexive****	**No**	**Yes**	**Yes**	**Yes**	**No**	**Yes**	**Yes**	**Yes**
True or False (Testable)	**Yes**	**T only**	**T only**	**T only**	**Yes**	**Yes**	**Yes**	**Yes**

Public Conditions of Satisfaction	**Yes**	**Yes/No**	**Yes/No**	**No**	**Yes/No**	**Yes**	**No**	**Yes**
Describe a Mental State	**No**	**Yes**	**Yes**	**Yes**	**No**	**No**	**Yes/No**	**Yes**
Evolutionary Priority	**5**	**4**	**2,3**	**1**	**5**	**3**	**2**	**2**
Voluntary Content	**Yes**	**No**	**No**	**No**	**No**	**Yes**	**Yes**	**Yes**
Voluntary Initiation	**Yes/No**	**No**	**Yes**	**No**	**Yes/No**	**Yes**	**Yes**	**Yes**
Cognitive System *******	**2**	**1**	**2/1**	**1**	**2 / 1**	**2**	**1**	**2**
Change Intensity	**No**	**Yes**	**Yes**	**Yes**	**Yes**	**No**	**No**	**No**
Precise Duration	**No**	**Yes**	**Yes**	**Yes**	**No**	**No**	**Yes**	**Yes**
Time, Place(H+N,T+T) ********	**TT**	**HN**	**HN**	**HN**	**TT**	**TT**	**HN**	**HN**
Special Quality	**No**	**Yes**	**No**	**Yes**	**No**	**No**	**No**	**No**
Localized in Body	**No**	**No**	**No**	**Yes**	**No**	**No**	**No**	**Yes**
Bodily Expressions	**Yes**	**Yes**	**No**	**No**	**Yes**	**Yes**	**Yes**	**Yes**
Self Contradictions	**No**	**Yes**	**No**	**No**	**Yes**	**No**	**No**	**No**
Needs a Self	**Yes**	**Yes/No**	**No**	**No**	**Yes**	**No**	**No**	**No**
Needs Language	**Yes**	**No**	**No**	**No**	**No**	**No**	**No**	**Yes/No**
FROM DECISION RESEARCH								
Subliminal Effects	**No**	**Yes/No**	**Yes**	**Yes**	**No**	**No**	**No**	**Yes/No**
Associative/Rule Based	**RB**	**A/RB**	**A**	**A**	**A/RB**	**RB**	**RB**	**RB**
Context Dependent/Abstract	**A**	**CD/A**	**CD**	**CD**	**CD/A**	**A**	**CD/A**	**CD/A**
Serial/Parallel	**S**	**S/P**	**P**	**P**	**S/P**	**S**	**S**	**S**
Heuristic/Analytic	**A**	**H/A**	**H**	**H**	**H/A**	**A**	**A**	**A**
Needs Working Memory	**Yes**	**No**	**No**	**No**	**No**	**Yes**	**Yes**	**Yes**
General Intelligence Dependent	**Yes**	**No**	**No**	**No**	**Yes/No**	**Yes**	**Yes**	**Yes**

Cognitive Loading Inhibits	**Yes**	**Yes/No**	**No**	**No**	**Yes**	**Yes**	**Yes**	**Yes**
Arousal Facilitates or Inhibits	**I**	**F/I**	**F**	**F**	**I**	**I**	**I**	**I**

Public Conditions of Satisfaction of S2 are often referred to by Searle and others as COS, Representations, truthmakers or meanings (or COS2 by myself), while the automatic results of S1 are designated as presentations by others (or COS1 by myself).

*** Aka Inclinations, Capabilities, Preferences, Representations, possible actions etc.**

**** Searle's Prior Intentions**

***** Searle's Intention In Action**

****** Searle's Direction of Fit**

******* Searle's Direction of Causation**

******** (Mental State instantiates--Causes or Fulfills Itself). Searle formerly called this causally self- referential.**

********* Tversky/Kahneman/Frederick/Evans/Stanovich defined cognitive systems.**

********** Here and Now or There and Then**

One should always keep in mind Wittgenstein's discovery that after we have described the possible uses (meanings, truthmakers, Conditions of Satisfaction) of language in a particular context, we have exhausted its interest, and attempts at explanation (i.e., philosophy) only get us further away from the truth. It is critical to note that this table is only a highly simplified context-free heuristic and each use of a word must be examined in its context. The best examination of context variation is in Peter Hacker's recent 3 volumes on Human Nature, which provide numerous tables and charts that should be compared with this one.

Those wishing a comprehensive up to date account of Wittgenstein, Searle and their analysis of behavior from the modern two systems view may consult my article The Logical Structure of Philosophy, Psychology, Mind and Language as Revealed in Wittgenstein and Searle (2016).

A major theme in all discussion of human behavior (e.g. metaphysics etc) is the need to separate the genetically programmed automatisms from the effects of culture. All study of higher order behavior is an effort to tease apart not only fast S1 and slow S2 thinking (e.g., perceptions and other automatisms vs. dispositions or abilities to act), but the logical extensions of S2 into culture (S3).

Searle's work as a whole provides a stunning description of higher order S2/S3 social behavior due to the recent evolution of genes for dispositional psychology, while the later W shows how it is based on true-only unconscious axioms of S1 which evolved into conscious dispositional propositional thinking of S2.

S1 is the simple automated functions of our involuntary, System 1, fast thinking, mirror neuron, true-only, non-propositional, prelinguistic mental states- our perceptions and memories and reflexive acts including System 1

Truths and UA1 --Understanding of Agency 1-- and Emotions1- such as joy, love, anger) which can be described causally, while the evolutionarily later linguistic functions are expressions or descriptions of voluntary, System 2, slow thinking, mentalizing neurons. That is, of testable true or false, propositional, Truth2 and UA2 and Emotions2 (joyfulness, loving, hating)-- the dispositional (and often counterfactual) imagining, supposing, intending, thinking, knowing, believing, etc. which can only be described in terms of reasons (i.e., it's just a fact that attempts to describe System 2 in terms of neurochemistry, atomic physics, mathematics, make no sense--see W, S, Hacker etc).

Disposition words have at least two basic uses. One is a peculiar philosophical use (but graduating into everyday uses) which refers to the true-only sentences resulting from direct perceptions and memory, i.e., our innate axiomatic S1 psychology (`I know these are my hands')--i.e., they are Causally Self Referential (CSR), and the S2 use, which is their normal use as dispositions, which can be acted out, and which can become true or false (`I know my way home')--i.e., they have Conditions of Satisfaction (COS) and are not CSR.

The investigation of System 1 has revolutionized psychology, economics and other disciplines under names like "cognitive illusions", "priming", "framing", "heuristics" and "biases". Of course these too are language games so there will be more and less useful ways to use these words, and studies and discussions will vary from "pure" System 1 to combinations of 1 and 2 (the norm as W made clear), but not of S2 only, since it cannot occur without involving much of the intricate S1 network of "cognitive modules", "inference engines", "intracerebral reflexes", "automatisms", "cognitive axioms", "background" or "bedrock" --as W and later S call our Evolutionary Psychology (EP).

The deontic structures or `social glue' are the automatic fast actions of S1 producing the slow dispositions of S2 which are inexorably expanded during personal development into a wide array of automatic universal cultural deontic relationships (S3). I expect this fairly well describes the basic structure of behavior.

So, recognizing that S1 is only upwardly causal (world to mind) and contentless (lacking representations or information) while S2 has content and is downwardly causal (mind to world) (e.g., see my review of Hutto and Myin's `Radical Enactivism'), I would change the paragraphs from S's MSW p39 beginning "In sum" and ending on pg 40 with "conditions of satisfaction" as follows.

In sum, perception, memory and reflexive prior intentions and actions (`will') are caused by the automatic functioning of our S1 true-only axiomatic EP as modified by S2 ('free will'). We try to match how we desire things to be with how we think they are. We should see that belief, desire (and imagination--desires time shifted and decoupled from intention) and other S2 propositional dispositions of our slow thinking later evolved second self, are totally dependent upon (have their COS originating in) the CSR rapid automatic primitive true- only reflexive S1. In language and neurophysiology there are intermediate or blended cases such as intending (prior intentions) or remembering, where the causal connection of the COS with S1 is time shifted, as they represent the past or the future, unlike S1 which is always in the present. S1 and S2 feed into each other and are often orchestrated seamlessly by the learned deontic cultural relations of S3, so that our normal experience is that we consciously control everything that we do. This vast arena of cognitive illusions that dominate our life Searle has described as `The Phenomenological Illusion' (TPI).

It follows both from W's 3rd period work contemporary psychology, that `will', `self' and `consciousness' are axiomatic true-only elements of S1 composed of perceptions and reflexes., and there is no possibility (intelligibility) of demonstrating (of giving sense to) their falsehood. As W made so wonderfully clear numerous times, they are the basis for judgment and so cannot be judged. The true-only axioms of our psychology are not evidential.

Like Carruthers and others, S sometimes states (e.g., p66-67 MSW) that S1 (i.e., memories, perceptions, reflex acts) has a propositional (i.e., true-false) structure. As I have noted above, and many times in other reviews, it seems crystal clear that W is correct, and it is basic to understanding behavior, that only S2 is propositional and S1 is axiomatic and true-only. They both have COS and Directions of Fit (DOF) because the genetic, axiomatic

intentionality of S1 generates that of S2 but if S1 were propositional in the same sense it would mean that skepticism is intelligible, the chaos that was philosophy before W would return, and in fact if true, life would not be possible. As W showed countless times and biology demonstrates, life must be based on certainty--automated unconscious rapid reactions. Organisms that always have a doubt and pause to reflect will die-no evolution, no people, no philosophy.

I would translate S's summary of practical reason on p127 of MSW as follows: "We yield to our desires (need to alter brain chemistry), which typically include Desire -Independent Reasons for Action (DIRA--i.e., desires displaced in space and time), which produce dispositions to behavior that commonly result sooner or later in muscle movements that serve our inclusive fitness (increased survival for genes in ourselves and those closely related)." And I would restate his description on p129 of how we carry out DIRA2/3 as "The resolution of the paradox is that the unconscious DIRA1 serving long term inclusive fitness generate the conscious DIRA2 which often override the short term personal immediate desires." Agents do indeed consciously create the proximate reasons of DIRA2/3, but these are very restricted extensions of unconscious DIRA1 (the ultimate cause). Obama and the Pope wish to help the poor because it is right but the ultimate cause is a change in their brain chemistry that increased the inclusive fitness of their distant ancestors.

Evolution by inclusive fitness has programmed the unconscious rapid reflexive causal actions of S1 which often give rise to the conscious slow thinking of S2 (often modified into the cultural extensions of S3), which produces reasons for action that often result in activation of body and/or speech muscles by S1 causing actions. The general mechanism is via both neurotransmission and by changes in neuromodulators in targeted areas of the brain. The overall cognitive illusion (called by S `The Phenomenological Illusion', by Pinker `The Blank Slate' and by Tooby and Cosmides `The Standard Social Science Model') is that S2/S3 has generated the action consciously for reasons of which we are fully aware and in control of, but anyone familiar with modern biology and psychology can see that this view is not credible.

A sentence expresses a thought (has a meaning), when it has clear COS, i.e., public truth conditions. Hence the comment from W: " When I think in language, there aren't `meanings' going through my mind in addition to the verbal expressions: the language is itself the vehicle of thought." And, if I think with or without words, the thought is whatever I (honestly) say it is as there is no other possible criterion (COS). Thus W's lovely aphorisms (p132 Budd) "It is in language that wish and fulfillment meet" and "Like everything metaphysical, the harmony between thought and reality is to be found in the grammar of the language." And one might note here that `grammar' in W can usually be translated as `EP' and that in spite of his frequent warnings against theorizing and generalizing, this is about as broad a characterization of higher order descriptive psychology as one can find.

Though W is correct that there is no mental state that constitutes meaning, S notes that there is a general way to characterize the act of meaning-- "Speaker meaning... is the imposition of conditions of satisfaction on conditions of satisfaction" which means to speak or write a well formed sentence in a context that can be true or false and this is an act and not a mental state.
Hence the famous quote from W: "If God had looked into our minds he would not have been able to see there whom we were speaking of (PI p217)" and his comments that the whole problem of representation is contained in "that's Him" and "...what gives the image its interpretation is the path on which it lies," or as S says its COS. Hence W's summation (p140 Budd) that "What it always comes to in the end is that without any further meaning, he calls what happened the wish that that should happen"..." the question whether I know what I wish before my wish is fulfilled cannot arise at all. And the fact that some event stops my wishing does not mean that it fulfills it. Perhaps I

should not have been satisfied if my wish had been satisfied"...Suppose it were asked `Do I know what I long for before I get it? If I have learned to talk, then I do know."

Disposition words refer to Potential Events which I accept as fulfilling the COS and my mental states, emotions, change of interest etc. have no bearing on the way dispositions function. I am hoping, wishing, expecting, thinking, intending, desiring etc. depending on the state I take myself to be in-- on the COS that I express and which can only be expressed by reflexive S1 muscle contractions, especially those of speech.

This is another statement of W's argument against private language. Likewise with rule following and interpretation --they can only be publicly checkable acts. And one must note that many (most famously Kripke) miss the boat here, being misled by W's frequent referrals to community practice into thinking it's just arbitrary public practice that underlies language and social conventions. W makes clear many times that such conventions are only possible given an innate shared axiomatic psychology which he often calls the background.

W's definitive arguments against introspection and private language are as clear as day—we must have a test to differentiate between A and B and tests can only be public. He famously illustrated this with the 'Beetle in the Box' as noted p191 of WAP. I have explained the functioning of dispositional language ('propositional attitudes') and W's dismantling of the notion of introspection above and in my reviews of Budd, Johnston and several of S's books. Basically he showed that the causal relation and word and object model that works for S1 does not apply to S2.

W famously rejected behaviorism and much of his work is devoted to describing why it cannot serve as a description of behavior. "Are you not really a behaviourist in disguise? Aren't you at bottom really saying that everything except human behavior is a fiction? If I do speak of a fiction, then it is of a *grammatical* fiction." (PI p307) But *real* behaviorism is rampant in its modern 'functionalist', 'computationalist','dynamic systems' forms. See my review of Carruther's 'The Opacity of Mind' for a recent egregious example.

Behaviorism etc. have no practical impact. Unlike other cartoon views of life, they are too cerebral and esoteric to be grasped by more than a tiny fringe and it is so unrealistic that even its adherents totally ignore it in their everyday life. Unfortunately not so with other cartoon theories like SSSM, BS and TPI, widely shared by religions, governments, sociology, anthropology, pop psychology, history, literature, and mom and dad, in spite of well known facts, such as that personalities of adults adopted as children are as different from those of their adoptive siblings and parents as people chosen randomly off the street. Religions big and small, political movements, and economics often generate or embrace already existing cartoons that ignore physics and biology (human nature), posit forces terrestrial or cosmic that reinforce our superstitions, wishful thinking and selfishness and help to accelerate the destruction of the earth (the real purpose of nearly every social practice). The point is to realize that these fantasies are on a continuum and have the same source. All of us are born with a cartoon view of life and few ever grow out of it. But the world is not a cartoon, so a great tragedy is being played out as the cartoons collide with reality.

In spite of the fact that most of the above has been known to many for decades (and even ¾ of a century in the case of some of W's teachings), I have never seen anything approaching an adequate discussion in behavioral science texts and commonly there is barely a mention. This is truly sad, but it is absolutely scandalous that the same is true of nearly all philosophy texts.