Review of Meaning and the Growth of Understanding Wittgenstein's Significance for Developmental Psychology -- Chapman and Dixon Eds. (1987)

Michael Starks

ABSTRACT

Although now over 25 years old, many of the essays are quite contemporary. As expected, none of the authors grasp the full relevance of W for the description of behavior, missing most of the points made in my comments above, his many examples of how S1becomes S2, his role as a pioneer in EP, and his attempts to separate nature from nurture. Brose has many good points and is aware of the foundational nature of On Certainty, but is too scattered and does not clearly describe W's analysis of how our innate automatic unconscious S1 is the axiomatic basis for all behavior (but with a few exceptions nobody else to this day has either). Russell's article is excellent, especially the first part dealing with Kripke's famously distorted view of W. For a more recent and superb deconstruction of Kripke's W that is of very general application, see "Kripke's conjuring Trick" by Read and Sharrock, available on the net.

I also found Coulter's article quite good and like Margolis and Harre, he has continued his work to the present day and published widely. Margolis is very bright and well read but his precious prose and attempt to include as many references as possible results in a lack of clarity and focus. Rosch makes the best effort to apply W to real research but also lacks the broad understanding of him that could transform the view of higher order thought. Harre has since become a major W scholar but has little to say here, so those interested should see my review of his "Wittgenstein and Psychology". Overall, considering that this book was written over 25 years ago and most of the authors were not philosophers they did a good job and the volume is still worth reading.

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).

"The confusion and barrenness of psychology is not to be explained by calling it a "young science"; its state is not comparable with that of physics, for instance, in its beginnings. (Rather with that of certain branches of mathematics. Set theory.) For in psychology there are experimental methods and conceptual confusion. (As in the other case, conceptual confusion and methods of proof). The existence of the experimental method makes us think we have the means of solving the problems that trouble us; though problem and method pass one another by." Wittgenstein (PI p.232)

"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." (BBB p18).

"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

"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

"Many words then in this sense then don't have a strict meaning. But this is not a defect. To think it is would be like saying that the light of my reading lamp is no real light at all because it has no sharp boundary." BBB p27

"The origin and the primitive form of the language game is a reaction; only from this can more complicated forms develop. Language--I want to say--is a refinement. 'In the beginning was the deed.'" CV p31

"Imagine a person whose memory could not retain *what* the word 'pain' meant-so that he constantly called different things by that name-but nevertheless used the word in a way fitting in with the usual symptoms and presuppositions of the word 'pain'-in short he used it as we all do." PI p271

"Every sign is capable of interpretation but the *meaning* mustn't be capable of interpretation. Is is the last interpretation" BBB p34

"There is a kind of general disease of thinking which always looks for (and finds) what would be called a mental state from which all our acts spring, as from a reservoir." BBB p143

"And the mistake which we here and in a thousand similar cases are inclined to make is labeled by the word "to make" as we have used it in the sentence "It is no act of insight which makes us use the rule as we do", because there is an idea that "something must make us" do what we do. And this again joins onto the confusion between cause and reason. We need have no reason to follow the rule as we do. The chain of reasons has an end." BBB p143

"If we keep in mind the possibility of a picture which, though correct, has no similarity with its object, the interpolation of a shadow between the sentence and reality loses all point. For now the sentence itself can serve as such a shadow. The sentence is just such a picture, which hasn't the slightest similarity with what it represents." BBB p37

"Thus we may say of some philosophizing mathematicians that they are obviously not aware of the many different usages of the word "proof; and that they are not clear about the differences between the uses of the word "kind", when they talk of kinds of numbers, kinds of proof, as though the word "kind" here meant the same thing as in the context "kinds of apples." Or, we may say, they are not aware of the different *meanings* of the word "discovery" when in one case we talk of the discovery of the construction of the pentagon and in the other case of the discovery of the South Pole." BBB p29

"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

"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

"Superstition is nothing but belief in the causal nexus." TLP 5.1361

"Now if it is not the causal connections which we are concerned with, then the activities of the mind lie open before us." BBB p6

"We feel that even when all *possible* scientific questions have been answered, the problems of life remain completely untouched. Of course, there are then no questions left, and this itself is the answer." TLP 6.52

"Nonsense, Nonsense, because you are making assumptions instead of simply describing. If your head is haunted by explanations here, you are neglecting to remind yourself of the most important facts."

Z 220

"Philosophy simply puts everything before us and neither explains nor deduces anything...One might give the name 'philosophy' to what is possible before all new discoveries and inventions." PI 126

"The more narrowly we examine actual language, the sharper becomes the conflict between it and our requirement. (For the crystalline purity of logic was, of course, not a result of investigation: it was a requirement.)"PI 107

"The wrong conception which I want to object to in this connexion is the following, that we can discover something wholly new. That is a mistake. The truth of the matter is that we have already got everything, and that we have got it actually present; we need not wait for anything. We make our moves in the realm of the grammar of our ordinary language, and this grammar is already there. Thus, we have already got everything and need not wait for the future." (said in 1930) Waismann "Ludwig Wittgenstein and the Vienna Circle (1979)p183

"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

"Our method is purely descriptive, the descriptions we give are not hints of explanations." BBB p125

"For the clarity that we are aiming at is indeed *complete* clarity. But this simply means that the philosophical problems should *completely* disappear." PI p133

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 is the descriptive psychology of higher order thought (HOT), which is another of the obvious facts that are totally overlooked –i.e., I have never seen it clearly stated anywhere.

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'

I would add that W was the first (by 40 years) 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 discussed many times what is now known as Theory of Mind, Framing and cognitive illusions. He frequently explained the necessity of the innate background and demonstrated how it generates behavior. He described the psychology behind what later became the Wason test--a fundamental measure used in EP research decades later. He noted the indeterminate nature of language and the game-like nature of social interaction. He examined in thousands of pages and hundreds of examples how our inner mental experiences are not describable in language, this being possible only for public behavior with a public language (the impossibility of private language). Thus, he can be viewed as the first evolutionary psychologist.

When thinking about Wittgenstein, I often recall the comment attributed to Cambridge Philosophy professor C.D. Broad (who did not understand nor like him). "Not offering the chair of philosophy to Wittgenstein would be like not offering the chair of physics to Einstein!" I think of him as the Einstein of intuitive psychology. Though born ten years later, he was likewise hatching ideas about the nature of reality at nearly the same time and in the same part of the world and like Einstein nearly died in WW1. Now suppose Einstein was a suicidal homosexual recluse with a difficult personality who published only one early version of his ideas that were confused and often mistaken, but became world famous; completely changed his ideas but for the next 30 years published nothing more, and knowledge of his new work, in mostly garbled form, diffused slowly from occasional lectures and students notes; that he died in 1951 leaving behind over 20,000 pages of mostly handwritten scribblings in German, composed of sentences or short paragraphs with, often, no clear relationship to sentences before or after; that he wrote in a Socratic style with 3 distinct persons in the dialog—the narrator, the interlocutor and the commentator (usually W's view) whose comments were blended together by most readers, thus completely vitiating the whole elucidatory and therapeutic thrust, that these were cut and pasted from other notebooks written years earlier with notes in the margins, underlinings and crossed out words, so that many sentences have multiple variants; that his literary executives cut this indigestible mass into pieces, leaving out what they wished and struggling with the monstrous task of capturing the correct meaning of sentences which were conveying utterly novel views of how the universe works and that they then published this material with agonizing slowness (not finished after half a century) with prefaces that contained no real explanation of what it was about; that he became as much notorious as famous due to many statements that all previous physics was a mistake and even nonsense, and that virtually nobody understood his work, in spite of hundreds of books and tens of thousands of papers discussing it; that many physicists knew only his early work in which he had made a definitive summation of Newtonian physics stated in such extremely abstract and condensed form that it was difficult to decide what was being said; that he was then virtually forgotten and that most books and articles on the nature of the world and the diverse topics of

modern physics had only passing and usually erroneous references to him, and that many omitted him entirely; that to this day, over half a century after his death, there were only a handful of people who really grasped the monumental consequences of what he had done. This, I claim, is precisely the situation with Wittgenstein.

Before remarking on "Meaning and the Growth of Understanding" (MGU), I will first offer some comments on philosophy and its relationship to contemporary psychological research as exemplified in the works of Searle (S), Wittgenstein (W), Hacker (H) et al. 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 geniuses, who provide a clear description of higher order behavior not found in psychology books, that I will refer to as the WS framework. A major theme in all discussion of human behavior 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, but the extensions of S2 into culture (S3). Searle's work as a whole provides a stunning description of higher order S2/S3 social behavior, 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)-called reflexive or intransitive in BBB), 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(called transitive in BBB).

It follows both from W's 3rd period work and from 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.

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 (philosophy) 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 expressing COS 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."

Wittgenstein (W) is for me easily the most brilliant thinker on human behavior. He shows that behavior is an extension of innate true-only axioms (see "On Certainty" for his final extended treatment of this idea) and that our conscious ratiocination emerges from unconscious machinations. His corpus can be seen as the foundation for all description of animal behavior, revealing how the mind works and indeed must work. The "must" is entailed by the fact that all brains share a common ancestry and common genes and so there is only one basic way they work, that this necessarily has an axiomatic structure, that all higher animals share the same evolved psychology based on inclusive fitness, and that in humans this is extended into a personality based on throat muscle contractions (language) that evolved to manipulate others. I suggest it will prove of the greatest value to consider W's work and most of his examples as an effort to tease apart not only fast and slow thinking (e.g., perceptions vs dispositions-see below), but nature and nurture.

W can also be regarded as a pioneer in evolutionary cognitive linguistics—the Top Down analysis of the mind and its evolution via the careful analysis of examples of language use in context, exposing the many varieties of language games and the relationships between the primary games of true-only unconscious, axiomatic fast thinking of perception, memory and reflexive emotions and acts (often described as the subcortical and primitive cortical reptilian brain first-self functions), and the later evolved higher cortical dispositional conscious abilities of believing, knowing, thinking etc. that constitute the true or false propositional secondary language games of slow thinking that include the network of cognitive illusions that constitute the basis of our second-self personality. He dissects hundreds of language games showing how the true-only perceptions, memories and reflexive actions of system one (S1) grade into the thinking, remembering, and understanding of system two (S2) dispositions, and many of his examples also address the nature/nurture issue explicitly. With this evolutionary perspective, his later works are a breathtaking revelation of human nature that is entirely current and has never been equaled. Many

perspectives have heuristic value, but I find that this evolutionary two systems view is the best. To paraphrase Dobzhansky's famous comment: "Nothing in philosophy makes sense except in the light of evolutionary psychology."

The common ideas (e.g., the subtitle of one of Pinker's books "The Stuff of Thought: language as a window into human nature") that language is a window on or some sort of translation of our thinking or even (Fodor) that there must be some other "Language of Thought" of which it is a translation, were rejected by W, who tried to show, with hundreds of continually reanalyzed perspicacious examples of language in action, that language is not just the best picture we can ever get of thinking, the mind and human nature, but speech *is* the mind, and his whole corpus can be regarded as the development of this idea. He rejected the idea that the Bottom Up approaches of physiology, experimental psychology and computation (Computational Theory of Mind, Strong Al, Dynamic Systems Theory, functionalism, etc.) could reveal what his analyses of Language Games (LG's) did. The difficulties he noted are to understand what is always in front of our eyes and to capture vagueness ("The greatest difficulty in these investigations is to find a way of representing vagueness" LWPP1, 347).

He recognized that 'Nothing is Hidden'—i.e., our whole psychology and all the answers to all philosophical questions are here in our language (our life) and that the difficulty is not to find the answers but to recognize them as always here in front of us—we just have to stop trying to look deeper and to abandon the myth of introspective access to our "inner life" (e.g., "The greatest danger here is wanting to observe oneself." LWPP1, 459). Incidentally, the equation of logic or grammar and our axiomatic psychology is essential to understanding W and human nature (as DMS, but afaik nobody else, points out).

Our shared public experience becomes a true-only extension of our axiomatic EP and cannot be found mistaken without threatening our sanity. That is, the consequences of an S1 'mistake' are quite different from an S2 mistake. A corollary, nicely explained by DMS and elucidated in his own unique manner by Searle, is that the skeptical view of the world and other minds (and a mountain of other nonsense including the Blank Slate) cannot really get a foothold, as "reality" is the result of involuntary axioms and not testable true or false propositions.

The investigation of involuntary fast thinking has revolutionized psychology, economics (e.g., Kahneman's Nobel prize) 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 presumably not ever of slow System 2 dispositional thinking only, since any System 2 thought or intentional action cannot occur without involving much of the intricate network of "cognitive modules", "inference engines", "intracerebral reflexes", "automatisms", "cognitive axioms", "background" or "bedrock" (as W and later Searle call our EP). One of W's recurring themes was TOM, or as I prefer UA (Understanding of Agency). Ian Apperly, who is carefully analyzing UA1 and UA2 in experiments, has recently become aware of Hutto, who has characterized UA1 as a fantasy (i.e., no 'Theory' nor representation involved in UA1--that being reserved for UA2—see my review of his book with Myin). However, like other psychologists, Apperly has no idea W laid the groundwork for this 80 years ago. It is an easily defensible view that the core of the burgeoning literature on cognitive illusions, automatisms and higher order thought is compatible with and straightforwardly deducible from W. 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.

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) *******	тт	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 RESEAR	СН							
Subliminal Effects	No	Yes/No	Yes	Yes	No	No	No	Yes/No
Associative/Rule Based	RB	A/RB	Α	Α	A/RB	RB	RB	RB
Context Dependent/Abstract	Α	CD/A	CD	CD	CD/A	Α	CD/A	CD/A
Serial/Parallel	S	S/P	Р	Р	S/P	S	S	S
Heuristic/Analytic	A	H/A	Н	Н	H/A	Α	Α	А
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	ı	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).

Now for some comments on MGU.

After the above and my many reviews of books by and about W, S, H etc, it should be clear what W is doing so I'll make just a few comments.

Although now over 25 years old, many of the essays are quite contemporary. As expected, none of the authors grasp the full relevance of W for the description of behavior, missing most of the points made in my comments above, his many examples of how S1becomes S2, his role as a pioneer in EP, and his attempts to separate nature from nurture. Brose has many good points and is aware of the foundational nature of On Certainty, but is too scattered and does not clearly describe W's analysis of how our innate automatic unconscious S1 is the axiomatic basis for all behavior (but with a few exceptions nobody else to this day has either). Russell's article is excellent, especially the first part dealing with Kripke's famously distorted view of W. For a more recent and superb deconstruction of Kripke's W that is of very general application, see "Kripke's conjuring Trick" by Read and Sharrock, available on the net.

I also found Coulter's article quite good and like Margolis and Harre, he has continued his work to the present day and published widely. Margolis is very bright and well read but his precious prose and attempt to include as many references as possible results in a lack of clarity and focus. Rosch makes the best effort to apply W to real research but also lacks the broad understanding of him that could transform the view of higher order thought. Harre has since become a major W scholar but has little to say here, so those interested should see my review of his "Wittgenstein and Psychology". Overall, considering that this book was written over 25 years ago and most of the authors were not philosophers they did a good job and the volume is still worth reading.

Finally, let me suggest that with this perspective, W is not obscure, difficult or irrelevant but scintillating, profound and crystal clear and that to miss him is to miss one of the greatest intellectual adventures possible.