Review of Understanding Wittgenstein's On Certainty by Daniele Moyal-Sharrock (2007)(review revised 2019)

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ABSTRACT

Wittgenstein (W) is for me easily the most brilliant thinker on human behavior and this is his last work and crowning achievement. It belongs to his third and final period, yet it is not only his most basic work (since it shows that all behavior is an extension of innate true-only axioms and that our conscious ratiocination is but icing on unconscious machinations), but as Daniele Moyal-Sharrock has recently noted, is a radical new epistemology and 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 in humans this is extended into a personality based on throat muscle contractions (language) that evolved to manipulate others (with variations that can be regarded as trivial). This book, and arguably all of W's work and all useful discussion of behavior is a development of or variation on these ideas.

Those wishing a comprehensive up to date framework for human behavior from the modern two systems view may consult my book 'The Logical Structure of Philosophy, Psychology, Mind and Language in Ludwig Wittgenstein and John Searle' 2nd ed (2019). Those interested in more of my writings may see 'Talking Monkeys--Philosophy, Psychology, Science, Religion and Politics on a Doomed Planet--Articles and Reviews 2006-2019 3rd ed (2019) and Suicidal Utopian Delusions in the 21st Century 4th ed (2019).

On Certainty was not published until 1969, 18 years after Wittgenstein's death and has only recently begun to draw serious attention. I cannot recall a single reference to it in all of Searle and one see's whole books on W with barely a mention. There are however excellent books on it by Stroll, Svensson, McGinn and others and parts

of many other books and articles, but hands down the best is that of Daniele Moyal-Sharrock (DMS) whose 2004 volume "Understanding Wittgenstein's On Certainty" is mandatory for every educated person, and perhaps the best starting point for understanding Wittgenstein (W), psychology, philosophy and life. However (in my view) like all analysis of W, they fall far short of grasping his unique and revolutionary advance in describing behavior. This exceptional work suffers from the same tunnel vision nearly all philosophy does by failing to put behavior in its broad contemporary scientific context, which I will attempt here. However, DMS is one of the top Wittgensteinians (and thus philosophers and descriptive psychologists) in the world and has written much new and ground breaking material since this volume appeared.

Wittgenstein (W) is for me easily the most brilliant thinker on human behavior of all time and this is his last work and crowning achievement. It belongs to his third and final period, yet it is not only his most basic work (since it shows that all behavior is an extension of innate true-only axioms and that our conscious ratiocination is but icing on unconscious machinations), but 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 in humans this is extended into a personality based on throat muscle contractions (language) that evolved to manipulate others (with variations that can be regarded as trivial). This book, and arguably all of W's work and all useful discussion of behavior is a development of or variation on these ideas.

In the course of many years reading extensively in W, other philosophers, and psychology, it has become clear that what he laid out in his final period (and throughout his earlier work in a less clear way) are the foundations of what is now known as evolutionary psychology (EP), or if you prefer, psychology, cognitive linguistics, intentionality, higher order thought or just animal behavior. Sadly, almost nobody seems to realize that his works are a vast and unique textbook of descriptive psychology that is as relevant now as the day it was written. He is almost universally ignored by psychology and other behavioral sciences and humanities, and even those few in philosophy who have more or less understood him have not carried the analysis to its logical (psychological) conclusion nor realized the extent of his anticipation of the latest work on EP and cognitive illusions

(the two selves of fast and slow thinking--see below). His heir apparent, John Searle, refers to him periodically and his work can be seen as a straightforward extension of W's, but he does not really get that this is what he is doing. Other leading W analysts such as Hutto and Moyal-Sharrock do marvelously but (in my view) stop short of putting him in the center of current psychology, where he certainly belongs. I eventually came to understand much of W by regarding his corpus as the pioneering effort in EP, seeing that he was describing the two selves and the multifarious language games of fast and slow thinking, and by starting from his 3rd period works and reading backwards to the proto-Tractatus. It has been extremely revealing to alternate W with the writings of hundreds of other philosophers and evolutionary psychologists (as I regard all psychologists and in fact all behavioral scientists, cognitive linguists and others).

W can e.g., be regarded as the pioneer of evolutionary cognitive linguistics--the Top Down analysis of the mind and its evolution via the careful analysis of examples of language use in context, to expose the many varieties of language games and the relationships between the primary games of the true-only axiomatic fast thinking of perception and memory and reflexive emotions and acts often described as the mostly subcortical reptilian brain first-self functions, and the later evolved higher cortical dispositional abilities of believing, knowing, thinking etc. that constitute the true or false propositional secondary language games of slow thinking and the network of cognitive illusions that constitute the second-self personality. With this evolutionary perspective, his works are a breathtaking revelation of human nature that has never been equaled. Many perspectives have heuristic value, but I find this one not only lets me understand W, but cuts like a hot knife through the frozen butter of discussions of higher order behavior.

The failure (in my view) of even the best thinkers to fully grasp W's significance is partly due to the limited attention On Certainty (OC) and his other 3rd period works have received, but even more to the inability to understand how profoundly our view of philosophy, anthropology, sociology, linguistics, politics, law, morals, ethics, religion, aesthetics, literature (all of them being descriptive psychology), alters once we accept this evolutionary point of view. The dead hand of the blank slate view of behavior still rests heavily on most people, pro or amateur and is the default of the second self of slow thinking conscious system 2, which is oblivious to the fact that the groundwork for all decisions lies in the unconscious, fast thinking axiomatic structure of system 1. Steven Pinker's brilliant `The Blank Slate: the

modern denial of human nature' is highly recommended preparation, even though it is now dated and he has no clue about Wittgenstein and hence of what can be regarded as the first really deep investigation into the foundations of human nature. He seems not to grasp that the Blank Slate is an expression of the cognitive illusions that constitute our mental life.

To say that Searle has carried on W's work is not to imply that it is a direct result of W study, but rather that because there is only ONE human psychology (for the same reason there is only ONE human cardiology), that anyone accurately describing behavior must be voicing some variant or extension of what W said. I find most of Searle foreshadowed in W, including versions of the famous Chinese room argument against Strong AI. Incidentally if the Chinese Room interests you then you should read Victor Rodych's excellent, but virtually unknown, supplement on the CR--"Searle Freed of Every Flaw". Rodych has also written a series of superb papers on W's philosophy of mathematics (i.e., the EP of the axiomatic system 1 Primary Language Games (PLG's) of counting as extended into the endless Language Games of math).

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 the best picture we can ever get of thinking, the mind and human nature, and his whole corpus can be regarded as the development of this idea. He rejected the idea that the Bottom Up approaches of physiology, psychology and computation could reveal what his Top Down deconstructions 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).

And so, speech (i.e., oral muscle contractions, the principal way we can interact) is not a window into the mind but is the mind itself, which is expressed by acoustic blasts about past, present and future acts (i.e., our speech using the later evolved Secondary Language Games (SLG's) of the Second Self--the dispositions -- imagining, knowing, meaning, believing, intending etc.). Some of W's favorite topics in his later second and his third periods are the different (but interdigitating)

LG's of fast and slow thinking-the epiphenomenality of our second-self mental life and the impossibility of private language. The PLG's are utterances of and descriptions of our involuntary, system 1, fast thinking, true only, untestable mental states- our perceptions and memories and involuntary acts, while the evolutionarily later SLG's are descriptions of voluntary, system 2, slow thinking, testable true or false dispositional (and often counterfactual) imagining, supposing, intending, thinking, knowing, believing etc. 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 (e.g., "The greatest danger here is wanting observe oneself" LWPP1, 459).

W makes these points throughout his works in countless examples and again his whole corpus can be regarded as the effort to make this clear. After all, what exactly is the alternative? W showed over and over that standard ways of describing behavior (i.e., most of philosophy, and much of descriptive psychology, anthropology, sociology, economics, etc.) are either demonstrably false or incoherent. Once we understand W, we realize the absurdity of regarding "language philosophy" as a separate study apart from other areas of behavior, since language is just another name for the mind. And, when W says (as he does many times) that understanding behavior is in no way dependent on the progress of psychology (e.g., his oft-quoted assertion "The confusion and barrenness of psychology is not to be explained by calling it a `young science' --but cf. another comment that I have never seen quoted "Is scientific progress useful to philosophy? Certainly. The realities that are discovered lighten the philosopher's task. Imagining possibilities." (LWPP1, 807).

So, he is not legislating the boundaries of science but pointing out the fact that our behavior (mostly speech) is the clearest picture possible of our psychology. FMRI, PET, TCMS, iRNA, computational analogs, AI and all the rest are fascinating and powerful ways to extend our innate axiomatic psychology, but all they can do is provide the physical basis for our behavior, facilitate our analysis of language games, and extend our EP, which remains unchanged (unless genetic engineering is unleashed to change our EP--but then it won't be us anymore). The true-only axioms of `'On Certainty'' are W's (and later Searle's) "bedrock" or "background", which we now call evolutionary psychology (EP), and which is traceable to the automated true-only reactions of bacteria, which evolved and operates by the

mechanism of inclusive fitness (IF). See the recent works of Trivers and others for a popular intro to IF or Bourke's superb "Principles of Social Evolution" for a pro intro.

Beginning with their innate true-only, nonempirical (nontestable) responses to the world, animals extend their axiomatic understanding via deductions into further true only understandings ("theorems" as we might call them, but of course like many words, this is a complex language game even in the context of mathematics). Tyrannosaurs and mesons become as unchallengeable as the existence of our two hands or our breathing. This totally changes one's view of human nature. Theory of Mind (TOM) is not a theory at all but a group of true-only Understandings of Agency (UA a term I devised 10 years ago) which newborn animals (including flies and worms if UA is suitably defined) have and subsequently extend greatly (in higher eukaryotes). Likewise, the Theory of Evolution ceased to be a theory for any normal, rational, intelligent person before the end of the 19th century and for Darwin at least half a century earlier. One cannot help but incorporate T. rex and all that is relevant to it into our innate background via the inexorable workings of EP. Once one gets the logical (psychological) necessity of this it is truly stupefying that even the brightest and the best seem not to grasp this most basic fact of human life (with a tip of the hat to Kant, Searle and a few others). And incidentally, the equation of logic and our axiomatic psychology is essential to understanding W and human nature (as DMS, but afaik nobody else, points out).

So, most of our shared public experience (culture) becomes a true-only extension of our axiomatic EP and cannot be found mistaken without threatening our sanity. 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) cannot really get a foothold, as "reality" is the result of involuntary fast thinking axioms and not testable propositional attitudes.

It became clear to me recently that the innate true-only axioms W is occupied with throughout his work, and almost exclusively in OC, are equivalent to the fast thinking or System One that is at the center of current research (e.g., see Kahneman--"Thinking Fast and Slow", but he has no idea W laid out the framework over 50 years ago), which is involuntary and unconscious and which corresponds to the mental states of perception and memory, as W notes over and over in endless

examples. One might call these "intracerebral reflexes"(maybe 99% of all our cerebration if measured by energy use in the brain). Our slow or reflective, more or less "conscious" (beware another network of language games!) second-self brain activity corresponds to what W characterized as "dispositions" or "inclinations", which refer to abilities or possible actions, are not mental states, and do not have any definite time of occurrence. But disposition words like "knowing", "understanding", "thinking", "believing", which W discussed extensively, have at least two basic uses (or, one might say, one major use and one abuse) or language games--a peculiar philosophical use by exemplified by Moore (whose papers inspired W to write OC) which refers to the true-only sentences based on direct perceptions and memory, i.e., our innate axiomatic psychology (`I know these are my hands'), and their normal use as dispositions, which are acted out and which can become true or false (`I know my way home').

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 One to combinations of One and Two (the norm as W made clear), but presumably not ever of slow System Two dispositional thinking only, since any thought or intentional action cannot occur without involving much of the intricate network of the "cognitive modules", "inference engines", "intracerebral reflexes", "automatisms", "cognitive axioms" or "background" or "bedrock" (as W and later Searle call our EP).

Another point made countless times by W was that our conscious mental life is epiphenomenal in the sense that it does not describe nor determine how we act. It is an obvious corollary of his descriptive psychology that it is the unconscious automatisms of System 1 that dominate and describe behavior and that the later evolved conscious dispositions (thinking, remembering, loving, desiring, regretting etc.) are mere icing on the cake. This is most strikingly borne out by the latest experimental psychology, which is nicely summarized by Kahneman in the book cited (see e.g., the chapter `Two Selves', but of course there is a huge volume of recent work he does not cite). It is an easily defensible view that most of the burgeoning literature on cognitive illusions is wholly compatible with and straightforwardly deducible from W.

Probably the leading current exponent of W's ideas on the language games of inner and outer (the `Two Selves' operation of our personality or intentionality or EP etc.) is the prolific Daniel Hutto (DH), who teaches at the same University as DMS. His approach is called `Radical Enactivism' and is well explained in numerous recent books and papers. See my review of his 'Radicalizing Enactivism' (2012). He is also author of the best deconstruction I know of Dennett's preposterous claim to be following in W's footsteps (in fact he is just repeating most of the classic mistakes in grandiose fashion). But of course one must read Searle too and the title of his famous review of Dennett's book says it well "Consciousness Explained Away". Incidentally, unlike some philosophers and other scholars, who make little or no effort to give the general public access to their papers, Hutto has put nearly every paper free online (though of course usually just proofs and not the final journal version, but see b-ok.org for these).

Here, as throughout W's works, understanding is bedeviled by possible alternative and consequently often infelicitous translations from often unedited and handwritten German notes, with "Satz" being frequently incorrectly rendered as "proposition"(which is a testable or falsifiable statement) when referring to our nonfalsifiable psychological axioms, as opposed to the correct "sentence", which CAN be applied to our axiomatic true-only statements such as "these are my hands" or "Tyrannosaurs were large carnivorous dinosaurs that lived about 50 million years ago"(and since this is an unavoidable extension of our psychology, what does this imply about creationists?).

Incidentally, regarding the view of W as the major pioneer in EP, it seems nobody has noticed that he very clearly explained several times specifically and many times in passing, the psychology behind what later became known as the Wason Test-- long a mainstay of EP research.

The view that even the brightest philosophers do not really grasp the context in which they are operating is perhaps most strikingly illustrated when they attempt to define philosophy. In recent years I have seen such definitions by two of those I hold in highest regard--Graham Priest and John Searle, and of course they mention truth, language, reality etc., but not a word to suggest it is a description of our innate universal axiomatic psychology and its extensions. Priest, by the way, has noted

that W was the first to predict the emergence of paraconsistent logic.

Let me note that even now new W writings continue to be published. Yorick Smithies notes on W's lectures has appeared and a version of the brown book which he dictated to Francis Skinner will be published by Springer in 2019. A new version of the Bergen CD will appear ca 2021 and see Pichler for the latest on the nachlass online http://wab.uib.no/alois/Pichler%2020170112%20Geneva.pdf.

Finally, let me suggest that with this perspective, W is not obscure, difficult or irrelevant but scintillating, profound and crystal clear, that he writes aphoristically and telegraphically because we think and behave that way, and that to miss him is to miss one of the greatest intellectual adventures possible.

The table of intentionality which I generated follows here.

The rows show various aspects or ways of studying and the columns show the involuntary processes and voluntary behaviors comprising the two systems (dual processes) of the Logical Structure of Consciousness (LSC), which can also be regarded as the Logical Structure of Rationality (LSR-Searle), of behavior (LSB), of personality (LSP), of Mind (LSM), of language (LSL), of reality (LSOR), of Intentionality (LSI) -the classical philosophical term, the Descriptive Psychology of Consciousness (DPC) , the Descriptive Psychology of Thought (DPT) –or better, the Language of the Descriptive Psychology of Thought (LDPT), terms introduced here and in my other very recent writings.

The ideas for this table originated in the work by Wittgenstein, a much simpler table by Searle, and correlates with extensive tables and graphs in the three recent books on Human Nature by P.M.S Hacker. The last 9 rows come principally from decision research by Johnathan St. B.T. Evans and colleagues as revised by myself.

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)

I suggest we can describe behavior more clearly by changing Searle's "impose conditions of satisfaction on conditions of satisfaction" to "relate mental states to the world by moving muscles"—i.e., talking, writing and doing, and his "mind to world direction of fit" and "world to mind direction of fit" by "cause originates in the mind" and "cause originates in the world"   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). I have adopted my terminology in this table.

I give detailed explanations of this table in my other writings.

	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

	Disposition*	Emotion	Memory	Perception	Desire	PI**	IA***	Action/ Word
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