

# **The Logical Structure of Consciousness (behavior, personality, rationality, higher order thought, intentionality) (revised 2019)**

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## **ABSTRACT**

After half a century in oblivion, the nature of consciousness is now the hottest topic in the behavioral sciences and philosophy. Beginning with the pioneering work of Ludwig Wittgenstein in the 1930's (the Blue and Brown Books) and from the 50's to the present by his logical successor John Searle, I have created the following table as a heuristic for furthering this study. 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 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.

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 21<sup>st</sup> Century 4<sup>th</sup> ed (2019).

About a million years ago primates evolved the ability to use their throat muscles to make complex series of noises (i.e., speech) that by about 100,000 years ago had evolved to describe present events (perceptions, memory, reflexive actions with basic utterances that can be described as Primary Language Games (PLG's) describing System 1—i.e., the fast unconscious automated System One, true-only mental states with a precise time and location). We gradually developed the further ability to encompass displacements in space and time to describe memories,

attitudes and potential events (the past and future and often counterfactual, conditional or fictional preferences, inclinations or dispositions) with the Secondary Language Games (SLG's) of System Two- slow conscious true or false propositional attitudinal thinking, which has no precise time and are abilities and not mental states). Preferences are Intuitions, Tendencies, Automatic Ontological Rules, Behaviors, Abilities, Cognitive Modules, Personality Traits, Templates, Inference Engines, Inclinations, Emotions, Propositional Attitudes, Appraisals, capacities, hypotheses. Emotions are Type 2 Preferences (W RPP2 p148). "I believe", "he loves", "they think" are descriptions of possible public acts typically displaced in spacetime. My first-person statements about myself are true-only (excluding lying) while third person statements about others are true or false (see my review of Johnston 'Wittgenstein: Rethinking the Inner').

"Preferences" as a class of intentional states --opposed to perceptions, reflexive acts and memories-- were first clearly described by Wittgenstein (W) in the 1930's and termed "inclinations" or "dispositions". They have commonly been termed "propositional attitudes" since Russell but this is a misleading phrase since believing, intending, knowing, remembering etc., are often not propositions nor attitudes, as has been shown e.g., by W and by Searle (e.g., Consciousness and Language p118). They are intrinsic, observer independent mental representations (as opposed to presentations or representations of System 1 to System 2 – Searle-C+L p53). They are potential acts displaced in time or space while the evolutionarily more primitive System One mental states of perceptions memories and reflexive actions are always here and now. This is one way to characterize System 2 and System 3--the second and third major advances in vertebrate psychology after System 1--the ability to represent events and to think of them as occurring in another place or time (Searle's third faculty of counterfactual imagination supplementing cognition and volition). S1 are potential or unconscious mental states (Searle-- Phil Issues 1:45-66(1991).

Perceptions, memories and reflexive (automatic) actions can be described as S1 or primary LG's (PLG's --e.g., I see the dog) and there are, in the normal case, no tests possible, so they can be true-only. Dispositions can be described as secondary LG's (SLG's --e.g. I believe I see the dog) and must also be acted out, even for me in my own case (i.e., how do I know what I believe, think, feel until I act). Dispositions also become Actions when spoken or written as well as being acted out in other ways, and these ideas are all due to Wittgenstein (mid 1930's) and are not Behaviorism (Hintikka & Hintikka 1981, Searle, Hutto, Read, Hacker etc.,). Wittgenstein can be regarded as the founder of evolutionary psychology, contextualism, enactivism, and the two systems framework, and his work a unique

investigation of the functioning of our axiomatic System 1 psychology and its interaction with System 2. Though few have understood it well (and arguably nobody fully to this day) it was further developed by a few -- above all by John Searle, who made a simpler version of the table below in his classic book *Rationality in Action* (2001). It expands on W's survey of the axiomatic structure of evolutionary psychology developed from his very first comments in 1911 and so beautifully laid out in his last work *On Certainty* (OC) (written in 1950-51). OC is the foundation stone of behavior or epistemology and ontology (arguably the same), cognitive linguistics or the logical structure of Higher Order Thought (HOT), and in my view the single most important work in philosophy (descriptive psychology), and thus in the study of behavior. See my article *The Logical Structure of Philosophy, Psychology, Mind and Language as Revealed in Wittgenstein and Searle* (2016) and the recent work of Daniele Moyal-Sharrock.

Perception, Memory, Reflexive actions and Emotion are primitive partly Subcortical Involuntary Mental States, described in PLC's, in which the mind automatically fits the world (is Causally Self Referential --Searle) --the unquestionable, true-only, axiomatic basis of rationality over which no control is possible). Emotions evolved to make a bridge between desires or intentions and actions. Preferences, Desires, and Intentions are descriptions of slow thinking conscious Voluntary Abilities--described in SLG's-- in which the mind tries to fit the world.

Behaviorism and all the other confusions of our default descriptive psychology (philosophy) arise because we cannot see S1 working and describe all actions as SLG's (The Phenomenological Illusion or TPI of Searle). W understood this and described it with unequalled clarity with hundreds of examples of language (the mind) in action throughout his works. Reason has access to working memory and so we use consciously apparent but typically incorrect reasons to explain behavior (the Two Selves of current research). Beliefs and other Dispositions are thoughts which try to match the facts of the world (mind to world direction of fit), while Volitions are intentions to act (Prior Intentions--PI, or Intentions In Action-IAA-Searle) plus acts which try to match the world to the thoughts--world to mind direction of fit--cf. Searle e.g., C+L p145, p190).

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).

In accord with W's work and Searle's terminology, I categorize the representations of S2 as public Conditions of Satisfaction (COS) and in this sense S1 such as perceptions do not have COS. In other writings S says they do but as noted in my other reviews I think it is then essential to refer to COS1 (private presentations) and COS2 (public presentations). To repeat this critical distinction, public Conditions of Satisfaction of S2 are often referred to by Searle and others as COS, Representations, truth makers or meanings (or COS2 by myself), while the automatic results of S1 are designated as presentations by others (or COS1 by myself).

Likewise, I have changed his 'Direction of Fit' to 'Cause Originates From' and his 'Direction of Causation' to 'Causes Changes In'. 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).

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.

INTENTIONALITY can be viewed as personality or as the Construction of Social Reality (the title of Searle's well known book) and from many other viewpoints as well.

**Beginning with the pioneering work of Ludwig Wittgenstein in the 1930's (the Blue and Brown Books) and from the 50's to the present by his successors Searle, Moyal-Sharrock, Read, Baker, Hacker, Stern, Horwich, Winch, Finkelstein etc., I have created the following table as an heuristic for furthering this study. 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), 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.**

	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

\* 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

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

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.

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.