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Carbon-Based Brain, Consciousness and Choice: A Phenomenological Update on the Concept and Reality of Free Will as an Existential Mode of Existence Exhibited in Human Praxis

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Abstract

The intent of this paper is to establish a non-reductive neural base for the conscious self and freedom. Given (1) the dependency of consciousness or the conscious self on the neural brain (2) established correlates between mental (cognitive) and neural states, (3) the persistent claim for 'free will' exhibited in human *praxis,* an attempt is made to continue the debate on 'free will' in the light of Libet's claim that "readiness potential" precedes the "will to act"? Do we need to locate, detect or create consciousness or the conscious self before we can accept it? We know that conscious self is contingent or related to the physical brain, but until (or unless) we can establish what role non-neural elements (temperature, pressure, neural oscillations and sleep) play in making 'conscious self' possible we cannot detect, locate or create the conscious self. All we know is that conscious self or consciousness is related to the physical brain, but it could be a fundamental property of the physical universe—as such not only related to the physical but related to the laws of physics. Consciousness is contingent or related to the physical brain but we do not know whether it is purely physical (as Dennett claims), whether it is reductive (as Smart suggests), whether it is non-reductive (as Chalmers claims), whether it is irreducible (as Searle claims), or whether it is immaterial (as Sartre claims). Consciousness is an existential/emergent mode of being and so is 'free will', hence only existentially detectable. The emergence of consciousness from organic sentience gives rise to the phenomenal, intentional, functional, moral and the existential but non-reductive self. The detectable genetic and neural activity generates the non-reductive 'state consciousness' (Rosenthal), which I shall call existential *sentience.* It is existential sentience' (the awareness that we are conscious) that is responsible for the self, which is non-reductive though organic in its roots. All creatures exhibit *levels of sentience* but human sentience exhibits something unique –the awareness of being conscious. The awareness that we are conscious to begin with is self-awareness. So belief in the conscious existential self is basic if one is to accept the phenomenal, functional, moral, and volitional self.

Keywords: Carbon-Based Brain, Conscious Will, Conscious Veto, Consciousness, Self-Consciousness.

Introduction

When insentient matter becomes organic it exhibits not only observable traits such as motility, metabolism, growth/development and replication but also exhibits levels of organic sentience. [1] Organic sentience or conscious states can be detected by functional magnetic resonance imaging (MRI). As such, correlation between mental (cognitive) and neural states can be established.[2] The phenomena of sentience is a 'visible emergence' as liquidity is,[3] but when organic sentience becomes existential sentience, as Rosenthal calls it "state consciousness'[4] (the awareness of being conscious, as exhibited in human life), it becomes 'invisible' like gravity, as such has no particular place or location. While property dualists argue that there is only one substance with two properties (physical and mental), only certain mental states are reducible to brain states, still others cannot be reduced to brain states. As such freedom and self are or better existential sentience is a 'non-reductive given' as gravity is where there is mass. Where there is existential sentience there is the self and freedom. Thomas Nagel argued that the awareness *that* we are conscious is not self-awareness. It is 'consciousness of self.'[5] In this paper it is argued that the awareness *that* we are conscious *is* the basis for self-awareness, this is what distinguishes our sentience from the sentience of other animals. The acceptance of Rosenthal's understanding of 'state consciousness', the awareness of being conscious, is fundamental not only to distinguish us from other sentient creatures, but provides the basis for what Armstrong states as 'introspective consciousness'[6], the reason we are able to argue for a conscious self. Without *state consciousness* we cannot talk about *self-consciousness*.[7] Without self-consciousness we cannot talk about what David Chalmers calls the "phenomenal experience" of the self.[8] If consciousness is a brain process[9] then what we are conscious *of* is either caused or comprehended. As such, belief-

[1]David J. Chalmers, "Consciousness and its Place in Nature" *Philosophy of Mind*, David Chalmers. (New York: Oxford university Press, 2002) 249. David Chalmers suggests that if God did create then he would have had to inject consciousness to physical atoms at one point. Because matter is insentient. Science does not tell us why, how or exactly when inorganic or insentient matter becomes organic and sentient.

[2]David J. Chalmers, "Consciousness and its Place in Nature" *Philosophy of mind*, 248.

[3]John R. Searle "The Irreducibility of Consciousness" Heil, John. *Philosophy of the Mind:* A guide and anthology. (New York: Oxford University Press, woo4) 700

[4]David M. Rosenthal, "Explaining consciousness" David J Chalmers Philosophy *of mind*, (New York: Oxford university Press, 2002) 407. Here he defines state consciousness as the state of being conscious of being conscious.

[5]Thomas Nagel, Mind and Cosmos. (2012).

[6]D. M. Armstrong "What is consciousness" John Heil *Philosophy of Mind*, 611. Here Rosenthal argues the introspective consciousness is self- awareness.

[7]Ned Block Concepts of consciousness David J Chalmers Philosophy *of mind*, (New York: Oxford university Press, 2002) 213. Here Ned Block argues that concept of the self is about thinking about oneself.

[8]David J. Chalmers, "Consciousness and its Place in Nature" *Philosophy of mind*, page, 247-48.

[9]John R. Searle "The Irreducibility of Consciousness" Heil, John. *Philosophy of the Mind:* A guide and anthology. 708

formation involves two types of beliefs—propositions we *have to believe* and propositions we *choose to believe*.[1] It is the conscious self that is cognizant as to when we *have to believe* (what is empirical) and when we *choose to believe* what is comprehended as *answers* to the *questions* related the human condition. To believe in the conscious and volitional self is to be aware of why we choose to believe in a paradigm that defines human nature as being free.

The Existential Self: The Basis for Freedom

Organic life is genetic, neural and sentient. All of these are detectable. But when what is genetic, neural and sentient gains existential sentience' (what Rosenthal calls state consciousness) it becomes non-reductive (as such has no place nor location) or as Chalmers states, is not deducible from physical facts.[2] Based on genetic and neural activity of sentient beings, all creatures exhibit levels of sentience, but human sentience exhibits something unique: *the awareness of being conscious* or "state consciousness". Rosenthal's distinction of 'state consciousness' not only differentiates us from animals[3] but provides the basis for the conscious self. Rosenthal's understanding of 'the awareness that we are conscious' must be understood not as another level of sentience but another type of sentience—existential sentience. This existential awareness is the basis for self-awareness. State consciousness, which I call existential sentience is non-reductive because it is a state of being within neural sentience. Why is it that we can create artificial sentience/awareness and artificial intelligence but not create existential sentience? We cannot because we do not know what role non-neural factors like temperature, pressure and sleep play in the creation of consciousness. Searle argued that consciousness is a visible emergence (like liquidity) but state consciousness –the awareness that we are conscious, is an invisible emergence (like gravity) within a visible emergence—a 'state' within the 'emergent state'. What must be noted is that organic sentience without existential sentience is no better than artificial awareness/intelligence/consciousness. Like animals, humans are aware but only creatures that are conscious that they are aware can have and hold beliefs.

Why is it important to establish the reality of the self? We cannot talk about freedom without establishing the self. It is the conscious self that is free. Without the 'self' talk about freedom is futile. Thomas Nagel argued that only a bat can know what it is like to be a bat.[4] The question is: is it possible for a bat to know what it is like to be a bat if the bat does not know that it is conscious? Just the fact of sentience alone cannot provide the basis for a bat to know what it is like to be a bat. Creatures must be aware and be consciously aware in order to know what it is like to be that particular creature. Only

[1]Louis P. Pojman "Believing, Willing and the Ethics of Belief" The *Theory of knowledge.* 529
[2]David J Chalmers, "Consciousness and its Place in Nature" *Philosophy of mind* 249.
[3]Animals are aware but unaware that they are aware, humans are aware and aware that they are conscious. Animals are aware but not self-aware, humans are aware and are self-aware.
[4]Thomas Nagel, "What it is like to be a bat" *Philosophy of Mind* David Chalmers 220

creatures that are consciously aware can, as David Chalmers states, be "phenomenally conscious"—"when there is something it is like to be that being". [1] This is what makes us distinct from bats and other animals. Being aware that we are conscious is self-consciousness. State consciousness--that which is common in each of us, can be discovered only through self-consciousness. What must be noted is that while the conscious self is the basis for freedom it is also the basis for what is common in each. How can the basis for freedom, what is common in each person, also be the basis for what is distinct in each? What is common is state consciousness which we call as the soul/mind/consciousness. But since it can only be discovered as the self, the self and the soul are the same thing. What is distinct in each is the self. The self is the individual soul or mind. It is only to this conscious self can we ascribe notions of freedom. Conscious self without freedom would be a petrified state of being. That is why Sartre argued that, to be conscious *is* to choose and to choose *is* to be conscious[2]as the fundamental basis for freedom. We possess a freedom cognizant consciousness.

We can argue that the conscious self is related to the physical brain, but we cannot be sure whether it is reducible to the physical brain. As such, some have suggested that it is irreducible, others have suggested that it is immaterial and still others have argued that there is "no self". Does the fact that we can clone the body/brain along with sentience but not the self with its memory mean there can be 'no self'? Should we rewrite Descartes' famous statement "I think therefore I am" (Cogito Ergo Sum) to say that I have brain activity therefore I am?[3] Does one have to precede the other or is the genetic and neural makeup the same as the conscious self? The question is can we establish a neural base for the conscious self that is aware of the volitional self? Is it possible to argue that the genetic and neural activity which give rise to organic sentience is the foundation for the conscious self? Paul Bloom argues that "the genetic you and the neural you aren't alternatives to the conscious you. They are its foundations".[4] Conscious self and conscious will are ontological neural emergences that find their basis in genetic and neural activity. The self along with the 'conscious will' is neuropsychological—the identity of the self is grounded in continuity of brain functions.[5] The 'self' lives off human neural activity even if the brain-cells present now are made of atoms that were not part of it ten years ago.[6] Human self and 'conscious will' is part of an organism.[7] The conscious self needs a body to live in. The existence of 'my' body precedes the existence of 'myself'. The body creates the self, and the self

[1]David J Chalmers, "Consciousness and its Place in Nature" *Philosophy of mind*, page, 247-48.
[2]Jean Paul Sartre, *Being and Nothingness*, 595.
[3]Allan H. Ropper Cogito Ergo Sum By MRI the New England Journal of Medicine, 2.
[4]Paul Bloom, The war on Reason. http://m.theatlantic.com/magazine/archieve/2014/03/the-war-on-reason/357561/
[5]E. J. Lowe, 858. *Non-Cartesian dualism*. Heil, John. *Philosophy of the Mind:* A guide and anthology. (New York: Oxford University Press, 2004) 851.
[6]Peter Van Inwagen *Metaphysics* (Westview: Perseus Books Group 2009) 326.
[7]Ibid, p 239. If the human self is part of an organism –how would one account for multiply selves. Is it possible that is a result of a brain within a brain?

in turn controls the body. Descartes argued that humans are "a thing that thinks." But in reality it is the self that thinks. We know that we can block the 'thing that thinks' by anesthetics. By this, we know that consciousness is a brain-process[1]. However, even though we know consciousness is a brain process, we do not know how consciousness is generated, much less how to create state consciousness or self-consciousness. We have succeeded in creating artificial intelligence (in that we can make computers do half what the brain can do) but have not succeeded in creating self-conscious intelligence.[2] What we know seems to suggest that human consciousness is contingent on the physical brain and related to physical factors; temperature, pressure, sleep, nutrition and oxygen. Though we do not know what role the laws of the physics play in the generation of consciousness, we have to assume it does because we cannot isolate the laws of physics from what is physical or what is related to the physical. Because consciousness is not only dependent on the physical brain but also contingent on non-neural factors (such as temperature, pressure, oxygen, and sleep) including the laws of physics for its reality, it is undetectable, non-reductive and irreducible. Being an invisible emergence, there is no particular place or location for it. It is an invisible emergence. What is common to all humans is existential sentience—the awareness that we are conscious. Just as you cannot talk about gravity[3] independent of mass you cannot talk about 'conscious self' independent of genetic and neural activity. We can only *experience* gravity. Similarly we can only experience *being* oneself but never end up *seeing* oneself. There is no empirical self only the existential self because the self is a irreducible given contingent on organic sentience

From Hume to Brentano all have talked about the idea of self—and the question has been: does the 'self' have substance? Brentano suggested that "inner consciousness" is a substance. Kant argued that the self is a thinking substance and E.J. Lowe suggested that it is a 'simple substance'.[4] The self is a a non-reductive emergence and we do not have any instrument to detect the self. Is the persistent, enduring and continuous self 'real' as the ego theorists argue for? Is the self an illusion as the bundle theorists argue for? Why it is hard to accept the reality of the conscious intelligent self? Do we have to be able to locate, create or detect the self before it is accepted? How must we

[1]John R. Searle. "The Irreducibility of Consciousness". Heil, John. *Philosophy of the Mind:* A guide and anthology. Page 701.

[2]We have succeeded in creating artificial eyes (camera lens) artificial ears but we cannot create 'conscious eyes' and 'conscious ears'. We can also create artificial intelligence and artificial sentience but we cannot create existential sentience. Organic sentience without existential sentience is no better than artificial sentience (thermometer) or artificial intelligence.

[3]Searle argues that consciousness is an emergent, like liquidity. I would like to use the analogy of gravity because while the quality called liquidity can be seen gravity can only be experienced. Here we can make a further distinction. The soul in each person can be compared to gravity—for where there is mass there is gravity. Similarly we can say where there is existential sentience there is the soul that is the same in each other. And the self is the individual soul.

[4]E. J. Lowe. *Non-Cartesian dualism,* Heil, John. *Philosophy of the Mind* 856.

address this question? Eliminative materialists argue that there are no mental states or state consciousness, (which is the basis for conscious self) as such reject conscious self because it is not detectable. At present, neuroscience can detect conscious states but cannot detect the self that is conscious of the conscious states. Others argue that there are mental states but the conscious self cannot have a particular place or location, because neural sentience turns into 'state consciousness' it becomes hidden. Still others argue the fact that if we can create functional states in non-carbon based systems then brain states are nothing but machine states and as such reject the presence of the conscious self. How then can we argue for the conscious self? The first option is to accept property dualism or non-Cartesian dualism[1] to provide the basis for accepting conscious self as a non-reductive or irreducible entity. All consciousness is consciousness of something by someone- the self. The second option is to accept that the conscious self as the presence of an immaterial soul as the dualist would want us to believe. The third option is to accept the self along with conscious intelligence and conscious will as an undetectable ontological emergence contingent on the genetic and neural activity of the brain. Instead of seeing both the neural activity and the conscious self as being mutually exclusive it is important to see the genetic and neural activity creating or responsible for the conscious self. The only way we can reject the self, conscience and free will is to be a strict physicalist, arguing that there are no mental states. The self, like the law of gravity, is a reality to be assumed if one is to do science or be involved in neuroscience. It is the conscious existential self that is intentional, phenomenal, functional, moral and free. While we can detect mental states we cannot state what the intentional, functional, phenomenal and moral self is aware *of.*

Conscious Awareness of the Conscious Will/Conscious Veto In the Context the Forces at Work

Libet states that we are only aware of what the neurons decide to do when he stated that "readiness potential" precedes "the will to act"[2]. What does Libet's finding of the time gap between "readiness potential" and the decision to act entail? What Libet fails to distinguish is 'the conscious will' from the "will to act". Consciousness or the 'conscious will' precedes "readiness potential" and the "will to act". Consciousness–the awareness of being conscious precedes "readiness potential" like gravity precedes 'falling'. We cannot have the possibility of 'falling' without gravity, similarly we cannot have the possibility of "readiness potential" without consciousness. It is the irreducible conscious self that initiates the decision to act which precedes both "readiness potential" and the decision to act. What Libet calls the "will to act" is nothing but muscle movement to enact the decision? Consciousness is not

[1]E. J. Lowe, *Non-Cartesian dualism,* Heil, John. *Philosophy of the Mind* 851.
[2]Libet, Benjamin, "Do we have a free will" Anthony Freeman, Keith Sutherland ed. *The volitional Brain*. Towards a neuroscience of free will 50-51 (UK: Imprint Academic, 2004)

mere sentience, consciousness is the awareness of being sentient. While conscious states are detectable the awareness that one is conscious is not. Libet's "readiness potential" is not the beginning of consciousness. Consciousness is a given or an emergence where there is human neural activity. Consciousness precedes both "readiness potential" and conscious "will to act". The conscious will is part of the nature of consciousness. Consciousness is a state of being, it is a disposition, and it is an invisible emergent, because of which we are conscious of what happens.

When we choose we are conscious of the forces that are at work. The forces can be genetic, environmental, social or religious in nature. This implies that choices are made in the context of constraints, this however does not negate conscious veto—the option to choose not to act. *Conscious will* must be always understood in the context of *conscious veto*. When an examination is given to students, they may choose to write however this does not imply that no one can't or won't choose to write. Though there are many forces at work, in the end when we choose in the context of conscious veto, free will is indeed real. Conscious self is aware of both the conscious will to act and the conscious veto not to act. Libet himself has argued that the fact that "readiness potential" precedes "conscious will" does not mean it negates "conscious veto". Libet agrees that we can veto the neural will to act. He does so by pointing out that we possess "veto control".[1] Libet's acceptance of conscious veto affirms what we know, that we choose in the context of constraints. Constraints, be it social, political, economic or religious are a given and now we are aware of neural constraints. We always choose in the context of constraints that we are aware of. As long as we know that we can exercise conscious veto our choice is free. (Even though there are antecedent deterministic causes). The fact we choose knowing well the sources of constraints and the fact that we can veto should be argument that *we can and do choose in the context of constraints.*

Can criminals use the data from Benjamin Libet's experiments on the readiness potential as an argument against personal responsibility for criminal offences?[2] Libet's finding might have relevance to science, but courts of law would then have a hard time redefining *mens rea*. The phenomenological reality that we are conscious of making choices implies that we are free to make choices. Who or what makes choices? Is it the thinking self or the excitatory and inhibitory neurons that make choices? Is the brain a "decision-making organ"? What is freedom? What is compatibilism? Can we accept *cause for action* and yet argue that cause does not determine the *choice of action*? What does it mean to say that "causes might cause us to act" but not necessarily choose the course of the action? Can Libet argue against conscious will and yet argue for conscious veto? How is it possible that we cannot initiate a choice but can veto it? We might still argue that regardless of what one

[1]Markus E. Schlosser. Free will and the unconscious precursors of choice. *Philosophical Psychology* (Vol.25, No. 3, June, 2012) 366.

[2]Wolfram Kawohl and Elmar Habermeryer, *Free will: Reconciling German Civil law with Libet's Neurophysiological studies on the Readiness Potential*, (Behavioural science and the Law 25, 2007) 309.

accepts from Libet's findings, we have to punish people for what their neurons do. Society cannot survive without penalty for even 'willful' neural doings. Society will eventually argue that it does not matter whether the conscious self or the unconscious neurons choose,[1] we will have to be punished for offensive or illegal behavior.

Conclusion

When consciousness is understood as a brain process, the conscious self along with freedom is an immediate but irreducible reality of the brain and its activity. Irreducible does not mean immaterial, it simply means it is invisible like gravity whose presence has no place or location. The conscious self is not only aware of the individual self but also aware of what is common between us as humans. All humans possess the same consciousness or the irreducible soul which exhibits itself as the individual self. It is the soul that is the same in each individual. That is why, while cloning can duplicate a brain with a mind, it cannot in the process duplicate or replicate the person nor its memory. Only the individual self can retrieve, recollect and reflect on its memory. While we can create artificial intelligence or sentience and simulate many activities related to the mind in non-carbon systems we cannot create a conscious entity nor duplicate, replicate or simulate a conscious self. The conscious self is an immediate creation of genetic and neural activity of the brain and once created, it is free to choose to live (to make choices) or choose to die (to end making choices). The conscious self as an existential emergent is aware of the phenomenal, moral and volitional self to which 'conscience' and 'free will' are attributed to. To deny the self is to deny the phenomenal, functional, moral and volitional self.

To conclude (1) it is the conscious self that is aware of the conscious will or the volitional self. For the conscious self without the conscious will would be a petrified state of being. That is why Sartre argued that "to be conscious one has to choose and one must choose in order to be conscious". When Libet's detectability of "readiness potential" and the "will to act" is understood in the context of nature of consciousness we realise that both the conscious self and 'conscious will' precedes both "readiness potential" and the "will to act". The conscious will is different than the "will to act" because the "will to act" is simply the will to enact the decision of the 'conscious will'. 'Conscious will' is part of the nature of consciousness which precedes both "readiness potential" and the "will to act". [2]

[1]Markus E. Schlosser, *Free will and the unconscious precursors of choice*, 366.

[2]Also (1) It is the conscious self that is aware of the phenomenal self. Nagel's understanding of the concept of "what it is like" to be, to think, to know and to do, is best understood when we highlight Chalmers and Ned Block's understanding of the phenomenal self.[2] Only creatures that are consciously aware can, as Chalmers states, be "phenomenally conscious"—"when there is something it is like to be that being".[2] It is only the conscious 'phenomenal self 'that can know what it is like to be oneself. It is impossible for a bat to know what it is like to be a

Organic sentience can be equated to artificial sentience if one is aware but unaware that one is conscious. While all creatures exhibit levels of sentience, what is unique about humans is existential sentience, the *awareness that we are conscious*. Existential awareness is self-awareness and the first abstract awareness of the self is that of the volitional self. To define the volitional self in context of the nature of consciousness we conclude that, while we do not choose to be conscious, to *be* conscious is to choose and we are conscious that we choose.

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bat if the bat is unaware that it is conscious. This is what makes us distinct from bats or other animals—in that only creatures that are aware that they are conscious can know what it is like to be that particular creature.[2] (2) It is the conscious self that is aware of the intentional self. Brentano's and Husserl's intentionality of consciousness is best understood when we highlight the self as being intentional. All consciousness is consciousness first of the 'self' after which all consciousness can be considered as consciousness of something. Heidegger's temporality of consciousness is best understood when we highlight the self as being volitional. For when we become aware of both being and non-being, we are aware that we can choose to live to make choices or choose to die to end making choices. Consciousness is temporal, volitional and intentional. Temporal in that it does not have an independent existence apart from a conscious brain, volitional in that being aware of both being and non-being can choose being or non-being. Intentional in that we can choose what to be conscious of. (3) It is the conscious self that is aware of the moral self. The moral self is best understood when the self is understood in the context of the volitional and intelligent self that discerns right from wrong and chooses right or wrong. It is meaningless to talk about discerning right from wrong if we do not have the freedom to choose right or wrong. (5) It is the conscious self that is aware of the 'functional self' which does calculations like computers. The difference between us performing calculations and the computers doing calculations is that we consciously perform calculations while the computers do not.

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