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Embodied and Socially Embedded 'Self': Understanding Jesus's Bodily Resurrection and Believers' Post Mortem Identity and Continuity

Are human beings mere souls with disposable bodies or just physical bodies with no souls? While Cartesian dualism propounded the former, contemporary science promulgates the latter. The purpose of this paper is to engage with these notions and to steer away from such dualistic / reductionist tendencies towards a nonreductive account, to construct an embodied and socially embedded identity of 'human self'. This paper will argue that Jesus's post-resurrection self-identity and continuity were constituted by his embodied and socially embedded relationship and hence believers' post mortem identity and continuity also should be an embodied and socially embedded reality. For this purpose, the author will engage with cognitive neuroscientific understanding and phenomenological consciousness.

Keywords: bodily resurrection, *post mortem* identity, science-religion dialogue, cognitive neuroscience

Introduction

Gilbert Ryle's take on the Cartesian dualism in his scathing remark, 'the dogma of the Ghost in the Machine' has gained popularity ever since.[1] René Descartes' axiom, *cogito ergo sum* (I think therefore I am) located the meaning of human existence in the inward 'thinking self' which exists not because of but despite the physical body. As Ryle contends, such a conception of an internal mind that operates the body without any reciprocal relationship is nothing but a 'ghost in the machine'. The implications of Ryle's critique are that it is an epistemic fallacy to claim that one's mental life is entirely private and accessible without fail. It is also unreasonable to dissociate one's mental life and external physical manifestations.[2] For Descartes, mind/soul (*res cogitans,* 'thinking thing') and body (*res extensa,* 'extended thing') are two discrete substances having nothing in common.

1 Ryle, G. *The Concept of Mind* , Chicago: University of Chicago Press (1949), p. 32.

2 Soteriou, M. *The Mind's Construction: The Ontology of Mind and Mental Action*, Oxford/New York: Oxford University Press (2013), p. 270. Descartes extended the Platonic body-soul dualism with a fine twist of an inward subjectivity as the primary principle of human existence.

But such a conception of a piloting 'soul' divorced from its dependence on a physical body has been widely challenged and refuted by contemporary scientific knowledge, especially with the developments in the cognitive neurosciences.[3] Hence, not just for the scientific community, but also for contemporary theologians who feel the need to engage with science in their theological articulations, to start from such a notion of Cartesian substance-dualism will be a huge disadvantage.[4]

However, quite a few modern scientists have gone on to claim that humans are comprised of entirely 'physical systems' and do not require an additional component like 'soul' to constitute a human being.[5] It is human brains that account for all cognitive, affective and conative functions of the person. While Descartes identified the *res cogitans* as a non-material substance that exists independently of the body, many contemporary scientific theorists uphold that the 'thinking thing' is the brain and that that brain alone (or brain together with the Central Nervous System CNS) is adequate for human self-consciousness.[6] But this has undoubtedly resulted in a reductionist account that again ignores the embodied aspect of a human being and also thoroughly discounts the spiritual dimension by constructing an exclusively materialistic conception.

In this regard, a pertinent problem for theological reflection exists in understanding the *post mortem* identity and continuity of an individual believer in the light of Jesus's resurrection being an embodied resurrection. The purpose of this paper is to engage with contemporary cognitive neuroscientific understanding while navigating away from such reductionist tendencies in order to understand resurrection through an embodied and socially embedded identity of 'human self'. This paper will argue that Jesus's human self-identity was constituted essentially in his embodied and socially embedded relationship and hence our *post mortem* identity and continuity also have to be an embodied

3 This topic has been covered in earlier S&CB articles: see Booth, D. 'Human nature: unitary or fragmented? - biblical language and scientific understanding', *Science & Christian Belief* (1998) 10 (2), 145-162; Turl, J. 'Substance dualism or body-soul duality?', *Science &Christian Belief* (2010) 22 (1),57-80.

4 Kärkkäinen, V-M. *Creation and Humanity: A Constructive Christian Theology for the Pluralistic World, Vol. 3*, Grand Rapids, MI: Eerdmans (2015), p. 307. Kärkkäinen refers to the fact that some of the early patristic thinkers have propounded a psychosomatic unity of the human person even though they maintained the dual notions of body and soul (or spirit). He identifies a threefold stage in the progression of such ideas: from the Hebrew (Monistic) to the Greek-Hellenistic milieu (Dualistic) in early Christian theology; during the Aristotelian revival in the Middle Ages (Thomistic Hylomorphism – soul as the form of body); and with the rise of biblical criticism and modern science during modernity (Physicalism).

5 Murphy, N. & Brown, W.S. *Did My Neurons Make Me Do It?: Philosophical and Neurobiological Perspectives on Moral Responsibility and Free Will*, 1st edn, Oxford/New York: Oxford University Press (2009), p. 3.

6 Maiese, M. *Embodiment, Emotion and Cognition*, 2011 edn, London: Palgrave Macmillan (2010), p. 15.

and socially embedded identity and apart from such embodiment, continuity of one's *post mortem* self-identity is difficult to conceive.

The first section of the paper will deal with the problem of reductive physicalism/materialism and will consider and evaluate a non-reductive physicalist account as an alternative. The second section will deal with the aspect of human-self as an embodied concept using the Essential Embodiment Thesis (EET), followed by an exposition of the socially embedded identity of human 'self'. Then, in the third section, the post-resurrection appearances of Jesus will be studied on the basis of EET and implications drawn for understanding his self-identity and continuity. Based on these explorations, the final section will attempt to understand the *post mortem* human identity and continuity as embodied and socially-embedded relations as opposed to the traditional notion of the 'soul leaving the body'.

Non-reductive physicalism

As mentioned earlier, any theological attempt to engage with contemporary science has to address first the prevalent reductionist paradigm of the scientific theorists. Francis Crick states this reductionist goal categorically in his book *An Astonishing Hypothesis* as he says, '[Contemporary science has proved that] you, your joys and your sorrows, your memories and your ambitions, your sense of identity and free will, are in fact no more than the behaviour of a vast assembly of nerve cells and their associated molecules… "You're nothing but a pack of neurons."'[7] Nancy Murphy and Warren Brown critique such approaches to mental phenomena 'that "locate" them "inside" the organism rather than recognize their co-constitution by the organism's action in the world, both physical and social'.[8]

As Murphy and Brown observe, Richard Rorty has also cautioned against this tendency of the concept of mind that we inherited from Descartes: 'The mind is an inner theater in which there appear a variety of kinds of "ideas": beliefs, desires, intentions, occurrent thoughts, mental images, and "raw feels" such as pains and sensory images.'[9] They rightly critique this propensity by saying, 'It is proving easier to exorcise the Cartesian ego – to get rid of Gilbert Ryle's "ghost in the machine" – than it is to close down the theater where the ego spent his time.'[10] Thus the new 'Cartesian materialism' has just replaced

7 Crick, F. *Astonishing Hypothesis: The Scientific Search for the Soul*, reprint edn, New York: Scribner (1995), p. 3.

8 Murphy & Brown *op. cit.*, (5), p. 1.

9 *ibid.* citing Rorty, R., Williams, M. & Bromwich, D. *Philosophy and the Mirror of Nature*, Princeton NJ; Woodstock: Princeton University Press (2009), p. 24.

10 *ibid.*, p. 11. Prominent neuroscientist Antonio Damasio appropriately notes: 'It is not only the separation of mind and brain that is mythical; the separation between mind and body is

the talk of the *mind* or soul with that of the talk of the *brain*. This pertinent critique against the Cartesian materialism of modern neuroscientific theories indicates that it is important that the vital aspect of an embodied nature of brain-mind relation has to be re-established in order to circumvent the trap of reductionism.

Towards this purpose, Murphy and Brown are recommending a 'Gestalt switch' that recognises mental as pertaining to a higher-level dynamical system (brain in the body) involved in interaction with the world, both physical and social.[11] They argue that the 'mind is paradigmatically manifested in informed engagement in action-feedback-evaluation-action loops in the environment'.[12] This action-feedback loop is made possible through the bodily experiences of the environment.[13] They use the anthropological concept of 'emergence' to establish their position. The theory of emergence states that: '[N]ew structures, capacities, and processes will come to existence; [and] that these cannot be reduced to the lower level; and that they can exercise a causal influence downward.'[14] There are two significant aspects to this manner of conception as Murphy and Brown postulate it: 1. Mental properties could change due to contextual factors without causing change in the base property (neurons); 2. The influence of top-down causation in the context of dynamic systems (mind-brain relations).[15] They term this phenomenon 'nonreductive physicalism'.[16]

The 'causal reductionism' reduces all causal efficacy to the base matter (neurons), or the mental causation as epiphenomenalism (mental life as a causally inconsequential by-product of physical processes in the brain). On the contrary, non-reductive physicalism considers 'the mental as an emergent novel property (or capacity or event) that "supervenes", that is, is dependent on the subvenient base, but that cannot be reduced to its base'.[17] Through such

probably just as fictional. The mind is embodied, in the full sense of the term, not just embrained.' *ibid*., p. 22, citing Damasio, A. *Descartes' Error: Emotion, Reason and the Human Brain*, reprint edn,, Penguin Books (2005), p. 118.

11 Murphy & Brown *op. cit.*, (5), p. 10.

12 *ibid.*

13 *ibid*., p. 18; see also Brown, W.S. 'Resonance and dissonance – a response to Malcolm Jeeves', *Science & Christian Belief* (2009) 21 (1), 65-71.

14 Kärkkäinen *op. cit.*, (4), p. 318.

15 *ibid.* see also Murphy, N. 'The problem of mental causation: how does reason get its grip on the brain?', *Science & Christian Belief* (2002) 14 (2), 143-158.

16 Murphy & Brown *op. cit.*, (5), p. 8. They clarify between 'physicalism' and 'materialism' as follows: 'We choose to call our view of the person ''physicalist'' rather than ''materialist'', first, because it is in keeping with current philosophical usage, but second, because ''materialism'' has been used more often to designate a world-view, and thus seems to carry additional atheistic connotations that we prefer to avoid.'

17 Kärkkäinen *op. cit.*, (4), p. 325. Addressing the common objection to the idea of a downward causation, the claim that the whole (comprehensive function of brain/central nervous system is nothing other than the functioning of its parts, (neurons), Alicia Juarrero rightly critiques

a top-down causality model of the dynamic core system of the brain, Murphy and Brown conceive the mental events as contextualised brain states (by the body's interaction in the environment) to negate the 'reductive materialism' of the prevalent scientific theories that has held that the higher-level processes are not only the function of the lower but that they are not even 'real'.[18]

However, as Kärkkäinen notes, this nonreductive physicalism has some inherent limitations.[19] Murphy says,

> [W]e are our bodies – there is no additional metaphysical element such as mind or soul or spirit. But … this 'physicalist' position need not deny that we are intelligent, moral and spiritual. We are, at our best, complex physical organisms, imbued with the legacy of thousands of years of culture, and, most importantly, blown by the Breath of God's Spirit; we are Spirited bodies.[20]

Thus, it becomes difficult to distinguish this idea from the reductionism it is trying to avoid. Kärkkäinen critiques this account by citing Philip Clayton:

> …it is not difficult to see the basic philosophical dilemma of nonreductive physicalism and that its claim for physicality as the ultimate base and explanation is its Achilles' heel: 'say yes, and you seem to end up with a reductive physicalism; say no, and you aren't really a physicalist after all'… Reference to emergence is hardly an explanation (it looks more like an observation).[21]

However, Brown in his later publications proposes an alternative to this predicament – a dual-aspect monism – which he defines: 'the modifier *dual-aspect* emphasizes the fact that an adequate description of human nature must entail at least two levels (or aspects) – a physical description provided by neuroscience and a mental description as represented in our subjective experiences and studied by psychology'.[22] But Clayton argues that the dual-aspect variant of the non-reductive physical account does not adequately bring out the causal

this tendency as 'an ontological bias that favors concrete things over processes and relations, substances over properties', (Murphy & Brown *op. cit.,* (5), p. 89, citing Juarrero, A. *Dynamics in Action: Intentional Behavior as a Complex System*, A Bradford Book: MIT Press (2002), p. 129.

18 Kärkkäinen *op. cit.*, (4), p. 318.

19 *ibid.*, p. 325.

20 *ibid.* citing Murphy & Brown *op. cit.,* (5), p. xi. Murphy is attempting to hold on to the spiritual aspect of human personhood without referring to any additional metaphysical notions of mind, soul or spirit. Such an approach, while refuting the 'causal' or 'reductive' materialism, still affirms 'ontological reductionism' that there are no nonphysical ultimate elements ('as one goes up the hierarchy of levels, no new kinds of metaphysical 'ingredients' need to be added to produce higher-level entities from lower', *ibid.*).

21 *ibid.* citing Clayton, P. *Mind and Emergence: From Quantum to Consciousness*, Oxford/New York: Oxford University Press (2006), p. 130.

22 Jeeves, M. & Brown, W.S. *Neuroscience, Psychology and Religion: Illusions, Delusions and Realities about Human Nature,* 1st edn, West Conshohocken Pa: Templeton Press (2009), p. 111; emphasis original.

relation. He says, '"dual aspect monism" ... [implies] that there is no causal interaction between mental and physical properties, since they are two different aspects of the one "stuff"'.[23] He contends that the 'upward and downward influences' have to be accounted as fully operative.[24] He proceeds to identify a minimalist metaphysical concept in order to account for the top-down causation of mind-brain relations. I do agree with Clayton's critique that dual-aspect monism alone is not adequate to capture the causal efficacy. I find Clayton's metaphysical enquiry for a 'personal agency' pertinent in this regard. In the next section I propose to revisit and understand the concept of 'consciousness', and thus 'self-consciousness' ('self' as egocentricity and its essentially embodied nature) in order, in the following section, to identify such an integrating personal agency as a conceptual framework for brain-mind-body interactions.

Embodied human self

One of the significant aspects of Murphy and Brown's nonreductive physicalist proposal is the top-down causation of mind-brain relation. Murphy and Brown augment this conception by utilising Edelman and Tononi's 'dynamic core theory' that references the neurophysiological basis of conscious awareness.[25] While a dynamic core is 'a complex, highly differentiated neural state that, from moment to moment, includes different subsets of neurons or neural groups',[26] Edelman and Tononi argue that a state of consciousness and its content is 'a temporary and dynamically changing process within the cerebral cortex that is characterized by a high degree of functional interconnectedness among widespread areas'.[27] According to them, such dynamic cores in the brain (and thus the consciousness) are characteristic of the mental life of human beings and such higher-order consciousness is enabled through symbolic representations and language abilities.[28] They further state that this developmental achievement depends on social interactions and social scaffolding.[29] This complex higher order consciousness, though it is not unique to human beings, still comprises the innate mental faculty of self-consciousness (and advanced linguistic capability) that develops and matures through the bodily experiences of the environment.[30]

23 Clayton *op. cit.,*(21), p. 62.

24 *ibid.*

25 Murphy & Brown *op. cit.,* (5), p. 142.

26 *ibid.*

27 *ibid.* citing Edelman, G. & Tononi, G. *A Universe of Consciousness: How Matter Becomes Imagination*, 1st edn, Basic Books (2008), p. 211.

28 *ibid.*

29 *ibid.*

30 see Jeeves, M. 'Changing portraits of Human Nature', *Science & Christian Belief* (2002) 14 (1), 3-32.

Can this self-consciousness that is dependent on the bodily interactions with the environment be construed as proper 'human self'? While Realists claim that the concept 'self' should be a substantial entity, the Irrealists refute this idea and treat self as a mere myth that does not actually exist. Michelle Maiese discards the Realist position while partly agreeing with the Irrealists that the 'self' is 'not a solid, really existing substance that serves as a stable basis for our fleeting and momentary sensations, feelings, and motivations', but then argues that self cannot be discounted as merely a fiction or an illusion.[31] She says, 'We cannot conclude that the self is a "nothing" simply on the basis that it is not a substantial "something".'[32] I agree with Maiese in proposing the concept of 'self' not as a physical by-product of the dynamic structure of the neurons but as an essential metaphysical notion and thus refuting the ontological reductionism. But this 'self' cannot be understood as a piloting 'thinking self' but as embodied egocentricity of an individual. Pannenberg also observes that William James's concept of 'social self' highlights the significance of the social environment for the 'genesis of self-consciousness'.[33]

Phenomenology helps us to elaborate such a conception of a 'self'. Phenomenological studies focus on 'the structures of conscious experience as experienced from the first-person point of view, along with relevant conditions of experience'.[34] And the principal structure of such an experience of the self is 'its intentionality, the way it is directed through its content or meaning toward a certain object in the world'.[35] This 'sense of self' in its intentionality for construing meaning through its experience of the world, constructs them with coherency and continuity. Varela et al. reiterate this: '[O]ur memories, personality, and plans seem to come together in a coherent point of view, a center from which we survey the world, the ground on which we stand.'[36] Maiese argues that such a phenomenological description provides the metaphysical underpinnings of the sense of self and not only the sense of self, but also the 'self' itself as 'essentially embodied and rooted in our biological nature'.[37] For the self to experience the world with certain coherence and continuity, 'human consciousness [needs to be] necessarily unified, and further, that this unity serves as the foundation for personal identity and an individual's unique

31 Maiese *op. cit.,* (6), p. 90.

32 *ibid.*

33 Pannenberg, W. *Anthropology in Theological Perspective*, O'Connell, M.J. (trans.), 1st edn, Philadelphia: Westminster John Knox Press (1985), p. 186.

34 https://plato.stanford.edu/entries/phenomenology/#WhatPhen accessed on 03/15/2017.

35 Maiese *op. cit.,* (6), p. 90.

36 *ibid.,* p. 91, citing *The Embodied Mind: Cognitive Science and Human Experience*, hardcover November 4 1991, MIT Press (1991), p. 59.

37 *ibid.*

sense of self'. Thus, the contents of such phenomenal consciousness 'are unified into one coherent whole, containing a unified "me" in the center of one unified perceptual world, full of coherent objects'.[38] This unified consciousness is the egocentricity of the human self. John Searle observes that this unity of consciousness exists in at least two dimensions: the horizontal and the vertical.[39] Horizontal unity is 'the organization of conscious experiences through stretches of time', described as 'diachronic unity'. This denotes the continuity in retaining a sense of what someone has said or thought moments ago, while she is speaking or thinking.[40] Vertical unity, or the synchronic unity, 'is a matter of being simultaneously aware of all the diverse features of one's conscious state'.[41] Searle describes this sense of unity as, 'I have my experience of the rose, the couch, and the toothache all as experiences that are part of one and the same conscious event.'[42] Such a unity of consciousness and being conscious of the continuity of one's mental states are essential to the sense of one's 'self'.

On elaborating further on the embodied consciousness, Maiese notes,

> … conscious minds are necessarily biologically alive and completely embodied in all the vital systems and organs of our living bodies. … our basic biological structure and complex self-organizing dynamics as living organisms provide the natural foundation for the key structures of consciousness, including its egocentricity, spatiality, temporality, and intentionality (i.e., directedness).[43]

She is clearly stating that our very self-consciousness is dependent on the 'natural foundation' of our being biological organisms in this world and not because of any non-physical intuitions. Along the line of Murphy and Brown's dynamic core systems, she proposes an 'Essential Embodiment Thesis' (hereafter EET), which she claims is about 'the operative neurobiological dynamics of conscious creatures like us'.[44] She says:

> According to EET, the I and me that constitute my egocentric point of view are centered around my body, for all mental activity is essentially embodied. Insofar as the subject's egocentric vantage point is spatially extended and located wherever her body is located, the sense of self also is rooted in the necessary spatial structure of sensorimotor subjectivity. Bodily sensations are spatial in the sense that they are felt in a particular location in an egocentrically centered objective space that is first and foremost part of

38 *ibid.*
39 Searle, J. *The Rediscovery of the Mind*, A Bradford Book, MIT Press (1992), p. 130.
40 *ibid.*
41 *ibid.*
42 *ibid.*
43 Maiese *op. cit.,* (6), p. 105.
44 *ibid*., p.,12.

one's body.[45]

The egocentricity of the self that is constituted through its self-consciousness and continuity of its consciousness is dependent on the spatial awareness of one's body in relation to the environment. It is the body that provides the basis for one's egocentric, spatial frame of reference, so that an experiential awareness of one's body is built right into the structures of perception and action.[46] Citing Shaun Gallagher, Maiese calls this a proprioceptive-kinesthetic experience which 'is a sense of self that involves a sense of one's motor possibilities, body postures, and body powers, and which is tied to one's 'embodied capabilities for movement and action'.[47] She argues that this proprioceptive awareness is a key facet of the essential embodiment of the human 'self'.[48] She identifies this proprioceptive awareness as 'pre-reflective (non-observational) awareness' and argues that along with EET it provides a sense of one's conscious relation to the environment even while allowing the body 'to remain experientially transparent to the agent who is acting'.[49] Thus we need to understand one's self-identity in this intricately interwoven relation of the mind and the body. It is no longer advisable to hold one's sense of self as being grounded in some purely disembodied point of view, but instead in an essentially embodied point of view that is situated in a spatially and temporally extended world. And this consciousness of the 'self' constitutes both the synchronic and diachronic unity of 'self'.

Having explored the inner dynamics of the essential embodiment of human 'self' and its identity and continuity, let us move towards the socially embedded nature of human identity.

Socially embedded identity of self

Not only the sense of proprioceptive-kinesthetic experience is vital for the self-consciousness and continuity of an individual, as Gallagher proposes, one's 'social cognition' is also dependent on the 'level of bodily sensations, in particular kinesthesis, or sensory experience of one's own movement'.[50] Maiese observes that when we observe someone else act in a certain way, 'our own kinesthetic system is activated in a way that mirrors the perceived action of the other person'.[51] Gallagher notes that 'mirror neurons' in the brain play an im-

45 *ibid.*, p. 11.

46 *ibid.*

47 *ibid.,* citing Gallagher, S. *How the Body shapes the Mind*, 1st edn, Oxford: Clarendon Press (2005), p. 74.

48 *ibid.*

49 *ibid.*

50 *ibid.,* p. 164, citing Gallagher *op. cit.,*(47), p. 97.

51 *ibid.*

portant role in such social cognition and that they can help 'to explain how this intermodal link between proprioception and perception of others is innate'.[52] 'Perception of others thus involves an activation of the kinesthetic modality, so that the other person's body serves as something that interacts with my body and activates my sensory-motor system.'[53]

Murphy and Brown also concur that we perceive others' intentions through the means of 'mirror neurons' as 'populations of neurons in several brain areas … selectively encode postures and movements performed by conspecifics'.[54] Thus, others' intentions are represented in our brain by means of the same kind of neural activity denoting our own intention to act. Gallagher calls this mirroring as 'a natural "pairing" that takes place from body to body' at the proprioceptive-kinesthetic level, in a manner that shapes our own perceptual experience.[55] For example, we are able to recognise a certain emotion in others on the basis of the activation of our own brain areas that are responsible for the experience of that emotion. Such activation thus contributes to the perceptual understanding of another person's actions (i.e. social cognition).

Also mirror neurons are activated only when we see another person's intentional action, and are not activated by inanimate objects like tools or machines, again emphasising the social aspect of human consciousness.[56] Pannenberg, while agreeing with George Mead's proposal that the foundation of the phenomenon of self-consciousness is the human ability to understand the gestures or movements of others (similar to the understanding of mirror neurons),[57] expresses his difficulty in understanding Mead's position that the 'self' is mediated through social relations while the ego is not. Arguing for the unity of the ego ('I') and the self ('me'), he avers,

> It has now become clear that the ego too bears the imprint of social relations in respect of its continuity and identity, since (above and beyond the unity of meaning that comes from the indexical word 'I') such continuity and identity belong primarily to the self, and to the ego only insofar as it knows itself to be identical with 'its self'.[58]

Pannenberg confirms that 'I' and 'me' are both constituted within the matrix of social relations and the 'self' is essentially the 'social self' and the ego is related to the 'self' as it depends on the egocentricity for its continuity of identity.

However, Maiese believes that pointing to mirror neurons will not be suf-

52 *ibid.*, citing Gallagher *op. cit.,* pp. 97-98.
53 *ibid.,* citing Gallagher *op. cit.*, pp. 97-98.
54 Murphy & Brown *op. cit.*, (5), p. 31.
55 Maiese *op. cit.*, (6), p. 165, citing Gallagher *op. cit.*, p. 101.
56 Maiese *op. cit.*, (6), p. 165.
57 Pannenberg *op. cit.*, (33), p. 189.
58 *ibid.*, p. 223.

ficient to provide a complete explanation of how we attain all of our cognitive achievements.[59] She is indicating that through our overall bodily attunement we understand others' emotions, expressions and gestures. She notes, 'Such bodily attunement is not simply a matter of mirror neuron activation, but involves a vast array of bodily dynamics, including muscles, increased blood flow, heart rate and blood pressure increases, vascular constriction, and metabolic and endocrine responses.'[60] She says, 'bodily cognitive-emotional form of understanding' is possible only because 'during interpersonal interaction, our whole bodies, not just our brains, resonate with the other person.[61] [And this] sort of bodily attunement, through which one enters into a reciprocal relationship with others, ensures that intersubjectivity is essentially a matter of intercorporeality.'[62] Murphy and Brown also reiterate this point by asserting that mental states are contextualised brain states and mental phenomena relate to the entire person, both brain and body, within social relations in the physical world.[63] Stanley Grenz drives home this point by quoting Alistair McFadyen, who said, 'A genuine individuality emerges only through properly structured relations.'[64] Brown and Brad D. Strawn's idea of 'Extended Cognition' reiterates this as they observe: 'Human nature is emergent from more than just a complex brain, but from entire bodily systems involved in behavioral interactions with the world and their consequences in ongoing sensory feedback about the outcomes of such actions.'[65]

Further, the individuality that emerges out of this socially embedded and embodied relation constitutes a personal agency. Citing examples from evolutionary biology, Clayton argues that the emergent entity of a natural selection process become causal agents *sui juris*.[66] By extending this to the mind-brain coordination and downward causation process, Clayton attempts to determine a unifying factor.[67] He concludes that if we account for a minimalist account of personal agency, we can provide an adequate answer and he asserts that it is in accordance with the emergent paradigm.[68] Hence, he suggests that we should

59 Maiese *op. cit.*, (6), p. 165.

60 *ibid.*

61 *ibid.*

62 *ibid.*

63 Murphy & Brown *op. cit.*, (5), p. 40.

64 Grenz, S. *The Social God and the Relational Self: A Trinitarian Theology of the Imago Dei*, 1st edn, Louisville, Ky: Westminster John Knox Press (2007), p. 14, citing McFadyen, A. I. *The Call to Personhood: A Christian Theory of the Individual in Social Relationships*, Cambridge: Cambridge University Press (1990), p. 7.

65 Brown, W.S. & Strawn, B.D. 'Beyond the isolated self: extended mind and spirituality', *Theology & Science* 15:4, 411-423, DOI: 10.1080/14746700.2017.1369755. Extended cognition is a theory from philosophy of mind that uses the general conception of embodied cognition.

66 Clayton *op. cit.*, (21), p. 66.

67 *ibid.*, p. 142.

68 *ibid.*, p. 147.

'conceive mind not merely as an emergent quality of the natural world, but also as a source of agency in its own right'.[69] By introducing at the emergent level the idea of a human agent ('the person as such' or 'the person as a whole'), he claims that, 'an integrated state [can be] established between a person and her body, her environment, other persons, and her overall mental state, including her interpretation of her social, cultural, historical, and religious context'.[70] This integrative state of the person will thus account for the affective, intellectual and social dimensions.[71]

This manner of conception helps us to understand the human 'self' in its agential and hence causal relation, as it emerges in the context of its socially embedded, embodied relations constituting one's synchronic and diachronic unity. Now, we will turn to the post-resurrection 'bodily' appearances of Jesus in order to understand his post-resurrection identity and continuity of his human 'self' according to this embodied and socially embedded conception.

Post-resurrection self and continuity in Jesus

One of the key components of Christological articulation is the hypostatic union of human nature and divine nature in the person of Jesus Christ. While the early Church had to grapple with myriad conceptions to explain this mystery, the Church Council at Chalcedon (AD 451) put an end to the debate by setting four apophatic parameters. A section of the Creed reads:

> to confess one and the same Son, our Lord Jesus Christ, the same perfect in Godhead and also perfect in manhood; truly God and truly man, of a reasonable [rational] soul and body; consubstantial [co-essential] with the Father according to the Godhead, and consubstantial with us according to the Manhood; in all things like unto us, without sin; … born of the Virgin Mary, the Mother of God, according to the Manhood; one and the same Christ, Son, Lord, only begotten, to be acknowledged in two natures, *inconfusedly, unchangeably, indivisibly, inseparably*; the distinction of natures being by no means taken away by the union, but rather the property of each nature being preserved, and concurring in one Person and one Subsistence, not parted or divided into two persons, but one and the same Son, …[72]

The four apophatic parameters *inconfusedly, unchangeably, indivisibly,* and *inseparably* serve as delimiters for any Christological conceptions. But our intention here is not to get into any Christological debate about the hypostatic union of Christ's human and divine nature. Rather, we basically affirm this mys-

69 *ibid.*, p. 182.

70 *ibid.*, p.196.

71 *ibid*. p. 198.

72 https://carm.org/christianity/creeds-and-confessions/chalcedonian-creed-451-ad accessed on 03/15/2017.

tery of the union in the person of Jesus and proceed to understand his human nature on the basis of the identity and continuity of his human 'self' as we have explored through the cognitive neuroscientific theories. Also, as our goal is to understand the *post mortem* identity and continuity of human 'self', we will only consider Jesus's post-resurrection bodily appearances. While considering Jesus's post-resurrection 'human' body, as per the creedal affirmation, we also uphold the hypostatic nature of his divinity.

As E. Earle Ellis points out, for Paul, the bodily resurrection of the dead is 'the sine qua non for a future life since without it Christ himself has not been raised'.[73] There have been many sceptical references to the bodily resurrection of Christ. As Kärkkäinen notes, Willi Marxsen claimed that instead of the history of resurrection we have access only to the beliefs in resurrection of the disciples.[74] He also points to Bultmann's claim that resurrection is not a historical event of the past but rather an experience or event by the disciples.[75] But as N. T. Wright warns us: 'Ruling out as historical that to which we do not have direct access is actually a way of not doing history at all.'[76] The historicity of the event cannot be quibbled over differences in our conception of history. Given the fact that the whole of Christian faith claims depend on this one pivotal event of Jesus's bodily resurrection, and the eyewitnesses to this event having confirmed it through their *kerygma* and martyrdom, we do affirm this event and also believe in its significance for our resurrection.

The tradition of the empty tomb as attested in the Gospels is not only evidential proof for the bodily resurrection, it also reiterates the aspect of resurrection as only bodily resurrection. As Raymond Brown categorically states, the resurrection had to be bodily for 'there was no other kind of resurrection'.[77] Also Hans-Joachim Eckstein asks pertinently, 'Why is it so important for all the Gospel writers to record that the grave of the Risen One was empty? And why did not or could not the early Christians combine their faith in the continuous living and working of the crucified Lord with the concept that his dead body

73 Douglass, J.R. *'This Flesh Will Rise Again': Retrieving Early Christian Faith in Bodily Resurrection*, MI: ProQuest Information & Learning Company (2008), p. 60, citing Earle Ellis, E. 'Soma in First Corinthians', *Interpretation* (1990) 44, 141-142.

74 Kärkkäinen, V-M. *Creation and Humanity: A Constructive Christian Theology for the Pluralistic World, Vol. 1*, Grand Rapids, MI: Eerdmans (2013), citing Marxsen, W. 'The Resurrection of Jesus as a historical and theological problem', in Moule, C.F.D. (ed.) *The Significance of the Resurrection for Faith in Jesus Christ*, London: SCM (1968), pp. 15-20.

75 *ibid.*, citing Pannenberg, W. 'New Testament and mythology', in Bartsch, H.W. (ed.) *Kerygma and Myth: A Theological Debate*, New York: Harper & Row (1961). pp. 39-42.

76 *ibid.*, citing Wright, N.T. *The Resurrection of the Son of God*, Minneapolis: Fortress (2003), p. 16.

77 Brown, R. *The Virginal Conception and Bodily Resurrection of Jesus*, New York: Paulist Press (1973), p. 116.

had decayed in the grave?[78] This indeed is the vital question that we need to ask in order to understand the most significant aspect of Jesus's resurrection as bodily resurrection and to conceive his 'self' identity and continuity. Pheme Perkins comments that Luke's account 'of the resurrection appearance of Jesus is equally concerned with the demonstration that Jesus's resurrection is bodily and not an apparition'.[79] It was not a mere 'spiritual' body in which Jesus appeared while his material body was decaying, but rather the very material body that was transformed into a 'new' body.

We also infer from the biblical accounts that the nature of the resurrected body is both consistent with and at the same time different from his temporal body. While there is an indication of radical discontinuity of Christ's resurrected body from that of his temporal body by his ability to appear and disappear suddenly (self-teleportation) in their midst, the account also emphasises the 'bodily' aspect. Given the multiple accounts of Jesus's post-resurrection appearances, we will consider Luke's account in chapter 24:36-49.[80] Jesus appears in the midst of a gathering of his disciples. But Christ's appearance among them leads the disciples to conclude that they are seeing a ghost (Luke 24:37). *Christ claims to have flesh and bones* (Luke 24:39) and *he invites them to see and touch his wounds* (Luke 24:39-40). *He also shares food with them* (Luke 24:41-43). Jesus possessing bones and flesh, the demonstration of his wounds, the invitation to touch and his consumption of fish, all very much signify the physical aspects.

As we considered before, here our intention is to understand Jesus's 'self' identity and continuity in terms of his human personhood. Let us review Luke 24:38-89:

> Jesus said to them, 'Why are you troubled, and why do doubts rise in your minds? Look at my hands and my feet. *It is I myself!* Touch me and see; a ghost does not have flesh and bones, as you see I have.' (NIV)

As Jesus suddenly appeared among his disciples, they were startled and were unable to make meaning out of his appearance. Then, Jesus reaffirms his identity by telling them, 'It is *I myself.*' As we recollect from Maiese's definition of Essential Embodiment Thesis, she said:

> I and me that constitute my egocentric point of view are centered around my body, for all mental activity is essentially embodied. Insofar as the subject's egocentric vantage point is spatially extended and located wherever her body is located, the sense of self also is rooted in the necessary spatial

78 Eckstein, H-J. 'Bodily resurrection in Luke', in Peters, T., Russell, R.J. & Welker, M. *Resurrection: Theological and Scientific Assessments*, Grand Rapids: Eerdmans (2002), p. 116.

79 Douglass *op. cit.*, (73), p. 59, citing Perkins, P. *Resurrection: New Testament Witness and Contemporary Reflection*, Garden City, NY: Doubleday (1984), p. 163.

80 I am indebted to Douglass *op. cit.*, (73) for insights on these sections.

> structure of sensorimotor subjectivity. Bodily sensations are spatial in the sense that they are felt in a particular location in an egocentrically centered objective space that is first and foremost part of one's body.[81]

Jesus establishes his identity as 'I' and 'myself' by inviting his disciples to touch him and make sense of his identity through his flesh and bones, demonstrating the essential embodiment of his personhood. In other words, Jesus's post-resurrection 'self' or egocentricty is extended here through his embodied continuity. In other resurrection appearances also, we can see that the seamless continuity of Jesus's self-identity is reiterated by his embodied appearances. His sense of a diachronic unity as 'the organization of conscious experiences through stretches of time' is constructed around his bodily experiences of crucifixion and the resultant scars and wounds. In John 20:27, when Jesus tells Thomas, 'Put your finger here; see my hands. Reach out your hand and put it into my side. Stop doubting and believe', the continuity of his conscious experiences is constructed through Jesus's embodied experience of suffering physical wounds on the cross.

Jesus's synchronic unity as 'a matter of being simultaneously aware of all the diverse features of one's conscious state'[82] is made possible through his embodied consciousness of being present among them, allaying their fear and sharing the food with them. Also, in terms of Jesus's 'bodily cognitive-emotional form of understanding', Jesus relates to his disciples through his emotional and physical responses, by perceiving their fear, responding by pronouncing peace and by allowing them to touch and feel in order to make sense of him. If Jesus's resurrection was only as a non-material, spiritualised body, and his consciousness only a disembodied mental phenomenon, his appearances would not have had the impact they had on his disciples as they would have had to rely on certain mental recollections of his identity. But the nature and manner of his appearances do emphasise Jesus's embodied and socially embedded self-identity within the matrix of interpersonal relations. This establishes the continuity of his self-identity in the life of his disciples (beyond all mere mental recollections) through his socially embedded relations.

Thus, we can safely conclude that, as per our understanding of the bodily resurrection of Jesus, his conscious experiences of himself and also the continuity of his self-identity for his disciples are made possible through the aspect of his embodied resurrection appearances. While his post-resurrection body did demonstrate discontinuity from his material body, however, only in relative similarity to his material body, his socially embedded and embodied self-identity was experienced.

81 Maiese *op. cit.*, (6), p. 105.
82 *ibid.*, p. 92.

Believers' post mortem identity and continuity

Having understood Jesus's bodily resurrection as his embodied self-identity and continuity, let us examine its implications for us as believers who are to participate in Christ in his resurrection (Romans 6:5; Philippians 3:10). In 1 Corinthians 15:20, Paul states, 'Christ has been raised from the dead, the first fruits of those who have died.' The metaphor 'first fruits' means that Jesus is the prototype of all other resurrections that are to follow. Since the time of the early Church, the bodily resurrection of believers in the same manner as Jesus's resurrection has been affirmed and is also stated in the creedal affirmations. (e.g. the Apostles' Creed states the belief in the 'resurrection of the body'). This emphasis on the bodily resurrection of believers is not often well articulated in churches as an implicit Cartesian dualism colours the general world-view.

However, many contemporary theologians have made attempts to reaffirm the bodily resurrection. Hans von Balthasar notes that in resurrection, 'the materiality of nature will not dissipate into Spirit but rather take on a new form beyond the reach of decay'.[83] Balthasar is basically propounding an embodied resurrection. Pannenberg also affirms this as he says, 'this present earthly body which will experience the transformation'.[84] Pannenberg not only affirms the bodily aspect of resurrection, he argues that it is 'this perishable body that is raised'[85] and also that the resurrected body is 'materially identical with the present one'.[86] This material continuity of our being is in line with what we have discussed in the previous sections. Pannenberg further notes,

> The transformation of what is mortal into a spiritual body will therefore be on the one hand so radical that nothing remains unchanged. On the other hand, however, it is this present earthly body which will experience the transformation… . What is to be created in place of the present body is not something totally different from it.[87]

Pannenberg, here, reiterates the radical discontinuity and continuity between the present and the future nature of our bodies and is similar to what we observed about Jesus's resurrected body. As we are interested in conceiving the identity and continuity of our 'selves' in *post mortem* reality, and our resurrections derive from the very fact and efficacy of Jesus's resurrection, the essential embodiment and social embeddedness that constituted Jesus's 'self' and continuity provides the basis for our own identity and continuity. While

83 von Balthasar, H.U. *Credo: Meditations on the Apostles' Creed*, San Fransisco: Ignatius Press (1990), p. 7.

84 Pannenberg, W. *The Apostles' Creed: In the Light of Today's Questions*, Kohl, M. (trans.), 1st US edn, Philadelphia: Westminster Press (1972), p. 174.

85 Pannenberg *op. cit.*, (84), p. 171.

86 Pannenberg *op. cit.*, (84), p. 174.

87 Pannenberg *op. cit.*, (84), p. 99.

discussing the aspect of continuity in our future lives, Pannenberg observes:[88]

> The stress on the identity of the body despite its transformation is directed against the Platonic idea of the rebirth of the soul in a different body. I mean that man's identity depends on the uniqueness and non-recurrence of his physical existence. That is why the creed insists on the identity of the matter of 'the body' with a rigidity which must have already seemed barbarous to the Hellenistic world.[89]

In contrast to the Platonic dualist conception of 'soul' leaving the material 'body' at death, Pannenberg also affirms the continuity through 'uniqueness and non-recurrence' of one's physical existence. In other words, it is in our essential embodied consciousness of 'self' and its socially embedded consciousness through intersubjective, interpersonal relations that the identity is continued. Along with EET, the proprioceptive-kinesthetic experience, synchronic and diachronic unity of consciousness, all are defined essentially by our embodied 'self' in its physical existence in the world. The resurrected body, despite its radical discontinuity in its nature, also depends on its material counterpart for the self-identity and continuity.

But there is remarkable difference between the way Jesus's resurrection happened and the manner of our anticipated resurrection. The empty tomb tradition highlights this difference. Jesus's body did not disappear because it was hidden beyond human search, but it was the same body that was transformed into the 'new' resurrected body of Jesus. And his bodily resurrection took place on the third day. But, our resurrection is a future event and also we don't see people's bodies disappearing because of any immediate resurrection. As bodies decompose and become one with the nature, how is it possible that we can be sure of our embodied continuity? Pannenberg provides certain guidelines which I think are germane in answering this difficult question:

> The conceptual difficulties can be solved, it seems to me, only on one condition: the assumption that our life, whose history ends in the moment of death, passes away in that moment from our experience, but not from the eternal presence of God. In God's memory our individual life is preserved. Thus, there is no element of earthly existence that would escape death in order to guarantee our continuous existence beyond death, but only God himself is able, because of his unlimited power, to preserve our temporal lives in his memory and to grant them a new form of existence of the own.[90]

Though our resurrection in its embodied and socially embedded consciousness is an eschatological event, we can find hope in the fact that 'no element of

88 I am indebted to Douglass *op. cit.*, (73) for references on Pannenberg.

89 Pannenberg *op. cit.*, (84), p. 171.Jenson, R.W. (eds.), *The Last Things: Biblical and Theological Perspectives on Eschatology*, Grand Rapids: William B. Eerdmans Publishing Co. (2002), p. 8.

90 Pannenberg, W. 'The Task of Christian eschatology', in Braaten, C.E. &

earthly existence that would escape death' and all our conscious experiences are safe in the memory of God who is able to reconstitute our being with the 'new' body that derives its self-identity and continuity from its earthly counterpart. John Polkinghorne seems to think on these lines as he observes, 'I believe it is a perfectly coherent hope that the pattern that is me will be remembered by God and its instantiation will be recreated by him when he constitutes me in a new environment of his choosing. That will be his eschatological act of resurrection.'

Though there are certain implicit difficulties in such a conception of our continuity extended and recreated in God's memory – especially the aspect of the 'resurrection of both the righteous and the wicked' as mentioned in John 5:29, Acts 24:15 and the speculative nature of a recreated 'self' – human finitude will have to bear these uncertainties as we attempt to understand the biblically attested emphasis of the bodily resurrection of believers in the same pattern as that of Jesus. Brown and Jeeves point to the prerogative of God's creative act as they note:

> Resurrection of the body … allows for the continuance of self-identity … While continued self-identity is guaranteed by scripture, it is always promised in the context of the activity of God's creative work. Immortality is not an endemic quality of humanity, but is granted by God in a new creative act in the context of our relatedness to him. Continuance of self-identity after death is, thus, entirely a product of the activity of the sovereign and omnipotent God.[91]

Given our trust in the creative act of God, we can safely conclude that our self-identity that is constituted within the matrix of a socially embedded and embodied relationality will be preserved in God's memory, and will be reconstituted into a new creation at the final resurrection. This will be patterned in the verisimilitude of Jesus's embodied resurrection as attested through his various post-ascension appearances.

Conclusion

Contemporary cognitive neurosciences claimed that they have found a cure for the platonic and Cartesian dualisms through their physicalist accounts. But, on a closer scrutiny, it became obvious that by exalting 'thinking brain' over 'thinking mind', they have only slipped back into a 'Cartesian materialism'. And as we saw, this tendency and most frequent rigidity of neuroscientific theorists posed significant problems for theologians who attempted to engage science in a mutually critical interface. Nancy Murphy and Warren Brown's proposal of a

91 Brown, W.S. & Jeeves, M.A. 'Portraits of human nature: reconciling neuroscience and Christian anthropology', *Science & Christian Belief* (1999) 11 (2), 148.

nonreductive physicalism was aimed as an alternative solution to this problem. Such a conception of a nonreductive physicalist account helped us to overcome certain critical issues within the prevalent 'causal' and 'reductive' materialist paradigms and provided us a basis to seek for a metaphysical conception of embodied-mind relations.

As we proceeded to understand the concepts – 'consciousness', self-identity and continuity – we employed Maiese's Essential Embodiment Thesis for further exploration. It became clear that all human consciousness is essentially an embodied consciousness, as the self intentionally construes meaning through interactions in the world from its proprioceptive-kinesthetic experience. These construals of meaning through such essential embodiment are organised coherently for the consciousness, constituting its synchronic and diachronic unity. Also, we found that not only for self-consciousness and self-identity, but also for one's social cognition embodied relations are important. Intersubjective and intercorporeal resonances constitute one's social cognition and identity. The individuality of the 'self', as it emerges out of a socially embedded and embodied relation, was further enhanced by Clayton's proposal of a personal agency acting as a unifying factor. This helped us to identify non-reductive physicalism as a plausible alternative.

Having established this aspect of embodied and socially embedded consciousness of 'self,' we reflected on the post-resurrection appearances of Jesus, to understand how the identity and continuity of his 'self' were established through his essential embodiedness. The continuity of his self-identity was derived directly from his bodily experiences on the cross and was further established by his socially embedded relations with the disciples. Despite the differences between the nature of both the bodies, the resurrected body's identity and continuity were shown to be constructed only through its material counterpart's synchronic and diachronic conscious experiences. We extended this application to our *post mortem* existence, as the resurrection of Christ becomes the fulcrum on which our future existence hinges. This helped us to understand that our identity and continuity have to be established within the matrix of our human experiences, and will be extended to the resurrected reality. Apart from this embodied and socially embedded self-identity in our human bodies, there is no other basis for continuity. We found that the eternal power of God's creative act is the only guarantee for this continuity of self-identity as every innate conscious experience of ours will be preserved in the memory of God at the point of our death. Believers can affirm their hope in God that their physical bodies will be transformed in *eschaton* by being reconstituted out of the embodied and socially embedded self-consciousness.

The following questions could be of interest for further research: (a) How is the Trinity preserved in the period between Jesus's death & resurrection? (b) In what mode did Jesus's self exist in the pre-incarnation and post-ascension period?

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