



The nature of human nature: Christ's resurrected body as the theological response to the mind/brain problem

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Abstract

This article will argue from a Scriptural viewpoint that human nature is not reducible to a set of individual physical characteristics but is embodied and all the qualities of being human are mutually dependent. The substance for this statement is rooted in the biblical confession about the characteristics of the resurrected Body of Christ. This premise could assist the sciences in their quest to define human nature, specifically relating to the mind/brain problem. In addition, it could contribute to the need for consilience and lead scientific research into a more comprehensive understanding of the human mind and brain and its embedded nature.

Keywords

Human nature; resurrection of Christ; resurrected body; mind/brain problem; science and religion

1. Introduction

How do you explain the nature of human nature? It seems that the famous paraphrase about the road ahead between the Cheshire Cat and Alice in Lewis Carroll's classic book: *Alice in Wonderland*, is true, when contemplating about human nature, "If you don't know where you are going, any road can take you there" (Carroll 1993). The answer in the quest for human nature seems to depend on whom you ask, and in many instances, differ because every scholar and every discipline pretend to know the answer completely, although the road up ahead remains shrouded in mystery. Visala & Fuentes (2015:25) notes that, "There is no single 'human nature', but several. There are at least three clusters of such properties that are most often put forward in efforts to define or categorize human nature:

(1) innate, hardwired traits or necessary essences; (2) unique properties; (3) universal properties.” In addition, the meaning of simply being called human is also not clear (Visala & Fuentes 2015:31).

Any theological reply to the substance of human nature are also not exempt from the challenges faced by natural science. Throughout the ages different theological viewpoints struggled to formulate a balanced picture of human nature, and often fell prey to the lure of a dualistic account.¹ However, the road up ahead, to borrow Carroll’s metaphor, is not completely unfamiliar. Theology, as opposed to natural science, lay claim to divine inspiration through Scripture. From a Biblical perspective the essence of human nature is not mystery. Does this mean that all naturalistic hypotheses are inadequate, and that theology lay claim to the ultimate (and untestable) answer? To the contrary, the author views science and theology as consonant to one other (Pieterse 2017). The complexity of human nature compels one to take a complementary approach² to the sciences. The challenge for natural scientists is a revaluation of their own beliefs about the real meaning of what scientific endeavour entail, and to consider the possibility that natural science is not the only (as scientism advocates) gateway to unlock the mysteries of creation and human nature. In his book, *The Great Mystery* (2018), McGrath addresses precisely this fallacy of scientism. He argues convincingly that although science is indeed a core resource in the human quest for knowledge and understanding, it is by no means able to provide every detail vis-à-vis the “big picture” of human nature and the complexities of the cosmos (McGrath 2018:10,14 and further). If one disregards this insight and embraces a narrow positivistic stance pertaining to the definition of science and struggle to accept any theological contribution as valid, a complementary approach may indeed be a bridge to far, and any theological proposal will be deemed pseudo-science. The author wants to encourage the sciences to keep engaging in dialogue in search for common ground. Ironically, the proposal of this research on the mind/brain problem, could assist natural science in refocussing their effort in acceptance of a theological contribution.

1 <https://plato.stanford.edu/entries/dualism/#HisDua>

2 Polkinghorne 2008:1

This article will argue from a Scriptural viewpoint that human nature is not reducible to a set of individual physical characteristics but is embodied and all the qualities of being human are mutually dependent. Research within the natural sciences sometimes tend to fragment a person into material and spiritual entities. Various disciplines, from the neurosciences to anthropology, propose unique characteristics which encapsulate being human, often from a specific, narrow, and selective point of view. This methodology gave rise to e.g. the mind/brain problem.

Why is the question about human nature so important for theology? *Firstly*, a faith based Biblical confession about what it means to be human cannot be ignored in dialogue with other disciplines if one is serious and true to your beliefs. *Secondly*, if being human only implies having a crude collection of specialised cells that could be physiologically explained, it suggests that all spiritual experiences and beliefs of humanity was an illusion and Freud's assessment³ was correct. It will reduce human beings to mere biological machines. This paper will show that current research in the neurosciences challenge the notion that a person is merely specialized matter. In addition, a theological anthropology⁴ might assist natural science in the search for human nature. If science is genuinely interested in the essence of being human, it is only logical to make use of all the available knowledge.

Therefore, the premise of this article is: the biblical confession vis-à-vis the substance of the resurrected body of Christ could assist the sciences in their quest to define human nature, specifically relating to the mind/brain problem.

In what sense? Is it even possible to relate the resurrected body of Christ to a post-modern neuroscientific conundrum like the mind/brain problem? I shall argue, absolutely and necessary. The hermeneutic key which connect

3 “Sigmund Freud (1856–1939), who in *The Future of an Illusion* (1927, 2010) contends that religious belief perpetuates psychological immaturity among individuals, and cultural immaturity on the social level. Freud asserted that religious illusion, inhibits scientific progress, and causes psychological neuroses, among its other pernicious effects.” (Jordan 2018)

4 “While touching upon a wide range of different aspects of human experience, theological anthropology is not concerned with any one particular aspect in isolation from the rest of our life. Its concern is with the entirety of human existence – ‘the whole man is created in God’s image’” (Cameron 2005: 56)

these two unlikely concepts is found in the essence of human nature as expressed in the bodily appearances of Christ after the resurrection. On occasion Jesus appeared in a physical state and invites Thomas to touch His hands and side. The next moment He displayed a spiritual nature that captured the imagination of the disciples and He moved effortlessly through locked doors. It is this spiritual/non-physical dimension which is denied and lacking in the reductionist arguments of some scholars with a one-sided physicalist opinion on human nature. *I believe the revealed substance of the resurrected Body restores eschatologically the essence of human nature, and crucially, in retrospect discloses what the true core of human nature is, though momentarily veiled.* To ponder in a reductionist manner over the mind/brain problem is essentially restrictive and is only part of the story. It is imperative for theology to contribute to this important matter, and reflections on the incarnated Christ is not only helpful but reinstates the true picture of what it means to be human.

I will structure the argument in the following manner: *Firstly*, a short synopsis of the complexities in defining what it means to be human. *Secondly*, I will briefly discuss the mind/brain problem, and the detrimental effect certain assumptions have on the debate. In addition, I will demonstrate the restricted nature of non-reductive physicalism as a possible solution to the reductionism associated with the mind/brain debate. *Finally*, I will suggest an alternative option: The resurrected body of Christ as the embodiment of human nature. *The core of this confession forms the theological contribution to the complexities of the mind/brain problem.*

The probe into the essence of human nature is a comprehensive matter engaging different faculties. The specific question about the meaning of, or relationship between, mind or brain is embedded within this broader understanding of what constitutes being human. Hence, it is necessary to give a *very brief* oversight on the matter of human nature. Visala & Fuentes (2015:31,32) argues that, “the debate ultimately comes down to the differences between naturalists and non-naturalists.”⁵ The naturalist

5 This unsophisticated distinction is enough for an entry level into the subject, but closer inspection reveals that the relationship between the sciences are more complex, e.g. the debate about the status of theological endeavour. The theologian will claim that his effort is quite “natural”.

belief that “there will be a complete ‘science of the human’ that involves explanatory factors that are reducible to basic facts of biology, chemistry and physics.” Conversely, the non-naturalist will argue that a person is more complex than the mere reduction into the elementary building blocks of nature. “There might be ‘supernatural’ or strongly emergent properties of the basic biological organism *homo sapiens* and its groups and environments.” (Visala & Fuentes 2015:32) and Du Toit (2017) develops this notion in his exposition of the biological foundations of the metaphysical mind and argues that natural sciences cannot escape the metaphysical thought processes of the human mind. He affirms that, “To discard the metaphysical dimension of our thinking and our representations of reality would mean to discard the human. Metaphysics will always be part of human thinking” (Du Toit 2017:8).

The various groups or beliefs systems often look to the sciences to give credibility to their opinion. For example, Tönsing (2017:1) highlights the traditional argument that the use of tools by early “man” is an important reference point for a naturalist understanding of human nature. The problem with this argument relates to purpose. The evidence about the use of a specific tool gives an account of the survival instinct of the individual but say nothing about consciousness or an inner religious experience. Instead, Tönsing (2017:3) argues, “It is in relation to something more than mere survival that humans can make meaningful sense of their world. It is the self-definition in this relation – for humans are fundamentally social beings of relationship – to the transcendent, to the mystery out of which, and to which one lives that I denote by speaking of *homo credente*.”⁶ It remains a struggle, even for specialized disciplines (e.g. anthropology or palaeontology), to grasp the essence of what it means to be human. The taxonomical challenges, historically presented by the interpretation of the limited amount of fossil evidence, reminds one of the subjective natures of some research concerning what constitutes being human (Bryson 2003).⁷

6 It is this openness to something more than that which is necessary for survival that I mean when I coin the term *homo credente* – the person of faith, the human being which finds itself in relation to something greater, from which it derives itself and to which it returns (Tönsing 2017:3).

7 Chapter 28, The Mysterious Biped

The journey in pursuit of human nature accelerated with the advent of the *Human Genome Project* (HGP). Gannet (2016) provides an overview of the different philosophies related to the project. Various proponents of the HGP believe that the “mapping of the genome” would settle the mystery concerning human nature. For example, Watson (2003:172) writes: “The Human Genome Project is much more than a vast roll call of As, Ts, Gs, and Cs: it is as precious a body of knowledge as humankind will ever acquire, with a potential to speak to our most basic philosophical questions about human nature, for purposes of good and mischief alike.” This optimism of scholars is firmly rooted in scientific excellence, and rightly so, but their enthusiasm radiates a perspective on reality that is embedded in reductionism. Polkinghorne (2002) for example, reminds us that, “Biological cells are biochemical systems of great inter-related complexity. Although it has become conventional to talk of DNA as carrying information (Biology, IV), this informational content is only meaningful and activated within the total context of the living cell. In isolation, DNA is no more than a very complex chemical.” In addition, all living cells in the human body are mutually dependent and are subject to upward and downward causation.⁸ Bryson (2003)⁹ attempts to describe this complex intertwining within the cellular matter of a single cell, and state: “Even the simplest (cell) are far beyond the limits of human ingenuity” (2003:450,51).

Any research about human nature are subject to certain limitations. The various disciplines are continually tempted to believe that a specific field of study has limitless insight into the essence of humanity. It was the error of pre-enlightenment theology, and unfortunately it became the struggle for

8 The significance of causation in the human body is regularly debated (Kärkkäinen 2015:320) but could be described as: “... downward causation is used as a designation for an alleged downward effect which emanates from the energetically defined higher level (e.g. “mind”) onto its constituents in the lower level”. (Emmeche, Köppe, Stjernfelt 2000:2). “The idea behind *upward causation* can be termed as follows: the emergence of a higher entity from a lower one is characterized by a certain causal process leading from the lower level entities to the higher-level ones, so that the lower level is the cause and the higher level as the effect. ... Consequently, the biological cell is able to control the single molecules of which it consists, or thought processes are able to guide their neurophysiological substrate in the brain. In this way, every time downward causation is assumed, this is a supplementary gesture to counterweight the threatening reductionism inherent in a previous upward causation” (Emmeche, Köppe, Stjernfelt 2000:5,6).

9 Chapter 24, p. 450–61

the natural sciences in the post-modern era. Maybe we should take note of Weissenbacher (2015:48) words of wisdom, “Neuro-literacy reveals that neuroscience – as is the case for science overall – must be viewed with a critical eye. A critical eye will discern the limits within which science works, and the limits to the capacity of neuroscience to explain just what makes us human in relationship to God.” Mindful of this insight we can cautiously proceed to the details of the mind/brain problem.

2. The mind/brain problem rooted in dualism

The exploration of the human brain and/or mind incorporate data and expertise of several disciplines. The mind/brain problem is indeed more complex than some studies often describe. Current research in the neurosciences, philosophy and theology all contribute. It is understandable then that the aim of this paper is not to delve into the fine detail, but to deal with the mainstream ideas and hypothesis. In addition, the complexity of the subject matter compels any research to rely on the relevant peer reviewed data from the various disciplines. Karkkainen (2015: xvii) observes that the current age is one of specialization. Knowledge in the various fields of science, philosophy and theology has reached a depth and intricacy that makes it impossible for a single researcher to be master of all. Therefore, any research that involves a multi-disciplinary approach is content to presuppose the truth of certain peer examined data. This is particularly true of the mind-brain discourse.

The expression *mind-brain problem* relates, “... primarily (to) the question of how the mind relates to the brain – (it) is one of the oldest and most persistent challenges in philosophy and science, ...” (Moreira-Almeida, Saulo De Freitas Araujo 2017:23). In addition, this causality (or absence of it) between the mind and brain has theological significance, especially in the apologetic dialogue between the sciences and the confession of religious belief. It is important to note that, although most research on the subject contains physiological “evidence” to prove or refute a hypothesis on the subject, ultimately the interpretation of the data comes down to a specific philosophical or theological belief. From a natural sciences

point of view this concept sometimes seems foreign.¹⁰ Therefore, when contemplating the mind/brain conundrum, it is important to pay attention to the distinction between *philosophy of neuroscience* and *neurophilosophy*. Bickle (2012) explains, “The former concerns foundational issues within the neurosciences. The latter concerns application of neuroscientific concepts to traditional philosophical questions.” The mind/brain problem incorporate both.

This difference is valuable when one relates the mind to the brain. By default, the foundation of the neurosciences is rooted in materialism or physicalism. This one-sided view of reality underpins the *philosophy of neuroscience*. Bickle (2012) remarks, “What we now know about the cellular and molecular mechanisms of neural conductance and transmission is spectacular. The same evaluation holds for all levels of explanation and theory about the mind/brain: maps, networks, systems, and behaviour.” From a physicalist point of view important research is continually being done. The dilemma is, “... the total picture, the relationship between the levels, the glue that binds e.g. knowledge of neuron activity to subcellular and molecular mechanisms ... “Bickle (2012), are often neglected. One of the implications of this specialization in the neurosciences is that the connection of a physical entity like the brain, to other non-physical aspects of personhood e.g. consciousness, soul, and mind are simply explained in a material way.¹¹ The triumphs of natural science sometimes lead to an overestimation of its explanatory powers and *scientific materialism* (Peters 1997:650, 651) dictates that even the spiritual realm could be explained purely in a physical manner. Positivism is alive and well, even in a post-modernist environment. An example of this methodology is found in the work of Boyer (2000). He argues that the higher capacities of the evolved mind, e.g. religious concepts concerning God and rituals, could be deduced from the cognitive psychological development of the human mind. Human

10 “Neuroscientific results and insights are not “brute facts”; they call for interpretation” (Kärkkäinen 2015:308). The reality is that “scientific evidence” is always entrenched in a preconceived expectation and hypothesis. It leads to a difference in the use of, and interpretation of the “facts”.

11 This perspective is simply an extension of a more comprehensive philosophy regarding human nature. Kärkkäinen (2015:307) concludes: “... among scientists studying human nature and nonreligious philosophers, by far the most common notion of human nature is physicalist (materialist) monism.”

minds are equipped with an *intuitive ontology* (Boyer 2000:196) which enables humans to envision imaginary supernatural agents, with the tacit assumption that these agents have full access to strategic information (Boyer 2000:210). This information is necessary for the continual progression of human evolution.

That being said, “during the last decades, many technical developments in neuroscience (e.g. genetics, neuroimaging) have advanced our understanding of the relationship between mental phenomena and neural circuitry” (Moreira-Almeida, Saulo De Freitas Araujo 2017:23). This exploration is essential for the neurosciences, theology, and various other disciplines. Unfortunately, this research often succumbed to the prevailing physicalist paradigm. The reason being the underlying philosophical foundation of natural science today. Baker (1995:490) states that, “*materialism* dominates contemporary philosophy. On the standard materialistic view of the philosophy of the mind, mental states are brain states.”

The foundational substance of this exclusive material approach to the mind/brain problem is questionable. In their article, *The mind-brain problem in psychiatry: why theoretical pluralism is better than theoretical monism* (2017), Moreira-Almeida and Saulo De Freitas Araujo argues conclusively that a one-sided approach to the mind/brain dilemma is problematic and scientifically flawed.¹² In his notable work, *Incomplete Nature: how mind emerged from matter* (2012), Deacon investigates this phenomena from the perspective of the philosophy of evolutionary biology. He claims that current research within the neurosciences shows an intrinsic incompleteness regarding a comprehension of what it means to be human, “Our scientific theories have failed to explain what matters

12 “The *first* problem to be noted is that physicalism does not necessarily follow from the empirical data available in contemporary neuroscientific research (Uttal, 2011; Araujo, 2012). On the contrary, the main findings from neuroscience can be accommodated to different views on the MBP. *Secondly*, in fields such as consciousness studies and the philosophy of mind, competing theoretical models and some pieces of empirical evidence point to many difficulties in physicalist perspectives on the MBP (Uttal, 2011; Lavazza and Robinson, 2014; Dolbeault, 2017), not to mention the persistence of the hard problem of consciousness (Schwitzgebel, 2016; Ataria, 2017). *Thirdly*, the MBP is mainly a theoretical problem, which involves conceptual analysis, thereby going far beyond the empirical dimension of scientific research (Araujo, 2012).” (Moreira-Almeida, Saulo De Freitas Araujo 2017:23)

most to us: the place of meaning, purpose, and value in the physical world” (Deacon 2012:22). The material and mental states of mind are physically related. But the mere presence of material-energetic properties as observed in empirical studies of the brain, opposed to their assumed absence regarding consciousness, does not diminish the powerful and important causal power presented by the mental state of mind.

The supremacy of a physicalist methodology leads to the question: What lies at the heart of the mind/brain problem? The answer to this question depends on the philosophical paradigm¹³ one employs in confronting this enigma. If one views the mind and brain as two separate entities where the brain has ultimate authority over the mind, then *dualism* is the correct answer. The problem becomes even more complex when one realizes that the definition of “mind” is not precisely fixed. The “mind” could refer to consciousness, the soul, spiritual experiences, or any combination of the above depending on the current dialogue.¹⁴

The history of, as well as the various combinations of dualism,¹⁵ entitles a separate study. In this article, I will focus on a general understanding of the concept.

Cartesian dualism implies that we see the world as one containing body and one containing souls. Kärkkäinen (2015:313) observes that, “Descartes no longer understands the soul as a higher substance: he sees it as the true subject, both in the human body and in the world of things ... a subject-object dichotomy.” The material and the spiritual are clearly two distinct entities and should be kept apart. The nature of this dichotomy and their relationship is being debated ever since.

13 Du Toit (2002:8,9) identify dualism; holistic dualism; reductive materialism/monism; nonreductive physicalism; eliminative/reductive materialism; emergent monism; and supervenient theories of mind as possible methods of dealing with the problem.

14 See (Kärkkäinen 2015:312).

15 “Dualisms (as much as they also differ from each other, particularly Platonic-Cartesian and Aristotelian-Thomist versions) locate humanity (human uniqueness) in the soul rather than in the human person as a whole ... dualisms tend to speak of the soul in terms of intellect (*anima intellectualis*) which elevates rationality as the vital principle. That was because early on the soul (Gen 2:7) or spirit was equated with reason” (Kärkkäinen 2015:315).

This dualistic assessment of reality apparently comes naturally. Bloom (2004: xii, 195) locates this manner of thought deep within us when he writes, “Our intuitive dualism grounds our understanding of personal identity.” This dualistic account of reality is also spiritually embedded. History teaches us that Christianity throughout the global church take dualism as the received tradition (Kärkkäinen 2015:308), and prominent Christian theologians e.g. Augustine, Anselm, Luther, and Calvin have assumed the truth of a mind/body dualism (Baker 1995:489).

This dualistic attitude towards reality is fortunately not the complete, or only perspective on human nature. There were room for divergent thoughts on dualism. In the Western Church for example there was an effort to bring the body and soul dualism closer together: Kärkkäinen (2015:312) refers the Council of Vienna (1312), where Aristotle’s idea that the soul is the “form” of the body, became Roman Catholic (church) dogma. These ideas on the unity of human nature were regrettably few and far between, and with the advent of the *Aufklärung* and Cartesian philosophy dualistic thought about human nature were fortified.

The influential Reformed theologian Karl Barth affirmed this modernist dualism. In his Church Dogmatics he has the epithet: “Man as soul and body” (Barth 2010: vii) and argues that the soul has a direct relationship with the Spirit, whereas the body only has an indirect relationship (Kärkkäinen 2015:315). The consequences of this kind of dualism sometimes cuts deep. Hagner (2011:64) concludes that the disregard for human life in some parts of our society is due to a neo-gnostic belief that the real person is the soul; therefore, the body is finally unimportant, dispensable, and even despised.

In recent years we have seen a resurgence in dualism relating to human nature. Herzfeld (2016) dissects this new dualism, where human nature in a digital age of quantum computing and smart phones, is strongly associated with information. Crick’s (1994:3) now famous remark that, as humans we are nothing more than a pack of neurons, reinforced a “... quasi-Cartesian dualism that separates the mind from the body and locates the self wholly in the mind” (Herzfeld 2016:85). It now seems as if information, rather than matter is at the core of personhood and indeed of the whole the universe. This assumption undergirds the dubious claim that Artificial Intelligence (AI) could in near future rival, and transcends the human

brain, and ultimately exist in a bodiless state. The mind, as oppose to the body (according to certain neuroscientific research), then becomes the core of human nature.

These views are contrary to the premise of this article concerning the reality and meaning of Christ's resurrected body. It is also in conflict with the foresight of early Patristic thinkers (e.g. Tertullian) who defended the psychosomatic unity, even though they made a distinction between body and soul (Kärkkäinen 2015:309).

The dominance of this embedded dualism within the physicalist approach in the neurosciences led to the idea that the brain could be divided into separate regions, each of which is *solely* responsible for certain physical, as well as mental functions. This hypothesis was reinforced through research and it became conventional to view the brain in this manner. In recent years though, some alternative voices from within the neuroscientific field regarding the nature of human nature and the deep connections within the brain came to the fore. Pessoa (2008:148) affirms this idea, "I will make a case for the notion, based on current knowledge of brain function and connectivity, that parcelling the brain into cognitive and affective regions is inherently problematic, and ultimately untenable for at least three reasons: *firstly*, brain regions viewed as 'affective' are also involved in cognition; *secondly*, brain regions viewed as 'cognitive' are also involved in emotion; and critically, *thirdly*, cognition and emotion are integrated in the brain."

Wilson and Foglia (2015) accentuates this concept by focussing on the data of *embodied cognitive science*. Research within this paradigm exhibit cognition as the product of a dynamic interplay between neural and non-neural processes, with no general fracture between cognition, the agent's bodily experience, and real-life contexts. Here the body is seen as distributing or regulating cognitive processing. This close connection between the brain/body and mind was originally proposed by Stern in his work, *General psychology from the personalistic standpoint* (1938). Stern's ideas were revisited in recent years. Sabat (2010:171) explains that, "The personalistic view is that individuals are not comprised partly of mind and partly of body, but that an individual is a person who has, by definition, a capacity to experience. As individual persons, we are part of the physical world in our corporeal nature, and we also have the capacity

to reflect inwardly, which is our mental nature.” This connectedness within the physical world is demonstrated on another, but very significant level. Polkinghorne (2002b:80) states that, “The EPR¹⁶ effect’s implication of a deep-seated relationality present in the fundamental structure of the physical world is a discovery that physical thinking and metaphysical reflection will have to come to terms with in fully elucidating all its consequences”.

Nevertheless, within the mainstream of neuroscience today the *identity theory of mind*¹⁷ still holds prevalence. It maintains that states and processes of the mind are identical to states and processes of the brain (Smart 2017). This perspective inevitably leads to the conclusion that even religious experience could be relayed to purely brain function. In contrast, Weissenbacher (2015:42) wisely observes that individual brain scans are informative, but “Any study that claims to understand religion based on a scan is failing to distinguish the fact that it is the religious experience of individuals under study and not religion itself.”

The relationship between the mind and the brain continues to be problematic for the sciences, especially when attempting to relate theology and natural science to one another. Scholars usually argue from a certain paradigm and attempts to resolve the issue are diverse. One credible possibility is nonreductive physicalism. I will briefly discuss this option as a possible solution to the mind/brain problem and as a plausible explanation of the nature of human nature.

3. Non-reductive physicalism

The process of aligning the mind and brain to one another and the acknowledgement of a mutual causal influence between them, inevitably

16 “... two quantum systems interact in such a way as to link both their spatial coordinates in a certain direction and their linear momenta (in the same direction), even when the systems are widely separated in space. As a result of this “entanglement”, determining either position or momentum for one system would fix (respectively) the position or the momentum of the other” (Fine 2017).

17 The identity theory is reductionist in nature. Kärkkäinen (2015:321) points out that there are several theories of the mind/body relationship which reject or minimise the possibility of the mind’s causal powers e.g. psychophysical parallelism, epiphenomenalism and other.

lead to an attempt to defeat reductionism,¹⁸ identity theory and its siblings. Non-reductive physicalism, as the phrase suggest, seems to be a credible alternative¹⁹ to the restricted nature of reductionism. One of its leading advocates is the philosopher Nancy Murphy (2010:251) who explains that “(It) ... is the view that humans are entirely physical and that they nonetheless exhibit all of the higher human capacities once attributed to the mind:²⁰ rationality, morality, spirituality and free will.” It is an attempt to recognize the existence of the spiritual and to bring the mind and brain closer together in a way that are mutually beneficial. Although non-reductive physicalism and *dual aspect monism*²¹ are used as synonyms, the latter is slightly different in substance.

The question is, does non-reductive physicalism provide a definite challenge to the constrictive materialism and physicalism so prevalent within the reductionist paradigm? Kärkkäinen (2015:328–331) argues that, although non-reductive physicalism has a certain value e.g. as a vehicle to move between recent scientific data and religious intuitions, its ultimate base, *physicality*, is also its weak point! It cannot avoid, “... facing the problem common to all physicalists, namely, that of the higher mental capacities, consciousness.” – the connection between the mental/

18 See Kärkkäinen (2015:322) for the different types of reductionism e.g. causal-, methodological-, ontological- etc.

19 Two other possibilities are: “A.N. Whitehead’s (1861-1947) process thought also resists reductionism. It is based on a metaphysics of individual events (“actual occasions”). These can be of varying degrees of complexity and they are not to be reduced to a single common denominator. Another antireductionist proposal was made by Niels Bohr (1885-1962) when he suggested exporting from quantum mechanics his concept of complementarity and using it as a way of relating life and matter. Bohr emphasised the point, already noted, that reducing a living entity to its molecular parts serves to kill it, so that encountering it in its holistic integrity or in its material decomposition are mutually incompatible alternatives. None of these metaphysical formulations, however, are without their difficulties” (Polkinghorne 2002a).

20 Kärkkäinen (2015:322) expounds the definition even further: “... it considers the mental as an emergent novel property (or capacity or event) that ‘supervenes’, that is, is dependent on the subvenient base (brain), but that cannot be reduced to its base.”

21 Polkinghorne(1996b:69) favours dual aspect monism (originally construed by Spinoza (Levi et.al. 2008), as a concept which describes a human being as a psychosomatic entity. The physical properties that non- reductive physicalism tend to accentuate, tend to be more balanced with the spiritual in Polkinghorne’s use of dual aspect monism. His view is that there is only one kind of substance but that it can be experienced by the two complementary poles of the material and the mental.

non – material and physical matter are still illusive and vague. In addition, a category mistake is made when metaphysical claims are based on scientific observation. Secondly, it seems to many that matter/physicality has become elusive, virtually “nonmaterial” in the current scientific debate, especially regarding the mind/brain problem. In his article, *The Myth of Nonreductive Materialism*, Kim (1989) shares Kärkkäinen’s reservations about the issue at hand. He argues persuasively that the support structures of non-reductive materialism(physicalism), e.g. *multiple realizability* and *supervenience*, are logically inconsistent from a purely philosophical point of view. Consequently, he is of the opinion that non-reductive materialism is not a stable argument against the pressures of reductionism.

Any alternative approach must incorporate a dualistic reality, but with holistic unity. Kärkkäinen (2015:338,9) believes that in any non-reductionist account, the distinction, yet not separation, between the physical and the mental is unavoidable, in philosophical, theological, and scientific discussion. In addition, the reality of mental life cannot be fully comprehended without a strong theory of emergence.²² This kind of emergence explains the mind’s downward and whole-part causation and is consistent with neuroscientific data. Consequently, he proposes the phrase *Multidimensional monism* (Kärkkäinen 2015:345). This expression attempts to encapsulate the idea that the “monistic nature of reality is honoured, but in its pluriform unity.” He states that the very least one can confess about human nature is a psychosomatic pluralistic unity. Kärkkäinen believes that this approach is the best way to portray human personhood and to acknowledge and describe the physical and mental aspects present.

Although Kärkkäinen’s proposal do justice to the complexity and relational structure of being human, it seems to be only an expansion of Polkinghorne’s idea of *dual aspect monism* and Clayton’s suggestion of emergent monism. All three of these propositions provide philosophical

22 The concept of emergence is outlined and refined in various definitions e.g. “An *emergent property* of an aggregate or a whole is, very roughly, a property that is something over and above the properties of its parts and the way they are arranged in the aggregate” (Gustavsson 2017). When relating emergence to the mind/brain problem, Polkinghorne (1996a:431) adds, “It is possible that emergence is, in fact, a two-way process; that it would be conceptually valid and valuable to attempt to transverse the ladder of complexity in both directions, not only relating the higher to the lower but also the lower to the higher.”

alternatives to the confinement of reductionism. Nevertheless, one gets the feeling that an even more substantial proposal is necessary. Maybe it is required to take a step back and concede that, “Despite growing knowledge about the human brain, we remain relational beings interacting with our biology, our family, our culture, and our God” Peters (2015:5). It is indeed our common humanity that makes this relational connection, not only with creation and our fellow man, but also with God possible. I want to present a theological extension to the issue at hand. I am convinced that the Biblical testimony about the resurrected Christ could advance and illuminate our comprehension of human nature even further.

4. An alternative option: The resurrected Body of Christ as the embodiment of human nature

The resurrection of Jesus Christ is probably the most contentious issue in dialogue between theology and science. One of the reasons is that the historical detail about the resurrection and the precise nature of the resurrected Body was/is debated and frequently questioned in the last two millennia.²³ This, despite Paul’s clear testimony in 1 Corinthians 15: 12–28 that the resurrection of Christ is the most significant aspect of the Christian faith (Lioy 2011:96). This article is not devoted to all the speculative possibilities, nor is its scope a detailed analysis of all the probabilities and theological constructions. The author believes in the resurrection of the Body, the supernatural transformation of Jesus’s earthly body and the testimony of the Sinoptic and Johannean Gospels regarding the nature of the resurrected Body.

This revelation vis-à-vis the resurrection of Christ’s Body is key to the cognition of the embodiment of human nature and it is the theological contribution to the complexities of the mind/brain problem.

The characteristics revealed in and through the resurrected Body of Christ clarify what it means to be human. Baker (1995:501) notes, “If the mind/body dualism were Scriptural, I would expect the doctrine to be suggested in the accounts of the resurrection of Christ. But the resurrection appearances of Christ are all bodily, with no hint of mind/

23 Habermas (2005); See also Smith (2016: 29–73)

body dualism ... hence, for a Christian, the fact that Christ appeared bodily is significant for the conception of human persons. Overall, the picture of human nature afforded by both the Old and New Testaments, seems to me best understood as non-dualistic: *a human psychosomatic unity*.” The way Christ appeared after the resurrection underlined and perfected the marred image of God which all people have in common. As Lioy (2011:112) correctly states, “From a theological perspective, even though within fallen humanity the image of God has been defaced through sin, people still bear the divine likeness to some degree (cf. Gen 5:1; 9:6; Jas 3:9). For believers, the image of God not only includes temporal (physical) life, but also eternal life. The encouragement and exhortation for believers was for them to wear the likeness of the one who came from heaven.” Christ, although unique in character, one Person (vere Deus et vere homo), displayed after his resurrection the restored essence of humanity, an embodied a physical and spiritual unity. The concept of “deep incarnation” presented by Gregersen (2001) may be helpful in this regard. This expression is an attempt to move beyond the narrow perception that God became flesh in Christ solely to die for the sins of humanity. In addition, “If we think of the incarnation in purely historical terms (Jesus as a bygone historical figure), and at the same time subscribe to the metaphysics of historicism (all that exists only exists as indexed in time and space), we could only speak of a skindeep incarnation” (Gregersen 2016:2). Deep incarnation implies an extensive *interactionist view* of the embodied mind. (Gregersen 2016:2) It is an attempt to paint a comprehensive view of what transpired when God became flesh in Christ and presupposes a radical embodiment that reached into the roots of our material and biological existence. (Gregersen 2015:225–226) Gregersen employs this notion to move away from anthropocentrism in our conception of Christ. In the context of this article, I shall focus primarily on the embodied mind.

Kärkkäinen (2015:332–7) takes note of this Biblical insights about human nature, both historically and contemporary. He writes that since the beginning of the twentieth century though critical scholarship began to question the body-soul dualism found in certain texts. He argues convincingly that, although certain passages in the Old Testament, as well as in Pauline theology, tend to favour a dualistic perspective on human nature, closer inspection reveals that *Scripture never intended to give an*

anthropological assessment of man. For example, the use of *nephes* (soul) in the OT refers to “life” or “living being”.²⁴ Unfortunately, this insight that the “soul” infers to a state of being, historically led to a disconnection from the body and a devaluation of the earthly. Believers tended to focus on the afterlife, as if this life were not important anymore. Classic texts which seemed to support dualism e.g. 2 Cor 5:1–10, rather refers to an eschatological tension between now and then where, e.g. “clothing” (v.3) is a reference to baptism. Therefore, Kärkkäinen (2015:337) concludes that: “... the current biblical scholarship has shifted the focus from substance dualism toward a more holistic and monistic view of humanity; from individualism to relationality and communion; from isolation from the rest of creation and cosmos to a deep connection and being embedded in nature.” One must note that this perspective is not embraced by every scholar, and that a dualistic account of human nature is still prevalent and widespread. In addition, this idea does not mean that individual personhood and responsibility is sacrificed on the altar of unity or some mystical humanistic connection. On the contrary, it is an attempt to realign humanity with its original origin. Nevertheless, it becomes clear that the disconnection between the physical and spiritual, or the complete rejection of the spiritual/ mind property by some scholars in the mind/ brain debate, is from a Scriptural perspective highly speculative. Exactly how could Biblical insights about the resurrected Body of Christ assist us in dialogue about the mind/brain problem?

The hermeneutic key which connect these two unlikely concepts is found in the essence of human nature as expressed in the bodily appearances of Christ after the resurrection.

The resurrected body of Jesus as described in John 20–21 had unique characteristics. While it sometimes demonstrates material characteristics and can eat food, it can also appear and disappear. It becomes the anticipated body that all believers will have at the eschaton. Hagner (2011:69) notes that, “Jesus was incarnated in a body of the first creation; (but) he was raised in a body of the second creation.” Although the resurrected Body is completely different from the natural body, there is a definite relation. Lioy (2011:109)

24 Green (2008:57)

use the analogy of a seed (as Jesus did) and reminds us, “... as with a seed placed in the ground and the plant it produces, there is both continuity and a splendid difference between what dies and what is raised from the dead.” *This transformation of the Body is possible because the natural body is not composed of only one materialistic reducible substance, as reductionistic scientism seems to imply in their contribution to the mind/brain problem.*

López (2013:150) accentuates these characteristics and argues that, “The “natural body” refers to the complete person, composed of matter and spirit, that belongs to this fallen Adamic realm in which two controlling powers (the “flesh” and the “Spirit” in Gal 5–6) fight to gain control of a believer. Conversely the “spiritual body” refers to the believer as a complete person composed of a material body and a renewed spirit (cf. Rom. 6:6) that is Christlike and belongs to His redeemed realm.” *Therefore, any separation between mind and body, or even worse, a denial of the mind/spiritual aspect in a person, is contrary to the revealed substance of the resurrected Christ.*

If one reflects about human nature and the resurrected Body of Christ, one also must take note of Paul’s insights as documented in 1 Corinthians 15.

In his extensive article, *N.T. Wright’s understanding of the nature of Jesus’ risen body* (2016), Joseph Smith evaluates Wright’s understanding of Paul’s vision of the resurrected body in 1 Corinthians 15. He gives an outline of the complexity of the subject matter, as well as the diverse opinions among scholars. In conclusion, he is critical of from Wright’s assessment that the resurrected Body was “robustly physical”.

Instead, López (2013:145) refers to 1 Cor 15:44 and explains that this passage says the opposite of what most people claim. Many people wrongly interpret the words “spiritual body” to mean an “immaterial” body (i.e., composed of “spirit”) or a body composed of a semi-spiritual “light” substance. One of Paul’s aims was to rectify the erroneous ideas commonly taught in Greco-Roman culture about the dualism between matter and spirit, where (as Platonism taught) the goal in life is to become free from one’s evil arterial existence (Lioy 2011:95; López 2013:145). In addition, López (2013:148) argues persuasively that Paul’s use of the adjectives “natural” (ψυχικός) and “spiritual” (πνευματικός) in 1 Corinthians do not refer to objects or persons composed of immaterial or material substance. Instead

he employed the terms to emphasize what kinds of powers are controlling a person.

Paul understands that the present body of man is characterized by fragility, it "... remains a weak instrument, far outspanned by the *mind* that is in it" Morris (1990:222). Through faith in the resurrected Christ believers' earthly bodies (with the capacity-mind to be enlightened on the spiritual level) will be physically transformed and resurrected in the same way as Christ was. *There is a direct relation between characteristics of the resurrected Body of Christ, and the ingrained potential rooted in human nature as created by God. I believe the revealed substance of the resurrected Body restores eschatologically the essence of human nature, and crucially, in retrospect discloses what the true core of human nature is. Christ's appearance as an embodied physical/spiritual Person reiterates the potential and properties already present in human nature as an image of God. If the mind/spiritual dimension is reductionistic ally devaluated, it may be detrimental to the resolution of the mind/brain problem.*

In conclusion, we began our inquest with the proposition that the nature of Christ's resurrected Body could enlighten the sciences about the essence of human nature, specifically pertaining to the mind/brain problem. The Scriptural testimony submitted seems to challenge the prevailing reductionist view so prevalent in literature concerning neuroscientific research. I will submit that the Biblical testimony about the embedded qualities of Christ's resurrected Body is an indication of the intrinsic essence of human nature. This confession could contribute to the need for consilience²⁵ and lead scientific research into a more comprehensive understanding of the human mind and brain and its embedded nature.

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25 McGrath (2018:13) - the ability to weave together multiple threads of knowledge in a synthesis which can disclose a more satisfying and empowering view of reality.

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