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The Battle of the Cosmos

A Comparison of Cosmopsychist Theories

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INTRODUCTION

Something about the mind and how it relates to the body, or (how mental properties are related to physical properties) seems to present with an unusually difficult problem. When one focusses on the mental property of consciousness for instance, one could ask the question: what exactly is consciousness, and how does it relate to the brain and the body? (Robinson, 2016). This is what leads us to the purpose of this paper. As the complexity of these issues started to grow over the years, more and more philosophical theories started to emerge with the hope of providing some sort of a basic conception of mind (Heil, 2004). These basic conceptions then formed the traditional frameworks within the mind-body problem, which to this day serve as the foundations from which other ideologies and theories are constructed. There have been a number of varying theories that have circulated and been reconstructed over the years, however the most prevalent of these traditional theories are Dualism and Materialism/Physicalism.

However, as popularly supported and debated as these theories might be, both appear to face serious problems that have debilitated them beyond repair to this day. Due to their continuous struggle in trying to provide sufficient solutions, a plateau was reached in terms of what could be done with these traditional modes of thought. Consequently, a need arose for an alternative theory that could avoid the traditional problems whilst offering a possible contemporary solution. This is precisely what will be examined within this paper. Today, there are a few contemporary theories available, the most prominent of these are Panpsychism, Panprotopsychism and Cosmopsychism. We will be exploring all three of these theories in more detail, with particular focus on the latest of these being Cosmopsychism. The main objective of this paper is to focus on the ontological questions regarding the mental aspect of consciousness, specifically with regards to the nature of consciousness and how it relates to the body and the rest of the universe. In our quest to find some answers, we will be focussing our attention on two adaptations of the Cosmopsychist theory in an attempt to discover which of the two theories provides stronger answers. The structure of this paper will appear as follows:

Section 1 will introduce the traditional theories of Physicalism and Dualism, followed by section 1.1 which briefly examines Physicalism and two problems that it faces. This is then accompanied by section 1.2 which looks to Dualism and briefly examines the problems it faces. Section 2 introduces an alternative theory in the form of Russellian Monism, which will then lead us into a more detailed explanation of the theory in section 2.1. Section 2.2 explores how this theory is able to overcome the obstacles faced by the traditional theories examined within section 1. Following this will be section 3, which will introduce the various theories that makes use of Russellian Monism as a foundational framework, with particular emphasis on the theory of Panpsychism in section 3.1 and the theory of Panprotopsychism in section 3.2. Following this is section 4, which introduces the serious problem of combination that appears to accompany theories of this nature. Within section 4.1, we will explore this problem in more detail, followed by how this specific problem impacts both theories respectively. Section 5 acknowledges the fact that there is a need for an alternative theory based on what was analysed in the previous section, which then leads us into the next section being 5.1.

This will provide a general outline of the theory known as Cosmopsychism, followed by the de-combination problem that appears to be attached to it in section 5.2. From this, we will then explore two adaptations of Cosmopsychism in depth, the first being an adaptation provided by Itay Shani in section 5.3, and the second being an adaptation provided by Philip Goff in section 5.4. Once this has been done, we move onto section 5.5 which provides a brief overview of the de-combination problem, accompanied by section 5.6 that analyses how Shani might respond to the de-combination problem, and section 5.7 which looks at how Goff might respond to the same problem. Pen-ultimately we shall explore which fundamental basis Shani and Goff incorporate into their theories, followed by the final section which leads us to the battle between these two theories and our final thoughts within the conclusion.

(1) PHYSICALISM V.S DUALISM

Traditionally when looking at ontological questions regarding the mind, one would have been forced into one of two directions in terms of searching for a possible solution. The two potential directions that one could have chosen from would be Physicalism or Dualism. The first of these theories suggests that everything in the universe is physical or supervenes on the physical (Stoljar, 2019). In contrast, the second theory suggests that the universe is divided into two distinct elements being mental and physical (Robinson, 2019).

In this chapter we will be briefly exploring these two theories in more detail in order to portray that both are faced with significant issues. While there have been many attempted responses to these problems (responses that we will not be considering here), the persistence of these problems motivates the idea that an alternative theory may be needed.

(1.1) PHYSICALISM

Physicalism became popular among philosophers and scientists from the 1860's onwards, as a result of the scientific advances that had taken place at that time. These advances changed the way in which people thought about everyday things, which led to a scientific and mechanistic outlook of the world. As such many scholars changed their views in order to adapt to this mechanistic outlook, which led them to believe that the nature of the world could be explained in purely physical terms (Stoljar, 2010).

According to the above theory, the nature of the universe, including everything within it, can be attributed to something physical, or that it supervenes on the physical. What this means is that one set of facts can completely determine another set of facts (Chalmers, 1996). For example, the physical truths about the world are able to determine biological truths, due to the fact that once all the physical truths are secured, the biological truths cannot alter (Chalmers, 1996). In layman's terms what this means, is that the universe and everything in it comprises of something that is physical in nature, or that by the very least it is a consequent of something physical (Stoljar, 2019). Another way to understand this, is to say that the nature of the universe and everything within it is grounded within the physical. The term grounded can be understood as a *non-causal explanatory relation* which holds between facts (Goff, Forthcoming). A simple manner in which to understand this relation is to look at an example: a rose is red *in virtue of* the fact that the rose is scarlet. The former attribute can be fully explained in terms of the latter attribute (Goff, Forthcoming). The terms supervenience and grounded can both be used to reductively explain certain concepts such as conscious experience, however for the purposes of this paper the term grounded will be the preferred term. [1] When physicalism is applied to the mind and its various mental states like consciousness for example, it is believed that these states are nothing more than consequents of the brain and its various functions.

A simpler way to understand this, is to think that everything that exists must have a cause. Daniel Stoljar calls this argument "*The Argument from Causal Closure".* Within this argument, it is stated that for every possible event there must be a sufficient cause, and that such causes need be physical in nature. When applied to matters of the mind, we assume that

[1] For more explanations on either term, see Chalmers (1996); Goff (2017).

mental events cause physical ones. The reason for this is that when one has a mental urge or desire it appears as though that desire causes a physical action. An example of this is when one has a mental event such as wanting to reach for a drink on the table, this appears to cause a physical event whereby one actually moves one's arm to reach for the drink on the table (Stoljar, 2019). This argument is the presiding theory in support of physicalism, and is the only argument that this paper will be reviewing. For more arguments on physicalism refer to (Stoljar, 2019, Chalmers, 1996). I now turn to briefly two specific objections to physicalism: the Knowledge argument and the Conceivability argument.

The most straightforward version of the knowledge argument was put forth by Frank Jackson in 1986, in the form of a thought experiment about an individual he calls Mary. The thought experiment goes as follows: Imagine a renowned neuroscientist called Mary who has been restricted to a black and white room for her entire life. Mary learns all there is to know about the world through black and white television, computers and books. Regardless of her restrictions, Mary has been able to learn everything there is to know about physical theory, and thus knows all there is to know about the physical. According to the theory of physicalism, Mary knows everything there is to know about the world. However, there appears to be something that Mary doesn't know. When Mary is finally allowed to leave her black and white room, and comes across a red rose, she learns something new. Mary learns what it is like to see a red rose, she learns about the qualia (quality/property) of certain experiences such as that of seeing colour. This suggests that there are some facts about the world (i.e., facts about conscious experience) that are over and above the physical facts.

The conceivability argument begins with the idea that if something is conceivable then it is possible. This can then be understood as the claim if something can be coherently conceived, then it exists in some possible world. 'Possible' here is meant to be understood as metaphysically possible (i.e., possibility in the broadest sense). The argument then goes that it is conceivable that there is a world very much like our own world in all physical respects, where human beings exist yet lack conscious experience. If such a thought is conceivable, then it is possible that such a world exists. The argument concludes that as it is possible for humans and consciousness to come apart in this way, there is more to conscious experience than given by the physical. To illustrate this point more clearly, one can consider the following possibility of 'zombies'.

The concept of zombies was introduced into this argument in 1974 by Robert Kirk, but was later developed by David Chalmers and as such is more commonly known as the zombie argument. The term zombie is to be understood in philosophical terms as an exact replica of a human being in terms of physical and behavioural aspects, the only difference however is that these zombies lack consciousness. In other words, there is nothing *it is like* to be a philosophical zombie (Chalmers, 1996). The above thought experiment can be seen as follows: Philosophical zombies are conceivable. If these zombies are conceivable then they are possible. If these zombies are possible, then that suggests physicalism is false. These zombies are possible, which results in physicalism being false. This presents with a serious problem for physicalists, as they are now unable to provide an explanation for the existence of consciousness, as it is viewed as a nonphysical fact about our world (Chalmers, 1996). It seems then that there are certain facts about our world that cannot be explained in physical terms, and that consciousness is not grounded in the physical.

As a result of these two problems for physicalism, some have been tempted to go in the opposite direction in search of a theory about our world that adds certain non-physical facts to our current theories. This direction would lead one onto the path of Dualism.

(1.2) DUALISM

If the knowledge argument and the conceivability argument hold true, this suggests that there is something extra which is non-physical in nature that needs to be accounted for. Due to the physicalist's inability to account for non-physical entities, another theory needs to be examined that is able to surpass this problem. Such a theory comes in the form of dualism. In simple terms, dualism states that there are two fundamentally distinct kinds of properties that exist within the universe, and it takes the position that at least certain aspects of the mind and those of the body are in some unequivocal sense fundamentally distinct from one another, in that some mental phenomena are non-physical in nature (Robinson, 2019). There are however a variety of theories under the term dualism, and the reason for this variation depends on one's choice regarding what to be dualistic about. Two of the most prominent elements that one could choose from are *substance* and *property* which in turn gives rise to what is known as *substance dualism* and *property dualism* (Robinson, 2019).

Property dualism suggests that fundamentally, there is only one type of *substance* that exists in the world which is physical, but that the physical has two distinct kinds of properties – mental properties and physical properties. Substance dualism on the other hand, states that there are two fundamentally distinct kinds of substances that exist within the universe – mental substances and physical substances – and that they each have their own unique properties. What follows is however neutral between these two versions of dualism.

To see how the theory of dualism works, one can refer to the knowledge argument or conceivability argument which are often seen as arguments for dualism as both seem to point to the requirement for further non-physical facts to account for conscious experience. In the knowledge argument, Mary learns something new when she leaves her black and white room, she learns what it is like to see colour, which suggests that there are non-physical facts about the world that need to be accounted for. In the conceivability argument, it is possible to have a world identical to ours but that lacks conscious people, which suggests consciousness is non-physical in nature and fundamentally distinct from the physical.

There are a number of issues that specifically plague the theory of dualism, however this paper will only be focussing on two of the most prominent of these, being the problem of interaction, and the exclusion problem. The core aspect of the dualist theory states that the mental and physical are fundamentally distinct yet have the ability to causally interact. This has been the selling point for this theory as it allows one to avoid the physicalist's problems. However, as convenient as this aspect is, it also appears to be disadvantageous towards the theory, as it presents with a problem. The first problem for dualists focuses on the problem of trying to account for the causal interaction between the mental and the physical if these are fundamentally distinct (Heil, 2004). If these are fundamentally distinct kinds, how can we explain the causal interaction between them – we can't do so in purely physical terms, nor can we do so in purely mental terms.

A dualist may try to counteract this problem by suggesting that the causal interaction between mental and physical is "*sui generis"*. However this only exacerbates the problem, as this unique type of interaction goes against our natural laws, and thus comes at what seems to many to be a considerable cost (Heil, 2004).

The second problem for dualists deals with the exclusion problem, and is generally considered to be the biggest problem for dualists. The problem it raises for the dualist is for them to show how mental states avoid being merely overdetermined causes (i.e., causes of an effect that already has a distinct sufficient cause). The question raised is given that we have reason to believe that the physical is causally complete (i.e., that every physical effect has a sufficient physical cause), how can mental states do anything but overdetermine effects? (Bennett, 2007). One could think of the problem by considering the following analogy. Suppose that there are two obstacles that a student faces when searching for employment, the first requires that the student possess the specific skills necessary for the job, and the second requires that there be employment opportunities available in the desired field. It is one thing to be suitable for the job, and it is an entirely different matter that there be such a job available. The exclusion problem can be viewed as analogous to the second obstacle (Bennett, 2007). If every physical effect has a sufficient physical cause, then what is there left for the mental causes to do? At best, there could be an overdetermination of causes. And such overdetermination would have to be systematic, in that every physical event that is claimed to have a mental cause would already have (given the causal completeness of the physical) a fundamentally distinct sufficient physical cause. As we have good reason to believe in the completeness of the physical based on the explanatory success of the physical sciences, and given that such systematic overdetermination seems to many to be implausible, if we want to accept that the mental can do causal work, it seems that the mental can't be fundamentally distinct from the physical, and so dualism is false. This argument's objective is to put the spotlight on the dualist's inability to show that mental states are not overdetermined causes, and that as a result this inability functions as the biggest argument against dualism. [2]

(2) AN ALTERNATIVE THEORY

Upon reviewing the above theories, it seems that the traditional routes on offer do not provide sufficient solutions to the problems they face. The theory of physicalism although attractive seems unable to account for consciousness, and dualism although capable of accounting for consciousness, suffers from its own explanatory gap in that it is unable to explain how mental and physical entities are capable of interacting, and how mental states are not overdetermined causes. This suggests that these traditional theories are ineffective in providing sufficient solutions to the ontological questions regarding the mind-body problem, and that one needs to search for an alternative theory that not only encompasses the best of both abovementioned theories, but one that avoids the problems that they both face. In this section, such an alternative theory will be examined in the form of Russellian Monism.

[2] For more information regarding the various options of denying each premise, see Bennett (2007), and more arguments against dualism refer to Heil (2004); and Robinson (2019).

(2.1) RUSSELLIAN MONISM

Russellian monism seems to encompass the best of physicalism and dualism but avoids the problems that they both possess. This theory is based on the ideology that "a single set of properties underlies both consciousness" as well as the most fundamental entities of the universe. (Alter and Pereboom, 2019). It was developed in light of philosopher Bertrand Russell's views regarding the ontology of consciousness, and was as a result partly based on a "structuralist interpretation of theoretical physics" (Alter and Pereboom, 2019). This interpretation explains how the world works in terms of structure and dynamics within time and space and the various changes that take place, but neglects to explain what the basis of such changes are. In simpler terms what is known about the world is how it functions, however what remains unknown is what exactly the basis of such functions might be. Here is where the theory of Russellian Monism comes into play, as it attempts to provide an answer to the question of what underlies the structure and dynamics of the universe. According to this theory, the things that underlie the structure and dynamics of the universe are granted with properties that may in some way ground consciousness (Alter and Pereboom, 2019).

Russellian Monism is comprised of an amalgamation of three central theses, the first of these is *structuralism about physics,* which suggests that physics categorizes the world according to its spatiotemporal structure and dynamics. The second theses is *realism about quiddities*, which suggests that what underlies these structures and dynamics just mentioned, are quiddities or properties. The third theses is *quidditism about consciousness*, which suggests that these quiddities or properties are pertinent to consciousness (Alter and Pereboom, 2019). In order to comprehend this theory, each component will be examined in further detail.

The first component of Russellian Monism is termed structuralism about physics, which looks at our scientific understanding of the world's basic structures according to time and space and the various movements and changes that take place. The basic structures of the world are understood in terms of their various relations to other things, such as a causal relation for example (Alter and Pereboom, 2019). Due to scientific explanation, the world's basic structures are viewed as being in a constant state of causal flow. In simpler terms, what this means is that one's understanding of the world comes down to the causal connection between entities (Chalmers, 1996). For further understanding, one could look at the distinction between extrinsic and intrinsic properties, or more specifically the differentiation between *relatively* and *absolutely* intrinsic properties (Pereboom, 2011).

Intrinsic properties are the properties that make something what it is, whereas extrinsic properties are how things are around other properties, or how things are in relation to other things. Take for example a tennis ball, an intrinsic property of the tennis ball is that it is spherical in nature, whereas the extrinsic property of the ball would be that it has the ability to bounce when dropped. One could go further by distinguishing from "relatively intrinsic properties which are properties that are nothing over and above extrinsic properties and absolute intrinsic properties, which are properties that are not relatively intrinsic", however this remains an inquiry for another day (Alter and Pereboom, 2019).

To make the distinction between these two properties clearer, one can view them as follows according to (Pereboom, 2016):

> *P* is a *relatively intrinsic* property of *X* just in case *P* is an intrinsic property of *X* and *P* is grounded in extrinsic properties of either *X* or parts of *X*.
>
> *P* is an *absolute intrinsic* property of *X* just in case *P* is an intrinsic property of *X* and *P* is not grounded in extrinsic properties of either *X* or parts of *X*. [3]

If structuralism about physics is understood in such a way that structural properties are explained as extrinsic properties or relatively intrinsic properties, then this shows us that physics only provides a partial explanation of the basic entities which exist within the world (Alter and Pereboom, 2019).

The second component of this theses is termed realism about quiddities, which suggests that there are properties of a certain kind that exist that physics has yet to examine, and which underlies the spatiotemporal structural properties of the world. According to Alter and Pereboom (2019), these kinds of properties ground the fundamental physical tendencies described to us by physics. These fundamental properties have been given the term quiddities. To make sense of this one could refer back to the tennis ball, whereby the tennis ball's round shape grounds its tendency to be able to bounce (Lewis, 2009; Chalmers, 2012). What this component suggests is that the explanation that physics provides about the world is merely a partial explanation, as it focuses only on relatively intrinsic properties or extrinsic properties, and ignores the existence of more basic properties. Realism about quiddities suggests that there is something more that needs to be examined and explained, in the sense that fundamentally there are properties that underlie and ground these extrinsic and relatively intrinsic properties (Alter and Pereboom, 2019).

The third component of this theses is termed quidditism about consciousness, which states that quiddities play a significant role in understanding and explaining consciousness. To understand this, one could reflect upon the feeling one usually experiences when seeing a bright colour such as yellow, or the feeling of pain one experiences when one stubs one's toe. There is generally *something it is like* to have phenomenal conscious experiences such as these (Alter and Pereboom, 2019).

Despite the disagreements about how exactly quiddities play an important role in conscious experiences, Russellian monists are in agreement that phenomenal properties are constructed by quiddities, or that they consist of various structural properties in addition to quiddities (Alter and Pereboom, 2019). Russellian monism could be classified as the combination of the above three theses, where each is explained in a variety of ways which would result in an array of interpretations. For the purposes of this paper the above will be sufficient. [4] Now that we've examined the theory of Russellian monism in more detail, we can move onto why it is considered to be a superior alternative in terms of providing answers to the mind-body problem.

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[3] For more on these distinctions see Pereboom (2016); Kant (1781).

[4] For more interpretations of Russellian Monism , see Pereboom (2011) ; Alter and Nagasawa (2012).

(2.2) RUSSELLIAN MONISM TO THE RESCUE

What makes Russellian monism more attractive in terms of possible options, is the fact that it embodies the best of what physicalism and dualism have to offer, while avoiding the specific problems associated with these theories (Chalmers, 2013). To see how this is possible, each theory's setbacks will be examined in turn.

Recall that physicalism states that the nature of the universe and everything in it is physical or that it is grounded in the physical, and that when it comes to the mind-body problem, mental states are merely consequences of physical functions. As noted previously, this physical outlook of the world presents with a serious problem as consciousness is not accounted for, which was made evident by the knowledge argument and the conceivability argument. This is where the theory of Russellian monism comes in handy, as it is able to preserve this scientific outlook of the world. According to Russellian monism the properties that construct consciousness such as quiddities play a vital role when it comes to the physical. As a result, consciousness and/or its components are therefore integrated into the physical which eliminates the problem of having to account for them (Alter and Pereboom, 2019). To see how this is possible, let us look at the following.

If one reflects back to the knowledge argument, one will remember that neuroscientist Mary spent her entire life confined to a black and white room, and that she learnt all there is to know about the physical world through her black and white resources. When she finally leaves her room for the first time and comes across a red rose, she learns something new. She learns what it is like to see the colour red. As previously mentioned, this suggested that the theory of physicalism was false, as it could not account for this fact about the world, which was Mary's colour experience. But, according to Russellian monism, Mary's various resources on the physical world leave out information regarding quiddities, and as such only provide her with half of the physical truths about the world. These truths would have been nonstructural quiddistic truths, but nevertheless physical truths (Alter and Pereboom, 2019).

The conceivability argument looks at the conceivability of a zombie world, which appears to be identical to our world, except for the fact that it lacks consciousness. The Russellian monist would respond to this argument by stating that a zombie world is not ideally conceivable, and that advocates of this argument are confusing a zombie world with a structural zombie world. Conceiving of a structural zombie world is conceiving of a world that lacks consciousness, but only replicates all the structural properties of our world to a minimum extent, ignoring the quiddities. But for the zombie argument to have any force, what is required is not that a structural zombie world is conceivable, but that a zombie world is conceivable, a world that is the same as our world in terms of the structure and quiddities, yet lack consciousness. But we lack sufficient reason to believe that such a world is conceivable, and thereby to believe that a zombie world is ideally conceivable. In simpler terms, what this means is that our perception of a zombie world being conceivable is mistaken. The reason being is that if a zombie world existed then it would only be a replica of our world in terms of the structural components. Our world is however constructed of both the structural components as well as the quiddistic components, and these quiddistic components ground consciousness.

What the above exhibits is that Russellian monism is capable of retaining the physical explanation of the world, but that this physical explanation includes not only structural truths, but quiddistic ones as well. This provides a nicely wrapped solution as consciousness is viewed as being comprised of nonstructural quiddities or parts thereof, which accommodates a physicalist view of the world and in addition, managing to account for consciousness while simultaneously taking nothing away from it (Alter and Pereboom, 2019). Now that one has viewed how the alternative theory has fared against the physicalist's problems, one can move onto examining how Russellian monism handles the problems faced by dualists. If one thinks back to the theory of dualism, one would remember that this theory stated that there are two distinct properties that exist within the universe, the one being physical and the other mental. In terms of the mind-body problem, dualists argued that the mind and body were fundamentally distinct yet managed to causally interact. This appeared to be a perfectly adequate theory until one was faced with the specific problems associated with this view.

Dualists seemed unable to explain how two entities that are fundamentally distinct could possibly interact, and even if they could, how the mental could avoid being an overdetermined cause. Once again, the theory of Russellian monism is able to offer assistance in solving these problems. Due to this alternative theory's retention of the physicalist's best aspects, along with its ability to solve its problems, it automatically retained the best part of the dualist theory in that it accounts for non-physical entities, while taking nothing away from consciousness. All that's left to do now, is to show how Russellian monism avoids the problems that dualists face.

Recall the first component of Russellian monism termed structuralism about physics, which looks at the scientific understanding of the world's most basic structures. According to physics, the most basic structures of the universe are understood in terms of their causal relations, and that these structures are constantly in a causal flow (Chalmers, 1996).

This component immediately solves the first problem faced by dualists, as it eliminates the mystery behind causal interaction. To see how, one need only look at the second component of the theory, which states that there are properties of a certain kind (quiddities) which underlie the spatiotemporal structural properties of the universe. These quiddities ground the fundamental physical tendencies explained to us by physics (Alter and Pereboom, 2019). Additionally, when one factors in the third component of the theory, one will remember that quiddities play a crucial role in understanding and explaining consciousness, and that phenomenal properties are either fully or partially grounded in quiddities or the combination of quiddities along with other structural properties (Alter and Pereboom, 2019). As a result of this, mental properties are seen as part of the basic structures of the universe and are understood in terms of their causal relations, which means that mental properties' causal interaction is already determined by the causal relation that is already taking place within the universe. The above explanation also eliminates the second problem, as it erases the worry of overdetermination. Due to the mental being a part of the basic structures of the universe, which forms part of the grounding relation that takes place within the physical, the mental can now avoid the serious problem of being viewed as an overdetermined cause.

The reason is that the mental is constituted in the physical, which means that it is viewed as a specific property within the physical. Therefore when an event is caused, there is no

overdetermination of causes because the mental is merely a physical property which allows it the freedom to cause certain events.

From all the information provided above, it appears clear that the theory of Russellian monism as an alternative theory is appropriately equipped to solve the problems faced by both physicalists and dualists alike, in addition to retaining the best aspects of each traditional theory. As a result, Russellian monism seems to be the best possible option when attempting to engage with the various problems associated with the mind-body problem. It is from this point that one must examine the various options within the framework of Russellian monism, in order to establish which theory is better suited to take on the task of solving the mysteries surrounding the mental phenomena of consciousness.

(3) VERSIONS OF RUSSELLIAN MONISM

Russellian monism is an amalgamation of three central theses, being structuralism about physics, realism about quiddities and quiddities about consciousness as mentioned previously. Depending on what a philosopher's intentions are, each thesis could be developed in its own manner resulting in a range of adaptations of the theory. Across the board Russellian monists are in agreement that quiddities play a significant role when it comes to understanding consciousness, where they differ is in their interpretations of what quiddities actually are (Alter and Pereboom, 2019). Those who understand quiddities as phenomenal properties are considered to be Russellian Panpsychists, whereas those who understand quiddities as protophenomenal properties are viewed as Panprotopsychists (Chalmers, 2013). Then there are another class of Russellian monists who interpret quiddities as being cosmophenomenal properties, which would result in them being classed as Cosmopsychists (Goff, 2017). In what follows we will explore the abovementioned adaptations in more detail in an attempt to discover which theory offers the better solution for the ontological questions surrounding consciousness. [5]

(3.1) PANPSYCHISM

The first adaptation of the above theory is termed Russellian Panpsychism, or more simply Panpsychism. This version of the theory states that phenomenality is universal as it appears everywhere in the same manner that fundamental physical properties do (Alter and Pereboom, 2019). Specifically with regards to Russellian Panpsychism, phenomenal quiddities are viewed as being either partially or completely responsible for the fundamental physical properties that construct our world (Chalmers, 2013). These fundamental properties of the world are thought to only exist at a microlevel, and panpsychists argue that some types of micro-level entities possess mental properties and that these types of entities are found all throughout the physical universe (Goff, Seager and Allen-Hermanson, 2017). In simpler terms, what this means is that Russellian panpsychists view quiddities as microphenomenal properties.

[5] For more adaptations of Russellian Monism see Alter and Pereboom (2019); Chalmers (2013); Goff (2017); Goff, Seager and Allen -Hermanson (2017); Wishon (2017).

To understand this more clearly, it is worth briefly examining the distinction between microphenomenal properties and macrophenomenal properties. Microphenomenal properties are the sorts of properties found within microexperiences that portray what it is like to be a microphysical entity. These entities are the fundamental physical entities of the universe. Macrophenomenal properties on the other hand are the sorts of properties found within macroexperiences, which portray what it is like to be a macrophysical entity. Such macrophysical entities could be human beings or animals or any other type of entity that is not regarded as a fundamental physical entity of the universe (Chalmers, 2013). As such, Panpsychism is the view that microphenomenal properties constitute quiddities, as they perform the roles generally associated with microphysical properties and additionally function as the grounds for macrophenomenal properties (Chalmers, 2013). To see how such a view could be supported, one could refer to *the argument against mysterious natures* put forward by Galen Strawson in 2016.

This argument states that our evidence for the existence of entities completely lacking consciousness, is more uncertain than the evidence we have for microconsciousness (Strawson, 2016). The reason being is that the only aspect of reality that we have considerable knowledge of, with regards to what it is like "from the inside" comprises of our own conscious mental lives. What this suggests according to Donovan Wishon is that the theory of Panpsychism is fairer compared to other theories, "as it takes reality to be of a kind with the only part of reality whose underlying nature we grasp" (Wishon, 2017:p58). [6] As we move forward with the exploration of the following Russellian monist theories, one will notice that they each possess elements of Panpsychism. Both Panprotopsychism and Cosmopsychism have made use of this theory in order to generate their own adaptations regarding the ontology of consciousness, and it is to these adaptations that we shall now turn our attention to.

(3.2) PANPROTOPSYCHISM

The theory of Panprotopsychism is relatively similar to that of panpsychism, except for the fact that it argues that *proto-consciousness* is fundamental and universal. The properties that generally define conscious experience are termed "phenomenal properties" therefore the properties associated with proto-consciousness be termed "protophenomenal properties" (Goff, Seager and Allen-Hermanson, 2017). To make more sense of this, one could think of *protophenomenal* properties as unique properties that are not in themselves phenomenal, but that have the ability to conjointly comprise phenomenal properties when organized in the right structural manner. In effect what this suggests, is that Panprotopsychism is the notion that some fundamental physical entities have protophenomenal properties (Chalmers, 2013).

These unique properties are thought to have a particularly inseparable link to phenomenal properties. To better understand this, one could explore the attraction to this uniqueness within the definition, which requires that:

[6] See Chalmers (2013) (2016); Goff, Seager and Allen - Hermanson (2017); Shani (2015); Nagasawa and Wager (2015); Wishon (2017) for more information regarding the theory of Panpsychism and its variations.

(i) Protophenomenal properties are different from structural properties and;

(ii) that there be an *a priori* entailment from truths about protophenomenal properties to truths about the phenomenal properties that they form (Chalmers, 2013: p15).

A possible objection is that Panprotopsychism seems to suffer from the same sorts of issues associated with the theory of Physicalism. This objection states that the epistemic arguments against Physicalism all point to the fact that there is a fundamental epistemic gap between the phenomenal and the nonphenomenal and that there is no *a priori* entailment from the nonphenomenal to the phenomenal (Chalmers, 2013). According to David Chalmers, this objection is incorrect as this gap in the objection to Physicalism relies on the gap between the physical and the phenomenal, which stems from a gap between the structural and the phenomenal. Chalmers argues that we have sufficient reasons to think that phenomenal truths cannot be completely grounded in structural truths, however we do not have the same sufficient reasons to think that phenomenal truths cannot be completely grounded in nonphenomenal truths as suggested by panprotopsychists. Although we do not have a clear idea of what protophenomenal properties are like, except for the fact that they are classified with regards to their relation to phenomenal properties, this limited knowledge is not enough to serve as an objection to the truth of Panprotopsychism (Chalmers, 2013).

There are a variety of Panprotopsychist theories, such as *constitutive* panprotopsychism and *non-constitutive* panprotopsychism, there is also *Russellian* and *non-Russellian* panprotopsychism, similar to what one would encounter with Panpsychist theories. With regards to *constitutive* panprotopsychism, the idea is that "macroexperience is grounded within the protophenomenal properties of microphysical entities, which implies that phenomenal truths are grounded within the protophenomenal truths of said entities" (Chalmers, 2013:p16). When it comes to *Russellian* panprotopsychism, the idea is that there are *some* quiddities that are considered to be protophenomenal properties, which suggests that these properties could potentially play a specific role in grounding the structural properties such as mass or charge. In terms of *Nonconstitutive* panprotopsychism and *nonRussellian* panprotopsychism, the idea is that protophenomenal properties merely account for *some* macroexperiences and that there is the possibility that these properties might not act as quiddities. [7] In terms of all the variations just mentioned, the form of panprotopsychism most suitable to our needs is the one advocated by David Chalmers, which is termed Constitutive Russellian Panprotopsychism. It is this variation that shall be the focus in what follows.

Constitutive Russellian Panprotopsychism can be viewed as the notion that macroexperience is grounded in the protophenomenal properties of microphysical entities and that all phenomenal truths are grounded in protophenomenal truths concerning these entities (Chalmers, 2013). This type of Panprotopsychism avoids the issues faced by physicalists and dualists alike, as it is able to respond to the arguments posed against both theories. For example, the response to the zombie argument against physicalists would state that zombies

[7] For more information regarding the various forms of Panpsychism and Panprotopsychism see Chalmers (2013; 2016); Goff, Seager and Allen-Hermanson (2017).

are *prima facie* conceivable but that they are not *ideally* conceivable. At first glance, the former would be conceivable as it seems possible (with regards to the information presented at the time) for one to imagine a human duplicate without conscious experience. However on the latter, such zombies would not be ideally conceivable, as given all the facts about the structure of our world and what grounds this structure it is impossible. In simpler terms, what this means is that zombies merely seem conceivable when all we focus on is the structural properties, but that a world identical to ours could not have such zombies that lack consciousness because the fundamental building blocks of our world contain protoconsciousness. With regards to the arguments posed against dualists, the constitutive Russellian panprotopsychist would respond by saying that fundamental protophenomenal properties are causally significant in light of the fact that they realize microphysical roles, and that macrophenomenal properties are granted with causal significance from protophenomenal properties in light of the fact that they are grounded in them (Chalmers, 2013). As such, these protophenomenal properties avoid the problem of being overdetermined causes because they form part of the causal interactions that take place within our physical world. [8]

Upon reflection both Panpsychism and Panprotopsychism function under the subtle assumption of what Gregory Miller argues is "priority pluralism", which states that the fundamental fabric of reality exists at the micro-level (Miller, 2017:p1). Coleman (2006) refers to this view as "smallism", which states that "facts about big things are grounded in facts about little things" (Goff, Seager, Allen-Hermanson, 2017:p11). What is implied here, is that these theories are built upon the presupposition of what is more commonly known as Micropsychism. The definition of micropsychism as provided by Goff (forthcoming) states that "all facts, including facts about organic consciousness are grounded in consciousness-involving facts at the microlevel." One need only to refer back to the descriptions of the abovementioned theories to see how this has been incorporated. According to Panpsychism, macroexperience is grounded in microexperience, which suggests that macroexperience is either completely or partially comprised of microexperience. Additionally this means that macrophenomenal truths exist on account of microphenomenal truths (Chalmers, 2013). In essence what this all amounts to is that the accumulation of microexperiences at the fundamental level generate macroexperience.

When one looks at Panprotopsychism, one finds something similar. In alignment with the version of panprotopsychism advocated by David Chalmers, it is stated that macroexperience is grounded in the protophenomenal properties of microphenomenal entities, and that all phenomenal truths are grounded in the protophenomenal truths of said entities (Chalmers, 2013:p16). As a result of this underlying assumption, both theories are classed as *bottom-up* views. The reason for this classification is due to the fact that they are based on the notion that the combination of micro-level entities at the fundamental level of reality will give rise to macro-level entities. It is this very notion that, as we will see, then leads these theories into a multitude of problems concerning combination. In what follows we will analyse the various types of combination problems that arise, while paying particular attention to the arguments

[8] For more information regarding Panprotopsychism see Chalmers (2013); Goff, Seager and Allen- Hermanson (2017); Wishon (2017).

put forth by Coleman in his 'subject combination problem', which has been deemed the hardest of all the combinations. [9]

(4) A SERIOUS PROBLEM FOR THE "BOTTOM-UP" THEORIES

Given the arguments reviewed thus far, it seems apparent that Panpsychists and Panprotopsychists are fully capable of solving the various obstacles associated with the traditional mind-body theories. The fact that these alternative theories manage to come to the rescue, is the reason that they appear to be so attractive (Shani, 2015). However, this attraction could prove to be short lived when one acknowledges that these theories are not immune to obstacles of their own. The types of obstacles associated with the *bottom-up* theories could prove to be so detrimental, that it positions them in the very same category as that of the Dualist and Physicalist obstacles, rendering them near impossible to solve. As with any theory, there are a variety of problems associated with Panpsychism and Panprotopsychism, but for the purposes of this paper we will focus on the combination problems, with particular emphasis on the subject combination problem.

(4.1) THE COMBINATION PROBLEM

The combination problem was initially posed by William James in 1890 and was later coined as such by William Seager in 1995 (Chalmers, 2013). This problem poses a unique obstacle for both Panpsychism and Panprotopsychism as they are both viewed as *Bottom-up* theories. What this means is that they start with phenomenal or protophenmenal properties of physical ultimates and try to build ordinary phenomenal properties from there (Nagasawa and Wager, 2015). In order to fully grasp why this poses such a serious problem for these theories, it is imperative that one begin by getting a clearer understanding of the problem itself. William James frames the problem as follows:

> *Take a hundred [feelings], shuffle them and pack them as close together as you can (whatever that might mean); still each remains the same feeling it always was, shut in its own skin, windowless, ignorant of what the other feelings are and mean. There would be a hundred and-first feeling there, if, when a group or series of such feelings were set up, a consciousness belonging to the group as such should emerge. And this 101 $^{s\,t}$ feeling would be a totally new fact; the 100 original feelings might, by a curious physical law, be a signal for its creation, when they came together; but they would have no substantial identity with it, nor it with them, and one could never deduce the one from the others, or (in any intelligible sense) say that they evolved it* (James, 1890/2007:160).

According to Sam Coleman (2013), one could distinguish between two versions of the combination problem by identifying what James means by his use of the term "Feeling". One could take the first interpretation of the term to mean something along the lines of 'qualitative

[9] For more in depth arguments on micropsychism see Chalmers (2013; 2016); Goff (Forthcoming); Goff, Seager and Allen- Hermanson (2017); Kastrup (2017; 2018); Miller (2017); Nagasawa and Wager (2015).

element'. To understand what is meant by 'qualitative element', one could refer to the following explanation.

Consider your current complete phenomenal experience, and notice how it comprises other things/experiences (like the feeling of your hands holding this article, or the feeling of seeing the words on the page you are currently reading) and notice how this experience is not in itself a component of any further experience. It is the ultimate property of yourself. If you were to now isolate one component of your entire experience, such as the component of seeing a white page with black letters spread across it, this visual experience would be regarded as a 'qualitative element' of the entire qualitative phenomenal sphere that you are able to enjoy via the various senses and faculties you possess (Coleman, 2013). What this example is meant to show is that the chosen qualitative element (or any other that could be chosen) could be isolated and described in its entirety, without having to mention the subject that is you. There seems to be no need, as you are the only one enjoying this particular experience, and we are able to identify the isolated component of your entire experience in purely qualitative terms. In simpler terms, what this means is that we are able to pick out a certain experience (like the experience of seeing a black and white page) without having to mention the "who" that is having the experience, which means that the visual experience is nothing more than a qualitative element of your overall experience (Coleman, 2013).

The second interpretation of the term 'feeling' appears when James mentions the assembly of feelings producing 'a consciousness belonging to the group as such…a 101 st feeling'. What this suggests is that the 101 st feeling is a separate, unique entity, that is created by the original 100 entities, and that this appears to be in alignment with panpsychist theories (Coleman, 2013). The meaning here is supposedly thought to be similar to that of 'subject' according to James, as he utilizes the terms 'a consciousness' and 'a feeling' interchangeably. Consciousness is to be understood as being what something is like for someone, and the term someone is to be understood as the subject. As such, when one refers back to James' explanation, one is able to see that the first interpretation of the term 'feeling' translates to qualitative elements that are experienced by a subject, and the second interpretation is meant to refer to the experiencing subjects (Coleman, 2013).

One's everyday understanding of the term feeling appears to align with the first interpretation, as people usually think of feelings as being the sorts of things one directly experiences, and these experiences usually don't require any mention of the actual person having the experience. One can merely identify these elements by making use of the various qualities they represent. This however does not imply that qualitative elements could exist apart from the subject experiencing them, but it does suggest that one is able to describe these elements without having to mention the subject within the description (Coleman, 2013). Now that we have examined the two possible interpretations of the term 'feeling' in more detail, we can see more clearly that the problem put forth by James can be perceived in two separate manners.

(1) Qualitative elements/ experiences cannot be assembled so as to have a substantial identity with their product.

Or:

(2) Subjects of experience cannot be assembled so as to have a substantial identity with their product.

Substantial identity in alignment with James' explanation, is to be understood as an item that *intelligibly evolves* from its antecedents (James, 1890/2007:160). What is meant by this is that the qualitative elements/ subjects are distinct from their newly produced "item" and that the new "item" evolves from the specific arrangement of these elements/subjects. The first interpretation suggests that the problem lies within the notion that a complex qualitative sphere cannot intelligibly (non-emergently, structurally) be assembled from qualitative ingredients. Whereas the second interpretation suggests that the problem lies within the notion that a macro-subject cannot intelligibly (non-emergently, structurally) be assembled from micro-subjects (Coleman, 2013). These are merely two interpretations of the combination problem as argued for by Coleman. In more recent research however, philosophers have attempted to narrow down the specific types of combination problems as the number of interpretations have led to an increased variety of problems. As a result of this, the combination problem can be broken down into an assortment of sub-problems. In recent work, Chalmers (2016) argues that the combination problem can be reduced to three main sub-categories which are:

1) **The Subject Combination Problem:** How do micro-subjects combine to yield macro-subjects (e.g. conscious beings like ourselves)?

2) **The Quality Combination Problem:** How do micro-level phenomenal qualities combine to yield macro-level phenomenal qualities, i.e. the sorts of qualities found in the experiences of human beings/animals?

3) **The Structure Combination Problem:** How does micro-experiential structure combine to yield macro-experiential structure, i.e. the kind demonstrated by the complex structure of visual and auditory spheres?

To understand these problems more clearly, one can briefly outline what each of them entails. The Subject combination problem according to Shani and Keppler (2017), has the burden of having to provide a dual explanation. The first of which is to explain why any accumulation of subjects (regardless of how they are arranged), should induce a greater subject. The second requires that the notion of 'subjective inclusion' in alignment with macro-level conscious perspectives being constituted of numerous jointly present microperspectives be coherent and able to avoid any logical contradictions or epistemic absurdities.

The Quality combination problem requires that one explain how the phenomenal abundance of the world could be explained by something as presumed and rigid as the phenomenal qualities demonstrated by something such as subatomic particles. The problem appears to be especially severe when it comes to Russellian panpsychist theorists. As Shani and Keppler (2017: p395) argue, all fundamental phenomenal properties are "realizers of (functionally characterized) primitive physical properties." In simpler terms what this means is that on such a view, a sparse palette of blurry qualities is strained with the heavy duty of producing a magnificent and abundant spectrum of all the possible experiences that exist via the process of combination. This problem has thereby also been referred to as the *Palette Problem* (Lockwood, 1993).

Finally, the Structure Combination problem involves the mismatch between the outline of everyday experience and the phenomenal structure that is expected from the combinational behaviour of microscopic experiences. Shani and Keppler (2017) argue that this mismatch presents us with a paradox, as the structure of everyday experience appears to be "both too rich and too poor" when compared to the structure of its microexperiential base (Shani and Keppler, 2017: p395). On one side of it, it appears arduous to comprehend how the primary structural properties of microscopic experiences could explain the substantial "spatiotemporal and multimodal complexity of macroscopic experience" (Shani and Keppler, 2017: p395). On the other side of things, macro-level phenomenology strikes one as unusually "coarse-grained" when compared to the presumed grainy structure of assemblages of microexperiences. This problem is thereby also known as the *grain problem* (Lockwood, 1993; Sellars, 1965).

The above list does not cover all the existing combination problems within the literature, but merely highlights those that are addressed more frequently. What lingers now is the question of: which of these variations poses the greatest threat for our "Bottom-up" theories? According to Coleman (2013) there appears to be no serious combination problem when it comes to the accumulation of '*qualitative instances*' into a '*qualitative whole*', i.e. *Quality combination.* His argument is that there appears to be no dire concern with the idea that: ingredients that possess their own qualitative characters could be put together to form a whole. In other words, it appears to be perfectly comprehensible that a macroscopic whole with its own qualitative character could be the product of the qualities of the various components in addition to their arrangement. The example Coleman provides to show how this could be possible is that of a "painting's composition", whereby the blending of certain paint patches/ qualitative elements survive in their contribution to the whole, which would be the painting (Coleman, 2013: p29). Another everyday example is the blending of ingredients to make a meal, the individual ingredients or their qualities survive the combination process and are still present within the newly constructed whole. From this it appears evident that this type of combination could be possible, and that there seems to be no serious worry with regards to qualitative combination. There have been a number of debates with regards to this type of combination among others, however it is beyond the scope of this paper to entertain all the possibilities in turn. As such, we shall focus on the combination problem which most philosophers acknowledge to be one of the biggest and perhaps most unsolvable problems for Panpsychists and Panprotopsychists, namely the subject combination problem. [10]

(4.2) THE SUBJECT COMBINATION PROBLEM FOR PANPSYCHISTS

There are a vast amount of arguments available concerning which combination problem poses the greatest threat in general and to specific theories. The general consensus is that the subject combination problem poses the gravest of threats to "bottom-up" theories and it is this very point that has been best portrayed by the arguments presented by Sam Coleman (2013).

[10] For more arguments on the various interpretations of the combination problem see Coleman (2013); Chalmers (2013; 2015; 2016); Dainton (2011); Goff, Seager and Allen-Hermanson (2019); Lockwood (1989; 1993); Maxwell (1978); Nagasawa and Wager (2015); Sellars (1965); Shani and Keppler (2017); Shani (2015); Smolin (2015); Wishon (2017).

As such, we will closely examine Coleman's arguments in an attempt to fully comprehend the alleged insurmountable task that plagues panpsychist theorists.

To make sense of this problem, one first needs to get a clearer understanding of what is meant by the concepts ***combination*** and ***subjects of experience***. A ***subject*** is to be understood as something that has experiences, and something that is conscious of its phenomenal qualities. The fact that a subject has a certain phenomenological point of view could be taken to mean that there exists a private '***sphere***' of conscious experiential occurrences that correlate with this subject. In other words, each subject has its own private ***range*** of experiences at their disposal. These experiences are distinct from those phenomenal qualities experienced by other subjects, and neither subject has direct access to the other's qualitative sphere. This suggests that a subject can be thought of as a point of view that is added to a private qualitative sphere. This is where Coleman suggests that a thought experiment will portray the interrelation between a subject's point of view and the qualities within her experiential scope. The experiment goes as follows:

> "Imagine a hundred qualitatively identical subjects at the 'starting line' of existence-their only difference is that they occupy distinct positions in space-time. They are about to set out on their lives. As time winds on, each takes a unique path through the environment, and is impinged upon differently. These different impingings result in different modifications of each sensory field. Thus each subjectival perspective has access to a qualitatively different array of qualia, as compared with other subjects, over its lifetime. It is the fact of these different points of view, these differently located 'lookouts' on the world, that then grounds the character of the peculiar set of qualities each subject experiences at a given time." (Coleman, 2013: p30).

This thought experiment is intended to show how a subject's point of view is related to the experiential ***range*** that the subject possesses, and why this relation plays a significant role. In terms of understanding what is meant by the concept of '***combination***', one can look at Coleman's example of the grouping of two hydrogen and one oxygen atom into a molecule of water. He suggests that there are two ways of viewing this type of combination, the first is in ***particular*** terms and the second is in ***property***-terms. He argues that these two forms function in a similar way, as "they operate in parallel: combination of particulars occurs thanks to the integration of their properties, and combination of properties occurs as the bearers of the properties are combined." (Coleman, 2013: p30). Simply put, these two rely on one another for combination to take place.

According to Coleman, when hydrogen and oxygen atoms combine into water they bond covalently, sharing electrons. "The oxygen atom completes its outer shell by borrowing an electron from each hydrogen. Thus the three atoms are *deformed,* intrinsically modified, by participating in the combination of water. Yet, more importantly, all three atoms continue to exist once combination is achieved" (Coleman, 2013: p30). Regardless of the fact that all three atoms combine, each atom manages to survive within the whole, while making a contribution to its new nature. This could be seen if one tried to remove one atom from the whole, as the entire molecule would then be destroyed. The concept of combination could thus be seen as the forming of a new whole whereby the original components manage to exist within this new element, but are intrinsically altered by combining with one another. More basic examples of such combination could be seen in the combination of paint patches within a painting, or the

combination of various ingredients to make a meal. “The survival of the components is entailed by saying the product is their combination or union, as opposed to being merely their effect or descendant.” (Coleman, 2013: p31).

One can now turn one’s attention to the combination of properties, whereby a combination possesses original *systemic powers*. A water molecule forms a dipole, which means that its charge has two elements, the negative element is attributed to the side of the oxygen atom, and the positive element is attributed to the hydrogen atoms. This is what gives water molecules the ability to bond, and gives water its boiling point. The newly produced element’s powers are merely a medley of the powers of its parts. The question then is, “what is the relationship of a unity’s new systemic power to the powers of its isolated, pre-combination parts?” (Coleman, 2013: p31). What makes the power of the unity so unique is that none of its parts possess it. However, this does not suggest that this new high-level power cannot be explained in terms of the powers possessed by its parts, as that would be regarded as a characteristic of emergents. Instead, the systemic powers of unities should be regarded as structural properties. The dipolar property of a water molecule can be understood as the *interactive organization* of the charges of its compositional atoms: these charges are arranged in such a way that they interact (electrons separate out and share) and the result of this interaction is that their charges combine to create the dipolarity that we see within the molecule (Coleman, 2013).

The constitutive Panpsychist supposes subjectivity, which is to be seen as the possession of a point of view to which qualities are presented, and which acts as a fundamental feature of matter, such as that of mass and charge. Basic mass and charge are directly relevant to their higher-level instantiations. The instantiations of mass and charge at higher levels of being are both ultimately the result of mass/charge interactions at lower levels all the way down to the ultimates. And the reason for initially putting forward the notion of fundamental mass and charge, was to account for the higher-level instantiations of these properties that we seem to have direct access to. Likewise, when it comes to subjectivity which is viewed as a high level feature that is available to us, the constitutive panpsychist puts forward fundamental subjectivity to account for these high-level instances. In order for this to work, Coleman argues that “fundamental instances of subjectivity (ultimate subjects) would have to ‘add up to’ bigger subjects, as fundamental charges and masses produce higher-level instances of these properties.” (Coleman, 2013: p32). But this seems impossible as points of view cannot combine. It seems unclear as to how two micro-subjects could possibly combine into a higher-level individual, as the combination we are after requires both ingredients to survive within the whole. Similarly with the case of the atoms surviving the process of combination, so would the microsubjects have to survive within the higher-level subject. As a result of this, one can reject the idea that after the process of combination only a single subject would exist. Moreover, it would not do to hold that only the original two points of view remain after combination as the objective was to gather the two subjects in order to constitute a *unified* higher-level subject with its own point of view, but if one is left with both original points of view then it seems we are no closer to achieving the combination of subjectivities into one subject.

The constitutive panpsychist’s position is that the integration of two subjects must result in there being a third subject. Coleman entertains another possibility of how this might be achieved by posing a question. He asks whether this scenario might represent some sort of

overarching 'Übersubject', comprising as constituents the two antecedent points of view, which survive in the whole? One can imagine that the Über-subject's experiential field could be the *qualitative product* of the experiential contents of the original's. If for example, one original subject experiences a solitary phenomenal blueness, and the other experiences a redness, the Über-subject could experience both colours possibly as a mixture that results in experiencing purple. Regardless of this advancement in terms of assimilating experiential contents, we have yet to succeed where it matters most, which is in combining *points of view.* The example only manages to show that the contents of these original points of view could combine/mix, but it fails to show that the points of view themselves could combine. This example presents with three points of view, that of the original two subjects and that of the third new subject. Coleman considers the idea that perhaps one could view the original two points of view as being *components* of the third point of view, but then provides us with two arguments for why this would be unsuccessful, by referring to the essential discreteness of subjectperspectives.

The first argument goes as follows:

> Consider the original two points of view. The first point of view is entirely infused with a blue colour and the second is entirely infused with a red colour and that is all they experience, respectively. To say these points of view were existent as components within the experiential perspective of the Über-subject ('*Ub*') would therefore be to say that *Ub* had experiences of each of these qualities in isolation, while managing to experience both colours at exactly the same time. What this is suggesting, is that experience excludes, as well as includes, which presents with a contradiction. But this does not seem to occur anywhere in *Ub*'s experience, as *Ub* only seems to experience a purple colour. Thus the original points of view cannot be seen as ingredients in *Ub's* subjectivity. Only their contents – the redness and blueness – are (Coleman, 2013: p33).

The second possibility asks us to "imagine *Ub* experiencing all and only blue, then all and only red, in series. But that, while it might (perhaps) count as occupying now *Red's* point of view, now *Blue's*, is not to have their two points of view synchronously compose *Ub's* point of view, which is what combination requires." (Coleman, 2013: p33).

Coleman's second argument attempts to show us that the original points of view don't compose the third, and tries to show us what would happen if we subtracted one of the points of view. In the combination of the hydrogen and oxygen atoms, removal of one component compromises the whole. If one removed one of the hydrogen atoms from H_2O, then the water molecule would be destroyed. In the paint example, if the red subject were to disappear it seems as though *Ub* wouldn't be affected, as red's Experiential *content* (the portion which provided the phenomenal redness) would still remain. What this shows is that *Ub*'s experience wouldn't change, as it is not the actual subject red that is doing the work, but it's content.

Coleman considers a possible objection, that if *Red* disappears, then the experiential content would as well, which would mean that *Ub* would lose the redness from his experience, resulting in his purple experience fading to blue. However he argues that would at most only be able to prove that *Red's* experiential content was integrated within *Ub's,* but that is not enough to prove that *Red's own perspective* was a component of *Ub's* perspective.

One could argue that Ub's existence depends on *Red's* and *Blue's*, so that if *Red's* point of view disappears *Ub* dies off. But this example merely implies a sort of dependence on the original points of view, and dependence is not equivalent to constitution (Coleman, 2013: p34). From all the possibilities we've examined thus far regarding the relationship between *Ub's* experience and those of the original two points of view's contents, it appears as though *Ub's* own experience can never be that of the combination of the two microsubjects, regardless of the fact that it might in some manner be their product.

All of the above information points to the fact that the *qualitative contents* of consciousness could perhaps be combined, but that consciousness itself or subjects of consciousness are not able to because points of view are exclusive by nature, which automatically inhibits combination from taking place. From this, we can see that Coleman's arguments have provided us with a clear picture of how the combination problem poses a serious threat to Panpsychists, but what of Panprotopsychists? In what follows, we will examine how Panprotopsychists fair in terms of the combination problem, by referring to the arguments put forth by David Chalmers.

(4.3) THE COMBINATION PROBLEM FOR PANPROTOPSYCHISM

In order to see how Chalmers (2013) presents this problem specifically for the panprotopsychists, it is worth reviewing how he presents the argument against panpsychists, as it is from this point that his arguments for the latter follow. The structure of the following arguments take the form of the conceivability argument as put forward by Goff (2009).

Below, *PP* is to be taken as the combination of all microphysical and microphenomenal truths about the world, and *Q* is meant to present a macrophenomenal truth, such as 'some macroscopic entity is conscious' (Chalmers, 2013: p21).

Premise 1: *PP*&~*Q* is conceivable.

Premise 2: If *PP*&~*Q* is conceivable, it is possible.

Premise 3: If *PP*&~*Q* is metaphysically possible, constitutive panpsychism is false.

Conclusion: Constitutive panpsychism is false.

Premise 2 and 3 in this argument are analogous to premises 2 and 3 within the conceivability argument against Physicalism, and are thus supported by the same reasons. According to Chalmers, the crux of the argument is premise 1, as it affirms the conceivability of *panpsychist zombies*, which are beings that are physically and microphenomenally identical to us (which include entire worlds that are physically and microphenomenally identical to ours), without any macrophenomenal states (Chalmers, 2013: p21). A possible justification provided by Chalmers for why panpsychist zombies are conceivable could be seen in James' objection to panpsychism in *The Principles of Psychology*. The principle states that "no set of conscious subjects necessitates the existence of a further conscious subject" (Chalmers, 2013: p22). In terms of conceivability: given any set of conscious subjects and any conscious subject not in that set, one can always conceive of all the subjects in the set without the further subject. Provided any combination *S* of positive phenomenal truths about a group of conscious subjects

and any positive phenomenal truth *T* about a conscious subject not in that group, *S*&~*T* is conceivable (Chalmers, 2013: p22). Put more simply, one can conceive of micro-consciousness without macro-consciousness and vice versa, which suggests that the one does not entail the other. This appears to present with an epistemic gap (subject/subject gap) as there appears to be no explanation of how existing subjects could give rise to the existence of distinct subjects.

Chalmers argues that *prima facie,* it seems conceivable that any group of conscious subjects could exist alone without any further subjects, but that if this is true then constitutive panpsychists have a problem. The reason for this is because all experiences are taken to be experienced by conscious subjects, which implies that microexperiences will be experienced by microsubjects, which further implies that macroexperiences will be experienced by macrosubjects. However, when one applies the above principle then it seems that one is able to conceive of microsubjects having their microexperiences without macrosubjects experiencing any macroexperiences. What this is meant to show, is that we can conceive of the idea of having a combination of all microphenomenal truths without having any macrophenomenal truths.

If one was to take this result along with that of the conceivability argument's then one would have to reject the version of constitutive panpsychism that states that macroexperience is entirely grounded in microexperience. In order to reject the other versions of this theory, which state that macroexperience is grounded in microexperience *in addition to structure* then one would need to adapt the principle used above. This adaptation could appear as follows: *S*&*S′*&~*T* is conceivable, where *S′* characterizes the physical and structural properties of the members of the original group. When implementing this principle, following premise 1 from above, if premises 2 and 3 are granted then constitutive panpsychism can be rejected (Chalmers, 2013). Here is where one might think that panprotopsychists could stand a better chance with regards to the combination problem as compared to panpsychists, however Chalmers provides a similar argument to show why this is not the case. As with the previous theory, panprotopsychists are faced with an adapted version of the conceivability argument, where *PPP* is meant to represent the combination of all microphysical and protophenomenal truths (or otherwise put protophenomenal truths, as the combination problem could be used to question whether supposedly protophenomenal properties are undoubtedly protophenomenal), and *Q* is a macrophenomenal truth such as the previous example (Chalmers, 2013: p23).

Premise 1: *PPP*&~*Q* is conceivable.

Premise 2: If *PPP*&~*Q* is conceivable, it is possible.

Premise 3: If *PPP*&~*Q* is metaphysically possible, constitutive panprotopsychism is false (Chalmers, 2013: p23).

Conclusion: Constitutive panprotopsychism is false.

Chalmers argues again here that the crux of the argument is premise 1, as it affirms the existence of *protophenomenal zombies:* which are beings that have the same supposed protophenomenal properties at the microphysical level, but without consciousness. The conceivability of protophenomenal zombies does appear to be considerably less apparent than that of panpsychist zombies and the reason for this is that our understanding of protophenomenal properties is elusive. Nevertheless, Chalmers argues that one could be

attracted to a general non-phenomenal/phenomenal gap, where for any non-phenomenal truths, one could conceive of all of those truths obtaining without any experience whatsoever. A possible reason for why one should accept this, could be that there is no non-subject/subject gap. This claim states that "no set of truths about non-subjects of consciousness can necessitate the existence of distinct subjects of consciousness." (Chalmers, 2013: p23).

In terms of the conceivability argument: "for any set of non-subjects instantiating non-phenomenal properties and any independent subject exhibiting phenomenal properties, we can conceive of the former without the latter." (Chalmers, 2013:p23). This principle automatically takes us to the first premise, but why should this be accepted?

A justification for this could be that subjects are conceptually fundamental entities, and that if subjects are metaphysically fundamental then that implies that they are not grounded in something more fundamental or that they are necessitated by the existence of other entities that are fundamental (Chalmers, 2013: p23). Similarly, if these subjects are conceptually fundamental, then they are not conceptually grounded in something more fundamental, and so their existence is not *a priori* entailed by other entities (Chalmers, 2013:p23). The above principles don't appear to be apparent, but there does seem to be an intuitive attraction to them.

Another possible justification is that of a non-quality/quality gap, which is based in the idea that phenomenal properties are qualitative, as they possess a range of qualities such as blueness or greenness etc. One could argue that non-qualitative truths never necessitate qualitative truths, as one is able to conceive of the former obtaining without the latter. In as much as protophenomenal properties are non-qualitative, this principle produces a gap between these properties, and the phenomenal properties that justifies premise 1 in the above argument. From this, we are able to see that both panpsychists and panprotopsychists suffer from the combination problem in their own way. For the panpsychists it is the subject/subject gap, and for the panprotopsyhcists it is the non-phenomenal/phenomenal gap (Chalmers, 2013: p24). Whether the one problem is more difficult than the other remains a debate for another day, but for the purposes of this paper the above is sufficient to show that neither theory escapes the problem of combination. [11]

(5) COSMOPSYCHISM: AN ALTERNATIVE TO THE BOTTOM-UP THEORIES

From the above we see that the sorts of theories that make use of micropsychism as their foundation run into a serious problem, which renders them theoretically unfavourable. As such, we have reason to search for an alternative theory with the hopes of avoiding problems such as the subject combination problem. One such alternative theory comes in the form of Cosmopsychism. This theory states that all facts, including those concerned with macro-level consciousness, are all grounded in facts about the consciousness of the universe, or simply within 'cosmic consciousness' (Goff, Forthcoming). As a result, Cosmopsychism is viewed as a 'top-down' version of constitutive panpsychism, placing it in the perfect position to be taken as a serious alternative to the *"bottom-up"* views presented so far.

[11] See Chalmers (2013); Coleman (2013); Nagasawa and Wager (2015); Shani (2015); Wishon (2017) for more arguments on the combination problem.

To understand how one arrives at this conclusion, the following section will examine a general outline of Cosmopsychism followed by two extensive adaptations of the theory as presented by Itay Shani and Philip Goff respectively.

(5.1) A GENERAL OUTLINE OF COSMOPSYCHISM

The theory of Cosmopsychism presents one with an exciting alternative to that of contemporary micropsychist views. To understand why this alternative view is theoretically more attractive, one need only examine the core commitments of each theory. On the face of it, the core commitment of micropsychist theories is that it attributes basic consciousness (or protoconsciousness) to micro-level entities, and considers these entities to be fundamental. In other words, all facts, including those concerning macrolevel consciousness, depend upon facts concerning consciousness existing at the micro-level.

In terms of Cosmopsychism, its core commitment is that the cosmic entity is fundamental and that it instantiates fundamental consciousness. This theory attributes basic consciousness to the entire cosmos, as opposed to that of micropsychist theories that attribute basic consciousness to micro-level entities. What this suggests, is that all facts including those concerning macro-level consciousness, depend upon facts concerning consciousness existing at the cosmic level.

Cosmopsychism then avoids the serious problems faced by "bottom-up" theorists. The reason for this is that the consciousness of medium-sized objects (and others) depends upon the fundamental consciousness of the cosmic entity, which allows this theory to *prima facie* avoid the problem of having to explain how the consciousness of medium-sized objects is built up from the consciousness or protoconsciousness of smaller entities from the bottom level. As a result, Cosmopsychism is classed as a "top-down" theory, and in this light may be viewed as being theoretically more advantageous than its "bottom-up" counter-parts. [12]

In terms of the two parts which constitute the core commitment of Cosmopsychism, it can be further divided resulting in different versions of the view. The first part of the commitment divides between the view that all other properties (especially properties of consciousness of medium-sized objects such as humans, animals etc.) are derived from this conscious entity, and the view that other properties (especially properties of consciousness regarding middle-sized objects) are not derived from this conscious entity, but rather depend on it in some weaker sense (these would typically be classed as emergentist properties). In what follows I will restrict my discussion to the former versions of Cosmopsychism that hold that all else is derived from the conscious entity. These views collectively fall under the umbrella of what is known as Constitutive Cosmopsychism. The second part of the commitment divides between the view that the *only* fundamental properties of the cosmos are properties of consciousness, from which nonconscious properties are derived, and the view that the cosmos has both the

[12] For more information on Constitutive and Non-constitutive forms of Cosmopsychism, see Goff, Seager and Allen-Hermanson (2017); Goff (2017). For more information regarding the various types of Monism, see Schaffer (2018).

fundamental properties of consciousness and then some other fundamental non-conscious properties (i.e. structural properties).

Kastrup (2018) argues that the latter retains an aspect of *"bottom-up"* Panpsychism which states that "a phenomenal ultimate has both *phenomenal* and *non-phenomenal* properties" (Kastrup, 2018: p134). As this theory posits that the cosmos as a whole is the only phenomenal ultimate, this suggests that the physical and structural properties of the cosmos are not in itself phenomenal (Kastrup, 2018: p134). What this means is that the intrinsic part of the cosmos is phenomenal but that its extrinsic parts that encapsulate the cosmos's phenomenal field, which is the physical matter that we can scientifically observe and measure are not phenomenal. In contrast, on the former view the nature of the basic fundamental entity (the cosmos) is inherently cosmic phenomenal consciousness (cosmic consciousness for short*)* (Kastrup, 2018: p135). On this view, only the cosmic consciousness fundamentally exists, there is nothing outside or independent of it. Put more simply, the cosmos does not contain phenomenality, it is completely constituted by it (Kastrup, 2018: p135). According to Kastrup this interpretation of Cosmopsychism aligns with the workings of Itay Shani in his 2015 paper.

While Cosmopsychism is able to avoid the combination problem, it faces a problem of its own—the Problem of De-combination. In the following section, we shall examine this problem in more detail as laid out by Gregory Miller, followed by an interpretation of Cosmopsychism from Itay Shani, as well as an interpretation provided by Philip Goff. The aim of comparing these interpretations is to establish which of these Constitutive Cosmopsychist theories is better equipped to solve the problem of de-combination, as well as provide potential answers to the ontological questions we have regarding consciousness. [13]

(5.2) THE DE-COMBINATION PROBLEM

In this section we will look closer at a specific version of the de-combination problem for Cosmopsychist theories put forward by Miller (2018). In section 5.5, after looking closer at two specific versions of cosmopsychism, we shall return to this problem with the intention of investigating how these two specific cosmopsychist theories might respond to this particular obstacle.

The de-combination problem is regarded as the reversal or mirror image of the combination problem. To see how this occurs we need to briefly revisit the combination problem, but as laid out by Miller (2018), as this will help us to fully understand the transition from the original problem to that of its reversal. As mentioned previously the combination problem has been attributed to William James (1890) in his work titled *The Principles of Psychology*, yet what's more interesting is the fact that the same work can be referenced as the source for the de-combination problem as well.

In section 4.1 we looked at the specific argument ("Take a hundred feelings…") James provided which attempted to highlight the serious problem that presented itself for

[13] For more information regarding the general outline of Cosmopsychism, see Goff (2017, Forthcoming); Goff, Seager and Allen-Hermanson (2017); Kastrup (2018); Mathews (2011); Shani and Keppler (2017); Nagasawa and Wager (2015).

Panpsychists. Due to the constraints of this paper we shall not revisit this argument again. However we shall examine a further argument provided by James that Miller appeals to in establishing the combination problem, which he then uses to set up the de-combination problem. The extended argument provided by James goes as follows:

> Neither contemporaneity, nor proximity in space, nor similarity of quality and content are able to fuse thoughts together which are *sundered by this barrier of belonging to different personal minds. The breaches between such thoughts are the most absolute breaches in nature.* Everyone will recognize this to be true, so long as the existence of something corresponding to the term *'personal mind'* is all that is insisted on (James, 1890: p226).

From this we can ascertain that one of the problems which James brings to the surface is with regards to the 'absolute breaches' that take place between subjects and the concept of 'personal mind' (Miller, 2018: p6). This obstacle, accompanied by the problem we examined in section 4.1, which looked at the nature of the experiencing subjects in terms of it being "shut in its own skin, windowless", suggests that the combination problem revolves around the "structural features of consciousness" (Miller, 2018: p6). As such Miller suggests that we focus on its structural features which are (1) unity and (2) boundedness, as they are vital components in a subject's nature (Miller, 2018: p6). Miller provides the following definitions to clarify the certain conditions needed for unity and boundedness to occur simultaneously.

> **Phenomenal Unity**: a set of experiences $E_{1 \ldots} E_n$ is phenomenally unified at time T_1 iff they have a conjoint phenomenology at T_1, i.e. there is something which it is like to have them 'together' at T_1.
>
> **Phenomenal Boundedness**: a set of experiences $E_{1 \ldots} E_n$ is phenomenally bound at time T_1 iff (i) they are phenomenally unified and (ii) not phenomenally unified with any other experience E_x beyond that set at T_1 (Miller, 2018: p6).

Miller then suggests that the two definitions combined result in what he terms the 'Unity/Boundedness Inconsistency Thesis' which he defines as follows:

> **Unity/Boundedness Inconsistency Thesis (UBIT):** (i) phenomenal unity cannot extend beyond a bound phenomenal field, and (ii) phenomenal boundedness cannot occur within a unified phenomenal field [14] (Miller, 2018: p7).

According to Miller, this is what James' concern amounts to when he talks about 'absolute breaches', as such breaches arise from unity and boundedness and which create minds that are private or windowless (Miller, 2018: p7). Additionally, James claims that this notion must hold true if there is to be any meaning behind the concept of a personal mind. Simply put, Miller argues that phenomenal unity and boundedness are "necessary for subjecthood" (Miller, 2018: p7). He expresses this concept as follows:

[14] The use of the term 'field' is meant to be understood as a set of unified experiences. See Miller (2018) footnote 17 for more clarification.

> **Subject Essence Thesis (SET):** Subjects are essentially phenomenally unified and bound. [15]

Taking this into consideration, Miller argues that one should view the combination problem as: "how can a multitude of essentially bound microsubjects and their consciousness make up an essentially unified macrosubject and its consciousness?" (Miller, 2018: p7). Essentially what Miller is suggesting is that this be seen as a problem of trying to bridge the gap between the absolute breaches in nature, in other words between phenomenal unity and boundedness (Miller, 2018). With this in mind, Miller then argues that the de-combination problem should be viewed as the reversal of this, being: "how can a subject with an essentially bound consciousness come from a cosmos-subject with an essentially unified consciousness?" (Miller, 2018: p8). In Miller's view this should be seen as the problem of creating conscious subjects with phenomenal spheres which exhibit the most 'absolute *external* breaches in nature' in the unified sphere of a conscious subject that has no '*internal* breaches' (Miller, 2018). The statement from James which Miller utilizes as a reference point for this particular problem can be viewed as follows:

> I can only define 'continuous' as that which is without breach, crack, or division. I have already said that the breach from one mind to another is perhaps the greatest breach in nature. *The only breaches that can well be conceived to occur within the limits of a single mind would either be interruptions, time-gaps* during which the consciousness went out altogether to come into existence again at a later moment; or they would be breaks in the *quality, or content, of the thought*, so abrupt that the segment that followed had no connection whatever with the one that went before (James, 1890: p237).

From this it seems as though the only breaches which could take place within a subject's conscious sphere according to James are: (i) temporal or (ii) qualitative. The absolute breaches which result from phenomenal boundedness, cannot take place in a single subject's consciousness. According to (Miller, 2018: p8) what the above suggests then is that James supports the Phenomenal Unity/Boundedness Inconsistency Thesis (UBIT) along with the Subject Essence Thesis (SET). In utilizing these two theses, Miller provides us with his formulation of the de-combination argument against Cosmopsychism, as follows:

1) **Cosmopsychism:** The cosmos is a single subject-whole and all macro-subjects are subject-proper parts of the single cosmos-subject.
2) **Unity/Boundedness Inconsistency Thesis (UBIT):** (i) phenomenal unity cannot extend beyond a bound phenomenal field, and (ii) phenomenal boundedness cannot occur within a unified phenomenal field.
3) **Subject Essence Thesis (SET):** Subjects are essentially phenomenally unified and bound.

[15] The term subject essence is meant to refer to a subjects experiences which are considered phenomenally unified and bound in the sense that if they weren't unified and bound, then subjects as we understand them would not exist. See Dainton (2014) and Bayne (2010) for similar theories.

4) The cosmos is essentially phenomenally unified and bound, and each of its macro-subject-proper parts is essentially unified and bound (from 1 and 3).

5) If the cosmos has phenomenal boundaries 'within' its phenomenally unified field, then it is not a subject, and, if phenomenal unity extends beyond the boundary of the subject-proper parts, then they are not subjects (from 2 and 3).

6) Hence, the cosmos is not a subject and its proper parts are not subjects (from 4 and 5)

7) Hence, cosmopsychism is false (from 1 and 6) (Miller, 2018: p9).

Miller argues here that both panpsychists and cosmopsychists fall prey to the subject-subject proper parthood relation problem in their own way, due to the fact that both theories are required to account for the vital components of unity and boundedness of conscious subjects. What he suggests is that it is possible to make this problem more generalized, as all that one would have to do is change 'cosmos-subject' with 'subject-whole' and 'macro-subject' with 'subject-part' (Miller, 2018: p9). This appears to leave the Cosmopsychists in the same predicament as that of the Panpsychists, as both seem to face a similar problem. [16]

(5.3) COSMOPSYCHISM: ITAY SHANI'S THEORETICAL PROPOSAL

Shani begins his theoretical proposal by stating that the Cosmopsychist theory is a deviation from the traditional modes of thinking within the philosophy of mind and that as a result, interest in this area has increased. The by-product of this interest, is the creation of numerous interpretations of Cosmopsychism, such as those produced by Jaskolla and Buck (2012), Mathews (2011), Nagasawa and Wager (2015), to name a few. Within his theory, Shani aims to achieve the following: firstly, he wants to show that the Cosmopsychist theory is compatible with what he terms **FPP** (Foundational Panpsychism), and that as a result of this, it can bypass the problems of **CPP** (Constitutive Panpsychism) and **EPP** (Emergent Panpsychism). *Foundational Panpsychism* is to be understood as "the view that ontological ultimates are subjects of experience, and that the relation between the subjectivity of ultimates and the subjectivity of macro-phenomenal subjects is one of partial grounding." (Shani, 2015: p403). Secondly, he wants to show how a holistic kind of **FPP** offers a template which explains how individual subjects (specifically macro-level subjects) come to exist, with specific focus on individual perspective. Lastly, Shani aims to show how his theory is able to adapt to certain foreseeable obstacles such as that of the De-combination problem (Shani, 2015: p407).
In order to fully comprehend Shani's theory, we must begin by addressing the several basic postulates that he puts forward, along with four sub-questions as they set the groundwork for what follows. The first postulate of the theory is that "the cosmos as a whole is the only ontological ultimate there is, and that it is conscious" (Shani, 2015: p408). Shani notes here that from this point forward, his use of the term 'the absolute' should be understood as the "cosmic conscious entity", as he wants to clarify what he means as well as avoid the connotations that have historically been given to 'the absolute' by idealists and other types of

[16] For other versions of the de-combination problem, see Albahari (2019), Chalmers (2015), Nagasawa and Wager (2016).

thinkers. [17] Cosmopsychism gives the opposite picture to that of modern day Panpsychism as it views 'the absolute' as being 'the single ultimate reality'. However, Shani notes that the core metaphysical commitment of Panpsychism (which states that ultimates are bearers of consciousness) remains a constant element within the Cosmopsychist theory (Shani, 2015: p408).

The second postulate of this theory is to *priority monism* as defined by Jonathan Schaffer, which states that "the cosmos as a whole is prior to its parts" (Schaffer, 2010). What this means is that the various parts which exist within the cosmos are dependent on the whole. This theory acknowledges that there are parts that exist in addition to the whole, however the whole is ontologically prior to these parts, which implies that everything that exists is grounded within the cosmos. By making this move, one is compelled to change one's outlook on what is considered to be a basic entity, regardless of the size of the various parts, they are neither fixed nor detachable from the rest of the cosmos (Shani, 2015: p408). Simply put, all parts are metaphysically dependent on the cosmos. [18]

Shani provides two closely related reasons for why he favours the priority monist framework above an existence monist framework, which maintains that 'only one concrete particular' exists. He first argues that the denial of the existence of parts of the cosmos is in conflict with common sense, as humans are predisposed to the beliefs: that the world consists of more than just one 'concrete particular' (basic entities), and that each individual person is regarded as a 'real-subject' (Shani, 2015: p409). His second reason follows from the above, which argues that Panpsychism utilizes the notion of 'subjectivity of ultimates' in an attempt to explain the 'subjectivity and individuality of macro-subjects', and that with this in mind, it would appear rather peculiar if a Cosmopsychist theory (which is a variant of a Panpsychist theory) were to result in a vastly distinct conclusion, whereby no objects nor subjects existed apart from the 'absolute' (Shani, 2015: p409). From this, he concludes that the priority monist framework appears to be the more sensible choice for Cosmopsychists, as it allows one to maintain the notion of plurality with regards to subjects, alongside the claim that the absolute is the only ultimate subject and that all other subjects depend on the absolute for their existence (Shani, 2015: p409).

The third postulate of this theory is the *lateral duality principle* which states that the absolute is constituted of a dual nature. The concealed side is an inherent realm of creative activity which is in a state of constant change, and the revealed side is the exterior, which is characterized as the observable representation of the inner activity. [19] He states that these two dimensions are complimentary and that they can be seen as the 'holistic' equivalents of the distinction that is fundamental to Russellian Panpsychism, *i.e.,* between quiddities and the observable entities that they ground (Shani, 2015: p410). The revealed realm of the absolute forms the structural outer appearance of the observable entities, which is what can be seen and measured by scientists, whereas the concealed realm coincides with a mysterious explicit realm

[17] See Shani (2015) footnote 20 for further explanation.

[18] See Sider (2007), Horgan and Potrč (2000, 2012), Kriegel (2012) for variations on Monism.

[19] For similar distinctions refer to Bohm (1980), De Chardin (1959), Hegel (1974), Spinoza (1677), Whorf (1950).

which grounds the observable system (Shani, 2015: p410). In a manner, this model supports a comprehensive rendition of the Russellian Panpsychist view. [20]

The fourth postulate of this theory suggests that the absolute is analogous to a "vast dynamically fluctuating ocean" (Shani, 2015: p411). Much like the previous postulate, this ocean consists of two complementary sides, being the concealed side and the revealed side. The concealed side is thought to be similar to that of the absolute's constantly changing creative activity mentioned above, in that the ocean's inner workings can be viewed similarly.

The revealed side is thought to be similar to the absolute's exterior, as it can be thought of as an observable representation of the inner activity occurring within the concealed realm of the ocean. As there is nothing over and above the absolute, Shani argues that the revealed side must be thought of as visible to observers and that it be created and situated *within* the ocean (cf. Mathews, 2011). To these observers, the revealed side appears to them as an extended form/structure within the ocean space, which changes over time and is distinctly structured into numerous stages and patterns. In other words, it appears to us as physical nature. In contrast, the concealed side is taken to be "an *intrinsically sentient* medium, a vast ocean of consciousness", in that the phenomenal elements of this medium such as the "ebbs and flows of experience" moving through it, are private and mysterious (Shani, 2015: p411). Thus the analogy depicts how the absolute with its revealed and concealed realms are in a constant state of change, moving through various stages and creating various patterns/arrangements that appear to us as the physical changes we observe in nature.

To put this simply, those who observe the absolute will see an imbalance between the revealed side and the concealed side as the methods of observation and examination that work for the one side/realm will not work for the other. Once again, Shani acknowledges the similarity of this view with that of the Russellian Panpsychist's. He argues that both theories assume that the ultimates of reality are equipped with phenomenal properties, and that this is validated by the fact that it is influential in the explanation of macro-level consciousness without the use of emergence as an explanatory aid. Additionally he states that the logic which prompted Panpsychism as an alternative to Physicalism can be applied to Cosmopsychism as well (Shani, 2015: p412).

There is an important clarification that he makes at this point, which is that the distinction between the two sides (concealed/revealed) of reality do not add up to ontological dualism (the existence of two completely distinct realms of being that are sewed together). Instead, he argues that there is only one ocean which is an intrinsically sentient medium/ a sea of consciousness. This ocean space is a powerful entity, that holds continuous activity and diverse distribution of power, this in turn creates numerous "quasi-independent patterns and arrangements that co-evolve in mutual interaction." (Shani, 2015: p412). In simpler terms, the revealed side of the absolute is the totality of all the inner environments, it is the absolute in its exterior appearance "complement to the subjective realities of created selves." (Shani, 2015: p412).

The fifth postulate, looks at the character of cosmic consciousness in connection with the consciousness of individual subjects (Shani, 2015: p412). With regards to the current model,

[20] For further clarification on this point, see Chalmers (2013), Seager (2006).

Shani suggests that cosmic consciousness appears to be equivalent to that of the Vedic notion of *pure consciousness*, as it functions as "the deeper layer of consciousness which grounds the specific streams of consciousness of individual creatures." (Shani, 2015: p412). He thereby suggests that the connection between 'cosmic consciousness and individual creature consciousness' is one of partial grounding. Partial grounding in this instance is a type of grounding relation whereby the nature of the entity being grounded is not exhausted by its dependency relation, so for example if ***X*** partially grounds ***Y*** then that suggests that there is more to ***Y*** than just its dependence on ***X***.

For Shani cosmic consciousness can be compared to the vacuum in quantum field theory as the vacuum represents a space of constantly swarming activity. Similarly cosmic consciousness can be viewed in the same manner, as an inner area which is constantly swarming with activity and which could be described as "qualitative feel" (Shani, 2015: p412). Additionally, as the vacuum functions as a diverse sort of background whereby "local field excitations and patterns" are recognized as events and entities (the particles and systems of our world), we could think of cosmic consciousness in the same way as a background, whereby "local interference patterns" are recognized as phenomenal states (the states associated with individual creatures) (Shani, 2015: p413). In summary, what this model suggests is that the universal medium that grounds the specific states of consciousness of individual entities, is an intrinsically sentient medium, which Shani labels as "an *endo-phenomenological* expanse" (Shani, 2015: p413). What this translates to, is that the universal medium acts as a "locus of experience", while simultaneously functioning as the "raw material" and the vessel that creates the visible, restricted states of consciousness of individual creatures (Shani, 2015: p413).

The sixth postulate claims that individual entities (both the physical kind and the mental kind) are "dynamic creations within the absolute." (Shani, 2015: p413). Shani mentions in a footnote, that even though the absolute is considered to be an ontological ultimate, that doesn't necessarily mean it can't be structured. [21] To be more specific, the sorts of things one generally classifies as objects, are in this case regarded as "meta-stable process configurations", which are "cohesive entities in which opposing forces and tendencies are balanced and brought to equilibrium." (Shani, 2015: p413). What this means is that all systems regardless of their stability and endurance are nothing but "dynamic differentiations" within the absolute (Shani, 2015: p413). All are based on the fundamental flux from which they arose, and to which they eventually disintegrate (Shani, 2015: p413). Furthermore, no system is independent of outside influences, all are interconnected in a "continuous web of interrelationship." (Shani, 2015: p413). Sometimes these connections are apparent such as those of an ecology, and sometimes they are undetectable such as the hidden connections that bind numerous particles together. However the point remains that no system is free from "*internal* (Constitutive) relations to other entities" (Shani, 2015: p414).

The final postulate of this theory examines how (the manner in which) individual entities are related to the absolute (Shani, 2015: p414). Considering the metaphor for the absolute's grounding relation is that of an ocean with "seamless" activity, how does one then explain the existence of individual entities? This aspect of Shani's proposal closely resembles that of Freya Mathews' theory in her work *The Mental as Fundamental* (2011), as she argues that we can

[21] See Shani (2015: p413) footnote 29.

make use of aquatic metaphors to help us in the comprehension of the notion of concrete individuals within an "underlying ontology of energy fields" (Shani, 2015: p414). Shani states here that one could think of local disturbances surging through the ocean as currents/ waves/ streams, among other things and that one could imagine that some of these could interfere to become *vortices* of enduring stability. Nevertheless, objects such as these are never entirely separable from the ocean or each other, as the whole is enmeshed in each and every condensed suborganization (Shani, 2015: p414). Before exploring Shani's theory in more detail, it is important that we look at a few side notes that he mentions, as it will provide further clarity as we move forward with the theory.

He begins by noting that his use of the term *relative* should be understood as any concrete system or object apart from the absolute itself, and that all individual subjects are relatives, but that not all relatives are subjects (Shani, 2015). What is meant by this, is that while some relatives are subjects others are non-subjects as they lack the interconnection of consciousness needed for them to be regarded as subjects (Shani, 2015: p415). In Shani's view, non-subjects can be thought of as *pure objects*, which implies that they are devoid of "unified subjectivity", but that their existence is not completely separated from consciousness (Shani, 2015: p415). Simply put, non-subjects lack that shared conscious connection with the absolute required for subjecthood, yet remain connected to the absolute in other ways. His final note at this point, is that his use of the term *subjects* should be viewed as reference to *created* subjects, which are all other subjects apart from the absolute. Now that we have explored the postulates put forth, we can move onto outlining a few related questions which act as explanatory tools that aid us in our journey to better understand Shani's explanation of how macro-subjects could exist within the above set out theory. The questions that follow will set the stage for the rest of this section, as each contributes to the explanation of the most crucial question which is: how does Cosmopsychism justify the existence of macro-subjects?

The list of questions can be viewed as follows:

(1) "How do relatives arise from the absolute?"

(2) Taking into account that relatives are comprised of a dual nature, how does one then justify the division between subjects and pure objects?

(3) Provided the specific sort of causal organization required for the distinction between subjects and pure objects is present, how does Cosmopsychism then view the existence of microscopic entities, are they regarded as subjects or pure objects?

(4) How does the theory set out above explain the existence of macrosubjects and its connection to the absolute? (Shani, 2015: p415).

We turn now to the first of these questions, which looks at how relatives arise from the absolute. If one starts by concentrating on the revealed realm of said absolute, then a relative would, according to Shani appear as a 'vortex' gushing from the background of the ocean. He describes this as an interconnected system with a unique form, which is maintained through a powerful balance between "opposing forces and tendencies" (Shani, 2015: p416). This correlation along with the fact that the system creates a powerful organization (that is distinct

from its surroundings), distinguishes it as a "quasi-independent region", in the same way that the edges of a vortex's whorl distinguish a whirlpool from that of its surrounding environment (Shani, 2015: p416). As a result of this system being physically interconnected (in that the vortex forms a part of its surrounding environment, the ocean) as well as having its own distinct functions, it presents with what seems like an outer exposed facet.

To the outside world, this can be thought of as a confined area of "synchronized causal powers" (Shani, 2015: p416). This sort of principle can be applied to relatives on all levels of organization in the same way that they were applied above, by utilizing what Shani calls *interference principles*. Simply put, *interference principles* explain how one system relates to or works with another, as shown above, the interference principle explains how the vortex relates to the ocean, by examining the merging of 'flow patterns' (i.e. opposing forces and tendencies) (Shani, 2015: p416). According to Shani, one could apply this to the formation of complexed systems such as mega-'vortices' whereby coordinated groups of lower-level systems unite to create the complex whole.
The above however only provides half of the picture as we have only looked at the revealed realm of the absolute. To get the complete picture we need to examine the concealed realm as well. One aspect of Shani's theory assumes the *lateral duality principle* which states that no solid system is solely comprised of a revealed realm without the inclusion of an inner realm. Additionally, it holds that the revealed realm is grounded within the concealed and that this realm be regarded as a sentient medium, or as Shani refers to it "an endo-phenomenological expanse" (Shani, 2015: p416). Hence, all relatives can be regarded as habitats for consciousness, as no subject is an empty vessel devoid of inner experiential qualities (Whitehead, 1985). It should be noted here, that although relatives are regarded as habitats or homes for consciousness, this doesn't imply that they themselves experience things.

A more reasonable hypothesis according to Shani, is that whether or not a relative is equipped with consciousness, depends on the sort of causal organization it embodies (Shani, 2015: p417). Some types of organization facilitate the spread and combining of consciousness while other systems prevent this from occurring. The very notion that the "unity of consciousness" is somehow based on the combination of various states and processes, is customary within neuroscientific research pertaining to consciousness. However, this theory assumes that consciousness is primitive and that the proper processes (whatever they may be) within the concealed realm, simply sew the smaller bits of sentience together into larger and larger regions (Shani, 2015: p417).

With the above in mind, we are led into our second question and subsequently the third. The second question looks at how one arrives at the distinction between subjects and pure objects when all relatives are comprised of the same dual nature, and the third question looks at how Cosmopsychism views the existence of microscopic entities, whether they are subjects or pure objects. In an attempt to provide clarification with regards to these questions, Shani provides us with the following explanation. If one refers to the example made earlier of a simple relative like that of a 'vortex', one would recall that systems such as these are distinct in terms of their functions and are thereby regarded as a separate system within the ocean. Shani suggests here that special focus be put on the fact that this division causes the sentient medium within the 'vortex' to become uniquely organized (Shani, 2015: p418). What this aims to show us is that the uniquely organized sentience which belongs to the 'vortex' is derived from the mass

sentience of its surrounding environment (the ocean). This implies that the absolute (ocean) generates subjects with their own unique sentience, as opposed to pure objects that lack sentience of any kind. Additionally, he argues that this sort of organization of the inner conscious environment is mutually connected to the exposed structure as well as to the history of the system, and that as a result of this separation from its surroundings its experiential workings are also separated, creating patterns of its own that mirror and react to the conditions of the system (Shani, 2015: p418).

What this means is that the above process consists in the amplification and organization of experience, while also concentrating it into a restricted space which results in the creation of a cluster of consciousness that appears to be self-contained with its inner reality separated from that of the oceans' inner reality (Shani, 2015). Regardless of the fact that there is a deep connection between the 'vortex' and the ocean's individual experiential niches, this relation is clouded by the "self-centred mental occupation" of the 'vortex', which gives rise to an "individual self" that is so overwhelmed by its own experiences that it becomes oblivious to the fact that there are deeper layers connecting it to that which grounds all things (Shani, 2015). Shani notes here that if one were to outline the problem of "unified subjectivity" in a way that compared whether or not one was able to successfully combine the experiential realms of microscopic elements into "macroscopic experiential wholes", then one would be assuming that the most basic elements themselves are subjects of experience. As we have previously seen, this type of assumption forms the basis for most Panpsychist theories. However, if one looks at the Cosmopsychist view one will notice that it is not taken for granted that microscopic entities are subjects of experience, as the most basic microscopic entities are considered to be derived from the absolute (Shani, 2015: p417).

According to Shani, the above should demonstrate that the 'derivation' produces subjects instead of pure objects due to the absolute being a subject of experience in its own right (Shani, 2015: p417). In simpler words, the Cosmopsychist theory views microscopic entities as being a part of the absolute, which suggests that the absolute produces smaller level subjects which are already endowed with consciousness, as opposed to pure objects that are devoid of it. The reason for this is due to the smaller level subjects being derived from the consciousness bearing absolute. What this explanation suggests is that simple relatives are real subjects, however when it comes to explaining whether complex relatives are subjects or pure objects the method of explanation varies slightly. If one recalls, the current hypothesis argues that some complex relatives possess an interconnected consciousness, while other complex relatives do not. The reason for this difference according to Shani, lies in the specific ways in which these systems are organized. He argues that this notion, of organization being the answer to why some macro-level subjects possess subjectivity while others do not, appears to be an indisputable point (Shani, 2015: p419).

In order to elaborate on this, Shani provides us with an example of the real Queen Elizabeth and her Madame Tussauds' replica, to illustrate the point that there are "fundamental differences between animate and inanimate objects" such as the real Queen possessing consciousness, while the replica is devoid of consciousness (Shani, 2015: p419) He argues that if one were to take the "componential analysis" further, one would find it incredibly difficult to pin point the differences between the "subatomic components" comprising the Queen and that of her replica (Shani, 2015: p419). What this suggests is that material constitution is not

enough to generate consciousness (otherwise the replica would be considered conscious alongside the real queen), rather it is the sort of organization that plays the pivotal role in explaining the difference. The use of the term organization in this instance is meant to refer to the manner in which the various components of a specific system are arranged. An additional reason provided for the significance of organization is that, in assuming that consciousness exists in all things along with the notion that simple subjects are relatives, one is required to explain how in some cases consciousness increases leading up to macrolevel subjectivity and in other cases one is left with macro-level subjects that lack subjectivity (Shani, 2015: p419). To elaborate on this very point, Shani introduces new terminology to distinguish between two broad categories of interconnected "macro-level compound systems" (Shani, 2015: p419).

The first of these are ***esonectic*** systems (from *eso* meaning inner and *nexus* meaning connection) which are whole systems whose micro-elements are interconnected in a way that the system is connected externally and internally. These are systems that are internally interconnected which means that the "endo-phenomenological" supply of micro-elements unite in a 'coherent' manner in order to generate a unified experiential realm (Shani, 2015: p419). Shani's use of the term "endo-phenomenological" should be understood as a systems'/ subjects inner experiences. The second of these are ***exonectic*** systems (from *exo* meaning outer and *nexus* meaning connection) which are systems whose micro-elements are interconnected in a way that the system is only connected on the external side, it is devoid of a macro-level inner realm to correlate with its external realm. The endophenomenological supply of micro-elements remain separated from one another and thus do not combine, which leaves us with a system lacking in subjectivity and whose demeanour gives no sign that it contains compartments of consciousness within its centre (Shani, 2015: p420). To put this simply, *esonectic* systems communicate with authentic macro-level subjects, while *exonectic* systems communicate with pure objects (Shani, 2015: p420).

Shani admits here that the above is speculative, as there are currently no available theories to prove or disprove it. However, he argues that regardless of this fact, the above provides a general framework for the development of a potential theory. It also provides an opportunity to explain how the existence of non-conscious subjects could fit into a Panpsychist or Cosmopsychist theory, which suggests that it should not be easily dismissed (Shani, 2015: p420). To further support his point, Shani argues that the above division corresponds with the empirical knowledge we have of characteristic differences in material organization between conscious entities such as organisms that have a brain and non-conscious entities such as minerals (Shani, 2015: p420). Once again, to fully understand this Shani provides another example for clarification.

He begins by examining the structure of minerals, stating that their composition is comprised of crystalline formations that are consistent and repetitive in nature. Their structural bonds which bind the various elements together are incredibly strong and communication between these various separated elements are non-existent. Contrary to this, when examining organisms, the characteristic features of biological brains and bodies are completely different to that of minerals. Organisms have a wide range of structural and functional elements, fragile structural bonds and a huge amount of communication between elements all over the system (Shani, 2015: p421). These features are all considered to be essential for macrolevel consciousness, as Shani argues that "weak structural bonds are necessary for flexible

modification, regulation and adaptation of processes, activities, and behaviours; while the combination of *differentiation* (through structural and functional variability) and integration (through global resonance and information transfer) is considered by many leading researchers to be a key characteristic of consciousness." (Shani, 2015: p421). [22] According to Shani, these differences imply that there are principled reasons for why one should expect consciousness to build up in humans and animals but not in minerals.

Even though this distinction is considered speculative, Shani argues that it is a natural distinction to make when working within a broad Panpsychist framework, as this distinction makes sense when referring to what we know about the nature and extent of the differences between living subjects and inanimate objects' structure and dynamics (Shani, 2015:p422). According to Shani, when one accepts this notion, it allows us to work our way back to the explanation of macro-level subjectivity, thus leading us into the fourth question.

In Shani's view, *esonectic* binding could assist in explaining how macro-level relatives with unified phenomenal fields arise, however he states that this does not completely tackle the crucial problem of defending the notion that "the existence of individual conscious perspectives in macro-level subjects depends on the fact that the ultimates of concrete reality are themselves subjects, and as such, the owners of individual perspectives." (Shani, 2015: p422). To frame this in terms of Cosmopsychism, one could look at it as the problem of having to show how the absolute being endowed with a perspective, grounds the fact that relative subjects such as humans for example are endowed with their own individual perspectives (Shani, 2015: p422). We are presented with an outline for Shani's argument at this point, where the first fact **AP** refers to the absolute's perspective and the second fact **RP** refers to the relative subjects' perspective. In the following, Shani tries to defend the notion that **AP** is a *partial ground* for **RP** (Shani, 2015:p422).

When saying that **AP** is a partial ground for **RP** what is implied, is that although **RP** is dependent on **AP**, there is more to **RP** than just it's "dependency" relation, as its nature is not exhausted by this relationship (Shani, 2015). This occurrence is to be expected when a particular component within a relative subjects' perspective is anchored in the absolute's perspective, and when another component affirms its "independence." (Shani, 2015:p423). Shani states that the dialectic set out above, holistically explains the situation which lies before us.

Within the above, each perspective of each relative subject bears what Shani refers to as "*specific character*", which is to be understood as a "unique individual profile" that is not obtained from another perspective nor a combination of perspectives. It also bears a *"generic character"* which can be thought of as a "basic template" which is obtained from the subjective perspective nature of the absolute (Shani, 2015:p423). With regards to the *"generic character"* every conscious perspective of every relative subject is grounded in the fact that the absolute is a subject, and that it has a firstperson perspective. With regards to the *"specific character"* on the other hand, it is regarded as an independent entity which does not ground any other perspective nor is it grounded by other perspectives (Shani, 2015: p423). In Shani's view, this dialectic provides one with a strong "blueprint" for tackling Coleman's combination dilemma,

[22] For further explanation, refer to Tononi (2012) and Shani (2015).

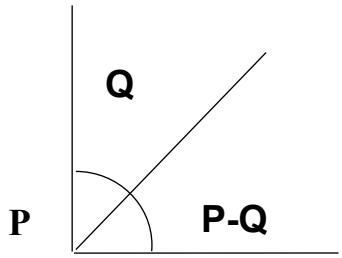
as it allows one to retain the claim that no perspective is a part of another perspective, and that **AP** is a vital explanatory tool for **RP**.

To fully understand this, Shani suggests that more be said with regards to the distinction between *specific* and *generic* character. The specific character of **P** (perspective) is it's differentiated form, which is a solid pattern of interconnected relationships that **P** incorporates, and which separates it from every other perspective. Every subjective perspective is comprised of a "unique outlook", in that it has "a singular way of relating to things from an intentional conscious standpoint: of perceiving, feeling, categorizing, synthesizing, anticipating, evaluating, selecting, preparing for action, and so on." (Shani, 2015: p423). This way of deliberately relating to things, is brought about by the synchronized network of interconnected dispositions, which aids it in retaining its structural form over time (Shani, 2015: p423). As such, Shani suggests that each subject is equipped with a perspective whose specific character is unique, which results in it being singled out from every other subject. The very fact that each individual perspective is distinguished based on its characteristic form, is what makes it vital in trying to explain why perspectives don't combine according to Shani. For us to understand how this works, Shani asks us to recall the combination problem in terms of perspectives. He sets out the argument as follows:

> "Suppose that a given perspective **P** is a compound made of other, more limited perspectives, say **Q** and **R**. This seems to imply that viewing reality from viewpoint P consists, in part, in viewing reality from viewpoint **Q**. The trouble, however, is that the vista which **P** opens up *transcends* the limitations (or boundaries) of viewpoint **Q**, and therefore that it presupposes the *elimination* of such limitations. Thus, on the assumption that **Q** is a compositional component of **P**, it follows that **Q** must both be present and absent – a contradiction." (Shani, 2015: p424).

In Shani's view, every perspective can be thought of as an opening from a specific point, and that the way in which this opening is formed, is what gives it its structure, and defines how things are perceived from this specific point. In other words, Shani suggests that one could "think of a perspective as an angle whose point of origin is its vertex and whose form is limited by the rays emanating from that vertex." (Shani, 2015: p424). He argues here that if the perspective has proper parts, then those parts would have to correlate with a division of the original angle which could be represented as a ray on the interior. He provides a useful illustration in the form of figure 1 below to better illustrate this point.

Figure 1:



The above is intended to show us that perspective **P** which is represented as the original 90˚ angle, is free from any limitations in terms of its specific outlook/view, as it is not comprised of any components. This however changes when one introduces the notion of components represented by **Q**, as it possesses its own unique outlook which automatically generates a limitation (represented by the middle ray) excluding the possibility of having outlook **P-Q**.

What this leaves us with is a contradiction, as we now have a situation where there is an inclusion of a perspective **Q**, as well as an exclusion of a perspective **P-Q**. To put Shani's point simply, this illustration is meant to show us that subjective perspectives are what he calls *"gestalts",* which are structural compounds that cannot be explained by reference to the combination of its various components/parts, and his reason for this is that when working with perspectives, the existence of parts excludes the existence of the whole (Shani, 2015: p425). The reason behind this, as shown above is due to the fact that by introducing a component/part, one introduces a limitation that was not previously there, thereby eliminating the existence of the whole/ original perspective. Should this argument prove sound, then that entails that perspectives by nature prevent the existence of precise compositional relations between perspectives.

However, this does not imply that all relatives are dependent on the perspectival nature of the absolute for their existence, as Shani argues that the notion of generic character can aid us in this regard (Shani, 2015: p425). If one recalls the definition of "generic character" provided above, one would remember that this notion assigns a set of common features to all perspectives, and that without these features there would be no perspectives at all. From this it follows that all relative selves acquire the generic character of their individual perspectives from the absolute, as the absolute itself possesses its own perspective and is considered the birthplace of the individual selves (Shani, 2015: p425). To demonstrate this idea, Shani presents the following two basic features which he considers to be generic, whilst emphasizing the way in which each feature could be viewed as emerging from the subjective type nature of the absolute.

The first generic feature according to Shani is *sentience*, and the reason for this is that each perspective requires an indication that it contains sentience due to the fact that each individual has their own way of experiencing reality. However, without the absolute's intrinsic capability for experience there wouldn't be individual experiences for relative subjects to have and

therefore no individual perspectives (Shani, 2015: 426). The second generic feature according to Shani is what he terms *"core-subjectivity"*. This can be thought of as the point of origin that a perspective has which is what gives it its unique outlook on the world. Within phenomenological literature, this point of origin is identified as ipseity or I-ness, which is used to refer to a sense of self or the "who" that receives certain things or experiences. [23] (Shani, 2015: p426).

When this is then combined with Cosmopsychism, the ultimate source of self or the I-ness that lies at the core of each relative perspective, is then the absolute's own core-selfhood (Shani, 2015: p426). Shani suggests that the general idea can be explained in the following way: to begin, it is assumed that the absolute's cosmic consciousness is a medium of subjective receptivity. When a relative is created within the absolute, this receptivity of the "oceanic consciousness" is transmitted to the relative, and it is topped off with a subjective realm (ability to experience things as an individual self). Yet, "each relative has a mind of its own", a spatiotemporally enclosed web of organized mental activity with an I-ness that has a "unique perspective." (Shani, 2015: p426). As a result of this, there is an automatic captivation that occurs with "the transformations, contents and interests" of the I-ness that it ends up creating a veil which conceals the connection to the cosmic consciousness which grounds all relative subjects and secures them together (Shani, 2015: p427). Taking this into consideration, what is suggested here is that the subjective receptivity which lies at the core of the individual's consciousness, is forced to function as a restricted I-ness that acts as the receiver of the experiences of said subject. As such, each relative subject has what Shani calls "an individual sense of selfhood" regardless of the fact that all "core-selves" are grounded in one massive "universal selfhood". [24] (Shani, 2015: p427).

At this point, Shani entertains the objection that the notion of "core-selfhood makes all subjects dissolve in the absolute", which suggests that there is only one subject – being the absolute and that it has "multiple windows on the world" (Shani, 2015: p427). Shani's response to this is that the theory which he has provided does enough to alleviate this concern. Regardless of the fact that relative subjects are grounded in the absolute, they are still considered real as they have minds of their own which contain all the normal features of individual subjects, such as "private experiences, unique epistemic outlooks and a core sense of self" which aligns with "private mental realities." (Shani, 2015:p427). Additionally, Shani argues that under normal conditions "there is an epistemic barrier" which precludes relative subjects from wondering whether they are anything over and above this perceived separated self (Shani, 2015: p427). The reason for this is that they view themselves as being distinctly separate from one another and from pure objects. Aside from this, Shani states that he cannot see further reason for concern, as Cosmopsychism is committed to *ontological priority*, which should not be understood as *ontological exclusivity*. To put this simply, Cosmopsychism does not assume that the cosmos is the only ontological entity to exist, but instead argues that the cosmos was the *first* entity to exist and that there are other entities which exist apart from it, and are dependent on the cosmos in some manner.

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[23] For more on this concept one can refer to Sokolowski (2000, 112) and Zahavi (2005, 124-125).

[24] Shani mentions here that this concept resembles that of a classical Hindu doctrine regarding *Atman*, and that there is also similarity to Teilhard de Chardin's notion of a cosmic conscious centre. (1959, 262).

In summary, Shani states that the debate of sentience and core-subjectivity demonstrates that in alignment with Cosmopsychism, all perspectives obtain their "generic character from the subjectival nature of the absolute" (Shani, 2015: p428). Simultaneously, each perspective is endowed with a specific character which cannot be derived from another perspective or combination of perspectives. As such, we are left with Shani's completed argument that **AP** is a partial ground for **RP**. This also demonstrates that Cosmopsychism is an adaptation of foundational Panpsychism (**FPP)** and that it is positioned in between Constitutive Panpsychism (**CPP**) and Emergentist Panpsychism (**EPP**). What can be concluded from the above, is that this theory provides a response to Coleman's problem, thus providing an opportunity to tackle the subject combination problem. The final point that Shani makes refers to what he terms the "explanatory profile, power and promise" of the theory, which is how it handles the problems faced by Constitutive Panpsychists, with particular focus on the subject-combination problem (Shani, 2015: p428). In Shani's view the solution to this problem should be evident, as the Cosmopsychist framework developed and which we have just examined, assumes that there are "no compositional relations between subjective perspectives", which results in there being no such problem simply because it does not arise (Shani, 2015: p428).

In summary, the theory presented here appears to be what Shani refers to as a "holistic alternative" to that of atomistic Panpsychism, as it states that there is only one ultimate "the absolute cosmic consciousness", and it aims to provide an explanation for how macro-level consciousness could be rooted within the cosmos' consciousness (Shani, 2015: p 431). According to Shani, this theory is powered by the idea that a holistic approach is supported by both the scientific and philosophic communities, and that it is influential in standing up to the famously arduous subject combination problem. What we are then left with, is a theory which moves away from modern-day Panpsychism in that it rejects the Constitutive and Emergentist type Panpsychism, while defending the view of Foundational Panpsychism (Shani, 2015: p432). With a clearer understanding of Shani's theory, we are now able to delve into the specifics of Philip Goff's adaptation of Cosmopsychism.

(5.4) PHILP GOFF'S CONSTITUTIVE COSMOPSYCHISM

Goff (2017) begins the defence of his version of Cosmopsychism with a few background assumptions before addressing the core argument, much like Shani did in the theory we just examined. Once again, in order to fully comprehend this version of Cosmopsychism, it is imperative that we address these assumptions as each one provides an important puzzle piece which consecutively leads us to an overall picture.

The first of these assumptions is Phenomenal Transparency, which is the notion that phenomenal concepts divulge the core of the states which they represent (Goff, 2017: p 107). According to Goff, we are in a special epistemic situation when it comes to our conscious states, as we are able to observe the conscious state which we are in, and we are able to form a "direct phenomenal concept" of this state by directly addressing it (Goff, 2017: p107). [24] By having this "direct phenomenal concept", the specific conscious state being addressed is directly presented to us in a way that (i) the entire nature of the sort to which this state belongs

[24] The idea of "direct phenomenal concept" is attributed to Chalmers (2003).

is made evident to us, and (ii) we are able to know for certain or "something close to it" that the specific conscious state exists (Goff, 2017; p107). An example would be when one addresses a certain pain and creates a direct phenomenal concept about this pain. Due to this pain being directly presented to you, you would know (i) exactly how it feels for someone else to feel this pain, and (ii) you would know with certainty "or something close to it" that you yourself are feeling that exact pain (Goff, 2017:p107). This is an example of the hypothesis termed "Revelation". [25] Goff notes here that the revelation hypothesis should not be viewed in the same manner as phenomenal transparency, regardless of the fact that the former brings about a form of the latter. As mentioned above, phenomenal transparency is the view that phenomenal concepts divulge the core of the states which they represent, in contrast to revelation which looks at the nature of a specific conscious state in terms of it being directly given to the subject. In accordance with this hypothesis, when one addresses a specific conscious state under a direct phenomenal concept, then the entire nature of the sort to which this state belongs is made evident to you which results in "Direct Phenomenal Transparency: the thesis that direct phenomenal concepts are transparent." (Goff, 2017: p107). The definition Goff provides us with to further explain transparency can be viewed as follows:

> Transparent Concept: A concept C of entity E is transparent just in case C reveals the nature of E (i.e. what it is for E to be part of reality is a priori accessible for someone possessing C, in virtue of possessing C): for example, <sphericity> and <party> [26] (Goff, 2017: p74).

The second assumption of this theory is ANTI-PHYSICALISM. From what we have previously seen, Physicalism is a theory which states that fundamental reality is completely physical (Goff, 2017:p14). As a theory this comes in a variety of forms which is why for simplicity sake Goff utilizes what he terms "pure physicalism" in his initial arguments, which states that the entire nature of fundamental reality can generally be captured in the workings of the physical sciences (Goff, 2017: p14).Goff's argument against physicalism is one that we have touched on in a previous section of this paper, which is that physicalism is incapable of explaining the existence of consciousness. Recall that the most popular arguments against physicalism are the knowledge argument and the conceivability argument (already discussed in section 1.1 above) which is meant to show us that there is more to conscious experience than what physical science is capable of explaining. Goff suggests that there are problematic areas within these traditional arguments and that in order to fix these errors, one needs to incorporate a commitment to the thesis of "Phenomenal Transparency" (Goff, 2017: p15). [27]

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[25] The term "Revelation" can be traced back to Mark Johnston's (1992) description of Galen Strawson's (1989) view on the nature of colour, and it was later utilized in the mind-body debate with regards to the nature of experience. Goff mentions that his use of the term here is meant to be more specific.

[26] Goff notes that "P can be a priori accessible for X even if X is not intelligent enough to access P as intuitively the thought would be that if X had sufficient rational powers then X would be able to access P. If the worry of how to define idealized rational powers emerges then one could simply alter the definition to the following: a concept C referring to entity E is transparent just in case there is a possible world in which someone works out the essence of E a priori, in virtue of possessing C, and without any empirical information other than what is required to possess C." (Goff, 2017: p74).

[27] It is beyond the scope of this paper to examine all of these arguments in turn, so for more information regarding the various ways in which to fix the knowledge argument and conceivability argument refer to Goff (2017: p23).

His particular argument against physicalism differs from what we have already examined and as such requires its own exploration. In order to fully comprehend how transparency leads us to an anti-physicalist argument, we must first examine the notions of transparent and opaque concepts. According to Goff, a concept is deemed "transparent just in case it reveals the nature of the entity it refers to", in a way that is a priori (Goff, 2017: p15). An example is the idea of *sphericity*. For the property of *sphericity* to be represented is for there to be something in which all points on the surface are equally distant from its centre (Goff, 2017: p16). Having this concept in mind suggests that one should be able to figure out a priori what *sphericity* is by utilizing what one already knows. In contrast, a concept is considered opaque when "it reveals little or nothing about the nature of the entity it's referring to" according to Goff. In other words "very little of what it is for that entity to be part of reality is a priori accessible." (Goff, 2017: p16). The notion of water is an example of an opaque concept, as the prerequisite for something to be water is that it is composed of H_2O molecules. This cannot be deduced a priori as one would need to scientifically examine water in order to discover what the nature of water really is (Goff, 2017).

As mentioned above, Phenomenal Transparency is when phenomenal concepts divulge the nature of the conscious states they are referring to. When one thinks about a certain pain with regards to what it is like, one is able to know what it is like for that pain to exist. In this way the concept of pain is similar to that of the sphericity example as opposed to that of the water. Let us examine what would happen if we applied the above to a physicalist argument. Consider the fact that physicalists believe that a physical pain has a completely physical nature, and that for something to feel pain is for its c-fibers to be firing. If one assumes that phenomenal concepts are transparent then the physical nature of pain would be accessible to anyone who has experienced pain, therein having a phenomenal concept of this pain. Just by having this experience of pain, it would allow one to know that for something to experience this particular pain, that specific something's c-fibers would need to be firing. According to Goff this isn't the case, as feeling this pain doesn't reveal the physical nature of that pain, which suggests that physicalism is false. If one secures Phenomenal Transparency then one has a solid argument against physicalism in Goff's view. [28] It is worth mentioning before heading into the argument, that Goff views the concept pure/A-type physicalism as physicalism (in the general sense), in addition to the notion that fundamental reality is completely comprised of 'pure physical facts', in the sense that these facts are entirely expressed in 'the mathematico-nomic vocabulary of physics'. With this in mind, Goff provides the following transparency argument against physicalism.

The transparency argument against pure/type-A physicalism

Premise 1: If Direct Phenomenal Transparency and either pure physicalism or type-A physicalism are true, then phenomenal concepts reveal their referents to be pure physical states.

[28] For further clarification on the various ways to secure phenomenal transparency refer to Goff (2017).

> *Premise 2*: If phenomenal concepts reveal their referents to be pure physical states, then there is no epistemic gap between the pure physical and the experiential.
>
> *Premise 3*: There is an epistemic gap between the pure physical and the experiential.
>
> *Conclusion 1*: Therefore, either Direct Phenomenal Transparency is false, or pure physicalism and type-A physicalism are false.
>
> *Conclusion 2*: Pure physicalism and type-A physicalism are false.
> (Goff, 2017: p124). [29]

When one accepts the above assumptions, one obtains strong grounds for accepting the third assumption of this theory which is the irreducibility of subjects. In Goff's view, Subject Irreducibility represents the following thesis: "*What it is for there to be a conscious subject S cannot be analysed into facts not involving S.*" This thesis states that "*there are no deflationary analyses of subjecthood*." (Goff, 2017: p209) The official definition which Goff provides can be viewed as follows:

> *General Form of a Deflationary Analysis of Subjecthood*-For it to be the case that there is a conscious subject X is for it to be the case that there are Y's that are F, where X need not be one of the Y's (or for it to be the case that there is a Y that is F, where X need not be identical with Y) (Goff, 2017: p210).

A simple example used to clarify this idea compares the above to a case where deflationary analysis is possible.

> *Deflationary Analysis of Partyhood*- For it to be the case that there is a party is for it to be the case that there are people revelling (Goff, 2017: p210).

This analysis defines what is required for there to be a party in terms of things which are not that party. Subject Irreducibility suggests that the above cannot be done with subjects as we are unable to analyse what it is for a particular subject to exist with regards to things which are not that particular subject (Goff, 2017).

What this shows us is that physicalists are unable to provide deflationary explanations of *subjecthood*. With this in mind Goff examines whether or not Russellian Monists could offer a deflationary explanation. He begins by defining the sort of deflationary analysis required for subjecthood, which appears as follows:

General Form of a Deflationary Analysis of Subjecthood – For it to be the case that there is a conscious subject X is for it to be the case that there are Y's that are F, where X need not be one of the Y's (or for it to be the case that there is a Y that is F, where X need not be identical with Y) (Goff, 2017: p211). Under the Russellian Monist banner, the micropsychist could present with the following response:

> *Micropsychist Analysis*- For it to be the case that there is a conscious

[29] This argument can be applied to weaker forms of physicalism. For more information on these arguments refer to Goff (2017).

> subject X is for it to be the case that there are micro-subjects S_1, $S_2 \ldots S_n$, none of which is identical with X, standing in n-place relation R (Goff, 2017: p211).

However, Goff suggests that the problem with this analysis is that it appears to be incomplete due to the fact that it is unable to explain what exactly the R relation is. If one were to adopt Phenomenal Transparency then the relation required would have to be a priori. According to Goff, 'armchair reflection' with regards to subjecthood does not divulge the a priori relation needed (Goff, 2014: p212). If one took it for granted that the relation was indeed a priori, then that would suggest that in some indirect sense, this is what one means when affirming the existence of a conscious subject. Goff poses the question: what is it for one to judge that there is a conscious subject, who he calls *Jane*? He argues that it appears unlikely that one would refer to a large amount of micro-subjects which are packed together in some or other relation as the explanation for this particular judgement, especially when one considers that these micro-subjects are not identical with the conscious *Jane*. When one takes into account that this is a general analysis of what is required for subjecthood, then one would realize that this sort of analysis could be applied to the micro-subjects themselves, as the existence of each micro-subject would be comprised of additional microsubjects packed together in relation R, and each of those micro-subjects would further be comprised of more micro-subjects packed together in relation R and so the cycle appears never ending. From this Goff argues that something has gone terribly wrong, suggesting that an alternative analysis is required.

Another possible option is to look at the Panpsychists response, which provides an analysis based on the experiences of micro-subjects. The question posed to Panpsychists is: what sort of relation could tie experiences together to form a subject? One possible response that Goff suggests, is to appeal to the relation of *co-consciousness* provided by Barry Dainton. This is "the relation two experiences bear to each other when they are experienced together." (Dainton, 2011a). The following analysis utilizes this very notion.

> *Co-Consciousness Analysis (1 st formulation)* - For it to be the case that there is a conscious subject is for it to be the case that there are certain experiences that are co-conscious with each other (Goff, 2017: p212).

In utilizing this analysis, the Panpsychist could argue that (i) a large amount of the experiences experienced by the micro-subjects which comprise one's brain, possess the co-consciousness relationship to each other and that (ii) it is in light of this very fact that one's conscious mind exists. What this appears to do, is analyse subjects into experiences. However, in order to assess this claim one needs to examine what exactly an experience is. Goff refers to work by Martina Nida-Rümelin, which states that phenomenal reflection shows us that "an experience is merely an event of a certain subject bearing certain experiential properties." (Goff, 2017: p213). When one thinks about this in terms of someone experiencing pain, then all that would be required for that pain to exist is for it to be the case that someone is feeling that particular pain at a particular time. If this is true then experiences are analysed in terms of subjects, which undermines the claim above that subjects could be analysed into experiences (Goff, 2017). Much like the first formulation, the second and third appear unable to provide a suitable deflationary analysis of subjecthood, which leaves the Russellian Monist with no further

options. [30] Once one dismisses the possible physicalist analyses, then it becomes evident that there are no further options with regards to "an a priori accessible deflationary analysis of subjecthood" (Goff, 2017: p214). While Goff admits it would be unfair to expect the Constitutive Russellian Monist to present us with 'precise necessary and sufficient conditions for the instantiation of subjecthood', he rightly argues that it is reasonable enough to request some sort of indication as to what might be required.

However, when reflecting on the sorts of properties which we have a transparent conception of, (regardless of the fact that it is usually problematic when attempting to determine the requirements needed for there to be a "token of the property as precise necessary and sufficient conditions"), one can still generate a rough estimate of what would be required (Goff, 2017: p215). Simply put, in order for there to be a party, one would roughly need a group of people congregating together with the intention of having a good time. This simple definition attempts to convey the notion that it is possible to have an idea of how an entity could be constitutively grounded in more fundamental features (Goff, 2017). Yet when it comes to the notion of subjecthood, it appears as though one is not able to offer even the slightest indication as to what the deflationary analysis of this might be, further suggesting that there is no amount of meticulous examination which could produce such an analysis according to Goff. It is at this point that he offers us the following argument for Subject Irreducibility:

The argument for Subject Irreducibility

> *Premise 1*- If the analysis of subjecthood is a priori, then it is deflationary only if analytic functionalism is true.
>
> *Premise 2*- Analytic Functionalism is false.
>
> *Premise 3*- The analysis of subjecthood is a priori (implied by Phenomenal Transparency).
>
> *Conclusion*- The analysis of subjecthood is not deflationary (i.e., Subject Irreducibility) (Goff, 2017: p216).

The reason why this is relevant is due to the fact that constitutive Russellian Monism is regarded as a form of constitutive grounding, which according to Goff can be understood in terms of grounding by analysis. From the argument just examined, this would rule out constitutive Russellian Monism. To fully understand how grounding by analysis works, let us examine the specific details.

Fact X is grounded by analysis in fact Y iff:

- X is grounded in Y, and
- Y logically entails what is essentially required for the entities contained in X (including property and kind instances) to be part of reality (Goff, 2017:p216).

Returning to the example of a party: the fact (F1) that there is a party is grounded by analysis in the fact (F2) that Rod, Jane, and Freddy are revelling because:

[30] For more on the other possible formulations refer to Goff (2017: p 213).

- F1 is grounded in F2, and
- The fact that Rod, Jane, and Freddy are revelling logically entails what is essentially required for a party to exist, that is, that there are people revelling (Goff, 2017:p216).

What the above implies is that the existence of a conscious subject (Jane) is grounded by analysis in the micro-level facts only if her non-existence is logically inconsistent with the obtaining of the micro-level facts (Goff, 2017: p217). According to Goff however, the problem with this is that compositional nihilism (the notion that there are no objects with proper parts) is logically coherent. There appears to be nothing incoherent in the idea that there are particles organized "table-wise, planet-wise and so on, but there are no tables, planets, and so on." (Goff, 2017: p217). In light of this, Goff argues that if one assumes that o-subjects (organic conscious subjects) are macrolevel entities, then one is able to form the following argument against constitutive Russellian Monism:

The Subject Irreducibility argument against constitutive Russellian Monism

> *Premise1*- The fact that Jane exists as a conscious subject is grounded by analysis in the micro-level facts only if the micro-level facts logically entail what is essentially required for Jane to exist as a conscious subject. (This premise follows from the definition of grounding by analysis).
>
> *Premise2*- (Subject Irreducibility) - What is essentially required for there to be an x such that x is a conscious individual cannot be analysed into facts not involving x.
>
> *Conclusion1*- The fact that Jane exists as a conscious subject can be grounded by analysis in the micro-level facts only if the micro-level facts logically entail the existence of Jane.
>
> *Premise3*- Jane is a macro-level entity, and hence her non-existence is logically consistent with the complete micro-level facts.
>
> *Conclusion2*- The fact that Jane exists is not grounded by analysis in the micro-level facts (Goff, 2017: p217).

The aim of this argument is to show us that the nature of subjecthood cannot be explained in terms of deflationary analysis, hence there is no way in which to utilize grounding by analysis. This however does not affect emergentist forms of Russellian Monism as they argue that conscious subjects are "fundamental and unanalyzeable" (Goff, 2017: p219). [31]

The Constitutive Russellian Monist is now left with a serious challenge, one that cannot be solved with traditional forms of grounding as we have just seen. As such, Goff suggests that what is needed is a theory that will incorporate the notions of (i) conscious subjects being irreducible, as well as (ii) the notion of conscious subjects being non-fundamental (as they are grounded in more fundamental facts). It is this which then leads us into the next assumption of Goff's theory.

[31] For more on the emergentist option, refer to Goff (Forthcoming).

The fourth assumption introduces an alternative to grounding by analysis in the form of "grounding by subsumption." (Goff, 2017: p220). With this Goff hopes to find a way of grounding conscious subjects, whilst also providing a logical form of constitutive Russellian Monism. Grounding by subsumption in the initial sense is a relation between entities according to Goff. [32] The definition which he provides for this relation can be viewed as follows:

> "Entity X grounds by subsumption entity Y iff (i) X grounds Y, and (ii) X is a unity of which Y is an aspect" (Goff, 2017: p221).

It should be noted that Goff's use of the terms "unity" and "aspect" are meant to be understood as primitives, thereby not requiring further analysis. In order to comprehend this notion he provides us with four examples, of which we need only examine two. The first of these looks at grounding by subsumption of Hue, Saturation and Lightness in Colour. If one takes a particular shade of orange (Goff refers to it as orange 7) – it would involve a red hue and a yellow hue, as well as some degree of saturation and some degree of lightness. One could view orange 7 as a mixed property comprised of red and yellow hues, as well as particular degrees of saturation and lightness. In other words, one could understand orange 7 to be a "unified property" whereby the above components are regarded as aspects (Goff, 2017: p221). Goff states here that if one is able to grasp this example, then one should be able to comprehend how "hue, saturation and lightness are grounded by subsumption in instances of color" (Goff, 2017: p221).

The second example looks at grounding by subsumption of regions of space in the whole of space. To fully understand this example, we need to begin by referring to some background information. When exploring the philosophy of space, one is met with a chief debate amongst *substantivalists* and *relationists*. The substantivalists argue that "at the fundamental level, space (or spacetime, or regions of space/spacetime) exists as an entity in its own right" (Goff, 2017: p223). A theological metaphor which Goff provides suggests that when God created the world, she first created space (the great container) and then she created all the things *in* space such as the stars and planets and so on. In contrast, the relationist argues that God's only duty was to create the stars and the planets, and to make sure that they held particular "spatiotemporal relationships" to one another (Goff, 2017: p223). As Goff describes it, "facts about space are grounded in facts about concrete entities and the relationship between them" (Goff, 2017: p223). The substantivalists are then faced with the question: "Are facts about larger regions of space grounded in facts about smaller regions of space, or vice versa?" (Goff, 2017: p223). According to Goff the substantivalists could argue that "(i) certain very small regions of space are the fundamental building blocks of reality, and that (ii) space as a whole is built up from such "spatial atoms"" (Goff, 2017: p223). Goff points out however that another option for these theorists could be to argue that (i) the whole of space is a fundamental unity, and that (ii) specific regions of space are *aspects* of this fundamental unity. If one is able to make sense of this latter view ("holistic substantivalism"), then one should be able to make sense of the notion that regions of space are grounded by subsumption in the whole of space (Goff,2017: 224).

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[32] Goff uses the term "entity" in a broad sense to refer to any world like thing such as individuals or properties, events or states of affairs etc.

One can then contrast this with Super-substantivalism which states that "(i) space (or spacetime, or regions of space/spacetime) is an entity in its own right, and that (ii) material objects are identical to regions of space/spacetime" (Goff, 2017: p224). Regions of space which one considers to be filled might differ from the regions one considers to be empty, and the reason for this according to Goff is because they appear to possess distinct properties. In either scenario the owner of these properties is "the region of space itself" and not some separate object held within this space (Goff, 2017). Simply put, properties are attached to space itself (Schaffer, 2009b).
Now if one were to combine holistic substantivalism and super-substantivalism, the result would be a form of priority monism. As previously mentioned, this theory states that there is only one fundamental entity. Similarly, the holistic super-substantivalist argues that "material objects are identical with regions of space, and regions of space are aspects of space as a whole" (Goff, 2017: p224). In summary, all that exists is obtained from the one fundamental whole which is space itself. A plausible question to ask at this point would be: what sorts of properties would such a fundamental whole have? One possible response would be in the form of "distributional properties" (Goff, 2017: p224). Distributional properties are properties characterized by how an object is "spatially filled in", for example are they spotted or striped? (Goff, 2017: p224). While one generally thinks of these sorts of properties as being non-fundamental as they are grounded in the properties of the whole, this need not be the case. The example Goff provides asks one to think about a red polka-dotted carpet. One generally thinks that the carpet is polka-dotted because of the red, round patches of material amidst the rest of the coloured material comprising the carpet. This ontological priority could however be applied the other way, as the carpet could have the fundamental property of being polka-dotted, and then have the red round patches in virtue of this property.

If we apply this analogy to space, then one could imagine a universe with a neat polka-dotted dispersion of mass throughout space (Goff, 2017). One might automatically presume that such a polka-dotted universe has this sort of distribution due to the mass-instantiated areas of space spread out in this particular manner. However, Goff argues that instead it could be that the ontological priority could go the other way, as "space is a fundamental unity with a fundamental distributional property of *having a polka-dotted distribution of mass*, and the mass instantiated regions, together with their mass, are aspects of this fundamental unity" (Goff, 2017: p225). If one is able to grasp this view, then one should be able to comprehend how the whole of space along with its own distributional properties ground by subsumption regions of space and their distributional properties. Goff suggests here that what unites these examples is the concept of an aspect. The idea is that an aspect could be structured as opposed to being a 'homogenous blob' and that all that would be required for this to be possible is for there to be various components which could be examined separately from the whole, but which remain dependent on the whole for their existence. There are possible scenarios where aspects could be considered "*unsaturated*", (whereby one is unable to identify the essence of said aspect without referring to the whole of which it is a part), however this need not be the only scenario. [33] To see how this could be possible, consider the following example.

[33] The term "unsaturated" is accredited to Frege (1951).

> The thesis that our space – call it "S"- is fundamental is compatible with there being a possible world in which S is subsumed in a more expansive space with a greater number of dimensions (Goff, 2017: p226).

The notion that "S" could be subsumed in a larger entity suggests that in its own right, it is possible that it could be a complete unity. This element of Goff's theory will become more relevant as we move along, but for now let us examine the final notes which accompany these assumptions.

In Goff's view, one can conclude two things from what we have just examined about grounding by subsumption. The first is that scenarios including this type of grounding relation imply an 'ontological free lunch', as the nature of an aspect is 'nothing over and above' the whole of which it forms a part. As Goff simply puts it: "if region R is an aspect of the whole of space S, then R is nothing over and above S" (Goff, 2017: p226). Thus grounding by subsumption appeases the requirement that: one needs to make sense of an ontological free lunch without identity as an aid. This is what Goff calls the "Free Lunch Constraint." [34] The second point which Goff argues plays a vital role in what follows, suggests that by acquiring an ontological free lunch, one is no longer required to provide an "*analysis* of grounded entities in more fundamental terms" (Goff, 2017: p227). If one refers to our previous example one can see why this is the case. An R region of space cannot be analysed in more fundamental terms, as R is considered to be an aspect of S (space as a whole). What this suggests is that "R is nothing over and above S", and that aspects can be "irreducibly subsumed in a more expansive whole" (Goff, 2017: p227). It is this concept of an aspect as outlined above, which obtains the ontological free lunch thus making the grounding relation of analysis obsolete. Now that we have all the relevant background information, we can move onto examining whether this type of grounding relation can aid us in the quest of trying to ground conscious subjects.
What we know so far about grounding by analysis, is that it asks us to ground entities into more fundamental facts. However when it comes to the grounding of subjects this cannot be done as subjects appear to be irreducible. Grounding by subsumption however does not require this sort of analysis as it provides us with an alternative way of grounding conscious subjects that is consistent with the fact that they are irreducible. What we now need to examine is the following:

> *Subject-Subsumption*- Each state of affairs of a particular o-conscious subject bearing certain experiential properties is grounded by subsumption in some more expansive unity (Goff, 2017: p227).

Naturally what follows from this is the question: what is the nature of such an expansive entity, is it another experience or could we perhaps wrap our heads around the idea that an experiencing subject could be an aspect of another experiencing subject? Goff provides us with the following 'toy example' where states of affairs are represented by the sentences in brackets.

> *Subject-Subsumption Scenario*- {subject BIG feeling, pain, anxiety, and experiencing red} grounds by subsumption {subject LITTLE $_1$ feeling pain}, {LITTLE $_2$ feeling anxious}, and {subject LITTLE $_3$ experiencing red} (Goff, 2017: p228).

[34] For more on the Free Lunch Constraint refer to Goff (2017: p42).

In this scenario the state of affairs of the BIG subject having all these various experiences is considered a fundamental unity and the LITTLE subjects along with their own experiences are considered aspects of this unity. Each LITTLE subject exists and has the experience it does on account of the fact that subject BIG exists and that it has its own experiences. Goff mentions here that he takes the BIG subject to be a "pure" subject in the Cartesian sense, indicating that the nature of this subject is exhausted by consciousness (Goff, 2017:228). He argues here that Coleman's combination problem incorrectly assumes that because subject X constitutively grounds subject Y, X must now be phenomenally present in Y's experience. Yet in the scenario of Subject-Subsumption it becomes evident that this type of assumption cannot be made, as LITTLE $_1$ is grounded in BIG on account of being an aspect of the BIG subject. This does not automatically imply that "BIG is phenomenally present within LITTLE $_1$" (Goff, 2017: p228).

Goff mentions that it is possible to form the following type of argument against the intelligibility of the Subject-Subsumption scenario:

> LITTLE $_1$'s point of view is a matter of its having *pain-to-the-exclusionof-all-else*; this point of view is not an aspect of BIG's point of view, as the latter experiences pain co-consciously with anxiety and redness (Goff, 2017: p228).

However, he argues that this argument appears to be weak and provides the following analogous argument to clearly portray this point:

> Y has 2 *grams of mass and no more*; hence, Y cannot be a constituent of X, as X has more than 2 grams of mass (Goff, 2017: p229).

Evidently this appears to be a weak argument, so why should this differ when applied to the scenario of Subject-Subsumption? What it's like to be LITTLE $_1$ is expressed by the fact that it experiences pain and nothing else. Why can this experience (limited as it may be) then not be an aspect of a more expansive unity? (Goff, 2017). As complex as it is for one to comprehend such a notion, there appears to be nothing that suggests that this argument is incoherent. In Goff's view, a more concerning obstacle to the coherence of the Subject-Subsumption case comes in the form of a conceivability argument which briefly states that if a concept is conceivable then it should be possible. Such an argument can be viewed as follows:

> *The anti-subject-subsumption conceivability argument*
>
> *Premise1*- "{BIG feeling pain, anxiety, and experiencing red} obtains in the absence of {LITTLE $_1$ feeling pain}" is conceivably true.
>
> *Premise2*- If BIG and X are conceived of as pure subjects, "{BIG feeling pain, anxiety, and experiencing red} obtains in the absence of {LITTLE $_1$ feeling pain}" is a transparent sentence.
>
> *Premise3- Transparency Conceivability Principle (TCP)*-If a transparent sentence is conceivably true, then it's possibly true.

Conclusion 1- Therefore, "{BIG feeling pain, anxiety, and experiencing red} obtains in the absence of {LITTLE $_1$ feeling pain}" is possibly true.

> *Premise4- Necessitation*: If fact/entity X grounds Y, then necessarily if X exists/obtains, then Y exists/obtains.
>
> *Conclusion 2*-Therefore, it's not the case that {BIG feeling pain, anxiety and experiencing red} grounds {LITTLE $_1$ feeling pain} [35] (Goff, 2017: p229).

In order to avoid this type of problem, Goff states that one needs to provide "some nature beyond consciousness into the grounding base." (Goff, 2017: p230). If one adds more nature to the fundamental fact, then one would be including more intrinsic nature to this entity over and above what it already has, thus making it an *impure subject* (Goff, 2017). One could thereby hold that consciousness is merely one aspect of a larger property, a property Goff refers to as "consciousness+", which incorporates experiential and nonexperiential elements into one unified property (Goff, 2017: p230). Then, if one presumes that the BIG subject within the Subject-Grounding case is an impure subject, and that it is instantiating consciousness+ as opposed to consciousness, one would thereby not be perceiving the entire nature of this subject when one conceives of it only as something conscious. As a result, the sentence "{BIG feeling pain, anxiety, and experiencing red} obtaining in the absence of {LITTLE $_1$ feeling pain]" is then not a transparent sentence, preventing the move from conceivability to possibility (Goff, 2017: p230). As a result, one is lead to the following:

> Consciousness+ Subject-Subsumption- {subject X bearing such and such consciousness+ properties} grounds by subsumption {Subject Y bearing such and such experiential properties} (Goff, 2017: p230).

Goff states here that the above notion involves a substantial "degree of noumenalism about fundamental reality." (Goff, 2017: p230). He argues that what attracts us to "a pure form of panpsychism" is the fact that we generally know that fundamental reality is transparent (Goff, 2017: p230). However, because we lack a general understanding of the non-experiential elements of consciousness+, we appear to lack "the general understanding of the deep nature of matter" (Goff, 2017: p230).As such, Goff argues that the only way to logically make sense of the grounding of conscious subjects by subsumption, is to utilize consciousness+ along with subject-subsumption. He notes that the component of noumenalism is not epistemically optimal as one would ideally prefer a *full* picture of reality. However he asks us to remember a crucial point, which is that physical science only reveals the causal structures of reality and hence should not provide us with unwarranted optimism about what it is that we can achieve when it comes to unravelling the deeper aspects of nature. Regardless of the fact that this theory incorporates noumenalism, Goff argues that it provides one with an advantage that other theories do not have. The fact that grounding by subsumption does not require one to reduce subjects into more fundamental facts, provides one with an opportunity to ground subjects in a manner that is in alignment with it being irreducible. As difficult as it is to get one's head around this idea, Goff argues that the task is not impossible. To see how this could be done, let us reflect on the following.

In sections 3.1 and 3.2, we examined potential theories which adopted the notion of smallism which stated that: everything that exists, is grounded in micro-level facts. This particular notion

[35] For a similar type of conceivability argument refer to Chalmers (2015).

accommodates a grounding by analysis understanding of constitutive grounding, as micro-level facts necessitate the existence of macro-level entities.

However, from what we have already seen this type of grounding relation appears to come up short when trying to ground conscious subjects. As a result of this failure, philosophers have gone in search for alternative theories that are better equipped to tackle this kind of challenge. One such promising theory comes in the form of *priority monism* which states that there is only one fundamental entity and that this is the *cosmos*. [36] According to this theory, everything within the cosmos exists and is the way that it is because the cosmos exists and is the way that it is. Priority monism accommodates a grounding by subsumption understanding of constitutive grounding, as the cosmos is considered to be a "fundamental unified whole" where all other entities are considered to be aspects of this whole (Goff, 2017: p234). By accepting priority monism, one is able to find a straightforward and neat way of grounding conscious subjects by subsumption.

As Goff explains:

> "We can suppose that the universe is a fundamental unified subject, a bearer of consciousness+, and that states of affairs involving osubjects having such and such states of consciousness+ are aspects of states of affairs of the universe having such and such states of consciousness+, which results in the theory we know as "cosmopsychism." (Goff, 2017: p234).

While it is possible to view this theory as a form of idealism, or as a form of constitutive Russellian monism, or even as a form of physicalism, Goff suggests that instead, we should view this theory as Constitutive Cosmopsychism. According to this theory, the cosmos is a physical entity and the "o-subjects it subsumes" are physical as well (Goff, 2017: p235). Goff argues here that although physical science is capable of explaining the causal structures of the universe, it is unable to explain its deeper nature due to the fact that it is comprised of consciousness+. The causal structure of the brain is outlined by neuroscience, but its deeper nature is "a bearer of consciousness+", and this bearer is considered "an irreducible aspect of the consciousness+ bearing universe" (Goff, 2017: p235).

A possible objection to this comes in the form of an argument put forth by Adam Pautz, which states that constitutive cosmopsychism is an unpleasantly complex theory. The cause of the complexity lies in the fact that the cosmopsychist is forced to assume a large number of "big-to-small grounding laws" (Goff, 2017: p235). If one were to examine the relationship between the fixed state of consciousness+ represented by the universe at this moment (one can refer to it as "consciousness+ $_{BIG1}$") and the fixed state of consciousness+ represented by one's own brain at this very moment (one can refer to it as "consciousness+ $_{LITTLE1}$"), then it appears as though one would be required to explain the grounding relation of these two properties. In an attempt to do this, one would need to explain the above relation in terms of the "brute big-to-small grounding law" which states that: should there be something which represents consciousness+ $_{BIG1}$, then that would ground the existence of something representing consciousness+ $_{LITTLE1}$ (Goff, 2017: p235). Goff argues here that entertaining such a notion would lead one into trouble, as this would require an extremely large amount of grounding

[36] See Schaffer (2007, 2009a, 2009b, 2010a, 2010b, 2010c, 2012, 2013) for more on priority monism.

laws. The reason being is that at any given moment a different fixed state of consciousness represented by the universe could occur (one could call it consciousness+ $_{BIG2}$), and a different fixed state of consciousness represented by oneself (one could call it consciousness+ $_{LITTLE2}$) could occur. This would then require a different grounding relation which would explain how something possessing consciousness+ $_{BIG2}$ grounds something which possesses consciousness+ $_{LITTLE2}$ etc. As Goff explains: "for every possible determinate state of the cosmos X and every corresponding determinate state of me Y, it must be a basic law that if something has X, then it grounds the existence of something having Y" (Goff, 2017: p236). What we can take from this is that one would then be required to account for all the possible states of any given subject and/or any given physical entity, as well as all the possible states of oneself resulting in an absurd amount of grounding laws forming the "extreme theoretical vice" which Pautz identifies. [37] (Goff, 2017: p236). Goff states here that perhaps Pautz views the fundamental properties of the universe as *blobby*, (devoid of any structure) which is why he argues that these grounding laws are required. However he denies that this is the case in the constitutive cosmopsychist world he's outlined, as he takes the fundamental properties to have *rich structure* (Goff, 2017: p236). Regardless of the fact that each property is considered fundamentally unified, this unity subsumes a large amount of other aspects in the same way that the cosmos being a fundamental unity subsumes a vast amount of parts as dependent aspects (Goff, 2017). He argues at this point that the state of affairs representing consciousness+ $_{BIG1}$ is a unity that incorporates the state of affairs representing consciousness+ $_{LITTLE1}$ as an aspect, and that as a result of this there is no longer the requirement for the grounding. A simple way to understand this is to refer to an earlier example. Recall that one's current experience of red is an aspect of one's overall conscious experience. From this it is clear that there is no need to include a grounding law as the red experience is already included in the overall experience as an aspect [38] At this point Goff decides to elaborate on his theory by providing us with more details, specifically with regards to whether or not there are other conscious subjects apart from the cosmos and o-subjects.

With what we have examined thus far, we know that Goff implicitly denies the notion that o-subjects are grounded by analysis. Yet what isn't clear is whether or not other features of reality are grounded by analysis. In the case of micro-level particles, if one considers them to be conscious then that would suggest that they be grounded by subsumption in facts about the universe. However, if one considers these particles non-conscious then there is a possibility that it could be grounded by analysis in facts about the universe. If we consider electrons for example, (which are characterized by their 'nomic role' in physics) it seems possible that the nomic role could correspond to a specific pattern within the distributional properties of the cosmos, in such a way that all that would be required for an electron to exist is for that specific

[37] See Pautz (unpublished manuscript) for more on these grounding laws.

[38] Goff (2017: p 237) makes a note here to say that the way he pictures constitutive cosmopsychism is no more parsimonious than emergentism as the relationship between them can be equated to the relationship between states of affairs and substrata and properties being fundamental. On Armstrong's view, substrata and properties are not fundamental because states of affairs are fundamental. However states of affairs contain substrata and properties as irreducible components, which suggests that the notion that fundamentally there are "substrata-having properties" is no more parsimonious than the notion that fundamentally there are substrata and properties (Armstrong, 1997).

pattern to be represented (Goff, 2017). Whether or not this can be applied to all entities (apart from the cosmos and o-subjects) depends on whether or not we believe that they are conscious. Goff argues that "parsimony and common sense" persuade us not to equate consciousness to inanimate entities, but that perhaps for reasons pertaining to elegance, one might consider otherwise (Goff, 2017: p238). Should one assume that matters regarding consciousness are not vague, then in Goff's view the notion that (aside from the cosmos) only o-subjects are conscious will eventually lead us to exact 'cut-off points' for the conditions required for a 'non-cosmic subject' to exist. According to this, we would have to presume for example that some exact change involving micro-level modification, ensures that there would be a conversion from 'non-conscious to conscious fetus'. What makes this seem unlikely is the fact that this difference was produced by this exact change according to Goff.

Due to this, Goff suggests that in figuring out the specific details of his theory, one would need to make room for conscious subjects within the commitments apart from o-subjects and the cosmos. If for instance one accepted the idea that the micro-level involved consciousness, then surely this would contradict the assumption of phenomenal transparency. The reason being, according to Goff, is that if one's pain is merely c-fibre firing, then c-fibre firing should basically involve a large amount of 'micro-level conscious properties.' And if one has a total understanding of the nature of one's pain, then it should be evident that one's pain basically involves a large amount of 'micro-level properties?' (Goff, 2017: p239). However this doesn't appear to be the case in terms of experience. This is known as the revelation argument traditionally posed against panpsychism, but which can also be posed against constitutive cosmopsychism. [39] In a response to this, Goff suggests that what is needed is a differentiation between the various types of aspects. The way in which he pictures his cosmopsychist world suggests that "for any object *o* with irreducible entities as proper parts x_1, x_2, x_n..., x_1, x_2, x_n are aspects of *o*." (Goff, 2017: p239). These aspects which are considered proper parts of the whole can be referred to as "vertical aspects", yet these aspects may have aspects of their own which take away from their inherent richness, which can be referred to as "horizontal aspects." (Goff, 2017: p 239).

In order to fully understand this, let us consider the following. One could think of a brain as being a vertical aspect of the cosmos in such a way that if one were to take away from some of the richness of said brain and perceive it purely in computational terms, then one would be perceiving the horizontal aspect of said vertical aspect (which is the brain) (Goff, 2017: p239). Simply put, the cosmos and its various parts are "particulars" however it is possible that there could be a similar distinction between aspects which are considered properties.

With regards to the Subject-Subsumption scenarios we've examined, we initially pictured subjects/experiences as being vertical aspects of other subjects/experiences. Nevertheless, it is possible to assume that subjects/experiences could be horizontal aspects of other subjects or experiences, in such a way that the former subjects/experiences are relatively rich, whilst the latter takes away from this richness (Goff, 2017: p240). Goff argues here that this concept appears difficult to comprehend, yet there appears to be no reason to think that it is unintelligible. Similarly as he describes, it appears difficult for one to comprehend the idea of a 4dimensional object, yet there appears to be no argument against the coherence of the idea

[39] Refer to Goff (2006) and Cutter (2016) for more on the revelation argument.

that there could be 4 - dimensional objects. If this is all coherent, then the constitutive cosmopsychist would need to view o-subjects as being horizontal aspects of brains, as brain states would be classed as the vertical aspects of the cosmos. [40] This solves the worry brought about by the revelation argument, as we have an explanation for why one's experiential states don't appear as having a large amount of micro-experiential properties. [41] The basic conscious states of one's brain does have experiential states which include a large amount of micro-experiential properties, but one's o-conscious states appear to be horizontal aspects of these initial basic conscious states, which implies that they take away from some of the richness of these basic states of one's brain.

As a result, the connection between one's consciousness and one's brain's consciousness is similar to the connection between "software and hardware." (Goff, 2017: p241). In the same way that one could know what the computational properties of a given system are without knowing what the physical properties are, (as the computational properties take away from the precise nature of the physical properties) one could gain "revelatory access" to the nature of one's consciousness without gaining access to the nature of one's brain's consciousness. [42]

There is of course another concern when it comes to the version of constitutive cosmopsychism which Goff has presented. This worry concerns the notion of sharing thoughts with the cosmos. If one's pain is considered a horizontal aspect of a vertical aspect of the cosmos, then it would appear as if one's pain is an aspect of the cosmos, which further implies that the cosmos would feel one's pain (Goff, 2017). [43] If this is true then that would suggest that every possible experience of every possible entity would be felt by the cosmos. According to Miri Albahari this presents with a serious problem for the constitutive cosmopsychist. She provides the following example to elaborate on this:

> Consider Fiona's intense and pervasive fear that she will be annihilated upon death, a fear whose first-personal character is partly owed to its mind-dominating nature. Goff's cosmic subject must directly experience not only Fiona's intense fear of dying but also Fred's overwhelming excitement at his impending reincarnation. Yet qualifying just a fraction of the cosmic mind, it's hard to envisage how each emotion could, from the personal cosmic perspective, retain their defining first-personal characters *as* intense and dominating, and hence as those particular emotions. It is also difficult to conceive of how the cosmic subject could first-personally harbour what would, to its singular conscious perspective, be the mass of everyone's contradicting beliefs and identities, e.g. "there is only one life", "there is more than one life", "I am Fiona", "I am Fred". These epistemic considerations make Goff's subject-grounding scenario not only unimaginable, but I suggest, incoherent. [44]

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[40] Goff (2017: p240) poses a question at this point asking whether or not the horizontal aspects of brain states do any causal work? Goff states that there appears to be no reason to deny this, as there is no overdetermination that occurs. The reason being is that one's conscious states are nothing over and above one's brain states, and in the case of cosmopsychism, one's brain states are nothing over and above the states of the cosmos.

[41] For more on how this response solves the structural mismatch problem, see Goff (2017: 241).

[42] Goff notes that his use of the notion of horizontal aspects is similar to the notion of a compositional property by Pereboom (2011: ch.8), and that the terminology which he uses is attributed to Hedda Hassel Morch.

[43] See Goff (2017: p231) for more on why this is a particular problem for the constitutive cosmopsychist.

[44] Albahari (2019).

Goff's response to this is to note firstly, that Albahari's argument is based on the assumption of phenomenal intentionality which states that "intentionality is grounded in consciousness." [45] (Goff, 2017: p242). This particular worry could then be avoided by simply denying this assumption, however Goff chooses not to take this route as he appears to support this notion. Instead Goff argues when focussing on the concept of 'mind dominating nature' one could interpret the meaning in two different ways. The first way to interpret this is to regard it as something which is "irreducibly phenomenological" (which means it possesses its own unique character) (Goff, 2017: p242). What this entails is that thoughts are grounded within the cosmos therein suggesting that they are primitives and therefore cannot be further reduced.

The second manner is to acknowledge the fact that Fiona has fear and nothing else apart from fear within her conscious mind according to Goff. In terms of the second understanding, he argues that the 'mind-dominating nature' is not regarded as a conscious state which must be shared with the universe. Instead this state of fear is brought about by the fact that there is no other equally overpowering conscious state within Fiona's mind. Additionally, Goff suggests that the fact that this is the only overpowering experience Fiona is feeling, does not exclude her from being 'subsumed in a more expansive conscious mind' (along with more overpowering experiences), just as one having an index finger weighing 2 grams does not exclude it from being a part of a larger body weighing 50kilograms. With regards to the cosmos having states of "conscious cognition" with content which appears to be contradictory, Goff argues that this is not a serious problem as Cosmopsychism does not adopt the notion of Pantheism (Goff, 2017: p243). He argues that there is no need for us to think of the cosmos as a 'supremely intelligent rational agent', as those characteristics are usually only assigned to 'highly evolved conscious creatures'. In addition, he argues that one need not view the universe as being divinely intelligent and rational as these are characteristics associated with "highly evolved beings", and as such do not apply to the universe (Goff, 2017: p243). Instead Goff notes that it is more likely that the consciousness of the universe is a mess, and that regardless of the fact that it appears difficult for us to picture such a singular mental entity possessing all these contents which are chaotic and conflicting, there appears to be no argument suggesting that it is impossible.

(5.5) SHANI AND GOFF VS THE DE-COMBINATION PROBLEM

Now that we are fully equipped with all the relevant background information, it is time to head to battle. In this section we have Shani versus Goff in the battle against the de-combination problem. By comparing these two theories, the hope is that we will be able to determine which rendition of Cosmopsychism is the better opponent in terms of solving the de-combination problem, in addition to figuring out which theory is better equipped to answer the ontological questions we have regarding consciousness. It should be noted that our opponents do not directly respond to Miller's argument within their respective theories. However, what we shall investigate is how they might potentially respond to this problem by utilizing the information we have gathered within the previous pages.

[45] Kriegel (2013) offers a collection of essays on this topic.

We begin this section by examining a brief overview of both theories before moving onto a more distilled view of how our opponents attend to the de-combination problem provided to us by Miller (as discussed in section 5.2).
To begin, let us recap some of the details pertaining to the de-combination problem before attending to our competitors and their views. If we recall the arguments put forth by Miller (2018) within the de-combination problem, the combination problem and the de-combination problem both examine the nature of experiencing subjects in terms of their features, specifically focussing on "unity" and "boundedness". The definitions which Miller provided us with to clarify the specific conditions needed for unity and boundedness to occur simultaneously are:

> **Phenomenal Unity**: a set of experiences $E_{1 \ldots} E_n$ is phenomenally unified at time T_1 iff they have a conjoint phenomenology at T_1, i.e. there is something which it is like to have them 'together' at T_1.
>
> **Phenomenal Boundedness**: a set of experiences $E_{1 \ldots} E_n$ is phenomenally bound at time T_1 iff (i) they are phenomenally unified and (ii) not phenomenally unified with any other experience E_x beyond that set at T_1 (Miller, 2018: p6).

When we combine the above definitions we are left with what Miller terms the 'Unity/Boundedness Inconsistency Thesis' which he defines as follows:

> **Unity/Boundedness Inconsistency Thesis (UBIT):** (i) phenomenal unity cannot extend beyond a bound phenomenal field, and (ii) phenomenal boundedness cannot occur within a unified phenomenal field [47] (Miller, 2018: p7).

What the above addresses, is the concern of 'absolute breaches' as raised by William James. Breaches such as these arise from unity and boundedness which evidently create minds that are private or windowless, and which must hold true if the concept of a personal mind is to have any meaning (Miller, 2018: p7). Simply put, the above structural features are required if one is to obtain 'subjecthood' (Miller, 2018: p7). Miller expresses this concept in the following manner:

> **Subject Essence Thesis (SET):** Subjects are essentially phenomenally unified and bound.

According to Miller, this suggests that the problem consists of trying to bridge the gap between the absolute breaches in nature, (between phenomenal unity and boundedness). If we keep the above in mind, then one could view the de-combination problem as being the problem of having to explain how a subject with an "essentially bound consciousness" could come from a "cosmos-subject with an essentially unified consciousness?" (Miller, 2018: p8).

From this we can ascertain that according to James' view, the only breaches which could possibly take place within a subject's conscious sphere are: (i) temporal or (ii) qualitative. The absolute breaches which result from phenomenal boundedness, cannot take place in a single subject's consciousness (Miller, 2018: p8). Miller argues here that what this implies is that James supports the Phenomenal Unity/Boundedness Inconsistency Thesis (UBIT) along with the Subject Essence Thesis (SET). In utilizing both, Miller leads us to the de-combination argument against Cosmopsychism which is as follows:

1) **Cosmopsychism:** The cosmos is a single subject-whole and all macro-subjects are subject-proper parts of the single cosmos-subject.
2) **Unity/Boundedness Inconsistency Thesis (UBIT):** (i) phenomenal unity cannot extend beyond a bound phenomenal field, and (ii) phenomenal boundedness cannot occur within a unified phenomenal field.
3) **Subject Essence Thesis (SET):** Subjects are essentially phenomenally unified and bound.
4) The cosmos is essentially phenomenally unified and bound, and each of its macro-subject-proper parts is essentially unified and bound (from 1 and 3).
5) If the cosmos has phenomenal boundaries 'within' its phenomenally unified field, then it is not a subject, and, if phenomenal unity extends beyond the boundary of the subject-proper parts, then they are not subjects (from 2 and 3).
6) Hence, the cosmos is not a subject and its proper parts are not subjects (from 4 and 5)
7) Hence, cosmopsychism is false (from 1 and 6) (Miller, 2018: p9).

What becomes evident at this point is that cosmopsychists are faced with the problem of explaining the subject-subject proper parthood relation which requires them to account for the key components of unity and boundedness of conscious subjects.

(5.6) OUR FIRST OPPONENT: ITAY SHANI'S RESPONSE TO DE-COMBO.

We begin with our first opponent (Shani), and his response against the decombination argument set out above. The battle which lies ahead of our opponent is the task of having to explain how macro-level subjects endowed with their own perspectives (which are comprised of the key elements of unity and boundedness) are connected to a cosmos-subject which has its own perspective (which is also comprised of unity and boundedness). Shani begins by rejecting the second premise of Millers argument which is the Unity/Boundedness Inconsistency Thesis (UBIT). He then formulates his theory in such a way that its structure is relative to *specific subjects* whilst distinguishing between the concepts of an *absolute* and a *relative's* unity and boundedness. This can be seen in his main argument which appears as follows: **AP** is a partial ground for **RP**. From what we already know, **AP** is meant to refer to the absolute's perspective and **RP** is meant to refer to the relative's perspective, both of which are comprised of the key components of unity and boundedness. Due to the fact that the **RP**'s nature is not fully explained in terms of this dependency relation, suggests that only half of **RP** is grounded in **AP**, and that the other half of its nature is what affirms its independence.

With what we've previously examined, we know that each perspective of every possible relative subject has a dual nature which is comprised of a *specific* character and a *generic* character. The *specific* character in Shani's view is meant to be thought of as a *unique individual profile* which does not come from another perspective nor a combination of perspectives, and the *generic* character is meant to be thought of as a basic template which comes from the subjective perspective nature of the absolute (Shani, 2015: p423).

In terms of the dual nature of any given perspective, Shani states that one half (which is represented as the *specific* character) is regarded as an independent entity, which implies that it neither grounds other perspectives, nor is it grounded by any other perspective, and that the other half of the same perspective (which is represented as the *generic* character), is grounded in the fact that the absolute is a subject which possesses its own first-person perspective.

It is due to this very notion (that perspectives are comprised of a specific character) that Shani argues that no perspective can be a part of another perspective, and that **AP** plays a crucial role in the explanation of **RP**. In section 5.3 we saw that the specific character of a perspective is what provides it with its differentiated form, which is what separates it from other perspectives. According to Shani, every subjective perspective is composed of a *unique outlook* which is what gives it its individual way of relating to things from a specific standpoint. This particular fact (that each perspective is different as a result of its specific characteristic) is what he relies on in his argument to show that perspectives cannot combine. If we recall the illustration Shani provided us with in the form of Figure 1, then we would remember that he utilizes this diagram to make his point clearer.

To summarize: he argues at this point that perspective **P** could be thought of as a 90˚ angle whose point of origin is its vertex and whose form is limited by the rays which emanate from that vertex. If this perspective **P** is to have any proper parts, then it would have to correlate with a division of the original angle which is what we see represented by the ray in the middle of this angle. What Shani attempts to show us with this illustration, is that perspective **P** (which is the original 90˚ angle) is free from any limitations with regards to its unique outlook as it does not have any components. However, once we include the concept of components (which is represented by the middle ray **Q** in Figure 1), then we simultaneously include a limitation as **Q** is comprised of its own unique outlook which now needs to be factored into the original angle. Due to this inclusion, we appear to be faced with an exclusion of a perspective represented by **P-Q** in the diagram, which leaves us with a contradiction as we now have an inclusion of a perspective **Q** as well as an exclusion of a perspective **P-Q** (Shani, 2015: p425).

What this aims to show is that subjective perspectives (outlooks) are what Shani refers to as *gestalts* which are structural compounds that cannot be explained in further detail by referring to the combination of their components. The reason for this is then that when it comes to working with perspectives the existence of parts excludes the existence of the whole (Shani, 2015: p425). With what we've already examined, this becomes apparent as the inclusion of components introduces a limitation which wasn't there before, further resulting in an exclusion of the original perspective. If the above holds true, then what is implied is that perspectives by nature prevent the existence of compositional relations between perspectives (Shani, 2015: p425). This however does not suggest that all relatives are dependent on the perspectival nature of the absolute for their existence. As Shani argues, this is where the notion of *generic character* could offer a solution.

The definition previously provided for this concept stated that a generic character was a set of common features assigned to all perspectives, without which there would be no perspectives. What this implies is that all relatives receive their generic character (of their individual perspectives) from the absolute, as the absolute possesses its own perspective and is regarded as the place of origin of these individual selves (Shani, 2015: p425). The two basic features of

sentience and *core-subjectivity* is what Shani provides us with in an attempt to explain how one could obtain such generic characteristics from the subjective nature of the absolute. He argues that the reason *sentience* is regarded as a *generic characteristic* is due to the fact that each perspective has its own way of experiencing things which suggests that it must have this particular feature. Additionally he notes that without the absolute's innate ability to experience things, there would be no individual experiences for the relatives to have and therefore there would be no individual perspectives. In terms of the second basic feature of coresubjectivity, Shani argues that this could be regarded as the *point of origin* that a perspective has which is what provides it with its unique outlook. This point of origin also referred to as ipseity/I-ness is considered as the *sense of self* which the relative has or in other words represents the 'who' that receives certain experiences (Shani, 2015: p426).

Why this becomes relevant, is that when we combine this with
Cosmopsychism, the sense of self/ I-ness which lies at the core of a relative, is actually the absolute's own core-selfhood. If we recall in the beginning of section 5.3, Shani stated that the absolute's cosmic consciousness is a medium of subjective receptivity. As such, when a relative is created within the absolute then this receptivity is transmitted to the relative (in the form of a generic characteristic) and is finished off with a subjective realm of its own (which is what allows it to experience things as an individual entity). However each relative has a mind of its own (which is the specific characteristic that it possesses) which is a spatiotemporally enclosed web of organized activity along with an I-ness that gives it its unique outlook. As a result of this, the I-ness becomes so overwhelmed and captivated by what its experiencing that it unknowingly creates a veil between itself and its connection to the cosmic consciousness. To put this simply, the subjective receptivity which lies at the base of the relative is forced to function as a restricted I-ness which acts as the 'who' that receives all that it experiences. Shani states that what this implies is that all relatives are imbued with an *individual sense of selfhood* regardless of the fact that all these *core-selves* are grounded in one gigantic *universal selfhood*. What this is meant to show us is that the basic features of *sentience* and *core-subjectivity* in conjunction with Cosmopsychism provides an argument as to how perspectives are able to obtain their generic character from the subjective nature of the absolute, whilst retaining a specific character which is neither obtained from another perspective nor a combination of perspectives. Simply put, the above elaborates on how Shani's theory of: **AP** is a partial ground for **RP** can occur.

From what we've just examined, we are able to see how our opponent is able to bypass the problem of de-combination. Shani differentiates between the absolute and the relative's perspectives, whilst arguing that the absolute's perspective is merely a partial ground for the relative's perspective. [46] Shani's approach to the problem at hand can be seen as a rejection of Miller's second premise which is the Unity/Boundedness Inconsistency Thesis. In rejecting this premise, Shani is able to avoid the *reducio* of the de-combination problem as he's differentiated between the absolute's perspective and that of the relative's perspective which manages to keep the key components of perspectives which are unity and boundedness from clashing.

[46] Shani's approach differs to that of Miller's, however the outcome remains the same. Refer to Miller (2018: p11) for his approach to rejecting the Unity/Boundedness Inconsistency Thesis.

Additionally, although Shani does not explicitly state this, it can be inferred from his theory that within the one half of the perspective's nature (which falls under generic characteristics), the key component of unity can be found, along with sentience and core-subjectivity.

As such, when a relative is created within the absolute, these basic features are transferred to the relative (in the form of a generic characteristic) along with its subjective realm. This provides the relative with its own unity, sentience and core-subjectivity which ultimately gives rise to its specific characteristics (via its own internal causal organization) which are its boundedness along with the I-ness required for it to be regarded as an individual entity. This allows Shani to maintain that the unity and boundedness of the absolute and relative do not clash, as the boundedness of the relative has no impact on the unity of the absolute due to it being regarded as a specific characteristic that is not derived from the absolute. Additionally, the absolute's unity does not appear to extend beyond the boundary of the relative, as this aspect was transferred to the relative as a generic characteristic from the absolute itself. As a result, Shani manages to provide an argument whereby the absolute's perspective is only a partial ground for the relative's perspective, which allows him to retain the notion that there are no compositional relations between perspectives, thus bypassing the problem of de-combination. With this in mind, we now move onto examining our second competitor's response to the de-combination problem.

(5.7) OUR SECOND OPPONENT: PHILIP GOFF'S RESPONSE TO DECOMBO.

Now that we have taken a closer look at Shani's response to the decombination problem, it is time to see how our second opponent faces up to the same challenge. To reiterate, the challenge which our opponent must face is the task of having to explain how macro-level subjects endowed with their own perspectives could be grounded in a cosmos-subject which is endowed with its own perspective.

Goff begins by accepting the primary premises 1-3, followed by the acceptance of the inferences to 4 and 5. From this point onwards, Goff denies the inference to 6 (from 4 and 5) as this inference only goes through given a background presupposition of a grounding by analysis relation. By denying this relation, Goff denies the existence of phenomenal boundaries within the cosmos' phenomenally unified field, as well as the notion that phenomenal unity extends beyond the boundary of the subject-proper parts. This then allows him to deny that neither the cosmos nor the subject-proper parts can be considered subjects, and thereby reject the conclusion that the theory of Cosmopsychism if false. To see how this is done, let us look at his first line of attack. Goff starts off by arguing that subjects by their very nature are irreducible entities, which renders the grounding relation of analysis within this argument obsolete. If we recall in section 5.4, Goff argues that when one accepts the assumptions of Phenomenal Transparency and Anti-Physicalism then one is provided with strong grounds for accepting the notion that subjects are irreducible. The definition which he provides for this appears as follows:

> *General Form of a Deflationary Analysis of Subjecthood* – For it to be the case that there is a conscious subject X is for it to be the case that there are Y's that are F, where

> X need not be one of the Y's (or for it to be the case that there is a Y that is F, where X need not be identical with Y) (Goff, 2017: p210).

From this it is clear that Subject Irreducibility should be understood as the thesis that there are no deflationary analyses of subjecthood, and that a conscious subject S cannot be analysed into facts not involving S (Goff, 2017: p209). When it comes to the notion of subjecthood, it appears that one is not able to provide a deflationary analysis which further suggests that an alternative means for grounding subjects may be required. As previously examined in section 5.4, Goff provides the following argument to argue this point.

> *The argument for Subject Irreducibility*
>
> *Premise 1*- If the analysis of subjecthood is a priori, then it is deflationary only if analytic functionalism is true.
>
> *Premise 2*- Analytic Functionalism is false.
>
> *Premise 3*- The analysis of subjecthood is a priori (implied by Phenomenal Transparency).
>
> *Conclusion*- The analysis of subjecthood is not deflationary (i.e., Subject Irreducibility) (Goff, 2017: p216).

The above is regarded as a form of constitutive grounding which can be understood as a type of grounding by analysis. From what we've previously examined and briefly re-called here, it appears as though this form of grounding is unsuitable for matters concerning conscious subjects. As such Goff's move is to provide us with an alternative manner in which to ground subjects by utilizing what he terms *grounding by subsumption*. This is defined as:

> Entity X grounds by subsumption entity Y iff (i) X grounds Y, and (ii) X is a unity of which Y is an aspect (Goff, 2017: p221).

If we recall from section 5.4, Goff states that the terms *unity* and *aspect* are meant to be understood as primitives, as neither term requires further analysis. He then leads us into some examples to elaborate on the concept of grounding by subsumption. In order to briefly refresh our memories, let us re-examine the example of Hue, Saturation and Lightness in colour which Goff provides. If one were to take a particular shade of colour for instance orange 7 (as Goff describes it), then one would notice that this colour involves a red and a yellow hue, along with a degree of saturation and a degree of lightness to it. One could then view this orange 7 colour as a mixed property which is comprised of red and yellow hues as well as specific degrees of saturation and lightness. To put this simply, one could view this colour as a unified property whereby the above elements are considered to be aspects. According to Goff, if one is able to wrap one's head around this example, then one should be able to grasp the notion of how hue, saturation and lightness could be grounded by subsumption in instances of colour (Goff, 2017: p221).

What this is meant to show us is that an aspect can be structured and that all that would be required for this to be a possibility is for there to be a number of components which could be examined separately from the whole, whilst remaining dependent on the whole for its existence.

This example is utilized to show us that by incorporating a grounding by subsumption relation, one obtains an *ontological free lunch*, as the nature of an aspect is *nothing over and above* the whole of which it is a component. If we apply this notion to the above example, then the yellow hue would be an aspect of the whole which is orange 7, and as such the yellow hue would be nothing over and above orange 7, suggesting there's an ontological free lunch. In addition, by acquiring this ontological free lunch there is no longer the requirement of having to provide an analysis of grounded entities in further fundamental terms. For instance is we refer to the above, the yellow hue cannot be analysed into more fundamental terms as it is considered to be an aspect of orange 7 as a whole. This implies that the yellow hue is nothing over and above orange 7, and that aspects such as these can be completely subsumed in a larger entity. By incorporating such a grounding relation, one no longer has to ground subjects into further fundamental facts, as this alternative form provides one with the means to ground subjects in a manner that is compatible with the fact that subjects are irreducible. In order to see how a subject could be subsumed within another subject, Goff provides the following example to elaborate.

> Subject-Subsumption Scenario – {subject BIG feeling pain, anxiety, and experiencing red} grounds by subsumption {subject LITTLE $_1$ feeling pain}, {LITTLE $_2$ feeling anxious}, and {subject LITTLE $_3$ experiencing red} (Goff, 2017: p228).

From what we've already examined, Goff argues that each LITTLE subject exists and has the experience it has as a result of the fact that subject BIG exists and that it has all its own experiences. In Goff's view, the nature of this BIG subject is exhausted by consciousness implying that it is a *pure* subject. The relevance of this becomes evident now as our opponent is faced with the task of tackling the de-combination problem. Goff refers to the original combination problem to make his point, as he argues that Coleman (2013) makes an incorrect assumption within this initial argument. He argues that Coleman incorrectly assumes that because subject X constitutively grounds subject Y, X must be phenomenally present within Y's experience. However in the case of Subject-Subsumption it becomes clear that such an assumption cannot be made, as LITTLE $_1$ is grounded within the BIG subject (as it is considered to be an aspect of the BIG subject), and as such does not imply that the BIG subject is phenomenally present within LITTLE $_1$. When we apply this to the de-combination problem as set out by Miller, Goff appears to reject the inference that leads to the 6 th premise as he denies the underlying assumption of grounding by analysis, thus rejecting the notion that subjects can be reduced into more fundamental facts. By making this move, Goff would then reject the 6 th and 7 th inference which appear as follows:

6) Hence, the cosmos is not a subject and its proper parts are not subjects (from 4 and 5)

7) Hence, cosmopsychism is false (from 1 and 6) (Miller, 2018: p9).

If one were to accept the assumption (of grounding by analysis), then what would follow would be 6 and 7 above, which we see within Miller's argument. With what we already know, Goff rejects this type of grounding relation (as he argues that subjects are irreducible entities) and hence the background assumption. Goff's line of attack is to incorporate a grounding by subsumption relation wherein the macro-subjects are considered aspects of the cosmos as a whole, thereby allowing both the macro-subjects and the cosmos to be phenomenally unified

and bound without there being any breaches. This then allows him to avoid the 6 th and 7 th inferences (from the 4 th and 5 th premises), as his incorporation of an alternative grounding relation ensures that macro-subjects can be completely grounded within the cosmos, while ensuring that both retain their status as subjects. As such, Goff has managed to retain the primary premises of Miller's argument whilst providing an argument of his own which allows one to constitutively ground macro-subjects in the cosmos-subject, thus rendering the theory of Cosmopsychism coherent and providing a solid argument against the decombination.

Now that we have addressed the aspect of how our opponents fair against the de-combination problem, we can move onto briefly examining the second commitment of the Cosmopsychist theory which was brought forward by Kastrup (2018) in section 5.1.

(5.8) WHICH FUNDAMENTAL BASIS BEST SUITS COSMOPSYCHISM?

With regards to the second core commitment of the Cosmopsychist theory, we examine which fundamental basis is better equipped to answer the ontological questions we have regarding consciousness. According to Kastrup (2018), this commitment divides between whether (i) the only fundamental properties of the cosmos are properties of consciousness, from which non-conscious properties are derived or whether (ii) the cosmos has both the fundamental properties of consciousness and then some other fundamental non-conscious properties such as structural properties (Kastrup, 2018: p134).

The first view suggests that the nature of the basic fundamental entity which is the cosmos is inherently cosmic phenomenal consciousness. What this implies is that fundamentally, only the cosmic consciousness exists as there is nothing outside or independent of it. To put this more simply, the cosmos does not contain phenomenality, rather it is completely constituted by it (Kastrup, 2018: p135).

The second view maintains that "a phenomenal ultimate has both phenomenal and non-phenomenal properties" (Kastrup, 2018: p134). Due to the fact that the cosmos is regarded as a whole and the only phenomenal ultimate, this implies that the intrinsic part of the cosmos is phenomenal while its extrinsic parts which encapsulate the cosmos phenomenal field are not phenomenal. The first view appears to be in alignment with Shani's theory as he argues that everything whether it be conscious or not is derived from the absolute (cosmic consciousness). This can be seen in his use of the aquatic metaphors within his theory, as well as in his third and fourth postulates which state that the absolute is comprised of a dual nature and that it is analogous to a "vast dynamically fluctuating ocean" (Shani, 2015: p411). According to these postulates, the absolute which is compared to the ocean is comprised of a dual nature in that it possesses a concealed and revealed realm. As we've already seen, the concealed realm is an intrinsic realm of creative activity which is in a state of continuous change, and the revealed realm is the exterior representation of this inner activity. As there is nothing over and above the absolute, Shani argues that the revealed realm ought to be thought of as a visible entity to observers which is *situated* and *created* within the absolute.

However, Shani is explicit that the distinction between the two realms does not amount to ontological dualism as his theory does not imply that there are two distinct realms which happen to be sewn together. Rather he argues that there is only one ocean which is an

intrinsically sentient medium/sea of consciousness and that this ocean is a powerful entity which holds continuous activity that results in the creation of a vast amount of "quasiindependent patterns and arrangements that co-evolve in mutual interaction" (Shani, 2015: p412). Simply put, Shani argues that there is only cosmic consciousness and that everything which exists is derived from this consciousness whether it be conscious or not. He states in his sixth and final postulates (as well as in the elaborated sections of his theory), that individual entities of a physical and mental kind are "dynamic creations within the absolute" and that whether or not they are conscious subjects or pure objects depends on the sort of causal organization that takes place within them (Shani, 2015: p414/415). In adopting this view, Shani manages to avoid a *bottom-up* Panpsychist element as there appears to be no problem of composition due to the fact that everything is created within the cosmic consciousness. At this point it is unclear as to what the repercussions might be in adopting such a view and perhaps this enquiry is better left for another paper. For now, let us turn our attention to our second opponent in order to see which fundamental basis he implements.

Goff appears to adopt a different fundamental basis compared to Shani, as he implements a version of second view, though differs from it in an important way explained below. This can be seen in his argument against the anti-subject subsumption conceivability argument in section 5.4, where he states that to avoid this particular problem, one would need to include some intrinsic nature beyond consciousness into the grounding base (Goff, 2017: p230).

According to Goff, one would be introducing more intrinsic nature to the cosmos over and above what it already possesses in virtue of consciousness. By adding to this intrinsic nature one would then change the cosmos' status from being a *pure subject* to that of an *impure subject*. This however would not be a view (as suggested by one way of understanding Kastrup above), whereby there are two distinct kinds of fundamental properties, experiential and non-experiential (or phenomenal/conscious and nonphenomenal/conscious) properties, rather the experiential and nonexperiential would be two aspects of an underlying fundamental property that Goff calls consciousness+. Consciousness+ is a more fundamental underlying property that then embodies both experiential aspects as well as nonexperiential aspects into the unity of the cosmos.

Goff acknowledges that this brings with it a cost, in that what generally attracts people to Panpsychism is the fact that fundamental reality appears to be transparent, as the only fundamental intrinsic properties are experiential. Yet as consciousness+ includes intrinsic non-experiential aspects to which we then lack access, Goff argues that we lack a broader understanding of the *deep nature of matter*, which is what gives rise to an element of noumenalism (though as consciousness+ also has experiential aspects, this noumenalism is only partial). What becomes evident here is that this particular theory (which has adopted the view that the ultimate has conscious as well as non-conscious aspects) incorporates an element of *bottom-up* Panpsychism to it. Whether this type of fundamental basis is strong enough to handle further enquiry and development regarding the ontological questions pertaining to consciousness remains to be seen. In what follows we will be comparing Shani's approach to that of Goff's in an attempt to discern which theory is better at solving the de-combination problem, along with which fundamental basis provides a stronger framework from which to develop further answers.

(5.9) THE BATTLE OF THE COSMOS: SHANI *vs.* GOFF

We reach the final stretch where it is time to compare which response to the de-combination problem is stronger and which fundamental basis provides the better framework from which to develop answers to the mysteries concerning the nature of consciousness. Both begin by drawing a distinction between the cosmos and the macro-level subject's perspectives. Shani does this by referring to the cosmos as the absolute and by referring to the macrolevel subject as a relative, and Goff makes a similar move by referring to the cosmos as a unity and by referring to macro-level subjects as aspects before moving onto their explanations of how these perspectives are separate. From this point forward our opponents move in opposite directions by taking different approaches to how they separate the above perspectives, along with how they tackle the de-combination problem. Shani appears to rely on partial grounding and Goff relies on grounding by subsumption. Both theories display advantages as well as disadvantages. In what follows we will be addressing each of these in turn, in an attempt to determine which of our opponents along with their theories emerge as our victor.

We begin with the fundamental basis which Shani incorporates into his theory. This states that the cosmos is entirely comprised of consciousness and that everything that exists is derived from this cosmic consciousness. The question we are then led to ask as a result is: how do macro-level subjects and all other subjects obtain their consciousness from this cosmic consciousness? Shani relies on the notion of partial grounding to answer this question as he states that the absolute's perspective is only a partial ground for the relative's perspective. He refers to the dual nature of perspectives at this point to clarify how this could be the case.

If we recall Shani's previous argument then we will remember that half of a given perspectives nature is comprised of a generic character which includes the features of sentience and core-subjectivity along with unity, and that these features are transferred from the absolute to that of the relative. The other half of the perspective's nature is comprised of a specific character of which boundedness is a component. This is where it obtains its individual profile and its own unique outlook, which is not derived from the absolute. Shani refers to the latter half of the perspectives nature in his argument for why there cannot be compositional relations between perspectives. The reason for this is due to the fact that when working with perspectives, the introduction of parts appears to exclude the existence of the whole. However, as Shani has argued that only half of the perspective is grounded in the absolute, this eliminates the clash between the perspectives as the half which contains the unique outlook (along with boundedness) has no connection to the absolute whatsoever. What this implies is that there are no compositional relations between perspectives and that there is no clash between the absolute's unique outlook and that of the relative's. By utilizing this fundamental basis along with the notion of partial grounding, Shani appears to have found a way to solve the problem of de-combination. The above achievement can be viewed as an advantage to accepting this type of theory.

On the other hand, by accepting this theory we appear to be faced with a disadvantage which happens to involve the very aspect which aids Shani in the above achievement. As useful as it is to have this separated specific character within a perspective's nature, it seems to come with a cost. The very fact that this character has no connection to the absolute is what allows Shani

to avoid the problem of de-combination. However, this lack of a connection comes across as an element of mystery within Shani's theory as it is not grounded in the absolute, nor is it grounded by other perspectives nor a combination of perspectives. The question that arises as a result is: what is this specific character grounded in? No further information was provided by Shani with regards to this. All that is known about this specific character is that it arises from the internal causal organization that takes place after the relative has separated from the absolute and obtained its generic character.

Shani does not elaborate on what precisely this causal organization entails nor does he offer further explanation as to how this half of the perspective arises and how it is grounded. As such, we appear to be left with unanswered questions in that only half of the macro-level subject's perspective holds a connection to the absolute, while the other is left hanging in limbo, suggesting that all we are really left with is half of a theory.

In contrast to Shani, Goff takes an alternative approach when it comes to his theory. The fundamental basis which he incorporates states that the cosmos is comprised of a property called consciousness+ and that this property includes both experiential as well as non-experiential aspects. Once again this leads us to the question of: how do we ground subjects which have their own perspectives in a cosmos subject which possesses its own perspective? Goff utilizes what he terms *subject-subsumption* in order to show us how this could be possible. Recall the example of the BIG subject which experiences pain, anxiety and the colour red, and how this BIG subject grounds by subsumption subject LITTLE $_1$ which experiences pain, as well as subject LITTLE $_2$ which experiences anxiety and subject LITTLE $_3$ which experiences red. What this is trying to show us is that each LITTLE subject exists with the experience that it has as a result of the fact that the BIG subject exists along with all of its own experiences, and that it is possible for these LITTLE subjects to be subsumed within the BIG subject. The LITTLE subjects are merely aspects of the larger entity which is the BIG subject and are therefore considered to be nothing over and above this BIG subject.

The advantage in adopting this type of theory is that one is provided with what Goff terms an *ontological free lunch*, which suggests that the nature of an aspect is nothing over and above that of the whole precisely because it forms a part of this larger entity. In addition, by obtaining this ontological free lunch one no longer needs to provide a deflationary analysis of subjects which is in alignment with Goff's earlier assumption that subjects by nature are irreducible. What this means for our opponent is that he is able to completely subsume subjects within the conscious cosmos as aspects. This provides one with the opportunity to constitutively ground subjects as entire entities in their own right as opposed to our previous opponent (Shani) who only partially grounds subjects. Another advantage which follows from this is that by adopting this particular grounding relation Goff rejects the traditional form of grounding by analysis, which allows him to accept the primary premises of Miller's argument whilst rejecting the inferences which follow. In doing so, Goff manages to provide us with a unique solution to the problem of de-combination.

However, this theory does come with its own disadvantage which happens to concern the fundamental basis. With what we've previously examined within Goff's theory, he argues that the fundamental basis of the cosmos is constituted of the property known as consciousness+.

This property is said to contain conscious (experiential) aspects as well as non-conscious (nonexperiential) aspects within it.

The problem that arises at this point, is that there appears to be *a degree of noumenalism about fundamental reality* according to Goff, as there is an element of mystery with regards to the non-conscious aspects. Due to the fact that we lack access to the non-conscious properties of consciousness+, this suggests that we will always lack a broad understanding of the intrinsic nature of reality (Goff, 2017: p230). Goff concedes that this element of the theory is not epistemically ideal, but tries to soften the blow by telling us to keep in mind that physical science is only capable of providing us with the causal structures of reality, which suggests that we are limited in terms of what it is that we can achieve with regards to unravelling the deeper aspects of nature.

With this in mind we can weigh up the advantages of our opponents theories versus their disadvantages. Both opponents fundamental basis appear strong enough to support their theories, and both opponents arguments seem strong enough to aid them in their battle against the de-combination problem. The advantage of Shani's theory comes from his use of the partial grounding relation in the sense that he's found a way to ground subjects in a deflationary manner. In grounding only the generic character of a specific perspective, Shani manages to avoid the clash between the unique outlook of the absolute and that of the relative which ultimately allows him to avoid the problem of de-combination. In terms of Goff's theory the advantages are followed by his use of an alternative form of grounding being the grounding by subsumption. The first of these advantages is the ontological free lunch which he obtains as this allows him to argue that macro-level subjects are nothing over and above the cosmos as a whole. What follows from this is the second advantage which is that Goff no longer needs to provide a deflationary analysis of subjects, which aligns with his assumption that subjects are irreducible. These advantages lead us into the third as subjects are now able to be completely subsumed as entities in their own right within the cosmos. From this it appears as though the advantages of each theory are relatively strong as they provide the key elements required for our opponents to defeat their obstacle. At this point, our opponents then appear to be on an equal standing.

However, as strong as our opponent's theories seem, there appears to be an element within that serves to weaken them both. Within Shani's theory, the use of a specific character allows him to argue that perspectives cannot combine due to this half of the perspective not being grounded in the absolute. As such the worry of a de-combination problem is eliminated, thus providing him with an advantage. Yet, this key component of Shani's happens to be his biggest disadvantage as well, due to the fact that this component has no grounding relation nor do we know how it arises.

What is implied by this is that half of the perspective mysteriously emerges from the inner workings of the generic character. It then seems strange that this half of a perspective that we know nothing about acts as the basis within Shani's theory. This implies that half of the relative's perspective is a mystery due to the fact that it is not grounded in anything, and accompanied by the realization that we know very little about it. We then appear to be left with only half a solution as half of our ontological question regarding consciousness has been left unanswered. The theory thereby seems at best incomplete, at worst, simply *ad hoc*.

With regards to Goff on the other hand, his biggest disadvantage comes from an aspect within his fundamental basis which is the notion of consciousness+. This particular aspect along with the notion of subject subsumption is what provided our opponent with the tools to tackle the argument posed against the anti-subject subsumption conceivability argument. Yet this component possesses an air of mystery to it, due to the fact that we know nothing about half of its intrinsic nature, which is its nonconscious aspects. The element of the unknown appears to be prevalent within both of our opponent's theories. With Shani this mystery element appears in the half of the perspective which is its specific character and with Goff the element of mystery appears within the fundamental basis as consciousness+. Without this key element, Shani would be unable to solve the de-combination problem. In terms of Goff's theory, the loss of his key component would result in him being unable to solve the conceivability argument.

Considering that both theories appear capable of solving the de-combination problem, it seems fair to assume that our competitors are on equal footing. From this alone we are unable to determine which of the two theories is stronger. The only way to determine a winner, is to look at which of their disadvantages is more acceptable. In terms of Shani's theory we are faced with an uncertainty regarding half of the relative's perspective. With regards to Goff's theory, we seem to be faced with an uncertainty pertaining to half of the deep nature of reality. So which portion of uncertainty are we willing to accept? Which level of uncertainty presents with the least amount of damage? With regards to Shani's theory, his level of uncertainty seems to directly impact the relative as half of the relative's perspective is left unrevealed. Additionally, if one were to remove the key element/disadvantage, then it would result in the inability to solve the de-combination problem. Goff's level of uncertainty however does not directly impact the relative or its connection to the absolute, but it does impact the cosmos and what we know about fundamental reality. The disadvantage accompanying Goff's theory however does not appear to impact his ability to solve the de-combination problem, nor would it result in undermining his theory more generally. When formulated in this manner it seems clear that Goff's disadvantage is less damaging than that of Shani's, in that the element of consciousness+ does not directly impact the relative/aspect and its connection, as the half of this property which is comprised of consciousness is what grounds the aspect via subsumption. It is worth noting that Goff's theory allows that (theoretically) if one was able to view things from a "God's Eye Perspective" one would have a full explanation of a relative's conscious states and its connection to the absolute, and that the only reason we have this element of mystery is due to the fact that we are limited in our perspective. (Goff, 2017).

Additionally, it seems easier to accept that there are aspects of the deep nature of the cosmos that we are oblivious to as opposed to being ignorant about our own consciousness. As Goff argued within his theory, we have direct access to our own consciousness which suggests that we ought to know more about it compared to what it is that we know about the universe. Shani's disadvantage directly impacts the relative as half of the relative's perspective is unaccounted for in terms of what grounds it and how it arises. Trying to accept the idea that we don't know what half of our consciousness is comprised of or what it is grounded in seems strange as we have direct access to it and it is more easily studied than the deep nature of the cosmos. If indeed half of this perspective relies on emergence then half of the grounding

relation appears to be weaker than that of Goff's, as his theory allows the entire subject to be constitutively grounded within the cosmos. Against the odds and the severity of his disadvantage, Goff's version of Cosmopsychism has managed to emerge as the stronger opponent.

(6) THE CONCLUSION OF THE BATTLE

From the traditional battle between the theories of Physicalism and Dualism, to the contemporary battle between two versions of Cosmopsychism, we have managed to gain more insight into the ontological mysteries surrounding consciousness. Although we are not where we want to be with regards to a complete theoretical explanation of consciousness, we have made progress in terms of where we are headed. By moving away from the traditional theories of physicalism and dualism we have been able to solve the serious problems which have prevented the traditional theories from moving forward, whilst managing to retain the best of what each theory had to offer. Although these adaptations of Cosmopsychism are faced with problems of their own, they aren't nearly as debilitated as those of past theories. With what we've managed to examine up to this point, it appears clear that it is entirely possible for philosophers who want to adopt some form of Cosmopsychism to generate solutions to the problems which they might face. As with every theory there comes a cost which must be paid for at some point.

Regardless of the fact that both alternative theories examined possess an element of mystery to it, we seem able to accept this complication for the time being, as these theories are still within the development stages. In terms of the battle that has just taken place, Goff's theory appears to provide us with more advantages than disadvantages, in the sense that we have more answers than we do questions. Even though there is a partially mysterious component within his theory with regards to the non-conscious aspect of the consciousness+ property, he has still managed to provide us with a fundamental basis which supports the notion of constitutively grounding conscious subjects within the cosmos via grounding by subsumption. As a result of this, he has also managed to obtain an *ontological free lunch,* thereby securing the elimination of the need to provide a deflationary analysis of grounded subjects into more fundamental facts. With what we've examined thus far, Goff's theory is the only one that has managed to accomplish these feats, which is why this sets his theory apart from the others. Taking all of the good and all of the bad into account, it seems safe to say that out of our two competitors, Goff has emerged as our victor in the battle of the cosmos.

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