

## Categorizing the Complexity of the Origin of Consciousness

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**I propose a four-category Cartesian spectrum that contains most, if not all, the extant theories of the origin of consciousness. This spectrum consists of four broad philosophical descriptions that help us organize the various theories of consciousness along lines of non-divine to divine (aka naturalism to non-naturalism) and along the lines of continuous to discontinuous (aka non-interventionist to interventionist). I give examples of each, ultimately favoring Nagel's view of Discontinuous Divine Influence (aka interventionist non-naturalism).**

Conversations pertaining to the concept of consciousness are common in this second decade after the decade of the brain (1990-2000). Whether this exposure is through biological, psychological, philosophical or sociological mediums, the quest to understand consciousness is clearly on the forefront ... and still, very much, unresolved.

For example, one only needs to observe the recent trends within the media to witness the infiltration of this topic into almost all aspects of society. An impeccable illustration of the overwhelming public interest in the meaning and origin of consciousness comes from the trends in movie themes. Over the past decade, there has been a drastic increase in science fiction movies whose central themes address aspects of the debate on consciousness. Movies such as *Chappie*, *Her*, and even *The Matrix* constantly compel the viewer to ask themselves questions such as: How do we define consciousness? Can technology that we create be given consciousness? If consciousness can be created, what consequences will this have on society?

One of the first tasks in answering these questions is to facilitate the discussion about the source of consciousness itself.

Despite lots of promise and specious claims, neuroimaging (e.g. fMRI) does *not* provide us with a full theory of mind, or consciousness, even if it may give us insights into consciousness.<sup>1</sup> In order to fully accomplish a complete theory of mind, perhaps it would help if we develop a more efficient system by which to organize the various theories of mind and the origin of consciousness.

Woven into this discussion must be the primary question: From where did consciousness first arise? Regarding the origin of consciousness, the academic world is split and has been for a significant period of time. In fact, instead of narrowing in on certain theories, philosophers and scientists continue to create new theories. While most of the theories contain many similar themes, there are clearly some significant deviations that cause the debate to remain unresolved and controversial.

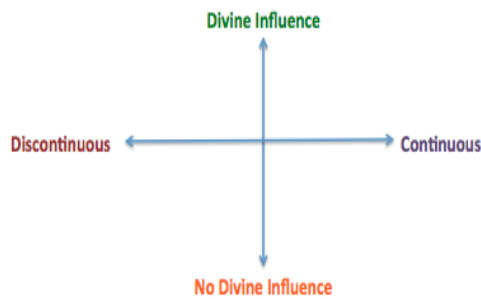
### A Proposal for Consciousness

As a way to sort through these theories, let us propose a four-category spectrum that contains most, if not all, the extant theories of the origin of consciousness. This spectrum consists of

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<sup>1</sup> Bayne, 2011

four broad philosophical descriptions



organized in a four-quadrant arrangement.

This Cartesian system allows flexibility for both specific and broad interpretation of each of these major reference points while still allowing for clarity. This general organization is valuable because it can ultimately allow the conversation on consciousness to occur in a more productive and civil manner. Above the horizontal line lies the area that concedes some sort of divine influence in the creation of consciousness. Consequently, the area under the horizontal line represents those that believe in no divine influence. The vertical line divides another significant point in the consciousness debate: continuous versus discontinuous. To the right-hand side of the vertical line lies the area that exemplifies those who theorize that consciousness arose through a continuous processes over an extended period of time. The left side, then, represents those who claim the creation of consciousness occurred in one abrupt moment in time.

When all of these reference points interact, four broad categories emerge. Therefore, I propose the four main origin of consciousness categories are comprised of:

*Discontinuous without Divine Influence (DwoDI); Discontinuous with Divine Influence (DwDI); Continuous without Divine Influence (CwoDI); Continuous with Divine Influence (CwDI).*

## Divine Influence?

One of the main reference points that plays a significant role in one's view of consciousness is the discussion of possible divine influence. While there are certain limitations on this discussion, due to its philosophical nature, this distinction must be addressed because it represents a significant position of the US population.<sup>2</sup> According to a study performed in 2008, approximately 87% percent of Americans surveyed believed in God.<sup>3</sup> Therefore, any discussion about consciousness needs to be prepared to address this viewpoint. However, it may be best to reframe Divine/Non-Divine into the terms "non-reductionism/reductionism."

## Non-Divine Influence

At the most basic level, reductionism is the "theory that every complex phenomenon, especially in biology or psychology, can be explained by analyzing the simplest, most basic physical mechanisms that are in operation during the phenomenon."<sup>4</sup> When this term is used in the consciousness debate, it represents the view that consciousness arose through only physical means and, therefore, can only be understood by studying the structure of the brain itself. While there is no shortage of variations within the reductionist community, the overarching theme of reductionism falls under the broad category of "No Divine Influence."

Since reductionism does not regard the supernatural realm, or any realm other

<sup>2</sup> Regardless of any *popular* polls indicating support of Divine influence, the methodological naturalism of science cannot deal with supernatural insertions into the natural order.

<sup>3</sup> Anderson and Chaves, 2012

<sup>4</sup> Reductionism, no date

than the physical, it would appear to be incompatible with the belief that there was divine influence in the origin of consciousness. While reductionism lies within the lower half of the four-quadrant spectrum, it has the capacity to contain either a continuous or discontinuous perspective on the origin of consciousness (the two lower quadrants on the spectrum).

Even though there appears to be more support of the reductionist position within the continuous viewpoint, it is important to understand that this is not the only view. To help distinguish between the two lower quadrants I will give examples of philosophers or scientists whose viewpoints seem to fall into either “Continuous without Divine Influence” or Discontinuous without Divine Influence.”<sup>5</sup>

### **Continuous no Divine Influence**

One of the prominent promoters of consciousness in the category of CwoDI is Dan Dennett. Dennett is an American philosopher whose research is focused on consciousness and evolutionary biology. When it comes to the origin of consciousness, Dennett makes the claim that consciousness can be reduced to purely physical processes within the brain.<sup>6</sup> In making this claim, Dennett takes all supernatural elements out of the equation, and therefore, can be classified in the “Non-Divine” scope of the spectrum. In fact, this placement on the spectrum is further supported by Dennett’s involvement within a group of four philosophers called the “Four Horsemen,” a group who actively criticize religion and naturalism.<sup>7</sup>

Dennett makes the assertion that “conscious minds are the result of three successive evolutionary processes, piled on

top of each other, each one successively much more powerful and complicated than its predecessor.”<sup>8</sup> As a result, Dennett’s theory of consciousness procures a location on the spectrum within the “Continuous without Divine Influence” category.

### **Discontinuous no Divine Influence**

When it comes to the quadrant that exemplifies the category of DwoDI, there are no obvious scholarly publications. This position would require an imposition into the natural world that is not divine but naturalistic.

There has been some speculation in academe regarding this position. David Chalmers, the most recent TED speaker on consciousness, makes the claim that the only way humanity will ever be able to understand consciousness completely is by coming up with radical ideas. His idea is that consciousness might be a fundamental building block akin to matter and energy.<sup>9</sup>

This position is radically different from Dennett’s because it claims consciousness has existed alongside matter and energy all along and did not evolve or develop over time. Thus, Chalmers’ idea seems to fit in the discontinuous region. Even though it has not claimed an initiating factor for its production, it would still imply that this foundation had an abrupt beginning and not a continuous one. While the category of DwoDI remains tangential to naturalistic ideas, it may garner support if data are found.

### **Divine Influence**

In contrast to reductionism is non-reductionism, which lies within the range of Divine influence on the spectrum. The premise of non-reductionism is that

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<sup>5</sup> One caveat should be mentioned here: it may be that insertion of the Divine should be thought of as limited to Divine *interference* rather than merely influence. God may still work *via* what appears to be natural (e.g. even reductionist) processes.

<sup>6</sup> Dennett, 2003

<sup>7</sup> Kettell, 2013

<sup>8</sup> Dennett, 1991, p. 1

<sup>9</sup> Chalmers, 2014

consciousness is not something that can be reducible to *nothing but* physical matter and energy or neurons firing within a sack of neurotransmitters; therefore, consciousness does not lie only within an individual brain.

This area comprises different viewpoints, not all requiring divinity; yet, they all share the belief that there is a non-physical ‘something else’ (bordering on mystery) in consciousness. In some pieces of literature, non-reductionists are considered ‘dualists’ to describe the belief that both the physical and metaphysical realms are involved. However, in order to accommodate all views, we can argue that dualism is not the only, or even the most appropriate, way to describe divine agency being involved in forming consciousness.

Divine influence needs to go beyond just a general definition of dualism because both philosophers and theologians refer to divine influence but differ significantly in their interpretation of the divine. On the one hand, there is Bucke who makes the claim that there is not a single monotheistic God in existence. Instead, every person is capable of becoming divine once the highest level of consciousness is reached.<sup>10</sup> Due to the supernatural necessity of some unexplainable and undetectable force (or will or power) behind consciousness, Bucke’s opinion would place him in the divine realm of the spectrum.

On the other hand, there are theologians who claim an all-powerful monotheistic God takes part in divine causation of consciousness. One example is Friedrich Schleiermacher. In opposition to Bucke, he argues divine influence comes from only one source, and that source is the incarnate Christian God. He argues not only that this God initiated all of creation, but that he is actively a part of that creation when he was when Jesus was on earth and is

involved in human consciousness development.<sup>11</sup>

Since both of these men clearly claim that some sort of supernatural realm is involved with consciousness, they would both be in the Divine Influence section of the spectrum--just in different locations on the line. The highest point on the Divine Influence line represents the extreme view that God occupies an active presence in the world; this is where Schleiermacher’s position falls. Consequently, Burke’s idea would fall beneath Schleiermacher’s on the vertical aspect of the spectrum because Burke’s view of the divine is more connected to the physical world (reductionism).

Now that we have made this distinction, we need to look at non-reductionist positions along the continuous or discontinuous axis.

### **Continuous Divine Influence**

Within the divine area of the spectrum lies the distinction between continuous and discontinuous, which mirrors the same distinction that must be made within the non-divine influence region. As explained earlier, each viewpoint can lie anywhere from behind the line to in front of it, depending on how extreme the view is. Overall, the quadrant entitled “Continuous with Divine Influence,” contains more theories than that of “Discontinuous with Divine Influence.”

One origin of consciousness pioneer who falls into this category is Richard Burke. Even though his theory was created over 100 years ago, his explanation of consciousness through a continual process is still influential in the philosophical world today. According to Burke, consciousness arose in parallel to evolution through a step-by-step process that gradually helped the brain store information more efficiently. He claims that the origin of consciousness

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<sup>10</sup> Bucke, 1929

<sup>11</sup> Kunnuthara, 2008

begins with the brain's ability to make an impression from one's senses, also called a *precept*. He then describes how, as the brain evolved over time, it began to grow more ganglia and become more complex so that it could then integrate and organize multiple *precepts*, to form overarching rules of behavior ending in a consciousness that recognizes other minds who can do the same thing. Burke claims that this process of grouping continues and, ultimately, leads to a byproduct of concepts and intuitions therefore composing the *cosmic consciousness*.<sup>12</sup> While there have been several theories put forth to supplement Bucke's interpretation of the origin of consciousness, he offers an example of a theory that *could* lie within the CwDI category (but only if we consider the mysterious some aspect of divinity).

### **Discontinuous Divine Influence**

On the other side of the spectrum, within the non-reductionist and divine influence area, lies the DwDI category. Based on the information given earlier to explain the criteria for both discontinuous development and divine influence, it would be fairly easy to predict that the doctrine of creationism would fall into this category.

Today the term creationism is mainly used to convey a literal interpretation of the opening chapters of Genesis, however the actual definition of creationism is broader. In actuality, there can be a significant difference in the interpretation of creationism depending on whether one takes a liberal progressive or plain sense literalism position.<sup>13</sup> Nonetheless, it appears that most creationists agree on two points. Their first claim would be that the formation of humanity required a supernatural intervention – for most people this is an insertion of a soul, image of God, or 'mind' into the human body by God. Their second

claim would be that human beings were created in their present form relatively recently. Given these two stances, I believe it is appropriate to place creationism within the category DwDI.

While the obvious direction for DwDI is interventionist creationism, I believe that Thomas Nagel, a philosopher at New York University, offers a non-theist perspective that could also be placed within this category. While Nagel has held a non-reductionist view for several decades now, his recent book has received considerable criticism from the scientific community who are typically strong proponents of Neo-Darwinian evolution.<sup>14</sup>

While the book poses several arguments, his viewpoints on consciousness and anti-reductionism are what bring his theory into the origin of consciousness spectrum. When analyzing Nagel based on the first reference point (divine or non-divine), his clearly anti-reductionist stance pulls him away from the non-divine area of the spectrum. While Nagel is definitively an atheist, he offers a viewpoint that requires influence from outside the material world, therefore opening the possibility for some non(super?)-natural influence.

The other viewpoint that brings Nagel into this discussion is his view on the origin of consciousness. Nagel makes the claim that evolutionary explanation of consciousness, as it is currently proposed, is not good enough because "something must be added to the physical conception of the natural order that allows us to explain how [evolutionary process] can give rise to organisms that are more than physical."<sup>15</sup>

Nagel is not claiming that evolution is invalid; instead, he is offering an alternative hypothesis wherein biological evolution needs revision in order to fully

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<sup>12</sup> Bucke, 1929

<sup>13</sup> Alters, 1999

<sup>14</sup> Nagel, 2012

<sup>15</sup> *ibid.* p. 46



explain the origination of consciousness.<sup>16</sup> In making this claim, Nagel rejects the theories that have already been proposed about the gradual process of consciousness evolving and opens the door for a new set of theories. It is this rejection of the continuous evolutionary process of the development of consciousness that places Nagel more on the discontinuous side of the spectrum. That being said, as Nagel continues to work on this alternative theory, he could begin to move closer to the continuous side of the spectrum. Until then, I believe his viewpoint to be a respectable example of DwDI *if* we are liberal with our definition of what is divine.

### Conclusion

While I recognize that each one of these categories contains strengths and weaknesses, I find myself most drawn to the viewpoint held by Thomas Nagel. I recognize that he represents a radical perspective, especially in the field of science, but he does not seem to be neglecting aspects of consciousness as some of the other viewpoints do.

Even though those within the non-divine category make valid points, in order to make assertions on the origin of consciousness they must make a jump into the philosophical realm, which they, themselves, cannot explain due to their reductionist views. In conjunction with the second reference point of continuous versus

discontinuous, I lean more toward the discontinuous side, again mirroring Nagel's beliefs. This perspective appeals to me because it is difficult to comprehend consciousness in a way that can be broken down into many parts. For example, I agree with Nagel when he states that "step-by-step" theory of biological evolution, as defined currently, does not address the subjective nature of consciousness. As I make this stance, I also realize that as Nagel begins to further articulate his alternative hypothesis, my viewpoint might begin to stray away from his. However, regardless of what the next several years will hold for the debate on consciousness, I strongly believe that I will be able to easily modify my position based on the origin of consciousness theory spectrum I have designed.

Despite the controversy, the mystery and the subjective nature of the debate, discussions about consciousness will remain contentious. While I recognize that consciousness is not on the forefront of everyone's mind, it still plays a significant role in society. How one conceives his/her own consciousness dictates his/her thoughts, behaviors, and actions, which ultimately shape our society. While most of humanity has a tendency to avoid the topics that require introspection and contemplation, consciousness is too influential to ignore.

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<sup>16</sup> *op. cit.* ref. 14

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