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# Pannenberg's Doctrine of Resurrection as Science

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**Abstract:** This article argues that Wolfhart Pannenberg's doctrine of resurrection can be demonstrated as science. I utilize the so-called "soft" sciences (history and anthropology) alongside the "hard" sciences (cosmology and neuroscience) to demonstrate the rationality of the ostensibly miraculous resurrection. In the discussion, I argue against empiricists who posit the impossibility of the resurrection on account of analogy to favor Pannenberg's approach of contingency and human exocentricity. Paralleling the shift in Pannenberg's own theological approach from anthropology to the Trinity, I also argue that Pannenberg's focus on the hard sciences in his later career reflects his concern for a more "objective" approach. Related to the hard sciences, I take the principle of continuity/discontinuity which touches on issues such as contingency, field theory, time and eternity, and various cosmological theories to demonstrate the scientific possibility of the resurrection that is both this worldly and other worldly. Moreover, using neuroscientific insights, I argue that the resurrection is not an immortality of the soul but a new body, consistent with modern science's emphasis on physicalism, lifted by a scientifically explained exocentric field. In the discussion, I argue that Pannenberg is a modified Kuhnian who underscores evidence and facts but also the context from which they emerge.

**Keywords:** Wolfhart Pannenberg; Resurrection; Science; Anthropology; Cosmology; Neuroscience; Theology; Theology and Science; Kuhn; Hume

In this paper, I will make a cumulative case argument that Wolfhart Pannenberg's theological understanding of Christ's resurrection can be apologetically explained as science. By science, I'm not limiting myself to just the natural sciences. Rather, I'm also incorporating the human sciences. That is, I will utilize the the so-called "soft" sciences (history and anthropology) alongside the "hard" sciences (cosmology and neuroscience) to demonstrate the rationality of the ostensibly miraculous resurrection of Jesus Christ. To start, I discern how Pannenberg applies historical and anthropological method in his theology of resurrection. As he argues, the resurrection is illogical only if one already brings a biased disposition against it. In the discussion, I argue against empiricists who posit the impossibility of the resurrection on account of the principle of analogy to favor Pannenberg's approach of contingency, the new, and human exocentricity. I then expand upon Pannenberg's initial engagement with cosmology and neuroscience by culling the insights of contemporary theologian/scientists who push forward Pannenberg's suggestions. Paralleling the shift in Pannenberg's own theological approach from an anthropological to a more trinitarian one, I argue that Pannenberg's focus on the hard sciences in his later career reflects his concern for a more "objective" approach. In the discussion on the hard sciences, I take the principle of continuity/

<sup>1</sup> As Philip Clayton and Nancy Murphey, among others, have argued, the division between the natural and human sciences is a false dichotomy limiting the full power of both the soft and hard sciences as both explanation and understanding. See Murphy, *Theology in the Age of Scientific Reasoning* and Clayton, *Essays from Physics to Theology*.

**<sup>2</sup>** By rationality, I'm not attempting to "prove" that the resurrection occurred. My more modest aim, as apologetics should always try to do, is a defensive posture of Christian reasonability.

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discontinuity which touches on scientific issues such as contingency, field theory, time and eternity, and various cosmological theories to demonstrate the scientific possibility of the resurrection which is both this worldly and other worldly. Using neuroscientific insights, I also argue that the resurrection is not an immortality of the soul but a new body, consistent with modern science's emphasis on physicalism, lifted by an exocentric field, a force that can also be explained scientifically. In the discussion I will also touch on Pannenberg's general scientific methodology. Taking elements of both Kuhn and Popper, I argue that Pannenberg is a modified Kuhnian who underscores evidence and facts but also the context from which they emerge.

According to theologian Michael Welker, no topic "seems less suited for the dialogue between theology and the so-called exact sciences than the topic of the resurrection." However, no topic is as important for the validity of the Christian faith as resurrection. As Pannenberg's theological methodology can be described as a "science of God" and Pannenberg self-consciously works as a scientist who, using a coherent approach to knowledge, assumes all data as hypotheses requiring confirmation, I will argue that the hypothesis of the resurrection is, at the very least, not unreasonable.4

# 1 History and Historical Method

Jesus—God and Man, as an early manuscript, presupposes a Christology from below based on anthropology which is counteracted by Pannenberg's mature theology which works from below and from above.<sup>5</sup> Nonetheless, the manuscript in question, by starting from below, is especially valuable concerning the truth of resurrection at the historical and anthropological levels.<sup>6</sup>

The rational challenge to resurrection, tracing its lineage to David Hume, is evident. Hume's evidencebased methodology is felt in two responses in modern theology: neo-orthodox or liberal.8 The latter, for instance, is the approach of Ernst Troeltsch's historical analogy. Pannenberg embraces Hume's empiricism, 10 but rejects Troeltsch's principle of analogy<sup>11</sup> because it is dominated by a biased worldview which apriori

- 6 Timothy Bradshaw calls Jesus-God and Man "a tour de force" on the resurrection of Jesus. Bradshaw, Pannenberg, 1.
- 7 See Steinhard, "The Revision Theory of Resurrection", 63 for a helpful list of rational challenges.
- 8 Murphey, Theology, 15.
- 9 See Pannenberg in "Redemptive Event and History", 44.
- 10 Nancey Murphy argues that while Pannenberg does generally follow Hume's empiricist methodology, Pannenberg's "futureentailing predicate" is "incommensurable" with Hume's "past-entailing predicate" and reinterprets Pannenberg as a Lakatosian research program to overcome the difficulties. Murphy, Theology, 43. My suspicion, however, is that as Murphey's interpretation of Lakatos requires new and novel facts, the program remains future-entailing. Moreover, Pannenberg's futurist ontology is still very much contingent upon past and present actions. Therefore, Pannenberg and Hume are more commensurable than Murphey argues.
- 11 I do however find Jürgen Moltmann's view that Christ's miracles are analogous to his resurrection as an interesting alternative view of analogy.

<sup>3</sup> Welker, "Theological Realism and Eschatological Symbol Systems", 279.

<sup>4</sup> Joel Haugen helpfully summarizes Pannenberg's asymmetrical relationship between theology and science: "With its adamant rejection of the two realities-two disciplines view, its emphasis on the commonality of the subject matter studied by science and theology, and yet its insistence that theology and science deal with different aspects of the same subject matter. . . it would be more accurate to describe Pannenberg's view of the science-theology relationship as one reality-two versions view. And the difference between speaking of "two versions" rather than "two aspects" is substantial. . . Therefore, the difference between science and theology derives not so much from which aspect of reality they chose to deal with, but from how much of reality they chose to deal with." Haugen, "Introduction", 5-6.

<sup>5</sup> Pannenberg's extensive treatment of "natural theology" in Systematic Theology, vol. 1 reorients anthropocentric natural theology toward a trinitarian ontological basis. See Pannenberg, Systematic Theology, vols. 1-3, 63-107. Moreover, Pannenberg, in 1997, comments on the relationship between theology proper and anthropology (as a science): "When "contact' is conceived in [anthropocentric] fashion the nontheological anthropology being used is not critically transformed and in this way appropriated by the theologian. It stands over against theology as something different from the latter. . . The demand that anthropology be critically appropriate means something quite different. The aim is to lay theological claim to the human phenomena described in the anthropological disciplines. Pannenberg, "Laying Theological Claim to Scientific Understandings", 59.

cuts the historian from unique historical events no matter how compelling the evidence may be.<sup>12</sup> Instead, Pannenberg argues for the historicity of the resurrection on account of two independent though complementary resurrection traditions: primary is the appearance tradition, specifically, Paul's encounter with the risen Jesus in 1 Corinthians 15.<sup>13</sup> Secondary historical evidence is the empty tomb tradition. Simply put, the claim of the empty tomb could have been refuted by presenting Christ's dead body. However, as neither scripture nor other relevant documents shows this to be the case, the resurrection has not been refuted.<sup>14</sup>

Pannenberg embraces the rational challenge unlike Kantian approaches and acknowledges the real contestability of the resurrection. But methodologically, he rejects the principle of analogy and the indisputability of natural laws<sup>15</sup> and concludes for the mutual complementarity of the appearance and grave traditions.<sup>16</sup> What does the resurrection of Jesus ultimately do? According to *Jesus—God and Man*, the resurrection metaphorically expresses the transformed resurrected life, a "completely unknown destiny," which subsumes and transcends in continuity and discontinuity with the old.<sup>17</sup> As I will argue later in this paper, the resurrected body helps overcome the difficulty of entropy in cosmology (discontinuity) while still preserving the centrality of the body as argued by neuroscience (continuity).

# 2 Anthropology

For consistency, I will use *Jesus—God and Man* to develop Pannenberg's use of anthropology in arguing for the rationality of resurrection. *Anthropological in Theological Perspective* (ET 1985) materially develops on the formal anthropological insights of the earlier work, however, the earlier work more intimately ties anthropology to the resurrection of Christ which justifies my use of it.<sup>18</sup>

The anthropology of *Jesus—God and Man*, influenced by Ernst Bloch, is hope presupposing natural human exocentricity: "The phenomenology of hope indicates that it belongs to the essence of conscious human existence to hope beyond death. . . summarily expressed in the language of modern anthropology by the concept of man's openness in relation to the world (*Weltoffenheit*), or his environmental freedom (*Umweltfreiheit*)." Founded on the anthropological structure of exocentric hoping beyond death, resurrection is posited as that which fulfills natural human desires. In other words, resurrection is a rational response to natural human tendencies as discerned by anthropological study.

The argument flowing from anthropology to resurrection is incomplete without Pannenberg's use of apocalyptic. In an early essay "Dogmatic Theses on the Doctrine of Revelation" (1969), he argues that the resurrection, in the context of the apocalyptic worldview of its day, suggests an eschatological meaning subject to historical scrutiny and a proleptical prefiguring of the future totality.<sup>20</sup> In *Jesus—God and Man*, Pannennberg connects apocalyptic expectations with anthropological yearnings for hope which together culminate in the resurrection of Jesus which is the beginning of a final consummation of hope beyond death. And the validity of Christ's resurrection arrived through historical scrutiny (as argued earlier) has implications for human hope and the basis of the Christian faith.<sup>21</sup>

<sup>12</sup> Pannenberg, "Redemptive", 46-48.

<sup>13</sup> Pannenberg, Jesus—God and Man, 89.

<sup>14</sup> Ibid., 88-106.

**<sup>15</sup>** Ibid., 97.

<sup>16</sup> Ibid., 105.

<sup>17</sup> Ibid., 74-75.

<sup>18</sup> Behavior geneticist Lindon Eaves argues that Pannenberg does not adequately engage the hard sciences and settles for the soft sciences such as anthropology which more easily fit Pannenberg's theological program. See Eaves, "Spirit, Method, and Content", 327. Pannenberg responds, "Eaves's criticism suggests that I avoided confronting the hard sciences in order to settle for the humanities, as if that were an easier line. In my experience, theological dialogue with the secular disciplines engenders no less conflict in the case of the humanities than the natural sciences." Pannenberg, "Theological Appropriation of Scientific Understandings", 434.

<sup>19</sup> Pannenberg, Jesus—God and Man, 85.

<sup>20</sup> Pannenberg, "Dogmatic Theses on the Doctrine of Revelation", 125. Also in Bradshaw, Pannenberg, 37.

<sup>21</sup> Pannenberg, Jesus—God and Man, 82-83.

In sum, Pannenberg confronts historicism by bridging the noetic and the ontic. Rather than arguing for the validity of resurrection by faith or the impossibility of the resurrection by sight, Pannenberg proposes a third way in which resurrection is argued by sight which confirms what we already know by sight. This approach mediates between the Chalcedonian Son of God perspective of the resurrection with liberal versions of Spirit Christology in which the historical Son of Man is underscored.

## 3 Pannenberg and the Hard Sciences

The hard sciences are increasingly underscored in Pannenberg's later works, particularly the second volume of his Systematic Theology and several essays. I propose three explanations for this shift. First, use of the hard sciences was an organic development considering the all-inclusive nature of Pannenberg's theological method. Second, the increasing scientific worldview of the twentieth-century required such a shift. Third, Pannenberg's methodological shift from anthropocentric to trinitarian paralleled the shift from the humanities to the more "objective" hard sciences.

For instance, in Systematic Theology 2 (1994) in a section titled "The Spirit of God and the Dynamic of Natural Occurrence," Pannenberg engages Leibnitz, Newton, Riemann, Clarke, and Einstein in a conversation on the notions of time, space, and special and general relativity.<sup>22</sup> Moreover, in his earlier essay, "Theological Questions to Scientists" (1981), he asks five questions to reconcile the difficulties of scientific and theological dialogue:

(1) Is it conceivable, in view of the importance of contingency in natural processes, to revise the principle of inertia or at least its interpretation? (2) Is the reality of nature to be understood as contingent, and are natural processes to be understood as irreversible? (3) Is there any equivalent in modern biology of the biblical notion of the divine spirit as the origin of life that transcends the limits of its organisms? (4) Is there any positive relation conceivable of the concept of eternity to the spatio-temporal structure of the physical universe? (4) Is the Christian affirmation of an immanent end of this world that in some way invades the present somehow reconcilable with scientific extrapolations of the continuing existence of the universe for at least several billions of years ahead?<sup>23</sup>

Notwithstanding criticisms of Pannenberg's use of science,<sup>24</sup> he incorporates field theory to explain the Spirit<sup>25</sup> while underscoring contingency, irreversibility, and a time/eternity dialectic that can reconcile theological understandings of the resurrection and scientific understandings which posit a "freeze or fry" scenario regarding the end of the universe. My discussion of cosmology and neuroscience will cover these topics, but as an excurses to these introductory remarks, I now cover Pannenberg's "scientific" method which is equally applicable to the soft and hard sciences.

## 4 Pannenberg's Scientific Method

Pannenberg's scientific method can be described as an "asymmetrical" relationship between theology and the sciences in which theology is not one "aspect" of truth, but a "version" which discloses more of reality

<sup>22</sup> Pannenberg, Systematic Theology, 2:76-136; see also Robert John Russell, Time in Eternity, 105-106.

<sup>23</sup> Pannenberg, "Theological Questions to Scientists", 37-48.

<sup>24</sup> For instance, David Wilkinson argues that Pannenberg is a deterministic thinker stuck in a Newtonian worldview who ignores chaos theory and quantum openness. David Wilkinson, Christian Eschatology and the Physical Universe, 41. This however is a misunderstanding for Pannenberg continually emphasizes contingency and the unique events of historical happenings prior to any kind of codification in laws. Wilkinson's critique is more apt in pointing out Pannenberg's lack of engagement with Hawking, the second law of thermodynamics, the anthropic principle, and on a Big Bang cosmology not published prior to 1949. Wilkinson, Christian Eschatology, 42-43.

<sup>25</sup> Wilkinson also critiques Pannenberg's use of field theory as outdated and requiring a host of qualifications. For instance, in physics, a field has both density and varies from place to place. What does this say about the Holy Spirit? Wilkinson, Christian Eschatology, 44-45.

than science does.<sup>26</sup> That is, science is provisional knowledge which finds fulfillment through the fuller knowledge of revelation. This reflects Pannenberg's vision of doing theology and the sciences under the aspect of the relation of God (*sub ratione Dei*).<sup>27</sup>

As several interpreters have noted,<sup>28</sup> Pannenberg's scientific methodology assumes the contextual approach of Thomas Kuhn's paradigm relative to Karl Popper's principle of falsifiability which is still (negatively) empiricist (and thus still assumes a historicist and analogical perspective). Perhaps this explains why J. Wentzel van Huyssteen finds problematic Pannenberg's contestability of the God hypothesis as it presupposes a falsifiability principle<sup>29</sup> or why Nancey Murphey categorizes Pannenberg's scientific method as two hermeneutical concentric circles, (or as I see it, paradigms) one circle centering on texts of Christ's resurrection surrounded by the entire New Testament and the apocalyptic worldview, the other circle centering on the anthropological phenomenon of hope surrounded by the hope of the resurrection which are also surrounded by the apocalyptic worldview.<sup>30</sup> Popper's approach does not require hermeneutical paradigms but the same empiricist data as logical positivism.

Pannenberg does not so sharply contrast Kuhn from Popper but takes elements of both in his own methodology: "I perceived Kuhn's ideas on revolutionary science and paradigm not as proposing a relativistic outlook...nor did I take his opposition to Karl Popper as a complete rejection of his ideas, but rather as a refinement of Popper's approach." He goes on to write, "To me the most important point was a less restricted recognition of the role of rival metaphysical vision in the history of science and the description of scientific theories as interpretations of empirical evidence, more comparable to hermeneutics than Popper would admit." <sup>31</sup>

Although hermeneutics is important in Pannenberg's historical approach, it does not negate the evidential facts. Therefore, when Murphey considers Pannenberg's concentric model as lacking and alternatively suggests a Lakatosian model<sup>32</sup> which, as I see it, is both Kuhnian (as a research program with a core theory) and Popperian (auxiliary hypothesis modifiable upon new data),<sup>33</sup> Pannenberg counters and says that the Lakatosian approach is "closer to my view of the task of theology than the image of concentric circles which [Murphy] attributes to me."<sup>34</sup> In other words, Pannenberg sees context and paradigms as mutually congruent with evidence-based fact gathering.

Nevertheless, what marks Murphey's Lakatosian interpretation is the ability of research programs to not only predict new and novel facts but a "retrodiction" of facts already known but previously deemed irrelevant.<sup>35</sup> Similarly, physicist/theologian Robert Russell's methodology of Creative Mutual Interaction (CMT) promotes science and theology interaction in which the facts of a Scientific Research Program (SRP) influences and promotes the research agenda of a Theological Research Program (TRP) and vice versa.<sup>36</sup> In CMT, there seems to be a separation of the science and theology programs, two aspects of truth rather than two versions of one reality, which does not reflect Pannenberg's own desire for an overall unity of knowledge. But Russell's strength in his work *Time in Eternity*, which I will discuss in the next section, is to dialogue cosmological (SRT) accounts of contingency, irreversibility, time/eternity with Pannenberg's position on resurrection (TRT) as an event of temporal and eternal, continuous and discontinuous, significance.

<sup>26</sup> Haugen, "Introduction", 5-6.

<sup>27</sup> See Shults, The Postfoundationalist Task of Theology.

<sup>28</sup> See van Huyssteen, "Truth and Commitment in Theology and Science" and Murphey, "A Lakatosian Reconstruction of Pannenberg's Program".

<sup>29</sup> van Huyssteen, "Truth and Commitment", 364-365

**<sup>30</sup>** Murphey, "A Lakatosian Reconstruction", 412.

<sup>31</sup> Pannenberg, "Theological Appropriation," 430.

<sup>32</sup> See Murphy, Theology in the Age of Scientific Reasoning for a fuller treatment of the Lakatosian research program.

<sup>33</sup> Murphey paraphrases Lakatos approach as that which mediates between "falliablism and commitment." Murphey, "A Lakatosian Reconstruction", 419.

**<sup>34</sup>** Pannenberg, "Theological Appropriation", 431.

<sup>35</sup> Murphey, "A Lakatosian Reconstruction", 413.

**<sup>36</sup>** See summary in Russell, *Time in Eternity*, 70-75.

## 5 Cosmology

Pannenberg embraces the hard sciences as a fruitful dialogue partner in extending the discussion of the science of God. He has particular interest in cosmology, especially Frank Tipler's theory of a proposed Omega Point which lies at the border of the universe. This "cosmology converges with a Christian eschatology and thus 'supports' the eschatological affirmations of the theologian." In this section, I will dialogue Pannenberg, Tipler, and other cosmological theories which provides a kind of scientific basis for the resurrection, particularly its ability to demonstrate the resurrection theology of overcoming the time and eternity distinction in order to affirm both.

Prior to this discussion however, I want to reaffirm Pannenberg's interest in contingency, irreversibility, and the time/eternity dialectic as Christian eschatological perspectives which find parallels in a cosmological understanding of the universe and what the resurrection does in continuity/discontinuity with it.

#### 5.1 Contingency, Irreversibility, and the Time/eternity Dialectic

Regarding contingency and irreversibility (which was broached in the historical discussion), Pannenberg's second question to scientists attempts to counter the absolute law of inertia (much like the absolute law of history) so that new events are not necessarily precluded beforehand due to established scientific laws. Pannenberg makes several points. First, any codification of natural law requires contingent events as initial and boundary conditions. That is, new and unique events must first happen prior to any systematization. Second, any regularity as described by natural law requires a first event in a temporal sequence. It's only after the second appearance that any sort of regularity can begin to be articulated. That is, although laws may be atemporal heuristic devices meant to explain and observe patterns, the events themselves are dependent upon the contingencies and unpredictably of what happens inside time. Third, if laws are dependent on temporal and singular events, all singular events are irreversible as they only happen once.<sup>38</sup> Patterns may be observed at the end of the sequence, but individual events are just that, they are individual.

Therefore, Pannenberg counters the law of inertia which carries a mechanistic worldview resistant to contingent and new events. He does so not by finding potential inconsistences between the established law and its observation in the natural world but sees the materials of the universe as products of contingent events in constitutive relation with one another and not as solid and independent bodies (which inertia assumes) exerting force on one another.<sup>39</sup> This description of relational contingency informs Robert Russell's proposal who applies it to the notion of time. Russell counters traditional cosmological arguments in which the three tenses of time: past, present, and future, are more-or-less ontologically independent realities (receptacles), and supports a "modified A-theory" of time in which past, present, and future exist through mutual relations.<sup>40</sup> This flowing time interpretation relativizes not only space but also the three tenses of time for past cannot exist without the present and the future, and vice versa.<sup>41</sup>

In Pannenberg's theology, God's free and unrestricted act in creation is a continuous creation of contingency.<sup>42</sup> After all, the resurrection (against principles such as analogy and natural laws which say

<sup>37</sup> Pannenberg "Theological Appropriation", 437.

<sup>38</sup> Pannenberg, "Theological Questions", 43-44.

<sup>39</sup> Ibid., 42.

**<sup>40</sup>** Russell, *Time in Eternity*, 134.

**<sup>41</sup>** This discussion of block time and flowing is related to Thomas Aquinas' descriptions of time as *tempus*, *aevum*, *aeternitas*. See explanation in Frank Tipler, "The Omega Point as Eschaton". As I see it, flowing time resembles *tempus*, as it speaks of time as relations between objects, whereas, block time resembles *aeternitas*, time as eternal now with past, present, and future as merely noetic awareness of time.

**<sup>42</sup>** Pannenberg, "Theological Questions", 44. Or as Russell argues, this is a Noninterventionist Objective Divine Action (NIODA). See Russell, "Time in Eternity", 3. Moreover, God's action in the world can be seen through the Spirit as force of field. Helpful discussion of Spirit as force of field is in Pannenberg's discussion of Teilhard de Chardin in which, unlike de Chardin, Pannenberg conceives of the Spirit not as a phenomenon of energy in and between bodies, but as an external field of force outside of bodies. See Pannenberg, "Spirit and Energy", 80-86.

otherwise) is a unique historical event. Moreover, God's revelation in history is always revealing the new. However, Pannenberg, as also seen by Russell, discerns an interrelationship between the new happenings (present) with both recollection (past) and expectation (future). To quote Pannenberg: "The [contingencies] of our sense of the present corresponds only remotely to the lasting and abiding Now of his present. *Yet the two do correspond* both in the objective "duration" of the species of creaturely existence and in our human sense of our own duration in the flux of time as this is extended by recollection and expectation" (My emphasis).<sup>43</sup>

Scenarios of "freeze or fry" in which the universe will either freeze or fry itself to nonexistence ostensibly flout<sup>44</sup> eschatological hope.<sup>45</sup> But if we conceive resurrection as both immanent and transcendent via a relational flowing interpretation of time, the eternal future of the trinitarian God transforms the contingent present (and its related notions of time, natural law, annihilation, inertia, conservation, impossibility of resurrection, etc.)<sup>46</sup> while respecting resurrection as that which has transcendent aspects. Thus, resurrection can overcome the problem of entropy and its resulting death while crossing the supposed chasm between time and eternity. And Pannenberg sees resurrection as an important case point of connecting the eternal with the present:

The relation between time and eternity is the crucial problem in eschatology, and its solution has implications for all parts of Christian doctrine. The identity of those who will be raised with those who are now alive; the relation of the future of God's kingdom at the end of history to its being present in the work of Jesus; the relation of the general resurrection of the dead at the return of Jesus Christ to the fact that even at death those who sleep in him are already with him, so that their fellowship with him is not broken; the relation of the return of Jesus himself to his earthly work; and last but not least the relation of the eternal kingship of God and his world government to the futurity of his kingdom — all these are questions and themes that are without answers, and the substance of which cannot be understood, so long as we do not clarify the relation between time and eternity.<sup>47</sup>

Robert Russell's description of time and eternity, influenced by Pannenberg, explains this reality:

I understand eternity to be the boundless temporality of the Trinitarian God, a lavishly rich 'supra-temporality' that is both the source and fulfillment of the temporality of creation: the temporality we experience in nature, in our lives, and in history. This is an eternity that flows out of the endless perichoretic dance of the divine persons ceaselessly taking place with the unity of the Trinitarian community.<sup>48</sup>

So the key to discovering a scientific (cosmological) understanding of the resurrection can be a scientific understanding in which time and eternity are affirmed, both contingency and transcendence in mutuality and distinction. On this point, Tipler's Omega Point, among other cosmological theories, is helpful.

#### 5.2 Omega Point and other Cosmological Theories

Pannenberg lacks a fully detailed cosmological approach to the resurrection<sup>49</sup> but is more convincing on more general matters of cosmology.<sup>50</sup> That is, as a I see it, a viable hypothesis regarding cosmology that is

<sup>43</sup> Pannenberg, Systematic Theology, 2:598.

**<sup>44</sup>** Thus, the secularist Bertrand Russell laments the scientific worldview: "The world which science presents for our belief is even more purposeless, more void of meaning... all the labours of the ages, all the devotion, all the inspiration, all the noonday brightness of human genius, are destined to extinction... and the whole temple of man's achievement must inevitably be buried beneath the debris of a universe in ruins." Quoted in Wilkinson, *Christian Eschatology*, 21.

<sup>45</sup> Pannenberg, Systematic Theology, 3:586.

**<sup>46</sup>** But it's worth noting that in *Systematic Theology 3*, Pannenberg does not conceive of death as a natural evil but a moral evil based on human egocentricity. Thus resurrection is as much moral as it is cosmological, with the cosmological restoration of natural evil as a side effect of restoring proper human orientation. See Pannenberg, *Systematic Theology*, 3:555-580.

<sup>47</sup> Pannenberg, Systematic Theology, 3:595.

<sup>48</sup> Russell, Time in Eternity, 21

**<sup>49</sup>** Perhaps this is impossible and general approaches are the best we can do this side of the eschaton. After all, since Pannnberg conceives of the resurrection not as a reversal of "natural evil" but overcoming human caused moral sin which has consequences for the environment, resurrection is ultimately a theological concept

<sup>50</sup> Wilkinson, Christian Eschatology, 43.

not automatically disqualified on analogical grounds and at least eligible for scientific testing. Thus, his interaction with Tipler's Omega Point<sup>51</sup> is a kind of general conceptual tool that is helpful for positing at least the possibilities of the resurrection.

Tippler, using physics and cosmology, attempts to demonstrate the indefiniteness of life in the universe based on a future "Omega Point" which carries omnipotence and omniscience and lies at the border of the universe. Interestingly, however, this proposed Omega Point does not transcend the universe but is also immanent in it, influencing and directing what happens inside.<sup>52</sup> Tipler's unique insight is that this future point is not carbon based. That is, the Omega Point will not resurrect or resuscitate physical processes such as breathing or eating but sustain information as recorded in the brain through historical processes.

Tipler underscores information. Life activities such as listening, enjoying, reflecting, and worshipping are simply datum of information operating in the the brain.<sup>53</sup> For Tipler, the "mind-as-computer-program" idea is absolutely central."54 Therefore, the future Omega Point is envisioned as a place of indefinite life/ information processing, consummating in the future the mental activities that has happened in the present and past. However, the capacity for such infinite processing requires an infinite amount of energy. Do the laws of physics, as presently conceived, permit this? His solution is yes if the "time integral of P/T is infinite, where P is power used in the computation, and T is the temperature."55 In other words, unlimited energy to power computation is possible if either computing power requires increasingly less energy the closer one gets to the final point or there are unexpected sources of energy in the universe.

According to Tipler there are two scenarios under two models of the universe that may solve this equation. In a flat and open universe, as one approaches the relative edges of the universe (Omega Point), temperatures approach zero because the universe is stretched and less energy is required for information processing. Thus infinite storage is possible. In a closed universe, on the other hand, where density and temperatures are infinite nearer the singularity (Omega Point), information processing would require greater amounts of energy. However, as Tipler notes, during the collapse phase of a closed universe, for a finite space cannot sustain itself indefinitely, the universe collapses asymmetrically so that one axis has greater energy than the other. It is such "shear" of closing universes, and the temperature differences of differently collapsing points, which provides the energy necessary to sustain infinite amount of information processing.<sup>56</sup> In a closed universe, which Tipler supports, the universe exists for a finite time in the proper sense. But as Tipler argues, as the Omega Point considers information processing and not physical processes, what counts is time as experienced by human beings, which one approaches toward the Omega Point.<sup>57</sup>

Tipler then proposes several hypotheses including: (1) The universe is closed. The closed nature of the universe helps explain the relationship between the events leading up to the Omega Point (immanence) and the point itself (transcendence). The natural boundaries which inevitably form in a closed universe concentrates communication within the boundaries for an infinite universe will inexorably scramble communication. As Tipler argues, the universe is consummated in a single boundary point only if the contingent events of history are causally connected with one another and with the Omega Point. Thus information processing includes everything that happens within the closed universe. The alternative would be multiple transcendent boundary points with their own conditioning events of history. Therefore, (2) There is a *c*-boundary point, a singe Omega Point which is the boundary of the universe, and (3) The Omega Point is both transcendent to and yet immanent in space time.<sup>58</sup>

<sup>51</sup> There are certainly scientific issues to Tipler's theory of the Omega Point. For one, the model assumes a Friedmann-Robertson-Walker Standard Big Bang general relativity model of the universe which does not necessarily apply near the singularity. Moreover, Tipler assumes general relativity, but wouldn't quantum effects become more pronounced near the Omega Point thus rendering classical GR inapplicable. Third, Tipler assumes that life in the Omega Point can reconstruct past events from light. But can light reach Omega? What about lights absorption into matter? See more critiques in Russell, "Cosmology and Eschatology", 204-205.

<sup>52</sup> Tipler, "Omega Point", 159.

<sup>53</sup> Ibid., 162.

<sup>54</sup> Ibid., 163.

<sup>55</sup> Ibid., 165.

<sup>56</sup> Ibid., 166.

**<sup>57</sup>** Ibid.

<sup>58</sup> Ibid., 166-168.

The Omega Point, as immanent yet transcendent, can be conceived as an *aeternitas* which experiences all past, present, and future events as a union.<sup>59</sup> For instance, our present perception of the Milky Way galaxy is a subjective view (*aevum*) of something that already happened millions of years ago (*tempus*). But as one approaches the Omega Point one gets closer to *aeternitas* and the union of both subjective time (*aevum*) and time in the proper sense (*tempus*).<sup>60</sup> These ideas are similar to the resurrection in which past, present, and future are coterminous and present with one another. The event of Christ's resurrection happened in *tempus*, but humans experience it in their own times (*aevum*). To conceptualize it differently, the future resurrection and consummation (*aeternitas*) is propleptically experienced in the *aevum* of present subjective experience. Following this, Pannenberg's *ST 2* cautiously welcomes Tipler's Omega Point.<sup>61</sup>

Robert Russell, alternatively, suggests a non-Hausdorff cosmological model in order to reconcile eternity and temporality. This non-Hausdorff manifold can also explain Pannenberg's view on resurrection and eternity (TRP to SRP). A Hausdorff manifold, like Euclidean geometry, is a one, two, or three dimensional space in which the points remain "separable." A non-Hausdorff manifold, by contrast, whether conceived of as a "branching line" or a "complete feather" has at least one pair of points that remain non separable. For example, in a branching line, one original line (like the trunk of a tree) is the non separable source of the subsequent branching lines. Russell's constructive insight is to associate the non-Hausdorff manifold with Pannenberg's view of resurrection and the New Creation: "it is the *distinction-preserving temporal non-separability*, offered by a non-Hausdorff concept of the temporality of eternal time, in contrast to *distinction-preserving temporal separability*, offered by a Hausdorff conception of ordinary time, that captures part of what I believe Pannenberg means by . . . the co presence of all events in eternity (Emphasis Russell)." Pannenberg's view of resurrection can be conceived as a non-Hausdorff concept because the two stages of the resurrection, in time and in the eschaton, are intimately related to one another in much the same way the past, present, and future are non separable in a flowing interpretation of time (which can also be described as non-Hausdorff).

As a case in point, Russell notes the non-Hausdorff "multiply connected manifolds" <sup>64</sup> such as the Schwarzschild black hole which connects two otherwise independent space-time realities so that events in one end are "the same and yet distinct" with events at the other end. <sup>65</sup> "The remote future (i.e., omega) remains remote for some observers...but it becomes the immediate future (i.e., the singularity) for others." <sup>66</sup> In other words, both spheres are non separable from one another. Therefore, the same-yet-different logic of black holes, "suggest that the relation Pannenberg describes between the eschatological future and the present is not a 'path' in the ordinary space of this world but a… connection between two different spheres. <sup>67</sup>

Whether through an Omega Point or a non-Hausdorff manifold, Pannenberg's view of proleptical resurrection can maintain a unity-in-distinction. The resurrection itself is not directly demonstrated, rather, the characteristics of resurrection: time, eternity, and contingency, are argued so that the resurrection is indirectly posited as a possibility that cannot be disqualified. Ultimate verification is reserved for the eschaton, but for now, only provisional, albeit authoritative, truth remains. I now turn to neuroscience

<sup>59</sup> Ibid., 165.

**<sup>60</sup>** Ibid., 167.

**<sup>61</sup>** Of course Pannenberg does not unequivocally accept Tipler's proposal. He accepts it with the important qualification that a Christological understanding of resurrection is foundational to any kind of Omega Point. Moreover, Tipler's information based eschatology seems incompatible with Pannenberg who asserts a real bodily resurrection, "computer-based" versus "carbon-based." Pannenberg, however, responds that "the 'computer capacity' of the divine Logos that was connected with the human life of Jesus in the incarnation and became fully available to him in his exaltation would be sufficient." I'm not sure what this means, but based on Pannenberg's view of the resurrection it has to be information that is not abstracted from the body but intimately related to it. See discussion in Pannenberg, "Theological Appropriation," 439.

<sup>62</sup> For full description with graphs of a non-Hausdorff manifold see Russell, Time in Eternity, 162-172.

**<sup>63</sup>** Ibid., 169.

<sup>64</sup> See ibid., 184-193 for further discussion and examples of multiply connected manifolds.

**<sup>65</sup>** Ibid., 187.

<sup>66</sup> Ibid., 188.

**<sup>67</sup>** Ibid., 188.

to see how Pannenberg's monism relative to the resurrection corresponds to neuroscience which sees the body as physical, and more specifically, neurological

### 6 Neuroscience

In order to use neuroscience to demonstrate the resurrection, I will first explicate Pannenberg's monism, the relationship between body and a so-called soul, and its significance for the resurrection body which helps answer Pannenberg's third question to scientists: is there any equivalent in modern biology of the biblical notion of the divine spirit as the origin of life that transcends the limits of its organisms?

In *ST 3*, Pannenberg discusses two competing views of human eschatological destiny, the resurrection of the body and the immortality of the soul.<sup>68</sup> Pannenberg, congruent with his general theology, rejects the immortality of the soul for its *amor sui* resists the exocentric call of the Spirit.<sup>69</sup> In fact, in a distinct departure from Jürgen Moltmann, he rejects natural evil and death because death is the moral consequence of human non acceptance of their finitude.<sup>70</sup> Christian hope, therefore, is a spiritual resurrection of a body which has died due to human drive for immortality (sin).<sup>71</sup>

The Spirit is the exocentric agent lifting human beings out of their self imposed finitude. Then how does the Spirit work relative to the human body? First, the body is not "simply a burdensome appendage or a prison to which the soul is tied so long as it has its being on earth." Instead, the person is a unity, based on modern scientific knowledge, "in which all phenomena relating to the soul are linked to the body."<sup>72</sup> That is, science shows that traits associated with the soul are in fact bodily. Second, the Spirit works on the united body in creation, salvation, and the consummating resurrection.<sup>73</sup> What I find unique in Pannenberg is a bodily monism, which, does not suggest an independence from the Spirit, but rather a radical dependence on an extrinsic Spirit not inherent to the body which elevates bodily (or traits previously taught to be based on soul) characteristics toward a resurrection life. As he argues, we cannot build doctrines "on the identification of spirit with mind that has come under so serious and pertinent criticism in history of modern thought."<sup>74</sup> In this statement, Pannenberg rejects the idealist tradition which associates the human mind with an immortal divine soul; however, it also underscores my point that the Spirit is external to any human element, be it bodily or mental.<sup>75</sup>

Pannenberg is relatively silent on the specifics of how exactly traits formerly attributed to the soul are bodily. To that, Nancey Murphey's account is helpful. In her work, *Bodies and Souls*, *or Spirited Bodies*?, <sup>76</sup> she argues for a nonreductive monism in which bodily traits have neurological, not supernatural, origins. Neuroscientific evidence demonstrates the monistic (bodily) identity of human persons. However, the mind, contra scientific reductionism is not all that exists.

A helpful explanation is found in chapter 2 of Murphey's monograph. There, she dialogues neuroscience with Thomas Aquinas' account of the animal soul.<sup>77</sup> For Thomas, the soul explains the sensitive traits of locomotion, appetite, sensation, and emotion. But to Murphey neuroscience explains these phenomena: locomotion is controlled by the motor cortex and by subcortical regions; appetite is controlled by neurotransmitters and chemicals such as oxytocin secreted by the posterior pituitary gland; sensation, for instance sense perception, is controlled by light-sensitive cells in the retina sending signals to the

**<sup>68</sup>** The former was rejected first due to Enlightenment naturalistic critique followed by the latter due to charges of excessive egoism. See Pannenberg, *Systematic Theology*, 3: 532-533.

**<sup>69</sup>** Ibid., 562.

**<sup>70</sup>** Ibid., 566.

**<sup>71</sup>** Ibid., 560.

**<sup>72</sup>** Ibid., 572.

<sup>73</sup> Pannenberg, "The Doctrine of the Spirit", 66-67.

<sup>74</sup> Ibid., 69.

**<sup>75</sup>** According to John Levision, Pannenberg speaks of a "topping up" of created endowments. See Levison, *Inspired*, 3. Even in the first endowment, the Spirit is a graced gift external to the human body.

<sup>76</sup> Murphey, Bodies and Souls, or Spirited Bodies?

<sup>77</sup> Ibid., 57-69.

visual cortex; emotions are controlled by the temporal lobe even before the perceptual aspects of the brain. Moreover, according to Thomas, the human soul is a rational soul of intellect (passive and active) and will.<sup>78</sup> But neuroscience explains the passive intellect (or memories) through as many as a dozen neurological memory systems via the temporal lobe and the hippocampus; active intellect (abstract reason) through regions of the brain knows as the Wernicke's area and Broca's area; and the will (religious experience and moral capacity) through patients with temporal lobe epilepsy.<sup>79</sup>

These neuroscientific descriptions, which are by no means exhaustive, provide some indication that faculties formerly attributed to the soul are bodily. Pannenberg would agree with the scientific explanations for traits formerly attributed to the soul. But while Murphy's use of emergence (or downward causation) explains how these cognitive processes are led to appear via metaphysical or epistemological frameworks of meaning, Pannenberg is clearer on how the Spirit<sup>80</sup> transcends the organism<sup>81</sup> but is still "permanently united with it as a "spiritual body." In other words, the Spirit is the exocentric agent lifting humans qua humans toward complexity and ultimate fulfillment. Thus, the Christian hope for resurrection "does not aim at a completely different life replacing the present one. It rather aims at a transformation of this present life to let it participate in the divine glory."

According to Pannenberg, future resurrected life is not incorporeal but similar to bodily existence now; furthermore, as a soul separated from the body has a different life history only a resurrection of the previous body affirms the same person. Hus neuroscience, which helps scientifically explain the centrality of the body, underscores the continuous bodily identity necessary for Pannenberg's view of resurrection. The Spirit, which as an external field of force (also applicable and scientifically explained in biological accounts of environment, ecology, DNA, behavioral genetics, and complexity theory) works to transcend and resurrect the body, instigates a bodily resurrection life without resorting to an incorporeal soul. As Pannenberg, and others, have argued, the Spirit can be naturally explained as field of force, or energy, inherent within creation and pushing it toward development. For instance, bioethicist Robert Potter writes on the natural world's capacity for transcending both the self and present time due to the "the supportive influences of the whole field in which each part exists." Similarly, biochemist Jeffrey Wicken argues that evolution is not simply an inevitable outcome of determined natural processes but the interaction between the physical world and a higher transcendent, "spiritual' orientation toward meaning. In sum, the Spirit as an exocentric agent within nature lifting the bodily existence of human beings seems more plausible than a supernatural account of an immortal soul

To conclude this section, I note Murphey's essay entitled "The Resurrection Body and Personal Identity," in which she considers what the resurrection body looks like. Similar to her conclusion in the project I considered earlier, neuroscience demonstrates that any life after death depends on a bodily resurrection of the whole person. Moreover, the physicality of the person means a congruence with the rest of nature so that resurrection happens within the physical world. But due to the ultimate unknowability of the laws of nature and the physical processes in the eschaton, she considers the knowable aspect of the resurrected body in the sense of moral and social character, which, if we consider neuroscience, is still a bodily phenomenon.

<sup>78</sup> Ibid., 65-69.

<sup>79</sup> Ibid., 65-69.

**<sup>80</sup>** Related to the Stoic *pneuma* and the Hebrew *ruach*, Spirit is a force field of moved air prior to bodily phenomena. See Pannenberg, "Theological Appropriation", 428.

**<sup>81</sup>** Pierre Teilard de Chardin's model of the biological environment on organisms is flawed, Pannenberg argues, because energy is conceived as interrelations between bodies and not what happens outside. Pannenberg, "Theological Questions", 45.

<sup>82</sup> Ibid., 45.

<sup>83</sup> Ibid., 45.

<sup>84</sup> Pannenberg, Systematic Theology, 3: 573.

<sup>85</sup> Potter, "Human Self-Transcendence and the Formation of Self and Society", 141

<sup>86</sup> Wicken, "Toward an Evolutionary Ecology of Meaning", 261-265.

<sup>87</sup> Murphey, "The Resurrection Body and Personal Identity", 204.

**<sup>88</sup>** Ibid., 204.

**<sup>89</sup>** Ibid., 202.

As Murphey argues, the concept of person is not an artificial construct of culture but a neuroscientific process of being a human being. And part of personal identity involves a spatio-temporal body, a subjectivity consisting of memory and self-consciousness, a character criterion based on virtues, emotions, and moral perceptions, and interpersonal relationships.<sup>90</sup> As Murphey acknowledges, the eschaton will ultimately transform material bodies, however, different "stuff" should not imply different processes: "While we can know that after the resurrection we shall be embodied, and that those bodies will provide the substrate for. . . the ongoing and endless development of our mental life and moral character, we cannot know anything more of a positive sort about the nature of that stuff."91 Here we see a continuity and discontinuity between life in the present and the eschaton, Murphey's project affirms a bodily continuity via neuroscientific moral and social processes which allows for a bodily discontinuity of material bodies in the proper sense. She's implying that moral and social processes do not decay. But if these processes are bodily in the neuroscientific sense, this does not necessarily hold if the law of entropy is accepted. I don't necessarily disagree with Murphey's suggestion, but perhaps she needs to particularize the moral and social processes rather than universalize them for both eons.

Nonetheless, Pannenberg generally agrees on the unknowability of the future stuff. After all, he argues for a resurrection of a body not a resuscitation of the same body, "Resurrection means the new life of a new body, not the return of life into a dead but not yet decayed fleshly body."92 But he does not fully flesh out what aspects of the current body remain in this new "spiritual body" and which ones perish away. Is it an issue of different material body but similar moral content, as Murphey suggests, or perhaps a dialectical time tension between the present and the future, or contingency and eternity, as Russell's cosmological approach suggests? Interestingly, Murphey argues for the unknowability of the material stuff and physical processes this side of the eschaton in comparison to Russell's cosmological project which allegedly more confidently asserts the bodily continuity of the present with the future, 93 because, I assume, Russell's clever use of time. But their differences need not be irreconcilable. From a hard science perspective, we can address Pannenberg's relative silence on the form and substance of the resurrection body through Murphey, who through a neuroscientific approach emphasizes the body in the sense of moral and social processes, and Russell, who through a cosmological approach uses physics and mathematics to theoretically demonstrate the compatibility of contingency and eternity, past and future, via a "boundless temporality."

At the very least I hope I have been able to use the soft and hard sciences to make possible the scientific validity of the resurrection. I will now turn to several critiques I have of Pannenberg's hypothesis of the resurrection as scientific.

# 7 Critique

Pannenberg's ambitious goal of placing theology as a legitimate science alongside disciplines more commonly understood as such is admirable. In this respect, his understanding of resurrection as rationally plausible can alleviate some of the uncertainties fostered by a purely fideistic approach. I doubt unbelievers will be persuaded by empirical evidence, but Pannenberg does concede that Christian theology presupposes some kind of faith<sup>94</sup> prior to his declaration that theology "present, test, and if possible confirm the claim . . . as an open question and not decide it in advance. 95

Despite my appreciation, I have several issues with Pannenberg's approach to theology (and relatedly, resurrection) as science due to epistemological and moral concerns. First, Pannenberg's view of truth appears as a rational endeavor exclusive to the intellectual domain. Following his statement that theological

<sup>90</sup> Ibid., 210-213.

<sup>91</sup> Ibid., 215.

<sup>92</sup> Pannenberg, Jesus—God and Man, 75.

<sup>93</sup> Murphy, "Resurrection Body", 202.

<sup>94</sup> Pannenberg, Systematic Theology, 1:150.

<sup>95</sup> Ibid., 150.

statements be tested as hypotheses just as any other potential facts, he comments, theology's "concern must be that in the course of all its thinking and arguments the rightness of the claim is at issue." <sup>96</sup> In other words, the truth claims of Christian doctrines such as the resurrection are established based on thinking and arguing through the empirical data and not necessarily other faculties. He agrees with St. Anselm that "reason alone (*sola ratione*)" should examine what theology believes. <sup>97</sup> Many commenters agree that Pannenberg is a foundationalist who holds reason as his *Grundprinzip*. <sup>98</sup> My own view is that Pannenberg is a *post*foundationalist who holds reason, history, and eschatology in relationality rather than foundational abstraction. Nevertheless, whether foundationalist, *non*foundationaist, or *post*foundationalist, all are ultimately *intellectual* verifications of truth.

I'm not proposing that faith work against reason, or that we discard open and rational discussion in favor of private commitments. My suggestion is simply that faith need not just seek understanding but other faculties as well. By other faculties I have in mind George Lindbeck's typologies for theology, namely, the experiential and the practical alongside the theoretical. Pannenberg, in *ST 1*, mentions these faculties. However, affective and practical verification merely "complements" the theological.<sup>99</sup> If, as Pannenberg suggests, resurrection is not mere resuscitation but something new, the resurrection should encompass more than just the intellectual.

Pannenberg's earlier work, *Theology and the Philosophy of Science*, <sup>100</sup> which more explicitly deals with scientific method and theology's place therein, touches on the more affective elements of knowledge. He does so by noting the strongly rationalistic analytic philosophy (logical positivism and critical rationalism) which characterizes the natural or physical sciences and the human approach based on hermeneutics and culture. <sup>101</sup> Following this, he rejects Dilthey's taxonomy of "explanation" (in the natural sciences) and "understanding" (human sciences) to favor a modified approach in which the whole (as yet incomplete) explanation is presupposed while the parts evolves through history. <sup>102</sup>

In other words, he aims to preserve both context and truth, and meaning and explanation. In the case of the human sciences, for example, Pannenberg talks of "the problem of the singular" in reference to Habermas. The priority is given to naturalistic "instinctual energies' and their corresponding 'needs' over 'cultural values.'" Similarly, he accepts Troeltsch, at least the latter's view of the human sciences and the psychology of religion as "'a gradual process of the filling of empty psyches from the external world of sense', and which correspondingly try to interpret morality, aesthetics and religion 'in terms of purely sensory experience."<sup>104</sup> In short, the affective dimensions of human experience are indirect revelations (knowledge) of the reality of God, "subjective anticipations" which are confirmed or rejected through new experiences. <sup>105</sup>

Despite the consideration of affective forms of knowing, the affective elements of knowledge are merely parts of a larger whole. These elements are just data, for its not experience itself that counts as knowledge but how this experience coheres with other elements of knowledge and the presupposed whole. Pannenberg's method for theology's self-appraisal as a science rests on two, "rational" approaches. "On the one hand it seeks to establish an external relation to other disciplines on the common basis of their scientific character. On the other, it must consider its own internal organization." We see here knowledge not in the sense of foundations (contra logical positivism) but one based on the postfoundational notion where the web metaphor of organization and congruence, whether internal or external, determines whether knowledge

<sup>96</sup> Ibid., 150.

<sup>97</sup> Ibid., 151.

<sup>98</sup> Such as Richard John Neuhaus, Reinhold Hütter, David McKenzie. See Shults, Postfoundationalist Task, 84-92.

<sup>99</sup> Pannenberg, Systematic Theology, 1:23.

<sup>100</sup> Pannenberg, Theology and the Philosophy of Science.

<sup>101</sup> Ibid., 21.

**<sup>102</sup>** Ibid., 26. See also 100.

**<sup>103</sup>** Ibid., 90.

**<sup>104</sup>** Ibid., 104.

<sup>105</sup> Ibid., 310.

**<sup>106</sup>** Ibid., 5.

is counted as scientific. It is this organization that demonstrates what "can be defended as necessary or at least rational,"107 Personal experience contributes to the development of meaning and explanation. However, it must fit into a rational structure of coherence internally and externally. The upshot is that rationality remains the modus operandi.

Sarah Coakley provides a vision in which resurrection is not just rational but demonstrated through a "polyphony of senses" <sup>108</sup>: The "'grammar' of resurrection faith is seemingly intrinsic to our continuing difficulties in expressing the reality of a risen Christ who cannot finally be grasped, but rather 'see'-'not with the eye only."109 My suggestion is that theology as a science of everything, in its fullest sense, is a faith not only seeking understanding but also experience and praxis, among others.

My second criticism of Pannenberg is his understanding of sin. Pannenberg argues that death is a result of human sin which is an egocentric resistance to the exocentric call of the Spirit. The resurrection is the ultimate exocentric act which overcomes the evil of death and nonexistence. Relatedly, there is no "natural evil" for death is primarily the consequences of moral sin. My problem with this perspective is not so much the lack of natural evil but its significance for resurrection life and the new creation. Following Pannenberg's logic, if sin is moral then resurrection is fundamentally a moral transformation, which means, potentially, any sort of bodily transformation is of secondary importance. As a result, theological understandings of sin, salvation, sanctification, and resurrection supersede natural and humanistic scientific explanations of the resurrection. This is not necessarily a problem. As stated earlier, Pannenberg's scientific methodology presupposes a theology which posits a fuller account of reality than science does, and Murphey's neuroscientific account potentially provides a scientific basis for body-based (brain) morality in the eschaton. However, the scientific problems of entropy and the resulting freeze or fry scenarios are not moral degradations, they are physical threats, and a purely theological account of moral transformation does not directly address a needed physical transformation. Admittedly, Pannenberg's interactions with Einstein and Tipler, among others, on matters of cosmology do address physical transformation (in the proper sense). However, this gets to my third criticism.

Third, whatever physical transformation Pannenberg proposes is not a direct transformation of natural evil but an indirect result of human moral transformation. This trait is apparent in the following excerpt, notice the human element preceding talk of a broader cosmological transformation:

Hence the presence of the Spirit also means already the overcoming of sin and death. If sin and death are to be finally overcome only in the eschatological consummation, victory over them is already in process in the present work of the Spirit, and above all in his presence as a gift in believers. Thus we are to view the presence of the eschatological future by the Spirit as an inner element of the eschatological consummation itself, namely, as a proleptic manifestation of the Spirit who in the eschatological future will transform believers, and with them all creation, for participation in the glory of God. 110

By focusing his criticism of neo-Protestant anthropocentrism on issues of experience and faith, I think Pannenberg oversees the anthropocentrism implicit in his own view relative to the moral significance of the resurrection. According to David Wilkinson, Pannenberg lacks detailed engagement with cosmology but is more convincing on more general matters.<sup>111</sup> Perhaps this reflects Pannenberg's detailed focus on the moral significance of resurrection over against the detached perspective of science. To conclude, if death is not simply a consequence of moral sin, but a natural evil, resurrection can detach itself from an exclusive tie to the moral and personal and potentially carry direct cosmic significance. In this matter, a more detailed engagement with the science of cosmological transformation would be necessary.

The common thread of these three criticism is caution against a Western rationalistic and anthropocentric account which Pannenberg represents. "Western culture, with its emphasis on rational

<sup>107</sup> Ibid., 5.

<sup>108</sup> Welker, "Theological Realism", 37.

<sup>109</sup> Coakley, Powers and Submission, 152.

<sup>110</sup> Pannenberg, Systematic Theology, 3:553.

<sup>111</sup> Wilkinson, Christian Eschatology, 43.

control and immanent explanation, has the tendency to reduce all prophecy, visions, and gifts of healing and tongues to mental, anthropological, and psychological factors."<sup>112</sup> I include resurrection to the list of prophecies and vision. That is to say, science, whether it be soft, hard, or even theological, is not the answer to the resurrection but only a suggestion.

## 8 Conclusion

In this paper I attempted to discern how Pannenberg understands the resurrection from a scientific perspective. By science, I meant a comprehensive account of knowledge which includes both the hard and soft sciences. In relation to the soft sciences, I engaged history and anthropology as these are the two primary disciplines of Pannenberg's early theology. In relation to the hard sciences, I engaged cosmology and neuroscience because Pannenberg's later theology has elements tied to cosmological and neuroscientific understandings. For the soft sciences, I used historical and anthropological methods that Pannenberg provides in his own writings in order to counter those who claim the resurrection is impossible on analogical grounds. But for the hard sciences, I incorporated concepts provided by contemporary scientist/theologians which fill out Pannenberg's general suggestions in order to demonstrate the resurrection as providing the continuity-in-discontinuity argued for in modern cosmology and neuroscience.

From what I can gather, Pannenberg's evidence for the resurrection, reflecting his modified Kuhnian (or Popperian) perspective, is not falsifiable. That is, resurrection is demonstrated not on irrefutable positive evidence but on circumstantial ones. For example, the historicity of the resurrection is possible because the two resurrection traditions have not been refuted and is cosmologically possible based on characteristics of the resurrection such as contingency, irreversibility, and the time/eternity dialectic but not on the resurrection itself. But is this merely tentative conclusion worth the time and effort spent to attain in. Skeptics will never be persuaded, but if the faithful can be strengthened and edified in their faiths, the effort is beneficial. Because for believers, if God's truth is absolutely everything, we must fully engage science, whether it be hard, soft, of theological. But as I concluded in my critique, knowledge need not be science in the intellectual sense, the emotions in addition to praxis will also "prove" the resurrection.

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