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## What is (Authentic) Knowledge?

We know things strictly in accordance with their natures or what they are in themselves and at the same time we allow what things actually are to reveal themselves to us and thereby to determine for us the content and the form of our knowledge of them. Proper knowing takes place through a steady dynamic interaction between our minds and objective reality. We encourage our thinking to adapt itself to the structural relations and coherent patterns already inherent in nature independent of our knowing of it and so to predominate over any antecedently conceived frames of thought on our part, and thereby we learn more and more to appreciate the contingency, subtlety, richness, variability, and complexity of nature. Thus epistemological and ontological considerations are dynamically wedded in our inquiries and formulations.<sup>1</sup>

—T.F. Torrance

For T. F. Torrance, all authentic knowledge is knowledge according to the nature of that which is known; it is knowledge *κατά φύσιν*. This conviction is the basic axiom of Torrance's epistemology.<sup>2</sup> Knowledge

1. Torrance, *Christian Theology and Scientific Culture* (Oxford: Oxford University Press, 1980), 27–28.

2. Elmer M. Colyer, *The Nature of Doctrine in T. F. Torrance's Theology* (Eugene, OR: Wipf and Stock, 2001), 15. Cf. *Divine Meaning: Studies in Patristic Hermeneutics* (Edinburgh: T&T Clark, 1995), 141, 211; *God and Rationality* (Oxford: Oxford University Press, 1971), 52–53, 89–95, 114–16; *Reality and Scientific Theology*. Revised 2002, Wipf and Stock ed. (Edinburgh: Scottish Academic, 1981), 50; *The Christian Frame of Mind* (Colorado Springs, CO: Helmers and Howard, 1989), 72; *The Ground and Grammar of Theology* (Charlottesville, VA: The University Press of Virginia, 1981), 8–10, 33; *The*

of anything, whether of God or creation, is primarily an act of submission, an allowing of that-which-we-seek-to-know to dictate for us how we shall know it. *Kataphysic* knowledge is not based on good reasons for belief, but that the reality we seek to know is what it is and not something else. In order to appreciate Torrance's position, it must be noted that his views are not to be understood as part of the tradition, in analytic philosophy, to provide a formal definition of knowledge.

One particularly influential definition of knowledge is that it is justified true belief. Edmund Gettier, in his well-known 1963 paper, "Is Justified True Belief Knowledge?"<sup>3</sup> critiqued this view, revealing its inadequacy. One major response to the so-called Gettier Problem is to attempt to articulate what must be *added* to the notion of knowledge as justified true belief so as to secure it from its weaknesses. In contemporary philosophical theology, such an approach is represented by Alvin Plantinga and his development of the idea of "warrant"<sup>4</sup> and the associated debates involving Swinburne and others.<sup>5</sup>

It is more helpful to consider Torrance's position in light of the discussions we find within the philosophy of science, a field with its own epistemological concerns. In the decades since Thomas S. Kuhn published his *Structure of Scientific Revolutions*,<sup>6</sup> philosophers of science have been forced to ask of even would-be scientific knowledge, "Justified to whom, or against the background of which point of view?" It has largely reached consensus that we cannot assume that attempts at justification weigh equally heavily against a variety of conceptual backgrounds, and so, we cannot assume that "justification" is an unambiguous term that is in no need of further analysis.

*Mediation of Christ*. Revised ed. (Colorado Springs, CO: Helmers and Howard, 1992), 2–5; *Theological Science* (Oxford: Oxford University Press, 1969), 25–26, 198; *Transformation and Convergence in the Frame of Knowledge* (Grand Rapids, MI: Eerdmans, 1984), 221.

3. Edmund L. Gettier, "Is Justified True Belief Knowledge?" *Analysis* 23, no. 6 (June, 1963): 121–23.

4. See *Warrant: the Current Debate* (New York: Oxford University Press, 1993); *Warrant and Proper Function* (Oxford: Oxford University Press, 1993); and *Warranted Christian Belief* (New York: Oxford University Press, 2000).

5. Richard Swinburne, "Plantinga on Warrant," *Religious Studies* 37, no. 2 (June, 2001): 203–14.

6. Thomas S. Kuhn, *The Structure of Scientific Revolutions*. 3rd ed. (Chicago: University of Chicago Press, 1996).

Related to this, we must ask what we mean when we say that a belief is “true.” For example, the belief in absolute space and time or action at a distance would have been considered justified and true when considered against the background of classical physics. However, the same cannot be said when we take the same beliefs within the context of relativity physics. The very notion of “truth” seems to have been approached very differently within the philosophy of science than it has been within other areas of analytic philosophy, such as that represented by contemporary analytic epistemology.

### **What Does Torrance Mean by “*kata physin*”?**

Torrance, it seems, approaches the question as to what makes knowledge authentic from an entirely different perspective. He claims that “knowledge is real only as it is in accordance with the nature of the object, but the nature of the object prescribes the mode of rationality we have to adopt towards it in our knowing, and also the nature of the demonstration appropriate to it.”<sup>7</sup> The term that Torrance uses to describe this kind of knowledge is the Greek expression *κατά φύσιν*.

This technical term comes primarily, as Torrance understands it, from Greek Patristic sources. Athanasius used the phrase “according to nature” as effectively equivalent to “according to truth,” or “according to the economy.”<sup>8</sup> However strong this connection was made in antiquity, it is certainly the case that, for Torrance, knowledge according to nature (*episteme kata physin*) is to be understood as being identical with knowing something in truth.

In any rigorous scientific inquiry you pursue your research in any field in such a way that you seek to let the nature of the field or the nature of the object, as it progressively becomes disclosed through interrogation, control how you know it, how you think about it, how you formulate your knowledge of it, and how you verify that knowledge. I often speak of this as *kataphysic inquiry*, a term that comes from the Greek expression *κατά φύσιν*, which means “according to nature.” If you think of something in

7. *Theological Science*, 198. See also *Theology in Reconstruction*, 15.

8. *Divine Meaning*, 383.

accordance with its nature like that, you think of it in accordance with what it *really* is—so that here thinking *κατά φύσιν* is to think *κατ’ ἀλήθειαν*.<sup>9</sup>

While it is clear that Torrance sees his understanding of authentic knowledge to be in continuity with that of the ancient Nicene theologians such as Athanasius,<sup>10</sup> and before him, Irenaeus,<sup>11</sup> he does not think that it is necessarily a distinctly Christian conviction. Indeed, he argues that “Irenaeus was applying the disciplined, scientific approach in knowledge that had been handed down in the Aristotelian and Stoic philosophies.”<sup>12</sup>

Even though a commitment to knowing *kata physin* is not *inherently* Christian, it seems clear that Torrance believes that the converse is true—that Christian convictions press one to affirm such an epistemological position, even if expressed in different terms. Torrance frequently articulates what he believes to be the core of Christian convictions in the expression, “What [Jesus Christ] is toward us He is eternally and antecedently in Himself, but what He is in Himself He is toward us within our life in space and time.”<sup>13</sup> This is one of Torrance’s favorite ways to express the importance and centrality of the doctrines of the Incarnation and Hypostatic Union in all Christian thought. Indeed, he describes this conviction as being “the crucial issue” at the first Council of Nicaea and its affirmation as giving voice to what the church had always believed.<sup>14</sup>

This expression of Torrance’s understanding of the core convictions of Christian faith makes it clear that at least as far as our knowledge of God is concerned, Christians must make something such as *kata physin*

9. *Preaching Christ Today: The Gospel and Scientific Thinking* (Grand Rapids, MI: Eerdmans, 1994), 45.

10. *Divine Meaning*, 204–5.

11. *Ibid.*, 106.

12. *Ibid.*

13. *Theological Science*, 208. For this expression and variations of it, see *Divine and Contingent Order* (Oxford: Oxford University Press, 1981), 7; *Reality and Evangelical Theology* (Philadelphia: Westminster, 1982), 24, 110, 124; *Reality and Scientific Theology*, 183; *Theology in Reconstruction* (Grand Rapids, MI: Eerdmans, 1965), 182; *The Trinitarian Faith: The Evangelical Theology of the Ancient Catholic Church* (Edinburgh: T&T Clark, 1988), 339; *Theological Science*, 141, 234; “Theological Realism,” in *The Philosophical Frontiers of Christian Theology: Essays Presented to D. M. MacKinnon* (Cambridge: Cambridge University Press, 1982) 169–96 (185); *Ground and Grammar of Theology*, 40, 118, 158, 161; *The Christian Doctrine of God: One Being, Three Persons* (Edinburgh: T&T Clark, 1996), 1, 99, 136, 142, 172.

14. “Theological Realism,” 185; see also *Christian Theology and Scientific Culture*, 30–31.

their epistemological position since, in Jesus Christ, we encounter one who is God according to God's own nature at the same time that he shares our human nature in our world of space-time. Because we are given a revelation of the very being of God, it would be manifestly inappropriate to attempt to develop any knowledge of God upon grounds independent of those provided in Christ.<sup>15</sup> Merely *apophatic* or abstract accounts of God cannot count as "knowledge" of God since they do not represent God according to God's nature as revealed in Jesus Christ, but derive from elsewhere. It is only because God has made his own nature known to humanity in Christ that we can have *kataphysic* knowledge of God, and therefore, consider theology to be scientific.<sup>16</sup>

It must be noted that simply demonstrating that Torrance believes that Christian faith implies something like *kata physin* as an epistemological principle for theological knowledge is not sufficient to make the same claim for knowledge more generally. One cannot make the *a fortiori* claim that "If we must know God according to his nature, how much more must we know creation according to *its* nature." Once the existence of God is granted, one could easily argue that we know reality truly, not when we know it in accordance with its own nature, independently conceived, but in accordance with the nature of God and God's intentions for it.

Though theological epistemology cannot *prescribe* a general epistemology, it may *suggest* one. When speaking of our knowledge of the objects of natural science, Torrance does so in precisely parallel language to our knowledge of God. "If nature is not in itself what it is in its relations toward us, if we are not able to grasp nature in the depth of its own reality, then we are not really concerned with science but only with useful arrangements of our own observations and experiments."<sup>17</sup>

15. This is the core of Torrance's opposition to natural theology in anything resembling the traditional sense. This resistance would certainly seem to be every bit as strong as Barth's.

16. It is because of the unique status of Christ within the context of Christian faith (which, for Torrance, is always Nicene) that it would seem that Torrance would not suggest that theology can equally be considered scientific within the context of other religious views.

17. "Theological Realism," 189. See also *Ground and Grammar of Theology*, 161–62, which makes the same point with a closer allusion to an Einsteinian aphorism, to which we shall return in chapter 2.

Though Torrance never makes an explicit argument that we can take the same approach, *mutatis mutandis*, in our epistemological engagement with created things as with God, he seems to see them as parallel with one another. This capacity of the findings of theological science to *suggest*, though never *prescribe*, courses of action for the natural sciences is one important aspect of Torrance's philosophy of science.

Torrance always wrote as a theologian and never primarily as a philosopher of science or historian. As such, his appropriation of various ideas throughout the history of philosophy are somewhat uneven. When Torrance takes up an idea or argument from a historical thinker, it is to bring it into service of his larger theological concerns. This means that when Torrance reflects on the nature of science, he is not attempting to answer the question, "How does (or should) science function," but rather, "How should science function *if the gospel is true?*" While Torrance's philosophy of science arises from a distinctly Christian starting point, it provides an understanding of science which could conceivably be appropriated even by one who does not share his Christian faith.

### **The Conditions of Knowing *Kata Physin***

The idea that true knowledge is knowledge according to a thing's nature is not value-neutral. There are some conditions that must be satisfied in order to obtain such knowledge. The first requirement is that there must be a "reality" actually existent in the universe in the sense that the objects of our knowledge are not *merely* constructs, either of individual minds or of communities. If there is no such independently existing reality, then there is no nature in accordance with which it is to be known.<sup>18</sup>

Additionally, if one is to have knowledge of such a reality, there must be some kind of epistemic *access* to it.<sup>19</sup> The requirements for this

18. This is not to say that, for the principle of *kata physin*, existence logically precedes essence. Rather, the two are equally primordial.

19. Making a similar point, Tapio Luoma, *Incarnation and Physics: Natural Science in the Theology of Thomas F. Torrance* (Oxford: Oxford University Press, 2003), 65, writes, "Torrance's realism does

access are very weak inasmuch as it need not be *complete* nor *infallible*, though it must be *reliable*. In other words, when we have access to a reality, our conceptual grasp of it need not be entirely adequate. We may, in the process of our inquiry, discover another aspect of the reality than we expected at the beginning. Consider, for example, the development of atomic and subatomic physics. Knowledge of the existence of atoms is possible without being aware of the existence of electrons and other subatomic particles.

Our epistemic access to reality also need not be (and never is) infallible. It is entirely possible that our first contacts with a particular reality are baffling and only after long and hard work are we able to bring our understanding to conceptual clarity. We are aware that it often takes time to develop the conceptual framework or perceptual skills necessary to discern what is really the case.<sup>20</sup> However, our access must be *reliable* in the sense that we actually *do* come into contact with the reality, and that, as we continue our investigation, we are not being fundamentally deceived.<sup>21</sup>

It must be noted that such an analysis of the conditions of *kataphysic* knowledge is entirely absent from Torrance's own writing. Indeed, there is no point where there is even a hint that the question as to what is required for his epistemology to be intelligible bothers him or has even occurred to him. There are a few places where Torrance seems to suggest that such conditions are required,<sup>22</sup> but he is utterly untroubled by it. It seems that he would find any sincere objection to the conditions of knowing *kata physin* to be unthinkable. For Torrance, God is not merely an idea but an existent reality whose existence he feels he cannot deny without denying his own rationality.<sup>23</sup>

not, therefore, contain only the belief in the existence of reality independent of an observer but also the conviction that, in the ideal case, this independent reality can and must be allowed to determine what we can know about it."

20. Polanyi discusses the development of skills in *Personal Knowledge: Towards a Post-Critical Philosophy* (Chicago: University of Chicago Press, 1958), 49–65. See also Feyerabend, *Three Dialogues on Knowledge* (Cambridge, MA: Blackwell, 1991), 104–6.

21. It is in this way that Torrance's views require a belief in a form of induction. We shall return to this in chapter 2 in the discussion on ultimate beliefs.

22. Most directly in *Theological Science*, 89. See also *Juridical Law and Physical Law*. 2nd ed. (Eugene, CO: Wipf and Stock, 1997), 3; *Trinitarian Faith*, 52.

23. *Theological Science*, ix.

Additionally, in Jesus Christ, we have epistemic access to God in God's own being. As long as we are considering theology from the point of view of Nicene Christianity, authentic knowledge of God according to the divine nature is indeed possible.

It would seem that Torrance would find a sincere objection to *kataphysic* knowledge within the realm of natural science to be preposterous as well. Physicists, for example, do not *prove* the existence of the reality they are studying; rather, they *assume* it.<sup>24</sup> The fact that physicists proceed in their studies through the use of experimentation shows that they believe that there is, in fact, epistemic access to physical reality.

Torrance does not claim that his position is radically new. Rather, it is a recovery of what he calls "the classical attitude of mind."<sup>25</sup> Indeed, he sees it as implied in our ordinary epistemological procedure in our everyday lives. His reflections on this are worth considering at length.

The fundamental principle that I have been concerned with is a very simple one, but its implications are deep and far-reaching when worked out consistently over the whole range of human knowledge. We know things in accordance with their natures, or what they are in themselves; and so we let the nature of what we know determine for us the content and form of our knowledge. This is what happens in our ordinary, everyday experience and knowledge, when, for example, we treat trees in accordance with their nature as trees and not as rocks, or treat cows in accordance with their nature as cows and not as horses, or treat human beings in accordance with their nature as persons and not as things. Science, in every field of our human experience, is only the rigorous extension of that basic way of thinking and behaving. This is a way of understanding scientific activity that is much more appropriate to the complexity and richness of nature as it becomes disclosed to us through the great advances of the special sciences than is that way to which we became accustomed within the compass of a mechanistic universe and its rigid instrumentalism. This is particularly evident in the field of biology, where advance has been obstructed through reduction of organismic relations into mechanistic concepts. Nature must be respected and

24. Torrance quotes Einstein with approval. "The belief in an external world independent of the perceiving subject is the basis of all natural science." *Christian Theology and Scientific Culture*, 57–58. See also *Theological Science*, 3.

25. For the classical attitude of mind as contrasted with the "modern," see "Classical and Modern Attitudes of Mind," in *Reality and Scientific Theology*, 1–31.



courted, not imposed upon. We must let it develop and flower, as it were, under our investigations. That is surely required if we are really to know anything in accordance with what it is in itself, and not simply along the lines of its artificial reaction to our tormenting distortion of it. Science is not, therefore, something to be set against our ordinary and natural experience in the world, but, on the contrary, is a development and a refinement of it, with a deeper penetration into the natural coherences and patterns already embedded in the real world and already governing our normal behavior day by day.<sup>26</sup>

It is Torrance's conviction that he is advocating nothing more than a "rigorous extension of [our] basic way of thinking and behaving."<sup>27</sup> However, he is also aware of differing perspectives. We shall return to these rival positions presently, after exploring Torrance's position in relation to other forms of realist epistemology.

### **How Does Torrance's Approach Differ from Other Forms of Realist Epistemology?**

Reality and realism are frequent topics of discussion in Torrance's writing. This makes it important to examine where Torrance's realism differs from other forms of realist epistemology. It should be noted right away that Torrance differs from certain forms of realist epistemology inasmuch as he seems to be completely uninterested in settling the question as to whether abstract entities exist. For example, nowhere in the Torrance corpus can one find a discussion of whether numbers truly "exist." Questions of moral realism also seem conspicuously absent from Torrance's thought, especially as one might expect him, as a theologian, to take a stance on whether Christian morality is "real."<sup>28</sup> Additionally, there is no attempt to understand

26. *Ground and Grammar of Theology*, 8–9.

27. *Ibid.*, 33. Similar expressions can be found in *God and Rationality*, 42; *Transformation and Convergence*, 92; *Theological Science*, 107, 317.

28. When considered in the light of Torrance's whole theological approach, this absence is not so surprising. To claim ontological status for virtue, even Christian virtue, in any way that would make it seem as though such a discussion could take place *independently* of the self-revelation of God in Christ, such as we find in the Platonic Socrates, would likely, to Torrance, seem to be a form of traditional natural theology which he categorically rejects. This is the case even in Torrance's pamphlet, "The Being and Nature of the Unborn Child" (Scottish Order of Christian Unity, 2000). Torrance's argument derives its force from the concrete revelation of God in Christ rather than some abstract and transcendent notion of the "good."

reality or realism by using formal language as we see in someone such as Alfred Tarski.<sup>29</sup> This means that there are entire discussions of what it means to be a “realist” that cannot even be brought into dialogue with Torrance.

If one turns one’s attention to where Torrance falls within the landscape of *scientific realism*, he seems to be difficult to place, though for different reasons. He consistently asserts his commitment to realism, yet he is silent with regard to the stereotypically realist concerns as to whether our theories ought to be interpreted literally or whether they may legitimately speak of entities that do not exist. Indeed, Torrance affirms the validity and rationality of theoretical concepts which, while important in the historical development of doctrines, have had to be rejected, such as transubstantiation.<sup>30</sup> He rejects what he calls “picturing models” and the one-to-one correspondence theory of truth that they imply,<sup>31</sup> and he acknowledges the importance of the phenomena described by Kuhn as paradigm shifts, though he prefers to speak of changes in “frameworks of thought.”<sup>32</sup>

One of the intriguing aspects of Torrance’s realism is that it seems to be so different from other forms of scientific realism. We never find, for example, a notion of “approximate truth” or “inference to the best solution,” so common in realist literature contemporary with and subsequent upon Torrance’s career.<sup>33</sup> It would seem that if one did not take Torrance’s vehement declarations of realism to heart, one

29. Alfred Tarski, “Truth and Proof,” *Scientific American*, vol. 220 (6) (Jun 1969): 63–77. The aspects of Tarski’s work that can be brought into dialogue with Torrance will be discussed in chapter 4.

30. *Transformation and Convergence*, 326–27; *ST&R*, 124–25.

31. For Torrance’s rejection of “picturing models,” see *Transformation and Convergence*, 255, 274–75; *Theology in Reconstruction*, 92, 96; *Ground and Grammar of Theology*, 124.

32. For Torrance’s use of “frameworks of thought,” see *Belief in Science and in Christian Life: The Relevance of Michael Polanyi’s Thought for Christian Faith and Life* (Edinburgh: Handsel Press, 1980), 19; *Preaching Christ Today*, 49–50; *Reality and Evangelical Theology*, 9–10, 81; *Reality and Scientific Theology*, 115–116; *Transformation and Convergence*, xii, 3, 81; *Mediation of Christ*, 3–4; *Ground and Grammar of Theology*, 93; *Christian Doctrine of God*, 28; *ST&R*, 14–15, 174.

33. See Stathis Psillos, *Scientific Realism: How Science Tracks Truth*, Philosophical Issues in Science, ed. W. H. Newton-Smith (New York: Routledge, 1999), 261–79; Jarrett Leplin (ed), *Scientific Realism* (Berkeley: University of California Press, 1984); André Kukla, *Studies in Scientific Realism* (Oxford: Oxford University Press, 1998); André Kukla and Joel Walmsley, “A Theory’s Predictive Success does Not Warrant Belief in the Unobservable Entities it Postulates,” in *Contemporary Debates in Philosophy of Science*, ed. Christopher Hitchcock, 133–48 (Malden, MA: Blackwell, 2004).

would have to conclude that, in the end, Torrance is an antirealist. Closer examination of Torrance's own writing as well as the discussion in secular philosophy of science on the topic of scientific realism as it existed during Torrance's career, however, will reveal that Torrance, for all his resonance with certain aspects of scientific antirealism, truly is a realist. Indeed, his understanding of "the real" and its relation to theoretical representation is one of the more interesting—and underexplored—elements of his theology. Unpacking this issue is one of the major tasks of this work, so we shall leave this analysis until we have probed Torrance's realist epistemology further.

Torrance cites various thinkers throughout history as exemplifying his epistemological values and demonstrating the kind of thinking that is demanded by the principle of *kata physin*. These thinkers, theologians, and scientists are separated temporally, from the fourth century to the twentieth, and represent a group of people who, it would seem, would not be grouped together for any other reason.

The first example of the kind of *kataphysic* thinker that Torrance recommends is Athanasius. In spite of the numerous references to the great Alexandrian theologian scattered throughout Torrance's work, the key methodological lesson we can learn from Athanasius is found in his two works, *Contra Gentes* and *De Incarnatione*.<sup>34</sup> In them, Torrance argues,

All *a priori* arguments are set aside and any argumentation from an epistemological or cosmological system people may have inherited prior to or independently of their actual knowledge of God as the Father of Jesus Christ. Nor is there any attempt made to derive knowledge of God abstractively from the Holy Scripture or out of the manuals of earlier theologians, but rather through a reasoned movement of thought within the field of Christian experience and faith to penetrate into its intrinsic order and intelligibility.<sup>35</sup>

That Athanasius was committed to knowing God in his own nature is manifest by his rejection of conceptual systems derived from outside of the Gospel and his rejection of abstractive ways of thinking.

34. *Reality and Scientific Theology*, 86–88. See also *Transformation and Convergence*, 276–77.

35. *Reality and Scientific Theology*, 86–87.

The second thinker Torrance cites as an example of *kataphysic* thinking is Anselm of Canterbury.

Here again we find a way of open inquiry that refuses to operate logico-deductively from fixed *principia* or traditional authorities, whether they are ecclesiastical or biblical, but insists on keeping close to the ground of actual faith and experience. . . . Anselm proposed a way of inquiry which methodologically sets aside even biblical statements regarded as formal premisses, or which passes through them to the solid truth on which they rest, in order that the mind may be brought directly under the compulsion of the truth and the impress of its rationality.<sup>36</sup>

For Torrance, one of the great lessons to learn from Anselm is the idea that truth is something far greater than can be captured in our statements.

He worked with a hierarchy of different levels in which his thought moved from the truth of statement through the truth of being to the Supreme Truth of God. This had the effect of clarifying the coherent structure of theology and of showing that theological concepts are formed and theological statements are made rightly only when they point beyond themselves to the Truth of God to which they are indebted as their Source. But it also has the effect of showing that, while all theological concepts and statements are inadequate, for God infinitely transcends all our thought and speech of him, nevertheless they are not for that reason necessarily false, for their truth as concepts and statements does not rest in themselves but in him to whom they refer. Expressed the other way round, Anselm showed that since God makes his own supreme Truth the objective ground of our knowledge of him he thereby confers relativity upon it. Thus theological inquiry and humility go hand in hand.<sup>37</sup>

Torrance's dialogue with Anselm will prove to be crucial when we turn our attention to what Torrance means by the term "truth" in a subsequent chapter. We shall leave him now to consider the next example of *kataphysic* thinkers.

Kierkegaard, particularly in his *Philosophical Fragments*, is yet another example of someone who resisted the constraints of formal logic.<sup>38</sup> "Once again we have a thinker who rejected the patterns of formal

36. *Ibid.*, 88. See also *Transformation and Convergence*, 277–78.

37. *Reality and Scientific Theology*, 89.

38. *Ibid.*, 89–90. See also *Transformation and Convergence*, 278–79.

argument and engaged in an open-structured movement of thought which, judged from the perspective of logic, represents no more than a set of fragments.”<sup>39</sup> Kierkegaard was one of the first major philosophers who recognized the incredible importance of taking *time* into account in our knowledge of God.

But what really gripped Kierkegaard and forced him to come to terms with [time] was the fact that in the Incarnation “absolute” truth moved into time in Jesus Christ and became “historical fact,” which implies that we cannot know the truth except in a dynamic way involving a temporal or historical relation to it.<sup>40</sup>

It is this kind of thinking that Torrance claims was taken up by James Clerk Maxwell in his dynamical interpretation of the electromagnetic field. This abandonment of attempting to think from a center of absolute rest by Clerk Maxwell is interpreted by Torrance as an example of scientists taking the same kind of step in science that thinkers like the ones just considered took in the field of Christian theology, setting the stage for the advances of people such as Albert Einstein.<sup>41</sup>

### **What Are the Alternatives to Thinking *Kata Physin*?**

After considering this idiosyncratic list of thinkers who represent the kind of epistemological engagement that Torrance thinks should be the norm, the question must be asked, “Are there any viable alternatives to Torrance’s principle of *kata physin*?”

When Torrance describes authentic knowledge as knowledge of a thing according to that thing’s nature, especially with its implicit claim that we do *not* properly know a thing when we know it according to something other than its nature, it is hard to see how this might be controversial. It might seem like nothing more than a truism. However, Torrance realizes that this has not been the only way people have approached knowledge. There are several epistemological approaches

39. *Reality and Scientific Theology*, 89.

40. *Ibid.*, 90.

41. *Ibid.*, 90–91.

that Torrance feels undermine knowledge according to the nature of a thing.

### Is Dualism a Problem?

The first and most dominant epistemological concern for Torrance is what he believes to be the distorting influence of dualistic ways of thinking. There are a variety of dualisms that have been developed throughout history that Torrance believes to be damaging to authentic knowledge and interpretation of the world. Speaking of the problem of dualism, though not by name, Torrance writes, "From time to time there have arisen in the course of human culture ways of thinking in which aspects of reality that are naturally integrated have been torn apart from each other, with damaging effect in different areas of knowledge."<sup>42</sup>

It would seem that Torrance's major concern with the effects of dualistic ways of thinking is their tendency to separate what Torrance believes are unified and integrated. Whether this separation is between the heavens and the earth (or between the sensible and the intelligible), how a thing appears to us and what it is in itself, or between the knowing subject and the object of their knowledge, dualisms drive a wedge between different facets of an integrated whole.

Torrance might argue that there is no reason, *a priori*, to assume that there must be such dualisms in our approach to the world, and so, their imposition is a falsification of reality itself. Regardless of what weight such arguments might have, the issue seems to go deeper. In order for knowledge according to the nature of reality to necessarily imply a non-dualist or unitary approach, there must also be a basic conviction about the ultimate nature of the universe; that reality does, in fact, have this unitary character. We shall return to the issues surrounding these so-called ultimate beliefs in the next chapter.

At the moment, we must ask if it is possible to give an account for

42. *Mediation of Christ*, 1.

why Torrance thinks that knowing things according to their nature implies a rejection of dualistic ways of thinking. As we shall see below, when Torrance argues for the inadequacy of dualistic ways of thinking, he does not do so by arguing on the basis of general human experience or some kind of secular philosophy. He argues deliberately and concretely from the standpoint of Christian faith. Though Torrance's radical commitment to unitary ways of thinking is not, in itself, distinctly religious and can thus be useful in self-consciously secular fields, such as the philosophy of science, it is clear that he feels driven to such a position because of distinctly religious, indeed distinctly *Christian*, convictions. If we begin, as Torrance does, by taking our cue about the nature of reality from God's self-revelation in Jesus Christ, it would seem that Torrance's anti-dualistic stance is justified.

Torrance's affirmation of *kataphysic* thinking, as exemplified by the great thinkers discussed above is, in part, rooted in the rejection of *a priori* judgments regarding what a thing is or must be. The moment one suggests that Torrance's rejection of dualism is the result of his Christian convictions, one must ask whether his anti-dualistic position is not a judgment *a priori*, the very kind of judgment that he opposes so strongly. It might be argued that Torrance's Christian convictions prevented him from fully understanding dualistic claims about the universe and our knowledge of it, and so, prevented him from appropriately discerning the relation of dualism to authentic knowledge.

Torrance, it would seem, would reject the accusation that his condemnation of dualism is *a priori*. Such an accusation might seem plausible if Christian convictions have universally and uniformly led Christians to radically anti-dualist positions, but this has not been the case. Not only does Torrance see dualistic tendencies alive and well in the contemporary church,<sup>43</sup> he has made a careful study of the intellectual trends that were current in the early church. Indeed, one might view his entire monograph, *The Trinitarian Faith*,<sup>44</sup> as a detailed

43. *Reality and Evangelical Theology*, 15–17.

44. *Trinitarian Faith*.

exposition of how the various dualisms inherent in what have come to be known as the christological and Trinitarian heresies are destructive to the most basic claims of the Gospel. It seems that Torrance can be defended against the charge of condemning dualism *a priori* because it is not initially clear that basic Christian convictions are not compatible with dualistic approaches to knowledge, as is manifest by the many attempts to explain Christian faith within a dualistic framework, such as we find in Arianism or Sabellianism,<sup>45</sup> and that it is only when it is seen how dualism undermines those Christian convictions in the actual unfolding of history that one can say with confidence that one cannot have knowledge of God in a dualistic framework, and so, as a Christian, such frameworks must be rejected.

As mentioned above, Torrance's opposition to dualism is rooted in his Christian convictions. While such anti-dualistic commitments can have effects far beyond the field of Christian theology, it is because of their incompatibility with Torrance's basic understanding of Christian faith, expressed in the phrase "What [Jesus Christ] is toward us He is eternally and antecedently in Himself, but what He is in Himself He is toward us within our life in space and time" that Torrance comes to reject dualism wherever he finds it. It would seem to be an accurate reconstruction of Torrance's general anti-dualistic stance to say that, however plausible dualistic ways of thinking may appear in fields outside of Christian theology, they are revealed to be utterly unacceptable *within* that field, and so, must be rejected by Christians in *every* field.

The issues of cosmological dualism seem to lend themselves to a more picturesque description than others. Torrance invites us to envisage three ways to consider the relation "between the divine and earthly realms."<sup>46</sup>

Picture in your mind the three ways in which two hemispheres may be related to one another: (1) as adjacent to one another but with a clear gap between them; (2) as touching one another tangentially; and (3) as

45. *Ibid.*, 115, 273–76.

46. *Preaching Christ Today*, 51–52.



intersecting one another or overlapping with one another. (1) and (2) presuppose a dualist framework of thought, whereas (3) rejects dualism in favor of interactionism.<sup>47</sup>

Within the context of the early church, dualistic presuppositions were given expression in the sharp differentiation between the *kosmos aisthetos* and the *kosmos noetos*, the world of sensible experiences and the world of intelligible reality.<sup>48</sup> Reflecting on the nature of such a separation, Torrance writes, “Pushed to its extreme point the *chorismos* [separation] between the *kosmos aisthetos* and the *kosmos noetos* means that the signs, words, statements, images, and conceptions arising within the world have only a this-worldly reference.”<sup>49</sup>

Torrance saw this kind of destructive dualism at work in Arian interpretations of Christian faith.

On the other hand, if God and the world are separated, as in the Arian scheme of things, and if the *cosmos noetos* and the *cosmos aisthetos* are disjoined from one another, then theology in the strict and proper sense is impossible, and there can be only mythology. Mythology is possible only on the axiomatic assumption of a radical dichotomy or *chorismos* between God and the world, for then our attempts to think of God are only *epinoetic* acts grounded in our own this-worldly self-knowledge and projected into God across the great gulf between us. But when that kind of gulf is eliminated by the condescension of the living and loving God who interacts with our world and human existence, and becomes incarnate in Jesus Christ, then a *dianoetic* way of thinking is possible, in which our thoughts, while remaining fully human, nevertheless repose upon the reality of God himself and are determined by his hypostatic self-communication to us in this world.<sup>50</sup>

To put Torrance’s conviction surrounding the problems of a cosmological dualism for Christian faith in other words, we might say that if it is indeed true that in Jesus Christ, God has crossed the alleged divide between the intelligible and the sensible and come to meet with us, such a dualism would falsify the Christian claim that in Christ, we may come face-to-face with God. As such, cosmological dualism

47. *Ibid.*, 51.

48. *Divine Meaning*, 45.

49. *Ibid.*, 158. See also 159, 188–90.

50. *Ibid.*, 203–4.

deprives Christianity of the ability to think *theologically* and it is left only with the ability to think *mythologically*.<sup>51</sup>

The problem of cosmological dualism extends beyond the Trinitarian heresies. Torrance also finds that christological positions condemned as heretical tend to flow from a tacit assumption of a cosmological dualism. In such a case, Christ is considered either “from above,” in which case, he is truly part of the intelligible world and not part of the sensible world, or “from below,” in which case, the opposite is true. Torrance considers these two approaches as being fundamentally the same, since they flow from the same dualistic tendencies, and classifies all such christologies as either “docetic” or “ebionite,” respectively.<sup>52</sup>

A further concern over cosmological dualism is that Torrance feels it is linked in some way with the development of traditional natural theology. “It is rather curious that natural theology seems to have flourished only in times when a cosmological dualism dominated thought and to have partaken of that dualism.”<sup>53</sup> It is important to note that the very thing that does so much to separate Christ from our world of space-time, and so, eliminate the primary way that Christians can come to know God would also seem to be responsible for the attempt to know God through another, entirely different, way.

Another dualism that Torrance finds destructive to authentic knowledge is what he calls “the Kantian idea that we cannot know things in themselves or in their internal relations, but only in their external relations as they appear to us.”<sup>54</sup>

There are several ways in which Torrance finds this Kantian dualism to be problematic. A dualism of this sort can have dramatic consequences for biblical interpretation.

By cutting out any possibility of immediate apprehension of rational or

51. *Trinitarian Faith*, 133–34. See also *Divine Meaning*, 264; *God and Rationality*, 45–46; *Preaching Christ Today*, 49–50; *Theological Science*, 329.

52. On the issue of docetic and ebionite Christology, see especially *Trinitarian Faith*, 111–13. See also *Divine Meaning*, 35; *Reality and Evangelical Theology*, 58–59; *Ground and Grammar of Theology*, 124; *Christian Doctrine of God*, 114–15.

53. *Reality and Scientific Theology*, 37.

54. *Ground and Grammar of Theology*, 28.

intelligible elements in any field of investigation, dualism limits the theological component in biblical knowledge to what is logically derived from observations or appearances. . . . This means, for example, that it is impossible for us ever to know anything of Jesus Christ as he is in himself, for we are restricted to Jesus as he appeared to his contemporaries—and indeed to the impression he made upon them as it is mediated through the structures of their consciousness, by which they made him an “object” of their faith and knowledge.<sup>55</sup>

As Torrance understands it, approaching the biblical text within the context of a Kantian dualism will necessarily place the reader in a position where they are at least two stages removed from the actual revelation of God through Christ. The biblical authors cannot bear witness to Christ as he is in himself, but only as he appeared to them. Further, the reader can never know what the biblical text is communicating in itself but only as it appears to them. Such would, for Torrance, eliminate any authority of the scriptural witness.

The fact that Kantian dualism is, for Torrance, antithetical to Christian faith is made clear when it is noted that the phrase we have cited as a kind of summary statement of Torrance’s conception of Christian faith is worded in such a way that stands starkly against such a dualism. One cannot believe that “what [Jesus Christ] is toward us He is eternally and antecedently in Himself, but what He is in Himself He is toward us within our life in space and time,” and yet, affirm that we can only know a thing as it appears to us as opposed to what it is in itself.

Torrance does not limit himself only to theological reasons for rejecting Kantian dualism. Scientific practice, as he understands it, also overturns its influence as it was manifest, according to Torrance, in people such as Ernst Mach.<sup>56</sup>

Science has been shedding its abstractive character, in which, through a predominantly observationalist approach, it tended to tear the surface patterns of things away from their objective ground in reality, as though we could have no knowledge of things in themselves or in their internal

55. *Ground and Grammar of Theology*, 28–9.

56. *Christian Theology and Scientific Culture*, 21; *Transformation and Convergence*, 272–73; *Ground and Grammar of Theology*, 34–35, 42–43.

relations, but only in their appearances to us. . . . But now all that is being cut back, as—in sheer faithfulness to things as they actually are in themselves—science is concerned to understand the surface patterns of things in the light of the natural coherences in which they are actually embedded, and it therefore operates with the indissoluble unity of form and being, or of theoretical and empirical elements in human knowledge.<sup>57</sup>

Torrance's opposition to Cartesian dualism is somewhat more complicated than other forms of dualistic thought. The reason for this is that it is somewhat difficult to pin Torrance down on precisely what he *means* by Cartesian dualism. Traditionally, Cartesian dualism is the sharp differentiation between the mind and the body. Torrance certainly uses the term in precisely this way from time to time.<sup>58</sup> However, he more often uses the term "Cartesian dualism" to describe a radical break between subject and object,<sup>59</sup> though he also seems to see this as implying a radical break between phenomenal events and their alleged "meaning."<sup>60</sup>

There is no point in Torrance's writing where he fleshes out the relations between these three meanings of the term, but it seems possible to provide something of an account of how they *might* be linked. In a definition of "dualism," Torrance considers "a dualism between the mind and the body," which certainly seems like the usual understanding of Cartesian dualism, and describes it as a situation "in which a physical and mental substance are conceived as either interacting with one another or as running a parallel course without affecting one another."<sup>61</sup>

It seems reasonable to suggest that a sharp separation between the mind and body could result in the kind of subject-object dualism which Torrance sets himself up against if one could say that, under dualist considerations, it is the mind that is the knowing subject as detached and abstracted from the body, unlike what we find in someone such

57. *Ground and Grammar of Theology*, 10–11.

58. One such example can be found in *Transformation and Convergence*, 156.

59. For this use of the term, see *Reality and Scientific Theology*, 15, 56–57, 72; *Transformation and Convergence*, 13–14; *Theological Science*, 306.

60. See *Transformation and Convergence*, 156.

61. *Belief in Science and in Christian Life*, 136.