

# Paradigms, Mission, and the Theology of the Cross

Joel Okamoto

*Abstract:* Philosopher of science Thomas Kuhn identified “paradigms” as central to the growth of scientific knowledge and practice. A “paradigm” is a concrete solution to a problem that proves valuable to identify and deal with other problems. This article applies this concept to Luther’s theology of the cross. It argues that the theology of the cross was a paradigm for Christian theology and practice at the time of the Reformation, and it shows that the theology of the cross still serves as a paradigm for mission and mission thinking in our time.

## Introduction

In an earlier article in *Lutheran Mission Matters*, I summarized Martin Luther’s theology of the cross in the Heidelberg Disputation and suggested ways it might frame discussion about mission and mission thinking.<sup>1</sup> I noted that Luther’s distinction between the theologian of glory and the theologian of the cross reflected his judgment that theologians of glory make a “category mistake.” This means more than they are wrong about some or many matters. Theologians of glory are confused in general. They mistake matters that belong to one category as though they belonged to an entirely different category.<sup>2</sup> A mistake of this magnitude justifies Robert Kolb’s assertion that Luther’s views “constituted a paradigm shift within Western Christian thought in the understanding of God’s revelation of himself, God’s way of dealing with evil, and what it means to be human.”<sup>3</sup>

In this article, I will pursue the idea that Luther’s theology of the cross amounts to a paradigm shift and apply this insight to thinking about mission in general and evangelism in particular.

## Paradigms, paradigm shifts, and mission

The expression “paradigm shift” originated with philosopher of science Thomas Kuhn in his vastly influential book *The Structure of Scientific Revolutions*.<sup>4</sup> He used the idea of a “paradigm” to argue that scientific progress is made not only and not primarily through the gradual accumulation of facts, theories, and methods, but especially through revolutions in how scientists think about their work, their concepts and aims, and the world itself. When a paradigm shift occurs, scientists who join the shift do not simply know more or do better. They convert to a different way of participating in science.



*Joel Okamoto is the Waldemar and Mary Griesbach Professor of Systematic Theology at Concordia Seminary, St. Louis, Missouri, where, since 1998, he has struggled to embody and explain the theology of the cross.*

The ideas, distinctions, and arguments in *Structure* have been adapted to many other areas of practice and theory. Kuhn himself did this when he responded to his critics several years after the book was first published.<sup>5</sup> As Kolb shows, Christian theologians have also done so. A widely known and well-regarded example in missiology is *Transforming Mission: Paradigm Shifts in the Theology of Mission* by David Bosch.<sup>6</sup>

What has been less widely appreciated about paradigms is that Kuhn used the term in two different senses.

On the one hand, [paradigm] stands for the entire constellation of beliefs, values, techniques, and so on shared by the members of a given community. On the other, it denotes one sort of element in that constellation, the concrete puzzle-solutions which, employed as models or examples, can replace explicit rules as a basis for the solution of the remaining puzzles of normal science.<sup>7</sup>

Kuhn called paradigms in the first sense of the term “sociological.” He referred to paradigms in the second sense as “shared examples” or “exemplars.”

Paradigms and paradigm shifts in the sociological sense have proven helpful in understanding historical development in many communities, not only scientific ones. It is paradigm in the sociological sense that explains Kuhn’s enormous influence. Kolb, for instance, meant paradigm in the sociological sense. This is evident as he explained Luther’s achievement:

His Heidelberg theses floated before his monastic brothers a new constellation of perspectives on the biblical description of God and of human reality....

What he offered his fellow monks in Heidelberg was not a treatment of a specific biblical teaching or two. He presented a new conceptual framework for thinking about God and the human creature. He provided a new basis or set of presuppositions for proclaiming the biblical message. Luther stepped to the podium in Heidelberg with an approach to Christian teaching that came at the task from an angle significantly different from the theological method of his scholastic predecessors. They may have disagreed among themselves on a range of issues, but they all practiced a theology of glory, according to the Wittenberg professor. Luther called for a different way of thinking about—and practicing—the proclamation of the gospel of Jesus Christ. Indeed, more than a proposal for a codification of biblical teaching, a theology of the cross, Luther called for the practice of this theology in the proclamation and life of theologians of the cross.<sup>8</sup>

Phrases like “a new constellation of perspectives,” “a new conceptual framework,” and “a different way of thinking about—and practicing the proclamation of the gospel of Jesus Christ” clearly reflect the sociological sense of paradigm, and it suits Kolb’s purpose of conveying the sweep of Luther’s proposal in context of Western Christian thought.

But the theses of the Heidelberg Disputation themselves can also be understood as paradigms in the second sense, that is, as *exemplars*. The idea of paradigms in the sociological sense explains how radical changes can be. The idea of paradigms as exemplars explains how such changes come about in the first place. Paradigms in the sociological sense work well for a project like David Bosch's, which tried to make sense of historical developments and contemporary differences in the church's theology of mission. Paradigms as exemplars, for reasons that will be made clear, can be helpful in better grasping and practicing mission itself.

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### **Paradigms in science and scientific revolutions**

The idea that scientific progress required revolutions was not in itself new. Talk about the “Copernican Revolution” and the “Scientific Revolution” had been commonplace for a long time. Still, Kuhn's proposal was itself revolutionary.

This is because Kuhn first developed a novel picture of science. Kuhn proposed that we think of science as normally a kind of puzzle-solving. A puzzle for Kuhn is a problem assumed to have a solution. Crossword puzzles and jigsaw puzzles are examples of puzzles in this sense because they are assumed to have solutions. The problem of designing lasting peace, on the other hand, is not assumed to have a solution and therefore is not a puzzle.<sup>9</sup> Scientists themselves might not like to be thought of as mere puzzlers, but the concept stemmed from Kuhn's conclusion that “[p]erhaps the most striking feature” of working on normal research problems—what Kuhn would call “normal science”—“is how little they aim to produce major novelties, conceptual or phenomenal.”<sup>10</sup>

Why so little novelty? Because normal science is “mop-up work.” Normal science fills in and makes more precise what is assumed to be the case. Therefore, as Kuhn explained, “Mopping-up operations are what engage most scientists throughout their careers. They constitute what I am here calling normal science.”<sup>11</sup>

What is normal science “mopping up”? “[O]ne or more past scientific achievements, achievements that some particular scientific community acknowledges for a time as supplying the foundation for its further practice.”<sup>12</sup> In contemporary times, these achievements are usually stated and passed on in textbooks and through laboratory work. In the past, classics like Newton's *Principia* served “implicitly to define the legitimate problems and methods of a research field for succeeding generations of practitioners.”<sup>13</sup>

Kuhn called such achievements “paradigms,” or, as he did later, “exemplars.” He did so “to suggest that some accepted examples of actual scientific practice—examples which include law, theory, application, and instrumentation together—provide models from which spring coherent traditions of scientific research.”<sup>14</sup> Paradigms are concrete achievements that share two essential characteristics. “Their achievement was sufficiently unprecedented to attract an enduring group of adherents away from

competing modes of scientific activity. Simultaneously, it was sufficiently open-ended to leave all sorts of problems for the redefined group to resolve.”<sup>15</sup>

As the label implies, exemplars are models for solving all sorts of problems. One of Kuhn’s illustrations was Newton’s Second Law of Motion, stated symbolically as  $f = ma$  and rendered in plain English as “Force equal mass times acceleration.” A student learns not only the symbolic generalization and its rendering, but also to recognize the forces, masses, and accelerations in various situations. But there is more, Kuhn pointed out. Students of science and scientists themselves often deal with situations in which  $f = ma$  itself is not applied but is what Kuhn called the “law-sketch” or “law-schema” for a variety of situations. In the case of free fall, gravity comes into play and  $f = ma$  becomes  $f = mg$ ; in the case of a simple pendulum, it become  $f = mg \sin \theta$ ; and so on. In this way,  $f = ma$  is an exemplar.

Kuhn’s central insight was that *exemplars are more basic than theories and methods*. They are, to repeat his own words, “the concrete puzzle-solutions which, employed as models or examples, can replace explicit rules as a basis for the solution of the remaining puzzles of normal science.” Considering the actual history of science, Kuhn realized that he had to account for the observable fact that scientific communities often did not operate with enough explicit rules or theories to justify the unquestionable coherent and successful practices they were engaged in. But shared examples “provide[d] what the group lacked in rules.”<sup>16</sup> Margaret Masterman, an early commentator on Kuhn’s proposal, put it this way: “The paradigm is something which can function when the theory is not there.”<sup>17</sup> These puzzle-solutions come first, and they retain their defining status; theories and other developments follow.

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At this point, it becomes clear why Kuhn was looking for a term like “paradigm” instead of “theory” or “framework.” Paradigms as exemplars are recognized *before* general theories are articulated and *before* new frameworks are adopted. It always is the case that first there are specific questions, problems, and puzzles and then attempts to solve them. Theorizing only happens once the questions, problems, and puzzles are recognized as legitimate, and after some success has been found in dealing with them. Through this process, these questions, problems, and puzzles become community property. They become shared examples or exemplars that define the science, like the inclined plane, pendulum, and planetary orbits listed by Kuhn for physics.

The idea of paradigms as “accepted examples of actual scientific practice” is very important for Kuhn’s argument, although he would later acknowledge that this was “the central element of what I now take to be the most novel and least understood aspect of this book.”<sup>18</sup> Paradigms in this sense are “shared examples” or “exemplars” of how to recognize and solve puzzles. In normal science, they are “the concrete

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puzzle-solutions that students encounter from the start of their scientific education... .”<sup>19</sup> More than anything, these exemplars set apart different scientific communities, not only broadly, like the difference between physics and biology, but also within disciplines. For example, astrophysics will have some specific exemplars that set it apart from particle physics. But all physicists “begin by learning the same exemplars: problems such as the inclined plane, the conical pendulum, and Keplerian orbits; instruments such as the vernier, the calorimeter, and the Wheatstone bridge.”<sup>20</sup>

A *paradigm shift*, then, may take place when anomalies in the normal scientific research become intractable and prompt a crisis about the viability of the paradigm itself. Normal science becomes impossible, and science becomes “extraordinary” in the sense that it is no longer trying to “mop-up” but to find a new way. “The proliferation of competing articulations, the willingness to try anything, the expression of explicit discontent, the recourse to philosophy and to debate over fundamentals, all these are symptoms of a transition from normal to extraordinary research.”<sup>21</sup> It is a search for a new paradigm. Of course, a new paradigm might not emerge and gain enough followers to sustain a new program of normal science. But when it does, a paradigm shift occurs.

Such a shift is *revolutionary*. A paradigm shift results not only in different and presumably better answers, but in different questions, problems, criteria, concepts, theories, and aspirations. A paradigm shift was nothing short of “a transformation of the world within which scientific work was done.”<sup>22</sup> Kuhn explained how the world changes:

Led by a new paradigm, scientists adopt new instruments and look in new places. Even more important, during revolutions, scientists see new and different things when looking with familiar instruments in places they have looked before. It is rather as if the professional community had been suddenly transported to another planet where familiar objects are seen in a different light and are joined by unfamiliar ones as well. Of course, nothing of quite that sort does occur; there is no geographical transplantation; outside the laboratory everyday affairs usually continue as before. Nevertheless, paradigm changes do cause scientists to see the world of their research-engagement differently. In so far as their only recourse to that world is through what they see and do, we may want to say that after a revolution scientists are responding to a different world.<sup>23</sup>

Since paradigm shifts result in transforming someone’s worldview, Kuhn spoke of the paradigm shift as a “conversion.” The change is so radical that “it must occur all at once (though not necessarily in an instant) or not at all.”<sup>24</sup>

### **Mission as paradigm shifts**

The ideas that paradigm shifts are revolutions, that they effect the transformation of one’s view of the world, and that they amount to conversions apply not only to scientific progress but also to mission. The mission of Jesus Christ, and therefore the mission of the Christian Church, do not amount to giving better answers to questions that everyone has. Christ proclaimed the coming of the radically new—the Kingdom

of God—and called on all to repent. Christ’s mission was revolutionary. For those who heard, repented, and believed, the message effected a transformation of their view and life in the universe. Christ converted them from their old identities and ways to a new identity and to new ways.

Put this way, it could be argued that what Kuhn did was apply religious ideas to science. In fact, this is what John Watkins did in a 1965 essay against Kuhn’s idea of normal science: “My suggestion is, then, that Kuhn sees the scientific community on the analogy of the religious community and sees science as the scientist’s religion.”<sup>25</sup> Watkins saw parallels both with normal science and with paradigm shifts. For normal science, he asked readers to consider a theologian dealing with an apparent inconsistency between two Bible passages.

Theological doctrines assure him that the Bible, properly understood, contains no inconsistencies. His task is to provide a gloss that offers a convincing reconciliation of the two passages. Such work seems essentially analogous to ‘normal’ scientific research as depicted by Kuhn; and there are grounds for supposing that he would not repudiate the analogy. For *The Structure of Scientific Revolutions* contains many suggestions, some explicit, others implicit in the choice of language, of a significant parallelism between science, especially Normal Science [sic], and theology.<sup>26</sup>

For paradigm shifts, Watkins points out: “And when Kuhn discusses the personal process of repudiating an old paradigm and embracing a new one, he describes it as a ‘conversion experience,’ adding that ‘a decision of that kind can only be made on faith.’”<sup>27</sup>

It does not matter for our purpose whether Kuhn intended such connections between his account of science and scientific progress. The parallels are apparent, and they are especially appropriate for describing and analyzing mission.

At this point we could go in a few different directions in drawing out implications from these parallels. I will return to the idea of paradigm as exemplar to show how the theology of the cross is a paradigm for evangelism, that is, for proclaiming the gospel to those who do not yet believe in the Lord.

### **Luther’s theology of the cross as an exemplar for evangelism**

Luther was already a controversial figure before the German Augustinians convened in Heidelberg in April 1518, so he was asked to prepare theses on sin, free will, and grace and avoid indulgences and penance. He consented. But the theses he prepared, especially the theological theses, were carefully composed and arranged. Taken together, they raised two basic problems and proposed two new solutions. In Kuhn’s idiom, Luther was offering two *exemplars*. One was a new solution to the puzzle of righteousness before God. The other was a new solution to the puzzle of being a faithful theologian.

The prevailing paradigm of the medieval church held righteousness before God was attained through human works and will. Luther pointed out how this ran contrary to the Scriptures in several ways (see Theses 1–18). The law promotes sin, and righteousness before God does not come by keeping the law (Thesis 1). Human

creatures are incapable of doing the works of the law anyhow (Thesis 2) and in fact put them under a curse (Thesis 3). The human will is free only to sin, so if “it does what it is able to do” (*facit quod in se est*), as the scholastics taught, it would commit mortal sin (Thesis 13). This is one set of problems.

All of this, Luther contended, derived from another problem: Not knowing God through the crucified Christ. The underlying theology—the theology of glory—understood that God’s ways could be seen by understanding how the world works (Thesis 19). In the world, the righteous ones are those whose will and works are righteous. Theologians of glory assumed that this is how it is with God. And this led to turning everything upside down. As Luther argued in the Proof to Thesis 21:

This is clear: He who does not know Christ does not know God hidden in suffering. Therefore he prefers works to suffering, glory to the cross, strength to weakness, wisdom to folly, and in general, good to evil. These are the people whom the apostle calls “enemies of the cross of Christ” [Phil. 3:18], for they hate the cross and suffering and love works and the glory of works. Thus, they call the good of the cross evil and the evil of a deed good.<sup>28</sup>

On the other hand, Luther’s new paradigm—his new solution—for the puzzle of righteousness before God is: “He is not righteous who does much, but he who, without works, believes much in Christ” (Thesis 25).<sup>29</sup> Righteousness before God is not a matter of good works or good intentions *at all*. Justification is by faith in the crucified Christ apart from works, and it comes about entirely at God’s initiative and action: “The love of God does not find, but creates, that which is pleasing to it...” (Thesis 28).<sup>30</sup> God does not look for someone or some works that he finds pleasing. He finds persons to love and makes them good and pleasing.

At this point, Luther’s new paradigm for knowing God is clear: God is known not according to the usual wisdom of the world but through the *crucified Christ* (Thesis 20). Faith in someone who is crucified is not merely unusual; it is strange and foolish. It means that God wants to be known and dealt with through a person whose words and deeds led to being rejected and put to death by crucifixion. But it is only through Christ that theologians call a thing what it actually is. Otherwise, they call evil good and good evil (Thesis 21).

Once again, Kuhn defined a paradigm as “sufficiently open-ended to leave all sorts of problems for the redefined group to resolve.”<sup>31</sup> This applies to both of Luther’s solutions in the Heidelberg Disputation. But the paradigm for knowing God is the one that applies more directly to evangelism. Knowing God *properly* is essential, as the New Testament testifies to often and in varied ways. But what is the proper way? Luther raised this as a problem. Like Paul, he stressed that God is known through a way that is weak and foolish, namely, the crucified Christ.

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The theology of the cross is a paradigm for evangelism by making the problem of knowing God properly the essential question. The corresponding solution is in proclaiming Christ crucified, a stumbling block to Jews and foolishness to Greeks (1 Cor 1:23).

In this case, “Christ crucified” refers not merely to the historical fact that Christ died on a cross, but to Him and His mission, which resulted in His rejection, suffering, and crucifixion. Sometimes “preaching Christ crucified” is shorthand for “Telling people Jesus died on the cross to save you from your sins.” Luther has in mind something very different. To be sure, Luther does not make this point directly. But we should not expect it from him, if we think that Luther is offering a paradigm, that is, an open-ended puzzle-solution. It is our puzzle.

Luther does direct us toward the solution in the paradigm of righteousness that he advances in the Heidelberg Disputation. Righteousness before God is by faith alone. The law, works, and the will have nothing to do with righteousness before God. It is not even theoretically possible for a perfectly righteous person to merit eternal life. In the same way, Christ is not someone who makes up for sin by His own good works and good intentions and who pays a debt owed because of sin. To insist on preaching Christ crucified only in this way is to prefer works to suffering and, in general, good to evil. Luther, to be clear, did not deny how important our sins are or how necessary forgiveness of sins is for us. But this is concern about our own righteousness. Here Luther is concerned about righteousness before God, and this righteousness is entirely alien; human creatures are completely passive. Who one is and what one has done are irrelevant. It is entirely according to His favor. It is by divine grace alone, and therefore it can only be received through faith. “[W]orks contribute nothing to justification,” Luther argued in the Proof of Thesis 25. “[A person’s] justification by faith in Christ is sufficient to him.”<sup>32</sup>

And how do we know justification by faith in Christ is sufficient for anyone? It is what God revealed through Christ in the first place. Naturally, this comes through clearest in the gospels because this is point of the gospels. What John wrote applies to all the canonical gospels: “These things were written that you may believe that Jesus is the Christ, the Son of God, and that by believing you may have life in his name” (Jn 20:31). Each gospel relates the story of Jesus Christ in its own way, but all the gospels tell of Jesus Christ come to announce, to teach, and actually to inaugurate new life in the new creation for those who believe in Him. He comes in fulfillment of promises made to Abraham and all Israel. But He confounds many in Israel. He calls sinners, not the righteous. He does not always keep the Mosaic Law. Demons are on a first-name basis with Him. He shows grace even to Samaritans and Canaanites. He calls Himself the Son of God. He is rejected and crucified. But God raised Jesus from the dead, and as the risen Lord and Son of God, Jesus sent His followers to proclaim Him. They are sent to proclaim faith in Him for life in the world to come when He comes again in glory, this time.

Proclamation along these lines is the puzzle-solution suggested by the exemplar of Luther’s theology of the cross. Moreover, when we consider the theology of the cross as a paradigm, then conversion is the goal, and transformation of the view of the world is the result. And conversion and transformation follow naturally. Knowing God through the crucified Christ implies a definite and unique picture of the universe. And



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knowing that Christ came and was willing even to be crucified for inviting the peoples of the world to enjoy new life in this new creation aims precisely for conversions.

All I have offered here is a puzzle-solution, not an approach or an outline. They would be part of the “mopping-up” that comprises the majority of the thinking and effort. However, someone might ask whether this kind of mopping-up is worth the effort today. Questions like this are about the actual contemporary relevance of evangelism along these lines. They are fair questions and appropriate for drawing this article to a close.

My answer is, “Yes.” My reason is that knowing God through the crucified Christ, and therefore evangelism that is centered in proclaiming the crucified Christ, aims to bring an end to all other ways of identifying and justifying oneself. In the Heidelberg Disputation, it was to bring an end to justifying oneself by one’s own efforts and intentions. But the crucified Christ means the end of identifying with other gods, with other philosophies, with self-made spiritualities. It also means the end to despair over meaninglessness and dismay over the confusion and violence so prevalent in contemporary life. This is because Christ came to rule over all things. He was rejected and crucified for this mission, but God raised Him from the dead. So, when He comes again, His kingdom will have no end. And for all who believe in Him, they will share in this everlasting kingdom. The Christian good news is intended to be good for any and for all.

## ENDNOTES

<sup>1</sup> Joel Okamoto, “Mission and the Theology of the Cross,” *Lutheran Mission Matters* 32 (2024): 67–74.

<sup>2</sup> Okamoto, “Mission and the Theology of the Cross,” 69.

<sup>3</sup> Regin Prenter, “Luther’s Theology of the Cross,” *Lutheran World* 6 (1959): 222.

Robert Kolb, “Luther’s Theology of the Cross,” *Lutheran Quarterly* 16 (2002): 443. In the introduction to the “Heidelberg Disputation” in *The Annotated Luther*, Dennis Bielfeldt concluded, “There is indeed much in the disputation that supports Kolb’s assertion.” Dennis Bielfeldt, *The Annotated Luther*, vol. 1, *The Roots of Reform*, ed. Timothy J. Wengert (Minneapolis: Fortress Press, 2015), 67.

<sup>4</sup> Thomas S. Kuhn, *The Structure of Scientific Revolutions*, 50<sup>th</sup> Anniversary Edition, with an introductory essay by Ian Hacking (Chicago and London: The University of Chicago Press, 2012). (Hereafter Kuhn, *Structure*.)

<sup>5</sup> Kuhn did this in his “Reflections on my Critics,” in *Criticism and the Growth of Knowledge*, ed. Imre Lakatos and Alan Musgrave, *Proceedings of the International Colloquium in the Philosophy of Science, London, 1965*, vol. 4 (Cambridge: Cambridge University Press, 1970), 231–278.

<sup>6</sup> David J. Bosch, *Transforming Mission: Paradigm Shifts in the Theology of Mission*, American Society of Missiology, No. 16 (Maryknoll, NY: Orbis Books, 1991).

<sup>7</sup> Kuhn, *Structure*, 174. Kuhn acknowledged that he believed this was the source of criticism and controversy over his book. See the Postscript in *Structure*, “Reflections on my Critics,” and “Second Thoughts on Paradigms” in Frederick Suppe, ed., *The Structure of Scientific Theories*, 2<sup>nd</sup> ed. (Urbana and Chicago: University of Illinois Press, 1977), all written around 1969, for Kuhn’s written efforts to clarify the two senses of paradigm in *Structure*. See also the collection of Kuhn’s essays in *The Road Since Structure: Philosophical Essays, 1970–*

1993, with an *Autobiographical Interview*, ed., James Conant and John Haugeland (Chicago and London: The University of Chicago Press, 2000).

<sup>8</sup> Kolb, "Luther's Theology of the Cross," 443. Emphasis added.

<sup>9</sup> Kuhn, *Structure*, 35–37, but the entire Section IV is devoted to "Normal Science as Puzzle-solving."

<sup>10</sup> Kuhn, *Structure*, 35.

<sup>11</sup> Kuhn, *Structure*, 24.

<sup>12</sup> Kuhn, *Structure*, 10.

<sup>13</sup> Kuhn, *Structure*, 10.

<sup>14</sup> Kuhn, *Structure*, 11.

<sup>15</sup> Kuhn, *Structure*, 10.

<sup>16</sup> Kuhn, "Second Thoughts on Paradigms," in Frederick Suppe, 482.

<sup>17</sup> Margaret Masterman, "The Nature of a Paradigm," in *Criticism and the Growth of Knowledge*, ed. Imre Lakatos and Alan Musgrave, *Proceedings of the International Colloquium in the Philosophy of Science, London, 1965*, vol. 4 (Cambridge: Cambridge University Press, 1970), 66. See also Kuhn, "Reflections on My Critics," in Kuhn, *Structure*, 168, where he quotes Masterman with approval.

<sup>18</sup> Kuhn, *Structure*, 186. This is part of the "Postscript" written in 1969, seven years after the initial publication of *Structure*.

<sup>19</sup> Kuhn, *Structure*, 186.

<sup>20</sup> Kuhn, *Structure*, 186.

<sup>21</sup> Kuhn, *Structure*, 91.

<sup>22</sup> Kuhn, *Structure*, 6. See also Section IX on "The Nature and Necessity of Scientific Revolutions" and Section X that shows how scientific revolutions are "changes of world view."

<sup>23</sup> Kuhn, *Structure*, 111.

<sup>24</sup> Kuhn, *Structure*, 149.

<sup>25</sup> John Watkins, "Against 'Normal Science,'" in *Criticism and the Growth of Knowledge: Proceedings of the International Colloquium in the Philosophy of Science, London, 1965*, ed. Imre Lakatos and Alan Musgrave (Cambridge: Cambridge University Press, 1970), 33.

<sup>26</sup> Watkins, "Against 'Normal Science,'" 33.

<sup>27</sup> Watkins, "Against 'Normal Science,'" 33. Watkins is quoting from *Structure*, 150, and *Structure*, 157.

<sup>28</sup> LW 31:53; WA 1.362.23–28: "*Patet, quia dum ignorat Christum, ignorat Deum absconditum in passionibus. Ideo praefert opera passionibus et gloriam cruci, potentiam infirmitati, sapientiam stultitiae, et universaliter bonum malo. Tales sunt quos [Phil. 3, 18.] Apostolus vocat Inimicos crucis Christi. Utique quia odiunt crucem et passiones, Amant vero opera et gloriam illorum, Ac sic bonum crucis dicunt malum et malum operis dicunt bonum.*"

<sup>29</sup> LW 31:55; WA 1.364.2–3: "*Non ille iustus est, qui multum operatur, sed qui sine opere multum credit in Christum.*"

<sup>30</sup> LW 31:57; WA 1.365.2: "*Amor Dei non invenit sed creat suum diligibile...*"

<sup>31</sup> Kuhn, *Structure*, 10.

<sup>32</sup> LW 31:55; WA 1.364.11–12, 14: "*[A]d iustificationem nihil faciunt opera... sua sibi sufficit iusticia ex fide Christi.*"