

# Comparative Metaphysics and Theology as a Scientific Endeavor: A Ruist (Confucian) Perspective

*An Invited Position Paper By*

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*Editor's Note:* The “Invited Position Paper” segment is a unique feature to SHERM journal where hand-selected scholars are invited to write their particular standpoint or attitude on a specific issue. While the position paper is intended to engender support for the paper's line of reasoning and overall conclusion, the paper is not intended to be a simple op-ed piece. Rather, each essay must be academic in nature by deriving its position from verifiable data and/or the author's training and experience as a scholar in a particular field of study.

*In this particular case, the author was asked to answer the following question:*

*“Can the study of theology and/or metaphysics be classified currently or ever qualify in the future as a scientific endeavor? Why or why not? If yes, what criteria or methods would need to be in place and practiced to make them scientific? If no, what is it about ‘science’ that prevents theology and/or metaphysics from qualifying?”*

*Abstract:* Understood as being nothing more than fallible assumptions about the boundary conditions of an inquisitive worldview, this article seeks to argue that metaphysics and theology can, in fact, be pursued as a scientific endeavor. If we broaden our understanding of how perceived realities furnish feedback in order to refine preestablished human discourses, Ruist (Confucian) metaphysics and theology especially can be recognized as being historically pursued as a science by its own right. Eventually, the distinction of Western and Ruist traditions of metaphysics and theology, as well as the imperfections in each of them, speaks to the need of mutual learning for constructing a more robust metaphysical worldview in the twenty-first century.

*Keywords:* Metaphysics, Theology, Science, Ruism, Confucianism, Kant, Luo Qinshun

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## Introduction

DURING A BUSY TIME near the end of my first college teaching year in the United States (2018–2019), I received an invitation from the journal of *Socio-Historical Examination of Religion and Ministry* (SHERM) to write a position paper on the following question: “Can the study of theology and metaphysics

be classified currently or ever qualify in the future as a scientific endeavor?" The decision for me to accept the invitation was easily made because I just finished defending my dissertation on a similar subject one year ago.<sup>1</sup> Here, I argued for a scientific method of comparison to tackle a metaphysical and theological debate in the history of Christian-Ru (Confucian) interaction, yet with no one on the dissertation committee having ever asked me this question on the day of defense!<sup>2</sup>

The reason why I was not asked the question, I think, is that key members on the oral defense committee, such as Robert Neville (Boston University), Wesley Wildman (Boston University), and Kimberley Patton (Harvard University), are all scholars in the field of comparative religion who understand and practice comparative religion as a scientific endeavor.<sup>3</sup> In other words, they all emphasize that a comparativist's interpretation of religions should be based on an objective description of comparative data from religions, with "objectivity" here construed as being achievable through continuous critiques and mutual corrections by a scholarly community. In particular, Neville and Wildman's comparative studies are elaborate in metaphysical and theological themes. Therefore, the committee may have gathered with a default position which implies a very positive response to the inviting question: yes,

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<sup>1</sup> Bin Song, "A Study of Comparative Philosophy of Religion on 'Creatio Ex Nihilo' and 'Sheng Sheng' (Birth Birth, 生生)" (PhD diss., Boston University, 2018).

<sup>2</sup> As noticed by scholars in the field of comparative philosophy and religion, "Confucianism" is a Western misnomer of the Ru (儒) tradition. The term Ru means a generally educated person dedicated to social harmony, and the Ru tradition existed long before Confucius. A detailed explanation of the history on the nomenclature of "Confucianism" can be found in Tony Swain, *Confucianism in China: An Introduction* (New York: Bloomsbury Academic, 2017), 3–22 and Anna Sun, *Confucianism as a World Religion: Contested Histories and Contemporary Realities* (Princeton, NJ: Princeton University Press, 2013), 45–76. Following the reflective scholarly trend upon this nomenclature, "Confucianism" will be written as "Ruism" or the Ru tradition, and "Confucian" or "Confucianist" will be written as "Ru" or "Ruist" in this essay. Accordingly, "Neo-Confucianism," which normally designates new developments within Ruism during the Song and Ming Dynasties in ancient China (960–1644 CE), will be referred to as Ruism in the concerned area and period.

<sup>3</sup> See Robert Cummings Neville, ed., *Ultimate Realities: A Volume in the Comparative Religious Ideas Project* (Albany, NY: State University of New York Press, 2001); Wesley J. Wildman, *Religious Philosophy as Multidisciplinary Comparative Inquiry: Envisioning a Future for the Philosophy of Religion* (Albany, NY: State University of New York Press, 2010); and Kimberley C. Patton and Benjamin C. Ray, eds., *A Magic Still Dwells: Comparative Religion in the Postmodern Age* (Berkeley, CA: University of California Press, 2000).

the study of theology and metaphysics is classified currently as a scientific endeavor, and its examples can be found in the aforementioned scholarly work.

However, despite the default position of my academic training, I still feel the need to explain my own position concerning the inviting question mainly because of two reasons. Firstly, there should be no default position for open inquiry. Scholars have a constant obligation to examine all the presuppositions of their research and to communicate them clearly across other disciplines, as well as with the public. Because of this belief, I greatly appreciate the invitation of SHERM journal. Its dedication to connecting scholars and the public is much needed by the academy. Secondly, the inviting question is broader than what I have articulated as a scientific method of comparison in my dissertation. Before we are committed to comparing metaphysical and theological ideas scientifically, we are indeed in need of clarifying how metaphysics and theology *per se* can be pursued as a science. After all, the purpose of comparison is not for the sake of comparison alone but to deal with those significant metaphysical and theological issues in a contemporary context.

Without repeating what I have explicated about the scientific nature of the methodology of comparative study of religion in my dissertation and other publications, the following position paper will answer the inviting question in three components. Firstly, since the terms used to formulate the question (e.g. metaphysics, theology, and science) derive from a Western origin, I will analyze those terms and answer the question using Western sources. Secondly, drawing upon my expertise in comparative study of religion and, in particular, my knowledge of the Chinese Ru tradition, I will advocate for the need to enrich our vocabulary so as to include non-Western traditions in order to join a global conversation on metaphysics and theology. Lastly, I will briefly explain the distinction between Western and Chinese Ru metaphysics, as well as express my sincere wish that these two traditions will learn from each other to contribute a robust metaphysical and theological worldview in the twenty-first century.

Since this is a position paper, my endeavors will be directed to tackle the inviting question directly using both Western and Ru sources, sometimes without paying much attention to referencing bibliographical details of these sources. Needless to say, all my arguments succumb to scrutiny from my colleagues in the field since I maintain the scientific nature of open inquiry on any possible issue, including the ones that I shall conduct as follows, beginning first with the pursuit of both metaphysics and theology as a scientific endeavor.

## How to Pursue Metaphysics and Theology as a Science in the West

### Defining Metaphysics and Theology

Both the terms “metaphysics” and “theology” derive from Aristotle’s works, so my inquiry will start from Aristotelian philosophy. After using four causes to explain natural phenomena in the celestial and sub-lunar worlds in *Physics* and *On the Heavens*, Aristotle started to investigate the first cause, the Unmoved Mover, for the entire chain of explanatory causes in his *Metaphysics*. By the same token, after enumerating five major elements in the universe and their respective natural positions and natures in *Physics* and *On the Heavens*, Aristotle’s *Metaphysics* explores what it meant to be counted a “substance” in general, in addition to other attributes predicated on a substance, such as qualities, quantities, relatives, etc. Thus, “metaphysics,” per Aristotle and its various expressions later in Western philosophy, can be defined as an inquiry into the most generic features of things so as to define the boundary conditions of a worldview, under the guidance of which humans can inquire further into concrete domains in the world. For Aristotle, metaphysics was surely a “science” because he believed science constituted distinctive methods (according to Aristotelian logic), which are then applied to the investigation of particular objects. With science being understood as such, the notion of metaphysics as “being qua being” (that is, things in so far as they exist) is certainly a specific domain of knowledge open to inquiry and rational debate.

Metaphysics construed as a rational and open inquiry into generic traits of things leads to the interesting idea of “theology.” For Aristotle, theology is necessarily part of metaphysics. While metaphysics defines the boundary conditions of a worldview, theology can be seen as lying at the cusp of these boundaries. In other words, taking the Unmoved Mover (that is, the first cause) as theology’s unique object of inquiry, Aristotle’s theology transformed the idea of deity prevalent in ancient Greek folklore and mythology into a rational Being who succumbed to the same degree of scrutiny as all other domains of human knowledge. This type of theology is now labeled “natural theology” or “philosophical theology,” and its epistemic nature stands steps away from “special,” “revealed” or “biblical theology,” which takes Scripture as the ultimate source of authority in deciding varying human understandings of God. In the history of Christianity, the former type of theology is sometimes forcefully opposed, while at other times, it could harmonize with the latter under the great endeavors of theologians who took a more balanced view towards faith

and reason, such as Thomas Aquinas in the middle ages and Paul Tillich in modern times. From this standpoint, “science” essentially becomes a humanistic endeavor. It takes the formal, logical rules of human reason, and the feedback furnished by objective scrutiny, as the sole authority, which is then vulnerable to further critique and refinement. In this sense, per Aristotle, we have to give a very positive answer to the inviting question while specifying a specific conception of theology. In other words, both metaphysics and theology, as being integral to metaphysics, were historically pursued as a science.

### The Challenge of Modern Science

Nevertheless, this acknowledgement of the scientific nature of metaphysics and theology was under serious challenge in modern times. The challenge started from British empiricism’s critique of Cartesian metaphysics, which culminated in Kant’s critical philosophy. Then, in post-Kantian times, logical positivism, the analytic tradition, and post-modernism continued to unleash their suspicions toward the status of metaphysics as legitimate human knowledge. During this process, humanity’s understanding of science was also renewed because of the achievement of the positive sciences and its productive application in numerous technologies. Per this new understanding, the model of “science” is conceived of as a formal system of mathematical symbols, each of which refers to a specific aspect of reality; and through this mathematical system, the consequences of any hypothesis about studied reality can be reduced to measurable facts in laboratories, observatories, and social surveys so that the truth of the original hypothesis can be temporarily secured. It is the exact mapping between the deductive relationship among mathematical symbols and the causal relationship among natural phenomena that has generated the greatest power for science regarding its transformative effect upon nature. And this is because the exact knowledge of natural causalities can now be utilized to invent technologies in order to harness part of the causal chains in nature for producing the effects needed and desired by humanity.

Given this renewed understanding of science, we would find it no surprise why the aforementioned distrust of metaphysics in modern times continue to arise. Metaphysics, for its modern critics, is just too abstract and speculative! There seems to be no way to settle any metaphysical claim because it is hard, if not impossible, to deduce measurable consequences from it and, thus, have its seemingly ethereal claims landed in concrete realities. A very harsh criticism levelled against metaphysics along this line of reasoning is from

logical positivism, which advocates that if a statement, such as metaphysical ones, cannot be verified by observable facts, then it is just meaningless!

Nonetheless, despite these critiques, philosophers, theologians and scientists are continually asking and attempting to resolve great metaphysical questions. In the twentieth century, we witnessed the formation of robust metaphysical systems, such as the development of process thought by Alfred Whitehead, who himself was a great scientist, as well as the flourishing of philosophical theology by Christian thinkers, such as Friedrich Schleiermacher, Paul Tillich, Neville and Wildman, who engage substantially with their contemporary scientific communities. For all these metaphysicians and theologians, what they pursue are thought of by themselves as undoubtedly scientific, because they all pertain to rational constructions of human intelligence about perceived realities, and the efficacy of these constructions succumb to further critique and reconstruction due to the continuous feedback furnished by the objective traits of evolving realities. Because of the accomplishments of metaphysics and philosophical theology, I have the confidence to provide a very positive answer to the inviting question at the beginning of our inquiry: yes, metaphysics and theology are currently pursued as a scientific endeavor.

### Addressing the Criticisms

Nonetheless, it would not satisfy those modern critics of metaphysics to merely point out the fact that metaphysics and theology have continued to thrive despite their critiques. After all, it was Kant who averred that although metaphysics cannot be pursued as a science, it is still a tendency intrinsic to human reason so that people will continue to conjure up metaphysical systems and be accordingly involved in metaphysical controversies, yet with no hope to eventually obtain any settlement on them. This means that in order to convince modern readers of the scientific nature of metaphysics and theology, we also need to explain how the pursuit of metaphysics and theology as a science is possible while using terms that are accessible to those modern critics and, thus, addressing concerns raised by them. In the remaining part of this first section of the essay, I will use two steps to propose such an explanation of mine. Firstly, since Kant took such an important role in the modern lineage of doubting thoughts towards metaphysics, I will refute some of Kant's arguments against the scientific nature of metaphysics and utilize some of his reflections on the regulative role of metaphysical ideas to channel a more positive assessment of

metaphysics. Secondly, I will follow the tradition of critical rationalism in the philosophy of science, mainly drawing on the thoughts of Karl Popper and Imre Lakatos to explain how metaphysics can fit into the scientific method depicted by these philosophers of science and, therefore, to furnish an account for how metaphysics and theology can be pursued as a scientific endeavor.

Three major points comprise my critique of Kant's suspicion towards the scientific nature of metaphysics. Firstly, Kant's critique towards the ambivalent nature of metaphysical debates, which is mainly embodied by his analysis of "antinomies," failed to take it into consideration the full range of metaphysical legacies before him and, thus, did not do justice to what is at stake in those metaphysical reasonings. For example, for Kant, the thesis "time has a beginning" versus its antithesis "time is infinite" can be refuted as both false. Accordingly, human reason will necessarily be trapped into an antinomy where no criterion helps to decide the truth of competing metaphysical theses. Nevertheless, the metaphysical tradition of "creatio ex nihilo" before Kant clearly differentiates the cosmological sense of a temporal beginning of the cosmos versus the ontological non-temporal beginning of the cosmos. In Thomas Aquinas's thought, for instance, the beginning of the temporal sequence of cosmic events can either exist or not. However, whether the cosmos has a temporal beginning or not, it still ontologically depends upon an ultimate creative "pure act to be" which initiates all modes of cosmic times in a non-temporal way. Therefore, according to Aquinas, "time has a beginning" and "time is infinite" can indeed both be true. Why this is so depends upon the metaphysical traits, cosmological and ontological, present when talking about the natural phenomenon of time.<sup>4</sup> Obviously, Kant's analysis of the antinomy surrounding the concept of time over-simplified Aquinas's metaphysical argument, which undermines his critique towards metaphysics in general.

Secondly, Kant demands metaphysical knowledge be synthetic *a priori* and then denies such a status of knowledge to metaphysics based upon the reason that the pure categories of human understanding cannot be applied to the whole of human experience. Nevertheless, a fallibilist epistemology can readily dismiss Kant's approach. Metaphysical knowledge, despite pertaining to the most generic features of things in the world, does not need to be *a priori*. Often functioning as deeper assumptions about the structural features of an inquisitive worldview, metaphysical knowledge derives from various sources of human

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<sup>4</sup> The English translation of Aquinas's "On the Eternity of the World" appears in Thomas Aquinas, *Sancti Thomae de Aquino Opera Omnia*, Leonine ed., trans. Robert T. Miller (Rome: Editori di San Tommaso, 1976), 43:85–89.

experience and guides, implicitly or explicitly, the application of human intelligence to the investigation of phenomena in concrete domains of the world. This implies that, as Charles Pierce once brilliantly argued, the pursuit of human knowledge always starts from somewhere. Being as abstract and speculative as it may be, metaphysical knowledge originates from the same common source of human experience as any other branch of human knowledge and, together with more concrete knowledge of the objective world, metaphysical knowledge must be continually tested, adjusted, and re-adapted in order to guide humans to engage more effectively those evolving realities. In my view, it is the debatable, *a posteriori*, and correctible nature of metaphysical knowledge that makes it on a par with any other scientific endeavor. Although, given its highly generalizing conceptual apparatus, the testability of metaphysical knowledge needs to be assisted by a whole other system of epistemic statements of which metaphysics lies at the core.

Thirdly, Kant's evaluation of metaphysical knowledge is not entirely negative. He thinks that despite being unable to furnish certain knowledge, metaphysics provides ideas of human reason to regulate the application of pure categories of human understanding so that derived empirical knowledge can progress. For instance, although metaphysics cannot provide certain knowledge about the beginning of time, the idea of "the beginning of time" can still regulate human understanding's use of the category of causality so that scientists can try to find time's beginning in the long run.

In my view, it is the regulative role of metaphysics in scientific inquiries that speaks to its own scientific nature because whether one specific version of metaphysics can regulate scientific inquiries well is one important criterion to debate the efficacy of such metaphysical knowledge. For instance, in the history of modern science, René Descartes was the first scientist who came up with a comprehensive mechanical cosmology to provide a physical account for the heliocentric Copernican astronomy. However, Descartes's physics was replaced later by Newton's, and one major reason for Descartes's theory to have lost favor among scientists is that compared with Newton's metaphysical assumption of atomism, Descartes's idea of body as "extension" precludes the existence of vacuum; as a result, it is not easy for Descartes to isolate an ideal status of those natural phenomena under investigation in order to build a mathematical model of them for testing hypotheses and predicting future outcomes. In other words, Descartes' metaphysics produced physical reasoning that was too complicated and, in this sense, it did not regulate the concerned

scientific enquiries very well. Eventually, it was replaced by scientists for a more viable alternative.

In a nutshell, Kant did not do justice to the rich legacy of metaphysics before him and theses listed in his antinomies for the sake of debunking the scientific nature of metaphysics are actually debatable. A fallibilist epistemology makes Kant's doubts against the *a priori* status of metaphysical knowledge misplaced; and using Kant's own terms, whether a metaphysical view can well regulate scientific inquiries is one significant criterion to judge its efficacy and, thus, put it on a par with other scientific endeavors. Given these reflections on Kant's critique towards the scientific nature of metaphysics, it would not be difficult for us to explain how metaphysics and theology can be pursued as a scientific endeavor in a more positive term. As outlined above, I will follow the tradition of critical rationalism to present this explanation.

A significant improvement of Lakatos's philosophy of science upon Popper's theory on the demarcation of science versus pseudo-science is that he emphasizes the holistic nature of scientific theories, which he called a "research program" consisting of a core of central theses and more auxiliary hypotheses. In this way, Popper's criteria for distinguishing science from pseudo-science (i.e. testability, refutability, and falsifiability) is kept by Lakatos; however, per Lakatos, in order to ensure the scientific nature of a specific piece of human knowledge is retained, we need to evaluate the falsifiability of an entire research program to which that piece of human knowledge belongs. Resonating with our above reflection about the fallible and regulative nature of metaphysical knowledge, I will submit that the right place for metaphysics and theology in a scientific research program lies at the core of its central theses. Both disciplines provide basic assumptions about the boundary conditions of an inquisitive worldview and regulate varying inquiries into concrete traits of worldly phenomena. Therefore, they constitute an indispensable and significant component to humanity's many scientific endeavors.

### **How to Incorporate non-Western Metaphysics and Theologies into Global Conversation**

If we include non-Western metaphysics and theologies into the conversation, such as that of the Ruist tradition, how should we modify our above answer to the inviting question? In other words, if Ruist metaphysics and theology (presuming one exists) is also meant when we say "metaphysics" or "theology" during a conversation, can we still argue that metaphysics and

theology is a scientific endeavor? The response to this new question needs to be broken down into two further steps. Firstly, we need to ask: Is there a metaphysics or theology in Ruism, which can be compared to its Western counterparts? Secondly, if there is indeed a metaphysical and theological dimension to Ruism, how can metaphysics and theology, understood in this more inclusive way, be pursued as a scientific endeavor?

Metaphysics is translated into Chinese as 形而上學, literally “a learning about things beyond shape,” and this translation derives from a verse in the *Appended Texts* of the *Classic of Change* (易經 繫辭), a quintessential Ruist text on metaphysics. “What lies beyond shape is called the Dao, and what lies within shape is called the utensil-like things” (形而上者謂之道，形而下者謂之器).<sup>5</sup> The underlying idea of this verse is that concrete things have a shape and can, therefore, be studied like a utensil since each of them, with its concrete characteristics, serves a specific relationship to the human world. However, if this kind of study is also seen as a kind of art or technology that is constrained to a specific domain of worldly phenomena, then there is another sort of learning that delves into how things in general originate, evolve, change, and, thereby, dynamically and harmoniously fit together. In a Ruist term, a learning delving into these more generic features of things in the world takes “Dao,” or the Way, as its objective. Its major task is to investigate layers upon layers of “principle” (理, li) in order to understand how things in varying worldly domains dynamically and harmoniously interrelate. For instance, from the most to less generic, terms used to characterize these principles are yin/yang vital-energies, four seasons, five phases (metal, wood, water, fire and earth), eight trigrams (each of which represents one pattern of evolving harmonies in the world, such as Qian [creativity], Kun [receptivity], and Kan [Risk]), and sixty-four hexagrams, etc. In a word, notwithstanding being embedded in a different linguistic and cultural system, Ruism has a metaphysical system which delves into the most generic features of things in the world and, hence, defines the boundary conditions of a Ruist worldview. In this sense, Ruist metaphysics can be compared to its Western counterparts, which are influenced by Aristotle.

Is there a “theological” dimension to Ruist metaphysics? While investigating the generic features of things in the world, the aforementioned Ruist metaphysical text is also immensely interested in probing the origins of the world. For instance, one verse tells us that there is a sequence of ontological dependence among the aforementioned principles. “Among cosmic changes

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<sup>5</sup> Unless otherwise noted, all translations of Chinese texts are my own.

there is something called ultimate polarity (太極, taiji). Ultimate polarity generates two modes. Two modes generate four images. Four images generate eight trigrams” (易有太極，是生兩儀。兩儀生四象，四象生八卦). In other words, the change of eight patterns of evolving harmonies in the world (eight trigrams) depend upon one of the four seasons or five phases (four images). The changing of the four seasons or five phases is furthermore conditioned by one of the yin/yang vital energies, and the yin/yang vital energies ultimately derive from an ontological origin called ultimate polarity. In the long-standing commentarial tradition of the *Classic of Change*, there are two major conceptions of ultimate polarity. One says it is the all-pervading cosmic field of vital energy (氣), the self-movement and further differentiation of which generate all things in the world. Another says that it is the supreme ontological principle which generates both cosmic vital energy and all other secondary principles accounting for how vital energies unfold and change in pattern.

Regardless, both interpretations see ultimate polarity as the Dao of the cosmos, which, per the literal meaning of Dao as “the Way,” makes the cosmos take place and start to work. Can this Ruist discourse of ultimate polarity (or the cosmic Dao) be counted as theology? As a rational inquiry into the ultimate cause of the cosmos, it surely can. Nevertheless, theism does not register prominently in the Ruist intellectual history of metaphysics. Dao, albeit a constant signifier of ultimate reality, is not typically conceived of by Ruist thinkers as a creator deity, standing behind the cosmic scene and dictating its unfolding. Because of this, a more appropriate term to describe the mode of philosophical theology in Ruism may be “dao-logy,” rather than “theo-logy.” However, we also need to remember that even for Aristotle, his idea of God is very different from the one prominent in ancient Greek folklore and mythology. In the history of Christian philosophical theology, we also frequently encountered thinkers who modified the theistic idea of God into a de-anthropomorphized abstract force, such as Aquinas’s “pure act to be,” Tillich’s “ground of being,” and other mystical conceptions of God. Therefore, if modified to include a non-theistic mode, “theology” is surely suitable to describe that dimension of Ruist metaphysics which investigates the ultimate cause of the world and its intricate relationship to concrete worldly phenomena.

This being the case, can metaphysics and theology, while including the Ruist case as a family member, still be pursued as a scientific endeavor? Science, per the above analysis, is a symbolic construction by human intelligence about reality, and the construction is vulnerable to further critique and revision among a scientific community due to the continuous feedback furnished by perceived

realities. For understanding Ruist metaphysics and theology as a science, it would not be difficult for us to acknowledge that the concern of Ruist metaphysics and theology, as indicated by our brief discussion of them above, are indeed a symbolic construction by human intelligence about realities vulnerable to further critique. According to the work of Joseph Needham on the history of science in ancient China, Whitehead on process thought, and other scholars of similar theoretical tendencies, we are also confident to aver that Ruist metaphysics can inspire modern scientists to come up with more robust conceptual tools to capture the biological, organic, and process aspects of worldly phenomena so as to contribute to the positive sciences. Nevertheless, to appreciate that Ruist metaphysics and theology were historically pursued as a scientific endeavor in their own right, we need to broaden our understanding regarding the sources that Ruist thinkers debated and refined in their metaphysical and theological discourses. In other words, how realities are perceived and, accordingly, what kind of feedback realities can furnish to refine a theorist's symbolic construction needs to be clarified (in the case of Ruism) in order for us to appreciate that the long historical Ruist pursuit of metaphysics and theology can also be seen as scientific.

In the model of scientific methodology discussed above, realities to revise scientific hypotheses are perceived mainly with an objective attitude. In other words, realities are perceived as data loaded with metrics, and they are obtained by objective observers through controlled experiments in laboratories, observatories or social surveys with a minimal involvement of the subjective traits of those observers themselves (such as emotions, characters, biographies, etc.). Correspondingly, the purpose of scientific construction is to locate the natural causalities linking varying aspects of reality with an expectation that the resultant knowledge can be put into further technological use. In contrast, the primary purpose of Ruist metaphysics and theology is not to represent reality objectively with a strong motive toward controlling it. Instead, the metaphysical and theological contemplation of Ruist thinkers serves a series of ethical, social and political goals premised upon the self-transformation of those thinkers themselves. This also means that while continually debating each other, Ruist thinkers tend to draw upon a much broader range of human experience to substantiate and critique varying metaphysical and theological stances.

### The Example of Ruist Self-Cultivation

In the remaining part of this second section, I will use an example in the intellectual history of Ruist metaphysics to indicate why this is the case and how we can understand it also as a scientific endeavor. The Ruist program of self-cultivation is specified by the classical text, the *Great Learning*, as consisting of eight steps: it starts from an investigation of things (格物), followed by attaining the needed knowledge (致知). Individuals can then make their intentions authentic (誠意) and rectify their heart-mind (正心) further by cultivating one's sense of self (修身). In this way, one can be dedicated to aligning one's family (齊家) and governing one's country (治國); and eventually, one can contribute to bringing harmony and peace to everything under the heavens (平天下). In the commentarial tradition of this text, two lineages of thought furnished widely different interpretations. One is called the learning of principle (理學), which embraces a more extrinsic style of learning and self-cultivation, and it demands that the entire program should focus on investigating the principles of things so as to understand how realities in the cosmic and human realms fit together. Another one is called the learning of heart-mind (心學), which interprets the character "knowledge" (知) as "conscientious awareness" 良知, and insists that the fulcrum of the entire program is to rediscover and maintain an ethical mindfulness so that one's innate moral consciousness can be firmly applied to correct things and affairs in the world. There are two pithy phrases to illustrate the difference between these two interpretations. For the latter, the heart-mind is the principle of things (心即理), so that an individual's self-cultivation should focus on preserving humanity's instinctive sense of ethics in any situation. However, for the former, although it also acknowledges that the heart-mind can comprehend the principles of reality (心具理), it denies that the principles of things can be entailed by the immediate interaction between outside things and the human heart-mind. In other words, there are objective traits to the principles of things that exceed the direct grasp of the heart-mind, so we must continue our learning in order to digest and include more principles in our heart-mind.

To make my point in the prior paragraph, we need first to understand that despite proposing divergent views, these two lineages of Ru thought both draw from a wide range of human experience to substantiate their understanding of key terms in the text. For instance, according to Cheng Yi (1033–1107), a pioneering Ru philosopher for the learning of principle, there are three major

ways by which one can investigate principles of things. Yi remarks, “Underlying each thing or affair, there is a principle; in each case we need to completely investigate its principle. The ways of investigating principle are varying: we discuss and understand the meaning of texts when we read books; we dispute about famous persons in ancient and recent times, and hence, distinguish right and wrong; we react appropriately when we deal with varying human affairs. All of these are ways of investigating principle.”<sup>6</sup> Here, studies about the external world with the help of books, ethical experience through empathizing with and assessing the deeds of human fellows, and first-hand practical dealings with human affairs are all perceived by Yi as sources of realities to implement his investigation of principles of things, which (according to our above analysis) is a richly metaphysical and theological pursuit.<sup>7</sup>

By the same token, for thinkers in the lineage of the learning of heart-mind, such as Wang Longxi (1498–1583), multiple ways are recognized as reaching “conscientious awareness” and, thus, having individuals become aware of the ontological bond between humans and the cosmic Dao. Longxi notes, “An exemplary person’s learning becomes praiseworthy only once they have achieved awareness (悟, wu). If the gate to awareness is not open, we have no way to confirm what has been learned. There are three ways someone might achieve awareness: some achieve it through words, some achieve it through quiet-sitting, and some achieve it through effort and practice amidst the changing circumstances of daily living.”<sup>8</sup> What is impressive about Longxi’s approach to self-cultivation is that compared to Yi, he emphasizes that Ruist spiritual practices, such as quiet-sitting, are also important sources of reality that contribute to the refinement of one’s learning and personhood.

Not only did Ruist thinkers muster all available sources of human experience to substantiate their metaphysical and theological inquiries, they also debated with each other in such a multifaceted way. As mentioned above, the idea that the human heart-mind is the principle in the learning of heart-mind implies that the conscientious awareness of humankind, as an innate sort of moral realization, encompasses all possible principles of things in the world.

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<sup>6</sup> Cheng Hao and Cheng Yi, 二程集 [Works of Cheng Brothers] (Beijing: Zhong Hua Shu Ju, 1981), 188.

<sup>7</sup> Cf. Peter M. Antoci, “Theology, Metaphysics, and Science: Twenty-First Century Hermeneutical Allies, Strangers, or Enemies?,” *Socio-Historical Examination of Religion and Ministry* 1, no. 2 (Fall 2019): 226–39, <https://doi.org/10.33929/sherm.2019.vol1.no2.06>.

<sup>8</sup> Wang Longxi, 王龍溪先生全集 [A Complete Work of Master Wang Longxi], vol. 17 卷十七 (會稽: 會稽莫氏, 道光 2 年).

Thus, self-cultivation should be merely about rediscovering and preserving this intrinsic moral consciousness rather than studying extensively the outside world. To this idea, thinkers in the lineage of the learning of principle, such as Luo Qinchun (1465–1547), propounded a powerful counterargument. “The heart-mind is by which humans are aware and sensitive [of things in the world]. It is where principles come in and reside. Why did they [i.e. thinkers in the learning of heart-mind] think that heart-mind is the principle and, thus, investigating the principles of things has just been reduced into investigating the heart-mind?”<sup>9</sup> In other words, for Luo, the heart-mind is one thing among many, and each of these myriad things has their own unique principle to be investigated. Therefore, a more plausible approach to self-cultivation is to investigate principles of both the outside world and the heart-mind so as to understand how all of them can fit together rather than focus predominantly on just one side of the equation (e.g. merely investigating the operations of human consciousness).

Throughout Luo’s writing, we find that he used at least three methods to exposit his own view of heart-mind, and debate his fellow Ruists in the learning of heart-mind. Firstly, he makes sure the discourse about conscientious awareness should follow a coherent ontological logic. “If we say humanity’s conscientious awareness is equal to the principle of the cosmos, then we would have to think human nature and human awareness are just one thing. However, in my view, we should differentiate these two. The reality of human nature derives from the original state of human life, while human awareness is just the wondrous function of human nature. Human nature is endowed by the constantly creative power of the cosmos at the beginning of humanity’s birth, but human awareness can only start to function after humans are born. If we have the original state [of human life] at first, we can expect its function follows suite. But we cannot take the function as the same as its original state.”<sup>10</sup> Here, Luo utilized the traditional Ruist metaphysical terms of “original state” (體) and “function” (用) to specify the correct ontological order of metaphysical entities. The principle of the cosmos (天理) is the original state of human life, which endows a specific nature (性) to the human species, and that nature is manifested through the function of human awareness. In this way, human awareness comes at the end, rather than at the beginning, so that the

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<sup>9</sup> Luo Qinchun, 困知記 [Records of Knowing after Difficulties] (Beijing: Zhong Hua Shu Ju, 1990), 114.

<sup>10</sup> *Ibid.*, 18.

identification of human awareness with the principle of the cosmos made by the learning of heart-mind is misplaced.

Secondly, Luo doubts whether views proposed by the learning of heart-mind can benefit people's actual practice of self-cultivation. He says, "If we think people's conscientious awareness is equal to the principle of the cosmos, then, what seems easy and simple will be practiced at first, and what needs labor and effort will follow. But what follows shall be normally delayed. If we say the principle of the cosmos is not equal to conscientious awareness, then, what seems easy and simple will be arranged afterwards, and what needs labor and effort will be practiced at first. Then, people will rush to do what is the number one priority."<sup>11</sup> In other words, if we think all we need to do for self-cultivation is to rediscover and maintain our innate moral consciousness, this seemingly easy and simple approach will make the laborious process of learning new principles of things unnecessary. In Luo's view, the practical consequence of this approach will undermine the genuine goal of Ruist self-cultivation; that is, the goal to transform human individuals during the process of learning and tackling things and affairs in the world.

Thirdly, Luo refers to a common-sense observation of facts to refute the metaphysical claim "conscientious awareness is the principle of the cosmos" by the learning of heart-mind. He says, "If we consider conscientious awareness as being the principle of cosmos, should we think as a result that the myriad things between heaven and earth all have this conscientious awareness? For the sublimity of heaven, it is difficult for us to perceive it; for mountains, rivers, and the broad earth, I did not find they have conscientious awareness, as well. There are really many things in the world, and our knowledge cannot easily cover them; for grass, wood, metal and stone, I really did not find they have any conscientious awareness.... We should know that the nature of each of the myriad things is nothing but their principle. Even for those things that have no consciousness whatsoever, they have their own principles. If this is not the case, then we cannot say that they have their own natures and there would then be things that do not have their own natures (which is absurd). From this perspective, we must be clear that conscientious awareness is not what the principle of the cosmos is all about."<sup>12</sup> In other words, because each and every

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<sup>11</sup> Luo, 困知記, 120

<sup>12</sup> Ibid., 123. My selection of references about Luo Qinchun is taken from Yao Caigang and Xiang Chengxiang, "论罗钦顺对王阳明心学的辩难" [On Luo Qinchun's Critique Towards Wang Yangming's Learning of Heart-Mind], *Journal of Hubei University* 39, no. 3 (2012): 46–49.

thing in the universe has a principle to account for how components of the thing can dynamically and harmoniously fit together and how the thing can co-exist with other things, and because not everything has “awareness” or “consciousness,” the moral conscientious awareness of humankind cannot be what the principle of the cosmos is all about.

Among all these three arguments, the first and third refer respectively to the philosophical coherence of concepts and the existence of facts to critique metaphysical and theological views, which are comparable to the way Western metaphysicians and theologians argue for their cases in the framework of a scientific methodology. However, the second argument points to the practical dimension of metaphysical and theological discourse, which takes the self-transformation of personhood as its primary goal. Considering the multiple ways Ruist thinkers substantiated their understanding of key metaphysical and theological terms, I think the Ruist reference to “realities” to debate metaphysical and theological viewpoints involves a much broader understanding of how realities can be perceived and how the whole person should be involved in the cognitive process of investigating the most generic features of things and principles in the world. In a word, if we expand our understanding about how human experiences can be furnished to refine preestablished belief systems, we can conclude that Ruist metaphysics and theology were likewise historically pursued as a scientific endeavor.

### **The Harmonization of Western-Ruist Metaphysics and Theologies**

Readers may already have a sense that the very efforts of my previous inquiries into issues on comparative metaphysics and theology aim to bring traditions together. But why do we need to do so? Why do we need to broaden our understanding of “science” so as to include non-Western metaphysics and theologies into a global conversation? That is because none of the compared traditions are perfect, even when being assessed according to their own historically set goals. And the imperfection of any rational construction by human intelligence speaks to the very need of rational criticism and open inquiry, which lie at the core of the humanistic-scientific spirit and, thus, have the potential to bring all traditions together to serve humanity’s common goals. In the following, I will briefly exposit my understanding on the pros and cons of each compared tradition and then conclude the paper with my wishes for the continued harmonization of varying metaphysical and theological traditions in the future of human discourse.

Regarding the role of metaphysics in the origination and development of modern science, without any exaggeration, we realize that without Platonism, there would have been no modern science. The prioritization of the Ideal over the material world in Platonism allows a mindset to see concepts, mathematical symbols and their intricate relationships among each other as comprising an independent realm of realities which deserve to be studied alone for its own sake. This Platonic interest in the “intelligible world” was quickly translated into Aristotle’s contemplation of pure knowledge, which was seen as the perfect happiness of human beings. In medieval times, it helped to systemize the Christian idea of a divine *Logos*, and the world was accordingly seen as obeying basic rules and laws in a divine plan even before the world was created. In modern times, the revival of Platonism was at the very core of the scientific projects pursued by those starry pioneers such as Copernicus, Galileo, Descartes, and others. For Karl Popper, his metaphysics of “three worlds,” especially the world of objective knowledge, is obviously an offspring of Platonism, and it is the very interaction between the human mental world and the objective physical world as mediated by the world of objective knowledge that engines the development of science. In my view, the significance of this recurring Platonic mindset in the formation of modern science is in the establishment of an exact and deductive symbolic system that includes abstract concepts and mathematical signs, such as Euclidean and non-Euclidean geometries, Aristotelian syllogism, cartesian coordinates, etc., so that the system can be further used to perceive and measure worldly phenomena in a scientific manner.

The reason I highlight the metaphysics of Platonic dualism is that in the Ruist metaphysical and theological tradition, concepts and mathematical ideas have never been studied alone for their own sake. If any deductive relationships among these concepts and ideas are revealed, the resultant knowledge was either used to interpret classics, such as the *Classic of Change*, or quickly related to broader worldly phenomena so as to serve the distinctive Ruist goals of individual self-cultivation, social management and politics. In other words, for the majority of Ruist and other ancient Chinese thinkers, the world has usually not been perceived as susceptible to pure intellectual analysis. In other words, the idea of a Platonic “intelligible world” has usually never come to mind in Chinese tradition. Since this idea comprises the very distinction between Western and Ruist metaphysical and theological traditions, our discussion of the pros and cons of each tradition will start naturally from here.

The immense value of Western metaphysics, as it is embodied by Platonic dualism and its accompanying idea of an intelligible world, consists in

its contribution to a unique attitude towards objective knowledge, which further promotes the formation of modern science. However, I will point out two of its major negative consequences. One, the pursuit of knowledge for the sake of knowledge itself implies that the ethical evaluation of how pure knowledge is applied to technology in human society at large is severed from the production of that knowledge. The resulting chasm of fact and value in human consciousness has caused a major humanitarian crisis since the twentieth century, such as environmental crises and the escalating threat of nuclear war. Two, the narrative of “divine plan” in major Western religions, which was historically fueled by the ontological priority of Platonic Ideals over materials, indicates an uncompromisingly exclusive tendency which have led to major religious conflicts among groups, nations, and civilizations. In modern times, these conflicts were resolved by the institutional arrangement of the separation of church and state in liberal democracies. However, the relentless interruption of religion into public discourse speaks to the volume of difficulty in keeping the two apart, and the increasing diversification of faiths and cultures in major democratic countries also makes classical Western philosophical wisdom untenable for many.

As for Ruist metaphysics and theology, although it has not yet been essential to the formation of modern science, its advantage seems to be exactly what can make up those negative impacts generated by Western metaphysics and theology. By “its advantage,” I mean Ruism’s holistic, unifying, and harmonizing mindset that is essential to the sustainability of any civilization. Apart from the above example of metaphysical argumentation, I would like to use two further ones to illustrate the point. Firstly, in the history of ancient East Asia, Ruism has contributed to a robust set of basic ethical standards oriented towards the harmonization of human relationships so that people in varying levels of civilization (from individuals, families, and communities all the way up to societies and countries) can live together and co-thrive. Secondly, Ruist metaphysics has indicated an incredibly open-minded, accommodating, and inclusive potential throughout the intellectual history of ancient Chinese thought. During Han Dynasty of China (206 BCE–220 CE), Ruism adopted major elements in non-Ruist ancient Chinese philosophies such as Daoism and Legalism, and achieved its first intellectual synthesis around the second century BCE, which became an ideological backbone of Chinese society in later times. In the Song and Ming Dynasty of China (960–1644 CE), Ru thinkers adopted major achievements of Buddhist and Daoist philosophies, which marked the second apex of ancient Chinese thought, the impacts of which were broadly

manifested in East Asian countries and constituted the foundation of their modernization. More importantly, I believe the third synthesis of Ruism is underway because of its encounter with Western philosophy and religion beginning around the sixteenth century.

Given the distinction and imperfections of the compared traditions, I believe what is urgent for the agenda of Western metaphysical and theological study is to regain the unity of human knowledge and human praxis without undermining its scientific sharpness. During the process, non-Western traditions such as Ruism can undoubtedly provide further insights that will be integral to a new era of global wisdom. On the other side, Ruists need to think about how to incorporate the Platonic conception of an intelligible world into their own lexicon about world principles so that a mandate of harmonization between the West and the East can be carried out more fully in this new era.

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