

# A Scientific Theology? A Programmatic Account of the Problems and Prospects for Confessional and Scientific Theology<sup>1</sup>

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**Abstract:** There are at least three kinds of arguments against the possibility of scientific and confessional theology: The first kind of argument tries to show that there is no universe of discourse that theology could investigate as a scientific discipline. The second kind of argument is not directed against the existence of theology's putative universe of discourse. Instead, this kind of argument tries to show that even if there is a universe of discourse theology could investigate, it fails to do so by using scientific methods. The third kind of argument tries to show that even if theology has a universe of discourse and deploys scientific methods, it is still not a scientific discipline because it conflicts with the historical and natural sciences that are supposed to be more reliable than theology. In what follows, I clarify the importance of the scientificness of confessional theology for the plausibility of religious worldviews. I analyse the arguments put forward against the possibility of scientific and confessional theology. I indicate systematic weaknesses in the arguments that the theologian should use to show that they do not stand up to scrutiny and suggest a programmatic list of tasks the theologian has to engage in to demonstrate that scientific and confessional theology is indeed possible, if not already at hand.

**Keywords:** Scientific theology, philosophy of science, analytic theology, confessional theology

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## **I. Worldviews and the Importance of the Scientificity of Confessional Theology**

To demonstrate the importance of confessional and scientific theology for religious worldviews I specify the concept of confessional theology and analyse what is meant by the scientificity of a discipline of human intellectual activity.

### **(i) A Brief Account of the Nature of Confessional Theology**

A worldview is a set of assumptions that shapes the way in which each one of us understands what is going on in their life and in the world as a whole. A worldview captures theory and practice both by providing an interpretational story of the origin, fundamental nature, future, and purpose of the universe and by implying what has to be done from an ethical point of view to foster the purpose of the universe. As Kim et al. (2012: 205) argue, “our worldview forms the context within which we base our understanding of reality, knowledge, morality, and life’s meaning and purpose. Our worldview has a profound impact on how we decide what is real versus unreal, what is right versus wrong, and what is important versus unimportant. It shapes our culture and expresses itself in all institutions including the arts, religion, education, media, and business.”<sup>2</sup> Life without a worldview is practically impossible for human beings. Whether we like it or not, each one of us has a worldview that explicitly or implicitly shapes the way in which we understand and perceive what is going on in the world. As Vidal (2012: 312) says, “most people adopt and follow a worldview without much thinking. Their worldview remains implicit. They intuitively have a representation of the world [...], know what is good and what is bad [...], and have experience about how to act in the world [...]. And this is enough to get by. Every one of us is in need of a worldview, whether it is implicit or explicit.”

Although different religions vary in the formulation of their overall worldview, two things are clear. First, each religion attempts to provide a worldview insofar as each one attempts to provide “a complete understanding for the subject’s known world and [tries] to introduce ways of living that encompass every aspect of life, including one’s [...] ethical perspective as well as social associations” (Carvalho 2006: 114). Second, although they differ as worldviews, there is an essential feature without which no worldview could be classified as religious and which consequently all religious worldviews share with one another. This essential feature consists in the fact that religious worldviews accept the truth of claims about the history or fundamental structure of the world that are likely to transcend empirical verification

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<sup>2</sup> Cf. Sire (1997), Walsh and Middleton (1984), and Löffler (2006: 151-173). Apostel and Van der Veken (1991: 29-30) specify the following essential questions related to the analysis of worldviews: “(a) What is? Ontology (model of being), (b) Where does it all come from? Explanation (model of the past); (c) Where are we going? Prediction (model of the future); (d) What is good and evil? Axiology (theory of values), (e) How should we act? Praxeology (theory of action)” [trans. in Aerts et al. 1994, 25, quoted from Vidal (2012: 309)].

and intersubjective confirmation. For instance, Christianity is based on the confession that Jesus Christ is the Son of God, whereas Islam is based on the confession that Mohammed is *the* Prophet of Allah. Neither assumption is likely to be empirically verified and both lack justification that is intersubjectively binding.

As any worldview, a religious worldview can remain implicit or become explicitly reflected upon. In the first case, its assumptions and narratives about the history of the world, its fundamental structure as well as its purpose and ultimate goal guide the life of the believers without them being explicitly aware of issues concerning the justification of the respective assumptions and narratives, and the relations amongst them. Religious worldviews often remain implicit for two reasons: first, because this is enough for them to function as guiding instances for the lives of the believers and, second, because a permanent reflection on the justification of one's basic assumptions about the nature of the world, and the relations amongst them, is likely to be a hindrance for the worldview to be of much use in daily life. In the second case, the religious worldview is explicitly reflected upon, which is to say that the justification of its assumptions and narratives about the history of the world, its fundamental structure as well as its purpose and ultimate goal, is made explicit and is critically reflected upon in a way that is accessible to the believer. The reasons a religious worldview is reflected upon are various and include the confrontation of the believer with internal unclarity, contradictions, and incoherencies as well as confrontations with other worldviews that provide a different interpretation of our pre-theoretical experience of reality.

It is precisely in the disciplines known as the various confessional theologies that religions, and the worldviews they lead to, are critically reflected upon. In contrast to pure philosophical theology, which one can engage in without commitment to any particular creed, a confessional theology of necessity is based on the same confessions as the religion it belongs to, and accepts the truth of certain claims about the history of the world or its fundamental nature, although these claims are neither likely to be empirically verified nor intersubjectively compelling.<sup>3</sup> The purpose of confessional theology is to show the practical and theoretical plausibility and coherence of the religion it is based on, primarily to the believers themselves, and secondary to the adherents of different worldviews. For instance, Christian theology is the reflection of Christianity and assumes that Jesus Christ is the Son of God, whereas Islamic Theology is the reflection of Islam and assumes that Mohammed is *the* Prophet of Allah. Both theologies reflect on the entailments and presuppositions of their respective religious confessions and intend to show that

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<sup>3</sup> Cf. Bochenski (1965: 14): "Theology may be defined as a study in which, along with other axioms, at least one sentence is assumed which belongs to a given Creed and which is not sustained by persons other than the believers of a given religion." Cf. also Göcke (2013) and Tetens (2015: 1): "Im Kontext der Philosophie bedeutet Natürliche Theologie, darüber nachzudenken, was sich über Gott, sein Dasein und seine Eigenschaften mit guten Gründen schon allein durch vernünftiges Überlegen und noch ohne Berufung auf die Offenbarung Gottes sagen lässt."

their assumptions as basic constituents of one's respective worldview can be justified internally and externally.<sup>4</sup>

## **(ii) A Brief Account of the Scientificity of a Discipline of Human Intellectual Activity**

I assume that there is a single concept of scientificity that is applicable both to the natural sciences and to the humanities, which is to say that I assume that the natural sciences and the humanities can both be referred to as scientific disciplines of human intellectual activity.<sup>5</sup> If there were no single concept of scientificity that covers both the humanities and the natural sciences, then questions concerning the scientificity of a particular discipline of human intellectual activity would be obsolete, or each discipline would be free to define its own criteria of scientificity. In this case, however, not only the unity of science would be lost, it would also be hard to exclude any discipline of human intellectual activity from the circle of scientific disciplines. The distinction between science and pseudo-science would collapse entirely.<sup>6</sup>

On this presupposition, I assume that a scientific discipline of research attempts to propositionally systematize a field of our pre-theoretically given experience of reality (a) based on certain presuppositions about the fundamental nature of reality, (b) with the help of scientific methods and (c) for a certain purpose.

There is, however, neither unanimity in respect to the methods that one could rightfully call "scientific" nor in respect to the very purpose of science, or its fundamental presuppositions. Since one's assumptions about the fundamental

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<sup>4</sup> Of course, there is no such thing as *the* Christian worldview; there are simply too many different denominations that refer to themselves as 'Christian' while at the same time the corresponding worldviews entail assumptions that are in conflict with presuppositions that are part of other Christian worldviews. For instance, according to some protestant Christian worldviews, there is no genuine human freedom because God's foreknowledge has already fixed what is going to happen in this world and, consequently, who will be saved from a soteriological point of view. For other worldviews, though, there is genuine human freedom to accept or deny God's offer of salvation and hence to play a part in our own fate. Furthermore, according to some Christian worldviews, such as the Roman Catholic one, reason itself is a valuable way to support the overall Christian case, whereas some Christian denominations suppose that reason is too damaged to be reliable in matters of religious truth and that the only way to deal with God is by faith alone (*sola fides*). The same is true *mutatis mutandis* of the various traditions of Islam.

<sup>5</sup> Although in English the term "science" is often understood to denote the natural sciences, in German the term "Wissenschaft" is applicable to both the natural sciences and the humanities, as in "Naturwissenschaft" and "Geisteswissenschaft".

<sup>6</sup> Cf. Maurer (2005: 27): "Die ‚exakten‘ Wissenschaften sind ebenso Sonderfälle wie die ‚Geistes‘-Wissenschaften. Es hat sich mittlerweile in der Wissenschaftstheorie der Gedanke durchgesetzt, dass es wenig sinnvoll ist, allgemeine Strukturen für die Wissenschaftlichkeit festzusetzen, die dann zumeist den technisch (und ökonomisch) verwertbaren Disziplinen entnommen sind. Das ändert aber nichts daran, dass es Grundzüge wissenschaftlicher Arbeit gibt, die sich auf Theoriebildung richten. Damit ist gemeint, dass ein Netz von Aussagen gebildet wird, das sich immer weiter vertiefen lässt und damit immer tiefere und schärfere Durchblicke ermöglicht. Wie das jeweils geschieht, hängt vom Gegenstandsbereich ab."

presuppositions of science, its proper methods, and its purpose are conceptually interwoven, it is no surprise that there is a whole variety of philosophies of science that come to different conclusions concerning what it really is that science is all about.<sup>7</sup> Because it is beyond the purpose of this paper to justify a particular account of science against other conceptions, I briefly sketch only those features of science that are fundamental to the discussion of the scientificity of confessional theology.

First, I assume that the expression “experience of pre-theoretical reality” refers to the realm of phenomena that constitutes one’s living-world, i.e. “the framework in terms of which man came to be aware of himself as man-in-the-world” (Scharp et al. 2007: 374). This realm is available prior to our theoretical investigation into the nature of reality. A *propositional systematization* of a particular field of our pre-theoretical experience of reality is a system of propositions that are structured by relations that correspond to the methods used to investigate the corresponding field of study. For instance, a system of propositions that is established deploying the method of deduction will structure the propositions in question according to logical entailment, whereas the method of abduction will structure the propositions by way of showing that the truth of some of the propositions provides the best explanation of the truth of other propositions. Deploying different methods of research will therefore lead to different propositional systematizations of the same field of our pre-theoretical experience of reality. Which method in fact is deployed for a field of study will depend in part on the questions that the scientist is willing to ask about this field of study, although commonly they concern the origin of a phenomenon, its causes, its constitutive elements, its relations to other phenomena and the like. A propositional systematization of a field of experience that answers the questions of the scientist is a scientific theory. A scientific theory about a realm of reality therefore is a system of propositions that are structured by relations that emergence from the method used to investigate this realm of reality. They provide answers to the questions the scientist has about this realm of reality.<sup>8</sup>

Second, I assume that the *fundamental presuppositions* concerning the nature of reality on which science is based are the necessary conditions for the possibility of science itself and can be addressed as the metatheoretical shaping principles of science. There are necessary conditions for the possibility of science in general and necessary conditions for the possibility of single sciences. Regarding science in general, there are at least two necessary conditions: First, since scientific research intends to propositionally systematize our pre-theoretical experience of reality it follows that reality must be such that it is open to the respective systematization. Second, the possibility of science presupposes that our epistemological constitution is such that a meaningful application of our methods of investigation is possible. Science in general, therefore, is only possible based on the assumption that, from an

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<sup>7</sup> Cf., for instance, Kuhn (1996), van Fraassen (1980), and Niiniluoto (1999).

<sup>8</sup> Cf. Weingartner (1971: 38): “Unter ‚wissenschaftlicher Tätigkeit‘ kann eine geistige und körperliche Tätigkeit des Menschen verstanden werden, deren Zweck das Finden einer in bestimmter Weise strukturierten Antwort auf eine oder mehrere Fragen bzw. Probleme ist.”

ontological point of view, reality allows for a systematization using particular methods, and based on the assumption that from an epistemological point of view we have the abilities to systematize reality in a meaningful way.<sup>9</sup> In addition to the conditions for the possibility of science in general, the possibility of a particular science presupposes that there is a corresponding well-defined object or field of study and that we have methods at our disposal that are adequate to investigate and analyse this field of study: Science is impossible if it does not have an object to study, or fails to possess adequate methods to analyse the nature of its object. For instance, the necessary condition for the possibility of physics consists in the assumption that there is a natural world that can be studied deploying the methods of experimentation and abductive reasoning, while the assumption that phlogiston exists is a necessary condition for the possibility of chemical theories that explain the burning of substances in terms of dephlogistication.

Third, I assume that the *purpose of science* is that what scientific research wants to achieve, which, since science is engaged in by scientists, is that what the ideal scientist wants to achieve through his work.<sup>10</sup> There are two suggestions that are widely discussed: that the purpose of science is to discover true propositions about its field of study on the one hand, and that research does not intend to discover true propositions but only intends to provide a systematization that is useful to predict and explain the phenomena in question.<sup>11</sup> On the first understanding, the purpose of science primarily is to use scientific methods to obtain knowledge of reality, where the corresponding methods are assumed to be truth-conductive and the established scientific theory is supposed to be a mirror of mind-independent reality. On the second understanding, the purpose of science is not primarily to discover true propositions, but instead is a pragmatic one that enables us to predict and explain the phenomena in the corresponding field of research, irrespectively of whether the propositions used to explain and predict the phenomena are true or false in the sense of mirroring reality: As long as the established theory can predict and explain the

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<sup>9</sup> Although at first sight these conditions appear to be trivially satisfied, it is a question of on-going philosophical debate whether the world and our epistemic constitution are indeed mutually fitting, and if so, whether there is need for explanation of this alleged fact. For instance, sceptical worldviews frequently deny both that we have the epistemic abilities needed for science to be possible and that the world is such that it is open to scientific exploration. Cf. Lowe (2002: 7-11) and Loux (2003: 1-19).

<sup>10</sup> Ideal scientists at least satisfy the following condition: “[They] are of the highest possible intelligence and of the highest possible degree of philosophical and logical acumen, and they are intellectually honest in this sense: when they are considering an argument for some thesis, they do their best to understand the argument and to evaluate it dispassionately. [They] have unlimited time at their disposal and are patient to a preternatural degree [...] and if their opponents think it necessary to undertake some lengthy digression into an area whose relevance to the debate is not immediately evident, they will cooperate.” (van Inwagen 2006: 42)

<sup>11</sup> Cf. Koperski (2015: 247-252): “Realists take mature scientific theories to be true or at least approximately true, where truth is understood as something like correspondence. [...] There are many different versions of scientific antirealism. [On this position,] all we need from science is the ability to make successful predictions and technological advances. Whether a given law or theory is true in a correspondence sense is irrelevant; what we want is for it to work.”

phenomena in question, it will count as a successful scientific theory. For instance, on the first understanding, a physical theory that explains atomic processes in terms of the properties of electrons is committed to the existence of electrons, whereas on the second understanding electrons are supposed to be theoretical entities introduced into the theory to be able to explain macroscopic phenomena in an efficient way, irrespectively of whether electrons actually exist.

The two approaches to understand the purpose of science are not mutually exclusive: on the first understanding the true propositions science intends to discover are assumed to be the pragmatically most appealing constituents of a theory that enables us to explain and predict the phenomena in question.

The discussion about the scientificness of a discipline of human intellectual activity is only philosophically interesting if it is assumed that the purpose of science is to establish true theories about fields of our pre-theoretically given experience of reality: If the only purpose of science was to establish a propositional systematization of a particular field of research that has no claim of being true, then it would be hard to see how a discussion concerning the scientificness of a discipline could arise as long as it would be able to provide some explanation of the phenomena in question. Therefore, I assume that the purpose of science is to establish true scientific theories about reality and that it is the truth of the theories in question that accounts for their ability to answer the questions the scientist is interested in.<sup>12</sup>

Fourth, the most difficult question to answer is the question concerning the nature of *scientific methods*. The reason is, on the one hand, that there is enormous discussion concerning both the proper understanding of the terms “scientific” and “method” and that, on the other hand, it is precisely the scientificness of its methods that is supposed to set aside science from pseudo-science. The problem is this: If our account of the characteristic features of scientific methods is too narrow, then we run danger to exclude disciplines of human intellectual activity from the set of scientific disciplines that objectively should be included, and if our account of scientific methods is too unrestricted, then we run danger to include human intellectual activities in the set of scientific disciplines that should be excluded. When it comes to the discussion of the possibility of scientific theology it is important to avoid both the Scylla of methodological exclusivism and the Charybdis of methodological inclusivism. We therefore must find an account of scientific methods that does not entail the scientificness of confessional theology, or its denial, while at the same time it is adequate to our intuitions concerning the essential features of scientific methods.

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<sup>12</sup> Cf. Schurz (2014: 23): “Das oberste Erkenntnisziel [...] der Wissenschaft besteht in der Findung von möglichst wahren und gehaltvollen Aussagen, Gesetzen oder Theorien, über einen bestimmten Gegenstandsbereich.“ Vgl. Werbick (1974: 332): „Wenn man den Sinn von ‚Erklären‘ darin sieht, die sinnvolle Einordnung von Erfahrungsgegebenheiten in ein Paradigma, in eine mehr oder weniger umfassende Sinntotalität reflektiert zu vollziehen, dann lässt sich der so verstandenen Erklärung nicht eine ‚Kunst des Verstehens‘ als total heterogenes wissenschaftliches Verfahren gegenüberstellen; dann lässt sich auch nicht länger [...] eine auf der Entgegensetzung von Verstehen und Erklären beruhende Einteilung der Wissenschaften in Geistes- und Naturwissenschaften aufrechterhalten.“

A method to achieve a certain goal is a set of rules that specifies what has to be done in theory or praxis to gain the desired result in a reliable way. Since science attempts to propositionally structure our pre-theoretical experience of reality, intending to provide understanding and explanation of the phenomena in question in form of scientific theories, it follows that a scientific method is a set of rules that specifies what must be done in theory or praxis to establish scientific theories that are true. The methods of science therefore are the theoretical and practical means with the help of which the scientist wants to achieve the goal of providing a deeper understanding and explanation of reality.

However, when it comes to the precise formulation of the theoretical and practical rules that the scientist has to obey, a problem emerges: Since, from a historical point of view, different methods have been referred to as scientific throughout the ages, and since the different sciences today factually deploy different methods that correspond to their object of study, there is no such thing as *the* single specific scientific method that could be applied univocally to all objects of study. There is, in other words, no method which one could apply to all objects of study in the hope of automatically gaining insight into its nature.<sup>13</sup> Therefore, instead of assuming that there is a single specific set of rules the scientist has to work with, it is more plausible to assume that there is a variety of methods that share a common methodological ground, but vary sufficiently to be able to capture the differences between the different objects of study.

The common ground that all scientific methods share can be specified by several necessary conditions. First, the corresponding method has to be explicitly reflected upon and has to be formulated *expressis verbis* in an intersubjectively intelligible way: The scientist has to specify what it is that he is doing, and what he is presupposing, in a way that enables other people to be aware of every step of the scientist's approach to reality. Second, the scientist has to justify why the particular method is assumed to be an adequate method to investigate the field of pre-theoretical experience of reality which it is applied to. It has to be justified why the method is assumed to be a reliable method of investigation instead of another. Third, it needs to be clear what has to be done in case there is a mismatch between the theory and our pre-theoretical experience of reality, which is to say that it has to be clear what counts as verifying and as falsifying evidence of the scientific theory in question.

Based on this common ground there is room for methodological specifications that respect the individual differences between the sciences and their approach to

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<sup>13</sup> Cf. Feyerabend (1986: 21): "Die Idee einer Methode, die feste, unveränderliche und verbindliche Grundsätze für das Betreiben von Wissenschaft enthält und die es uns ermöglicht, den Begriff ‚Wissenschaft‘ mit bescheidenem, konkreten Gehalt zu versehen, stößt auf erhebliche Schwierigkeiten, wenn ihr die Ergebnisse der historischen Forschung gegenübergestellt werden." Cf. Harrison (2015: 168): „In keeping with the indiscriminate uses of the term ‚science‘ in the first half of the nineteenth century, talk of a scientific method had initially meant simply a systematic plan of attack that could be applied to any number of activities, from physiology to fishing.”



reality. For instance, both physics and the study of history share the same methodological common ground, but vary in their specifications of scientific method: In physics, based on our perception of the world, the methods of induction and abduction lead to scientific theories that are tested in the laboratory, and in the study of history the available textual evidence and exegetical methods lead to knowledge of the past.

In sum, for our purpose, we can specify the scientificness of a discipline of human intellectual activity as follows: A discipline of human intellectual activity is a scientific discipline if it intends to establish a true scientific theory that answers the questions which the ideal scientist has about a particular field of our pre-theoretical experience of reality in such a way that the methods used are intersubjectively intelligible, transparent, are shown to be reliable, and specify how the resulting theory deals with evidence and counter-evidence.<sup>14</sup>

### **(iii) The Importance of Confessional and Scientific Theology**

The suggested concepts of science and confessional theology lead to the following concept of scientific and confessional theology: A scientific and confessional theology is a theology that is (a) based on religious confessions that are unlikely to be empirically verified and not intersubjectively binding. (b) It tries to show the internal and external plausibility and coherence of its religious worldview (c) by developing a scientific theory that has a claim of being true. (d) It deploys methods which are intersubjectively intelligible, justified as proper methods to deal with theology's universe of discourse, and able to specify how the developed theory relates to the available evidence and counter-evidence.

The scientificness of confessional theology is not important for religious worldviews as such. There is no intrinsic commitment for religious worldviews, first, to become reflected upon, and second, to engage in scientific reflection on their constitutive elements. Some confessional theologies, like for instance theological systems in the Christian protestant tradition, might even provide reasons to assume that a scientific theology is not possible or needed at all. Confessional and scientific theology becomes important only in a context in which the religious community in question assumes that a scientific approach to their pre-theoretical experience of reality and their tradition is of intrinsic value both for the internal dialogue of the community and for the exchange with adherents of other worldviews. In this case, scientific and confessional theology is the means of the religious community to show

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<sup>14</sup> One could object that there are sciences that deal with objects that are not part of our pre-theoretical experience, for instance, particle physics or transfinite mathematics. However, although prima facie these sciences might be understood as not dealing with our pre-theoretical experience directly, they originate from sciences, physics and mathematics, that directly deal with the realm of pre-theoretical experience and therefore they indirectly deal with what is pre-theoretically given to us in experience. They are reflections on the deep structure of the world of experience insofar as it is a quantifiable world, or insofar as it is constituted by atomic particles.

the reasonability and plausibility of their worldview as a worldview to live by both to the religious believers and to adherents of other worldviews.

## **II. Problems for the Possibility of Scientific and Confessional Theology**

There are three types of arguments against the possibility of scientific and confessional theology. On the first type of argument, scientific theology is impossible because theology has no proper object to investigate. On the second type of argument, scientific theology is impossible because theological methods fail to be scientific. On the third type of argument, scientific theology is impossible because its assumptions contradict insights of other scientific disciplines. I analyse the logical structure of these arguments and indicate their alleged justification. Although I focus paradigmatically on Christianity and Christian theology, the arguments, *mutatis mutandis*, also apply to other religious traditions.

### **(i) The Missing Universe of Discourse of Theology**

The first kind of argument that intends to show that scientific and confessional theology is impossible tries to establish the conclusion that there is no proper object that confessional and scientific theology could investigate. It has the following form:

- (1) Confessional and scientific theology is possible only if there is an object that confessional and scientific theology can investigate deploying the methods of science.
- (2) It is not the case that there is an object that confessional and scientific theology can investigate deploying the methods of science.
- (3) Therefore, it is not the case that confessional and scientific theology is possible.

The argument is valid, which is to say that the truth of the premises entails the truth of the conclusion. For it to be sound, the premises have to be true. The first premise is true: Because any scientific discipline needs an object it investigates using adequate scientific methods, it follows conceptually that confessional theology is impossible in case there is no object for it to investigate. The crucial premise therefore is the second one. It is backed up by arguments the conclusions of which deny the truth of fundamental assumptions of religious worldviews. These arguments typically argue for the conclusion that God does not exist, or that it is at least irrational to believe that God exists. There are two popular arguments for the conclusion that God does not exist: the argument from evil and the argument from naturalism.<sup>15</sup>

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<sup>15</sup> The argument from divine hiddenness and the argument from religious pluralism could also be discussed under this heading.

The common ground of all arguments from evil is the apparent conflict between a particular philosophical concept of the divine being as perfect and our experience of a large variety of kinds of evil in the world. In the discussion, this common ground is taken as a starting point for the formulation of many versions of the argument from evil that concern both animal and human suffering. Arguments from evil conclude that the theological assumption that God exists is a false assumption or at least cannot be rationally defended in light of the suffering of humans and animals in the world. If God does not exist, however, there is no proper object to be studied by scientific and confessional theology.<sup>16</sup>

In contrast to the argument from evil, the argument from naturalism is not concerned to show that theology is based on contradictory assumptions but instead tries to show that for ontological reasons it is false, or irrational, to claim that God exists. The argument from naturalism presupposes that, setting aside abstract entities, only those entities can rationally be supposed to exist that are part of scientific theories of the natural sciences.<sup>17</sup> It then goes on to argue that God is not an entity that is mentioned as a part of scientific theories developed by the natural sciences. Therefore, it is argued, it is false to assume that God exists and false that confessional and scientific theology is possible.

## **(ii) The Improper Methods of Theology**

The second kind of argument against the possibility of scientific and confessional theology is not directed against the existence of theology's object of study and is fully consistent with the existence of God. Instead, it concentrates on the scientificness of theology's approach to deal with its field of study and tries to show that theology fails to deploy scientific methods. The argument has the following form:

- (1) Confessional and scientific theology is possible only if theology deploys proper scientific methods to investigate and analyse its object of study.
- (2) It is not the case that theology deploys proper scientific methods to investigate and analyse its object of study.
- (3) Therefore, it is not the case that confessional and scientific theology is possible.

The argument is logically valid. For it to be sound, the premises have to be true. The first premise is true: For it to be a scientific discipline, confessional theology not only needs to have a proper object to study, but needs to deploy scientific methods to analyse it. There is no scientific theology if theology does not deploy scientific methods. The crucial premise is the second premise. Although there is a variety of arguments in support of this premise, I am going to mention only two arguments for

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<sup>16</sup> Cf. van Inwagen (2006), Stump (2012), Swinburne (1998), and McCord Adams (1988).

<sup>17</sup> Cf. Quitterer (1999), Müller (2007), Löffler (2010) and (2011).

the conclusion that theology fails to deploy scientific methods: the argument from conceptual clarity and the argument from revisability.

The argument from conceptual clarity is a corollary of the fact that scientific methods are used to establish a propositional systematization: Such a systematization *prima facie* presupposes that the concepts involved in scientific theories are well-defined. The argument from conceptual clarity, though, intends to show that theology does not satisfy this condition and therefore has to be excluded from the circle of scientific disciplines. Based on the premise that scientific and confessional theology is only possible if it specifies its essential terms in a clear-cut way, it is argued that it is not the case that theology is able to specify its essential terms on the standards demanded by scientific methods. Therefore, it is not the case that confessional and scientific theology is possible. For instance, it is argued that the central concept of theology is the concept of God and that theology fails to provide a clear-cut definition of what it means by "God".<sup>18</sup>

The argument from revisability is relevant to questions concerning new insights provided by the academy and concentrates on theology's ability to change its assumptions. The first premise states that scientific and confessional theology is only possible if theology is willing to change each of its assumptions in the light of new evidence that speaks against these assumptions. The second premise of the argument argues that confessional theology is not willing to change each and every of its assumptions in the light of new evidence, delivered by the other sciences. Therefore, the argument concludes, it is not the case that scientific and confessional theology is possible. For instance, it is argued that Christian theology cannot be a science because it will as a matter of principle never give up the assumption that Jesus Christ is the Incarnated Son of God. It therefore fails to satisfy a necessary condition for the scientificness of any discipline of human intellectual activity.

### **(iii) The Conflict of Theology with the Natural Sciences and the Sciences of History**

The third kind of argument directed against the possibility of scientific and confessional theology tries to show that there is a conflict between theological assumptions with insights found in the other sciences. The argument has the following form:

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<sup>18</sup> Cf. Gatzemeier (1975: 89/90): "Die Untersuchung hermeneutisch-traditioneller, logischer und sprachanalytischer theologischer Sprachlehren konnte nicht den Nachweis erbringen, dass eine sinnvolle Einführung des Wortes ‚Gott‘ möglich ist. Auch Ersatzformulierungen wie ‚das Absolute‘ usw. vermögen nicht das theologisch/kirchliche Begründungs- und Verständlichkeitsdefizit aufzuheben [...] Die Methode, die uns zu diesem Ergebnis führte, kann nicht – wie es von Seiten der Theologie häufig geschieht – als formalistisch, naturwissenschaftlich, mathematisch oder positivistisch und damit als für theologisch/religiöse Probleme inadäquat abgetan werden. Wir sind ausgegangen von der Frage nach den Kriterien, denen eine Sprache genügen muss, mit deren Hilfe gesicherte Orientierung gefunden werden soll."

- (1) Confessional and scientific theology is possible only if theology's assumptions do not contradict the natural sciences and the sciences of history.
- (2) Theology's assumptions contradict the natural sciences and the historical sciences
- (3) Therefore, it is not the case that confessional and scientific theology is possible.

The argument is valid and the first premise is true if one assumes that truth does not contradict truth, and that the assumptions and insights of all scientific disciplines carry with them a claim for truth that leads to the unity of science in an overall coherent theoretical representation of our pre-theoretical experience of reality.<sup>19</sup> It is, however, not true without qualification because a contradiction between the conclusions of the different sciences does not entail that there is something wrong with a *particular* science involved in this contradiction. It only entails that one science or the other has got something wrong. The second premise of the argument is backed up paradigmatically by two kinds of arguments: arguments that show a putative contradiction between theology's assumptions and the apparent results of the natural sciences and arguments that show a putative contradiction between theology's assumptions and the apparent insights of the historical sciences.

Arguments of the first type focus on a particular theological assumption and argue that a contradiction can be derived to what we know from the natural sciences. Let us look at a particular example: Since the possibility of special divine action is an essential part of Christian theology, arguments from the impossibility of special divine action intend to show that special divine action contradicts the insights of the natural sciences.<sup>20</sup> A frequently discussed version of this argument, in a first step, tries to establish that special divine action is possible only if the world is not causally closed. In a second step it is argued that it is a presupposition of the possibility of the natural sciences, or an empirical insight itself, that the world is causally closed and, consequently, that special divine action is impossible. Although there are different versions of causal closure discussed, the general idea is that the actual world is

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<sup>19</sup> Cf. Peacocke (2004: 147): "[T]he different sciences relate to each other and to the world they study – the hierarchy of sciences from particle physics to ecology and sociology. The more complex is constituted of the less complex, and all interact and interrelate in systems of systems." Cf. also Edwards (2004: 202): "When science looks at any thing at all – whether it be a proton, a galaxy, a cell, or the most complex thing we know, the human brain – it finds systems of relationships. Every entity seems to be constituted by at least two fundamental sets of relationships. First, there are the interrelationships between the components that make up an entity. Thus a carbon atom is constituted from subatomic particles (protons, neutrons, and electrons). Second, there is the relationship between the entity and its wider environment. So a carbon atom in my body is constituted as part of a molecule, which forms part of a cell, which belongs to an organ of my body. I am part of a family, a human society, and a community of interrelated living creatures on earth. The earth community depends upon and is interrelated with the sun, the Milky Way galaxy, and the whole universe."

<sup>20</sup> Cf. Göcke (2015) and Göcke (2015a).

causally closed because every obtaining state of affairs has a purely physical causal history that is responsible for its obtaining. As Clayton (2008: 135) says, “a basic assumption of many modern physicists is that physical systems are closed to causal interventions from outside (the principle of the conservation of energy).”<sup>21</sup> Since a special divine action is a supernatural, and therefore a non-physical intervention in the actual world, we obtain the following conclusion: if the actual world is causally closed, then special divine action is impossible. But then it follows that a confessional theology that is committed to the possibility of special divine action is impossible as a scientific discipline.

The second type of argument tries to show that there is a contradiction between particular theological assumptions concerning the history of the world and what we know about the history of the world given the historical sciences. These arguments conclude that the respective theological assumptions are false and that therefore theology contradicts the historical sciences and cannot be called scientific itself. For instance, it is sometimes argued that the assumption that Jesus of Nazareth actually lived cannot be confirmed using proper scientific methods because there are insufficient valid historical sources confirming the existence of Jesus of Nazareth. Based on this assumption the conclusion is drawn that we should withhold belief that Jesus of Nazareth existed because the best explanation for the fact that there are insufficient valid sources is that Jesus of Nazareth never existed.<sup>22</sup> If there was no such person as Jesus of Nazareth, however, then there was no such person that was crucified and could have been raised from the dead. Consequently, a scientific theology that is based on the assumption that Jesus Christ is the Incarnated Son of God contradicts the historical sciences.

### III. Prospects for Scientific and Confessional Theology

To provide a programmatic account of the tasks the theologian has to engage in, we have to take account of the arguments against the possibility of scientific and confessional theology. The central premises of these arguments have been the following ones: (a) that there is no object which scientific and confessional theology could study, (b) that theology does not deploy scientific methods to deal with its object of study, and (c) that theology’s assumptions and claims contradict the insights of the natural and the historical sciences.

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<sup>21</sup> According to Papineau (2002: 17), the completeness of physics can be stated as follows: “All physical effects are fully caused by purely physical prior histories.” Cf. Papineau (2000) for a justification of the validity of the principle of causal closure. See Göcke (2008) and Lowe (2008) for a critical discussion of the plausibility of causal closure. As Saunders (2000: 518) says: “The causally closed view of science in which every event leads to another seems to many to leave no room for God at all.” Cf. also Pollard (1958: 12): “I found extraordinary difficulty, when I thought about events in scientific terms, in imagining any kind of loophole through which God could influence them.”

<sup>22</sup> Cf. Doherty (2009: vii-viii) who argues that “no historical Jesus worthy of the name existed, that Christianity began with a belief in a spiritual, mythical figure, that the Gospels are essentially allegory and fiction, and that no single identifiable person lay at the root of the Galilean preaching tradition.”

The theologian's task consequently is twofold: he needs to show, first, that the arguments in support of these premises are not sound arguments and, second, that confessional theology in fact respects the conditions of scientificity. In what follows, I sketch how these tasks could be engaged in before I turn to the single most decisive question that is at the root of the whole discussion concerning the possibility of scientific and confessional theology.

### **(i) The Missing Universe of Discourse Reconsidered**

Concerning the existence of theology's object of study, theology is confronted with a certain unfairness: whereas nobody demands that physics proves the existence of the physical universe it studies, but instead is allowed to simply assume its existence, theology is nowadays expected to argue explicitly for the existence of its object of study, that is, the existence of God.<sup>23</sup> The reason for this seems to be due to the currently dominant Western worldview for which the existence of God is no more a basic metaphysical assumption, unlike to the worldviews dominant until roughly the enlightenment. To show the plausibility of the Christian worldview, the theologian therefore has to show both that the arguments against the existence of God are not based on compelling philosophical arguments and that there are reasonable arguments for the conclusion that an entity that is adequately referred to as "God" exists.

To show that the argument from evil is not a compelling argument the theologian has to develop a theodicy that explains why based on the assumption that God is morally perfect, omniscient, and omnipotent, He still allows evil in this world to occur. This theodicy, of course, will be plausible only for those who share enough of the relevant theological and religious claims on which it is based. However, this does not entail that it could not be a reasonable and reflected theodicy which specifies its assumptions and methods clearly according to the standards demanded by science. Certain stories and arguments simply are only plausible if put in a context which one has to accept to see their rationality. This is true as much of theology as of any other scientific discipline.<sup>24</sup>

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<sup>23</sup> One might say that the existence of the universe *prima facie* is better supported than the existence of God because all people apparently experience its existence by day and night. However, I am not sure whether there is a philosophically neutral way to analyse what it means to experience the existence of the universe: for centuries it was to experience God's creative act, for some it is to experience the mind of God, for others it is an experience of something that is mind-independent, then again some argue that the universe as such can never be an object of experience etc.. The important point is that, due to their implicit or explicit worldview, many people today are unreasonably sceptic regarding many important metaphysical assumptions that involve the existence of something that goes beyond what can be measured in the lab.

<sup>24</sup> Cf. van Inwagen (2002: 30): "A 'defense' in the weakest sense in which the word is used is an internally consistent story according to which God and evil both exist. Sometimes the following two requirements are added: The evil in the story must be of the amounts and kinds that we observe in the actual world, and the story must contain no element that we have good scientific or historical reasons

To show that the argument from naturalism is not a compelling argument the theologian has to reflect on the claims of the argument and has to show that they are not consequences or presuppositions of the natural sciences. It can here be argued that the possibility of natural science does not entail that only those entities exist that are mentioned in the respective scientific theories. This is a metaphysical assumption of a naturalistic worldview that has no compelling argument to it. And it is simply the denial of the metaphysical assumption of the Christian worldview, that it is not the case that only those entities mentioned in the theories of the natural sciences exist.

However, the theologian cannot rest by simply refuting the arguments put forward against the existence of God. He also has to show the plausibility of the assumption that God exists. That is, he has to explicitly state which method he deploys to support the conclusion that there exists an entity that is adequately referred to as "God", and he has to show that the premises needed for this conclusion are reasonably assumed to be true.<sup>25</sup> For instance, deploying the method of conceiving alternative scenarios, the theologian can argue for the contingency of the existence of the world. He can argue that the principle of sufficient reason, on which nothing happens for which there is not a sufficient reason explaining why its happening, is a plausible epistemological and ontological principle that lies at the root of any scientific approach to our pre-theoretical experience of reality. Based on this he can argue that there has to be a cause for the existence of the universe, and that this cause is identified as God. As Turner (2004: 242) argues, "[what] is the minimum the atheist has to deny if his denials are to be worth the theologian's bother entertaining? And the answer is going to be that the atheist's minimum denial is of the validity of the question itself, "Why is there anything at all?" Once you admit that question you are already a theist. For since any question which is not merely idle must have an answer, you have conceded, in conceding that the question is intelligible, that there is an answer: the world is created out of nothing."

In sum, the first task of the theologian is to engage in an analysis and refutation of the arguments against the existence of God on the one hand, while on the other hand he has to show the reasonability of the assumption that God exists.

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to regard false. A theodicy is a story that has the same internal features as a defense, but which the theodicist, the person telling the story, puts forward as true or at least highly plausible." Furthermore, "A defence will ascribe to God some reason for allowing the possibility of evil in his creation (for example, creaturely free will is a very great good, a good so great that its existence justifies the risk of its possible abuse). It will go on to say that this source, whatever it may have been, produced not just some evil, but vast amounts of horrendous evil, and it will, finally, ascribe to God another reason for not simply removing from his creation by fiat the vast amounts of evil that issued from the Source of Evil, a reason for allowing the vast amounts of horrendous evil produced by the Source to continue to exist" (van Inwagen 2001: 66-67).

<sup>25</sup> Cf. Copan (2003), Ricken (1998), and Bromand (2011).



**(ii) Improper Methods Reconsidered**

Concerning the accusation that theology does not deploy scientific methods to deal with its object of study, the theologian both has to show that the arguments put forward in support of this premise are not compelling and has to specify why he deploys which methods.

With regard to the argument from conceptual clarity, the theologian can provide reasons that the concept of the Christian God is difficult to specify and changes its meaning in the course of history because it is the concept both of a God who is supposed to have shown himself to his people throughout history and the concept of an *ens perfectissimum* that transcends our epistemic understanding and therefore of necessity escapes a clear-cut definition.<sup>26</sup> He can also point out that many of the basic terms used throughout the sciences share the same fate. For instance, the physical concept of energy is defined in different ways in different theories, and the concept of quantum phenomena and their relation to macroscopic phenomena escapes a clear-cut intelligible definition.<sup>27</sup>

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<sup>26</sup> Cf. Rahner (1976: 56): "In Bezug auf das Wort „Gott“ sieht es zunächst so aus, als ob das Wort uns anblicke wie ein erblindetes Antlitz. Es sagt nichts *über* das Gemeinte, und es kann auch nicht einfach wie ein Zeigefinger fungieren, der auf ein unmittelbar außerhalb des Wortes Begegnendes hinweist und darum selbst nichts darüber sagen muss, so wie wenn wir ‚Baum‘, ‚Tisch‘, oder ‚Sonne‘ sagen. Dennoch ist diese schreckliche Konturlosigkeit dieses Wortes [...] doch offenbar dem Gemeinten angemessen, gleichgültig, ob das Wort ursprünglich schon so ‚antlitzlos‘ gewesen sein mag oder nicht. [...] So ist das antlitzlos gewordene, d.h. das von sich selber her an keine bestimmte Einzelerfahrungen mehr appellierende Wort ‚Gott‘ doch gerade in der richtigen Verfassung, dass es uns von Gott reden kann, indem es das letzte Wort vor dem Verstummen ist, in welchem wir es durch das Verschwinden alles benennbaren einzelnen mit dem gründenden Ganzen als solchem zu tun haben." Cf. also Alston (1985: 21): "Thoughtful theists have long felt a tension between the radical 'otherness' of God and the fact that we speak of God in terms drawn from our talk about creatures. If God is radically other than creatures, how can we properly think and speak of Him as acting, loving, knowing, and purposing? Wouldn't that imply that God shares features with creatures and hence is not 'wholly other'? [...] The respects in which God has been thought to differ from creatures can be roughly arranged in a scale of increasingly 'otherness'. Without aspiring to range over all possible creatures, including angels, let's just think of the ways in which one or another thinker has deemed God to be different from human beings: A. Incorporeality. B. Infinity. This can be divided into: B1. The unlimited realization of each 'perfection'. B2. The exemplification of all perfections, everything else equal it is better to be than not to be. C. Timelessness. D. Absolute simplicity. No composition of any sort. E. Not a being. (God is rather 'Being-itself.' Even if D. and E. rule out any commonality of properties between God and man, it may still be, as I shall be arguing in this paper, that A.-C. do not."

<sup>27</sup> Cf. Kuhn (1996: 47-50): "Paradigms could determine normal science without the intervention of discoverable rules. [...] Scientists [...] never learn concepts, laws, and theories in the abstract and by themselves. Instead, these intellectual tools are from the start encountered in a historically and pedagogically prior unit that displays them with and through their applications. A new theory is always announced together with applications to some concrete range of natural phenomena [...] Consider, for a single example, the quite large and diverse community constituted by all physical scientists. Each member of that group today is taught the laws of, say, quantum mechanics, and most of them employ these laws at some point in their research or teaching. But they do not all learn the same applications of these laws." Cf. also Joos (2006).

To show that the argument from revisability is not compelling the theologian can argue that indeed there are assumptions that Christian theology cannot give up. However, since any science is based on specific assumptions without which it could not proceed, this *as such* does not seem to be a good objection against the scientificness of confessional theology – as long as there is no compelling argument against a specific claim, which is discussed below. For instance, physics will never give up the assumption that the universe which it investigates exists, and the historical sciences will never give up the assumption that the past actually was real. Nobody, though, argues based on this fact against the scientificness of physics or history.

However, it is not enough for the theologian to refute the arguments against the assumption that theology deploys proper scientific methods. He also has to formulate and state explicitly the methods used in theology in an intersubjectively intelligible way and has to show that it is reasonable to suppose that the methods deployed are adequate to theology's object of study. This, however, has always been part of Christian theology and is explicitly expressed in the meta-reflections of the different theological disciplines. For example, it has always been essential to Catholic theology to reflect both on the epistemological limits of our theorizing about the nature of God and to provide philosophical reasons that a univocal way of speaking about the ultimate ground of reality is likely to be impossible for creatures like us. These reflections always considered philosophical insights concerning language, knowledge, and reality.<sup>28</sup>

In sum, the second task the theologian has to engage in is to justify the adequacy of theological methods as methods to deal with theology's object of study in a scientific way and to show that the arguments for the conclusion that theology does not deploy scientific methods are either not compelling or concern features common to all the sciences.

### **(iii) The Conflict with other Disciplines Reconsidered**

Concerning the argument that theology's assumptions contradict the insights of the natural and the historical sciences, the theologian has to analyse whether the arguments for this conclusion are really based on insights provided by the natural and historical sciences, or whether they are due to particular metaphysical interpretations of the results of the sciences. On the one hand, if they are metaphysical interpretations of the results of the sciences, then he has to ask for the plausibility of the respective metaphysical interpretation and whether it is a compelling interpretation. If it is not, then he has to explain why the theological assumptions under attack in fact cohere with proper scientific insights. On the other hand, if they are due to proper insights of the sciences, then the theologian has

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<sup>28</sup> Cf. Müller (2012), Seckler (1988) and (1988a).

indeed to give up the problematic assumption as a constituent of the Christian worldview.<sup>29</sup>

Not every theological assumption, however, is of the same value for the Christian worldview. Some are closer to the core of the Christian worldview and consequently will damage Christianity more in case they turn out to be false than others which are closer to the periphery. The theologian therefore has to be aware of the importance of his assumptions for the identity of the Christian worldview. He has to state the reasons for allocating different levels of importance to the different religious and theological assertions. It is only in the case that central assumptions of Christianity turn out to contradict the other sciences that a scientific Christian theology is impossible.

With regard to the argument from the impossibility of special divine action, though, the theologian can argue that the assumption that the universe is causally closed is not due to insights of the natural sciences but is a metaphysical assumption concerning the fundamental structure of the universe that without contradiction to the natural sciences can be rejected. Based on this, the theologian is free to develop models that show how the assumption that God acts in the world coheres with the results of the natural sciences.<sup>30</sup>

With regard to scientific insights into the history of the world, however, the theologian has to accept that there are religious assumptions about the history of the world that are false on our best scientific theories. Although it is only a minority of historians that actually doubt the historical existence of Jesus of Nazareth, many Biblical narratives turned out to be historically false. For instance, it is false that God created the world in the way it is described in the two narratives of creation in the Book of Genesis. However, it is not the case that these narratives understood literally constitute the core of the Christian worldview.<sup>31</sup> From its very beginning, Christian theology was aware that there are different ways to understand and interpret the Bible and that it is not essential to give a literal reading to every part of the Bible.<sup>32</sup>

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<sup>29</sup> It is in principle possible to revise theological assumptions because the “Grundsatz, dass Vernunft und Offenbarung sich letztlich nicht widersprechen können, gilt nach beiden Richtungen. Er fordert in Konfliktfällen zur Überprüfung unseres Vernunftwissens und unseres Offenbarungsglaubens, die beide geschichtlicher und kontingenter Art sind, heraus” (Seckler 1988a: 195). Cf. also Tapp (2014).

<sup>30</sup> Cf., for instance, Göcke (2015b) for an analysis of the consistency of divine omniscience and randomness in the physical universe and Göcke (2015a) for a model of special divine action.

<sup>31</sup> As van Inwagen says, “suppose that someone who had never heard of the Bible and had never so much as thought about the beginning of the world were one day to read the book of Genesis and were to take everything it contained in a pretty literal sense and were to believe every word of it. This person would thereby come to believe many true things and many false things. [...] The true things [, however,] are much more important than the false things. In fact, the true things are among the most important there are, and the false things are not very important at all.” (Van Inwagen 2010: 840)

<sup>32</sup> Cf. Harrison (2015: 59): “The most common medieval classification distinguished four senses of scripture: literal or historical, tropological, anagogical, and allegorical. The literal sense is more or less self-explanatory. The tropological sense referred to the moral application of the text — how it could be put into practice. The anagogical sense referred to the promises of scripture and the foretaste of heaven — what was to be hoped for. Finally, the allegorical sense places Christ in the center of history.

In sum, the third task for the theologian is to structure the objections against the scientificness of theology by showing which objections are based on actual scientific results and by specifying which theological assumptions are central for a Christian worldview and which can be rejected in the light of new scientific developments.

#### **(iv) The Core of the Problems for Scientific and Confessional Theology**

We saw what the theologian has to do to counter the mentioned arguments against the scientificness of confessional theology and we briefly gestured at the arguments the theologian can deploy to succeed in this task. There is, however, a last and most important objection that seems to lie at the root of the conflict concerning the scientificness of confessional theology. The objection is primarily directed at the epistemic status of religious and theological assumptions and secondary at their ontological implications.

Religious and theological assumptions are neither likely to be empirically verified nor are they of an intersubjectively compelling nature. They are such that, if they do not contradict proper scientific insights into the nature of reality or lead to contradiction, they can be freely adopted by an individual or a community as fundamental assumptions of a specific worldview. Consequently, they also can be freely rejected by other individuals and communities. Apart from cases where claims about empirical history are made, religious and theological assumptions therefore properly belong to the realm of contingent metaphysical assumptions about the fundamental nature of reality.

The single most important question, then, is whether a scientific discipline is possible if it is based on metaphysical assumptions that are likely to transcend empirical verification, fail to be intersubjectively compelling, but do not lead to a conflict with the other sciences, or to contradiction. Seen from the other side of the coin: are scientific theories only possible if they are based on assumptions that are intersubjectively compelling and likely to be empirically verified? Some philosophers currently appear to suppose that we can indeed only speak of a scientific discipline if it is based on intersubjectively binding assumptions that are empirically verifiable or if it is based on a concept of reason that is autonomous. They argue that a scientific discipline cannot be based on assumptions that are neither empirically verifiable nor intersubjectively compelling.<sup>33</sup> However, quite the contrary seems to be the case if looked upon both from the systematic and the empirical point of view.

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John Cassian, one of the first to employ this scheme, offers an example of how this might work in practice, by explaining the different meanings of "Jerusalem." A biblical reference to this place would denote, in its literal sense, the city of the Jews; in its tropological sense, the human soul; in its anagogical sense, the heavenly city of God; and in its allegorical sense, the Church of Christ."

<sup>33</sup> Cf. Schurz (2014: 44): "Theologien, die gewisse religiöse Annahmen, die das ‚Credo‘ der Religion ausmachen, dogmatisch voraussetzen, [verlassen] in doppelter Weise die Grenzen der Wissenschaft [...]: erstens dort, wo sie spekulative Annahmen über Wesen und Existenz Gottes voraussetzen, und

First, from a systematic point of view, we have to be aware that our present concept of science is itself a contingent cultural achievement that is based on specific ontological and epistemological presuppositions concerning the nature of reality; presuppositions that are neither empirically verifiable nor intersubjectively compelling.<sup>34</sup> The function of these assumptions, insofar as they do not contradict insights of other disciplines or lead to contradiction, is precisely to constitute a particular perspective from which our pre-theoretical experience of reality is structured and made accessible to the mind in a propositional systematization for both theoretical and practical purposes. For instance, on the one hand, the theological assumption that God creates the world, although it is a reasonable assumption, is neither empirically verifiable nor intersubjectively compelling. However, it enables to account for the very possibility of a reliable scientific investigation into the nature of reality because it explains it by recurring to the reasonable nature of God, who wants us to live in a world that we investigate in a reliable way. On the other hand, the physical assumption that there are genuine relations of causal efficacy regulating the behaviour of fundamental particles in the physical universe, or the assumption that mathematics is the language in which the fundamental structure of the physical universe can be expressed, function in the same way. They constitute a specific perspective from which our pre-theoretical experience of reality can be structured. They are, however, themselves beyond empirical verification, not intersubjectively compelling, and in part are even restricted by criteria like simplicity, in the case of causation, and aesthetic beauty, in the case of mathematics. Since human beings are bound to a perspective interpretation of the world, and since there are different assumptions constitutive of the sciences that are neither intersubjectively compelling nor likely to be empirically verified, the best we can do to show the adequacy and plausibility of a particular scientific discipline, therefore, is to be clear, explicit, and reflective about our theoretical and meta-theoretical shaping principles and to show that on them a meaningful worldview is possible, both theoretically and practically.

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zweitens dort, wo sie fundamentale Wertannahmen voraussetzen." Cf. also Morscher (1974: 341): "1. Die Theologie enthält Sätze, die nicht intersubjektiv kritisierbar sind. 2. Sätze, die nicht intersubjektiv kritisierbar sind, können nicht in einer Wissenschaft vorkommen. 3. Daher: Die Theologie ist keine Wissenschaft." Cf. also Seckler (1988a: 226): "Derselbe Einwand, der gegen die Wissenschaftsfähigkeit der Theologie zu sprechen scheint, wird häufig auch als Argument zur Bestreitung ihrer Forschung in Forschung und Lehre angeführt. Da sie nicht nur faktisch, sondern grundsätzlich und axiomatisch einen Glauben, nämlich den christlichen Glauben im Medium des kirchlichen Glaubenszeugnisses, zur sie konstituierenden Voraussetzung habe, sei sie in ihren Voraussetzungen, Methoden und Zielen nicht frei. Dieser Einwand verkennt, dass es eine voraussetzungsfreie Wissenschaft nicht gibt und nicht geben kann."

<sup>34</sup> As Harrison (2015: 194) argues, "science and religion are not natural kinds, they are neither universal propensities of human beings nor necessary features of human societies. Rather they are ways of conceptualizing certain human activities – ways that are peculiar to modern Western culture, and which have arisen as a consequence of unique historical circumstances." Of course, the Chinese, Indian, and Arabs, for instance, also engaged themselves in activities that can be called scientific. However, today the expressions "science" and "the sciences" primarily seem to be related to those fields of study that have become immensely successful as disciplines of the European university.

Although this conclusion may seem unacceptably modest, experience suggests that such epistemic humility at least disposes us to those insights that do, on the whole, lead to worldviews that are ultimately richer and more interesting.

Second, from the empirical point of view, a glimpse into the variety of theories discussed in the natural sciences and the humanities immediately reveals that there are many different theories that (a) both carry with them an undisputed claim for scientificity, (b) are accepted in the community as scientific theories, but (c) are based on assumptions that are likely to transcend empirical verification or intersubjective confirmation; else they would not be there to be discussed. Let me provide two brief examples: First, the assumption that our universe is part of a larger multiverse is neither likely to be empirically verified, nor is it an intersubjectively compelling assumption, not even amongst physicists. Although it is not clear whether the multiverse-theory could be empirically verified, and therefore whether it should be addressed as a metaphysical assumption on a level with the assumption that God exists, or as a yet unconfirmed empirical hypothesis, it is nevertheless discussed as a (part of a larger) scientific theory. Second, the philosophical assumption that the self is a physical substance is also carried forward with an undisputed claim for scientificity, accepted in the community as a scientific philosophical theory, but is based on assumptions that transcend empirical verification and intersubjective bindingness, as a brief look into the discussion of substance dualism shows. In fact, the longer one reflects on this, the harder it seems to find a scientific theory – be it philosophical, mathematical, physical, theological, chemical – that is not based on assumptions that transcend empirical verification and fail to be intersubjectively binding.

Therefore, for both systematic and empirical reasons, a scientific discipline can be based on assumptions that are likely to transcend empirical verification and binding intersubjective confirmation – as long as they do not contradict the other sciences or lead to contradiction. If, then, the theologian carries forward the tasks specified above in constant dialogue with the other sciences, a scientific and confessional theology as an integral part of both the university and the Christian worldview is not only possible, but looking at the immense work of theologians and philosophers done in this area, already at hand.

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