Catholic Theology and

the Dispute over the Image of Science:
A critical assessment of the scientific character of Catholic theology

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Introduction

Whether theology is a science is a question that is hundreds of years old. Thomas Aquinas (1225-1274) already asked that question in the Middle Ages in his famous work *Summa Theologiae*. Regardless of Thomas Aquinas' ingenuity in finding an answer, the fact that such an issue is still being worked on today may indicate that his approach or solution is no longer satisfying to modern day theologians or philosophers of religion. The dawn of the new image of science (*i.e.* since Galileo) has called into question the Aristotelian concept of science and, thus, the old claim of the scientific profile of theology. In that situation, it is not surprising that the doubts have repercussions on the long-undisputed credibility and authority of theology, especially, in the public and academic-scientific community, *i.e.* universities.

Obviously, criticism of the old claim has not deterred theologians and philosophers with a great interest in religion from arguing for the need to justify the scientific profile of theology through a non-traditional approach. Even so, there is no consensus among them about how it should be done.² For some people, that situation can arouse curiosity about the reasons or motives of theologians and philosophers of religion for such a need.

Reeves believes that it may have something to do with a fear of losing recognition from the academic-scientific community. He clearly states that

[I]n my own training in science and religion at Boston University, I was struck by how many science and religion scholars were attempting to use the authority of science to secure the legitimacy of theology as a discipline. Theology had long struggled in the twentieth century to find a secure place in public research universities, for it seemed to rely upon faith claims that are problematic from a philosophical point of view.³

If that is really the case, then it is the 'political' education system that has forced theologians and philosophers of religion to find out how to work 'scientifically' in their own area. From that point of view, being scientific (*viz.* being part of a science) is all important. What is not

¹ See TH. AQUINAS, Summa Theologiae, I, q. 1 a. 2 (Translated, with Commentary, by Brian Shanley, O.P., introduction by Robert Pasnau, Indianapolis – Cambridge 2006, 4).

² Cf. Wolfhart Pannenberg, Wissenschaftstheorie und Theologie, Frankfurt am Main 1987; Nancey Murphy, Theology in the Age of Scientific Reasoning, Ithaca – London 1990; Wentzel van Huyssteen, Alone in the World? Human Uniqueness in Science and Theology. The Gifford Lectures, the university of Edinburg, Spring 2004, Gottingen 2006.

³ Josh Reeves, "Methodology in Science and Religion: A Reply to Critics", in: Zygon 55 (2020) 824-836, 825.

part of science or cannot function according to scientific standards is not worthy to pursue at universities.

Although it sounds reasonable, Reeves sees that such a policy can also be problematic. It presupposes and claims to know the essence of science. Because of his sympathy for the (socio-) historical approach, he rejects such a typical essentialist discourse, contending that there is, in history, a complexity in the term 'science' as well as in the term 'religion' (*i.e.* theology). This complexity, consequently, renders the discourse about the essence of 'science' or 'religion' pointless. Even so, he concludes that it is still possible to promote dialogue between, and progress in, science and religion "by focusing on specific religious topics as they connect to particular scientific theories".⁴

What Reeves seems to be suggesting here is that there is a clear distinction between science and religion (*i.e.* theology); and yet, that instead of wasting time discussing what makes science a science, or theology a theology, it is better to work on specific problems within certain disciplines and to learn from each other. Only then will the university become a place where interdisciplinary networking is possible. From that perspective, it is no longer 'being scientific' that decides the affiliation of a particular discipline with the universities, but its ability to cooperate across disciplines and make progress.

Without a doubt, Reeves' anti-essentialist position is noteworthy and his interest in dialogue between, and progress in science and theology deserves credit. Still, generally speaking, it sounds strange to use a technical term like 'science' (or 'theology') in a work that is supposed to be a scientific work without first explaining what the term means. If he believes that science and religion are different – and he does believe so, then there must be a demarcating line between them. Contrary to his claim, some philosophers of science are still interested in the demarcation problem in the current discussion. Exploring this is certainly not an easy task, but it can and must be done. Otherwise, an objection to the scientific status of theology makes absolutely no sense. For that reason, a kind of essentialist discourse is still needed, although it should not be conducted in the traditional way.

That being said, it is hard to disagree with Reeves' comment about the fear of loss of recognition from the academic-scientific community on the part of theologians or

⁴ REEVES, "Methodology in Science and Religion", 832.

⁵ See Massimo PIGLIUCCI/Boudry MAARTEN (eds.), Philosophy of Pseudoscience: Reconsidering the demarcation problem, Chicago - London 2013.

⁶ A non-traditional essentialism can be found in Popper's 'modified essentialism' that rejects any 'ultimate' attribution to anything like reality or explanation. (See Karl POPPER, Realism and The Aim of Science: From the Postscript to the Logic of Scientific Discovery, edited by W. W. Bartley III, London – New York 1999 [with correction], 135f.; and footnote 5)

philosophers of religion. This kind of psychological consideration can possibly be one reason why they feel obliged to protect the scientific profile of theology, but it certainly should not be the only reason.

In conjunction with this it has been argued that the main reason theology still qualifies as science, and that the objection to it is unacceptable, is that the arguments underlying such an objection are usually not convincing enough. Commonly, there are three things that are believed to distinguish theology from science: the source of knowledge (viz. theology is based on the revelation of the transcendent God known by faith); the object (viz. theology has God as its object); and the truth-claim (viz. theology is about certainty guaranteed by the Scriptures as God's Word). Hence, it is an appeal to a supernatural entity (i.e. God) and its authority, or to put it differently, to metaphysics, that distinguishes science and nonscience, and that usually leads the critics to reject the scientific profile of theology. For some theologians and philosophers of religion, this kind of objection has a naturalist bias, i.e. a hostile attitude towards metaphysics; and it is flawed and unacceptable. To argue against such an objection, they normally try to point out that science is even based on metaphysics; and with such a conception of a metaphysics-based science, they seek to justify the scientific profile of theology. This view, obviously, must have taken a particular philosophical position, i.e. a non-naturalist position.

It must be admitted that bringing philosophical considerations into the scientific enterprise is something that not all professional scientists agree with. However, some of them can easily accept the idea that science needs philosophical insights, ¹² or that some ideas of modern physics can find their roots in the metaphysical ideas of ancient Greek thinkers. ¹³ On that account, it wouldn't be preposterous to say that speaking of metaphysics is somehow

⁷ See Benedikt P. GÖCKE, "Katholische Theologie als Wissenschaft? Einwände und die Agenda der analytischen Theologie", in: Benedikt P. Göcke (Hrsg.), Die Wissenschaftlichkeit der Theologie. Band I. Historische und systematische Perspektiven, Münster 2018, 145-164; esp. 159-162.

⁸ Cf. Peter J. Etges, Kritik der analytischen Theologie: Die Sprache als Problem der Theologie und einige Neuinterpretationen der religiösen Sprache, Hamburg 1973, 19f.; Göcke, "Katholische Theologie als Wissenschaft?", 153-159.

⁹ For example, a string theorist, Susskind, stated that science is about avoiding speaking of supernatural entities or metaphysics in explaining the world or reality. (See Leonard Susskind, The Cosmic Landscape: String Theory and The Illusion of Intelligent Design, New York – Boston – London 2006, 197).

¹⁰ See GÖCKE, "Katholische Theologie als Wissenschaft?", 148-153, 162.

¹¹ Philosophers with a great interest in religion usually have no sympathy for naturalism. For an example, see William L. CRAIG/J.P. MORELAND (eds.), Naturalism: A Critical Analysis, London – New York 2000.

¹² Cf. David DEUTSCH, The Beginning of Infinity: Explanations that Transforms the World, London 2012; Peter WOIT, Not Even Wrong: The Failure of String Theory and The Search for Unity in Physical Law, New York 2006.

¹³ See Carlo ROVELLI, Reality Is Not What It Seems: The Journey to Quantum Gravity (orig. *La realtà non è come ci appare*), London 2017.

helpful in science, especially in the context of scientific discovery. Even so, those metaphysics-friendly scientists would not suggest that metaphysics must therefore be regarded as an integral part of scientific knowledge. For them, science and metaphysics can and must remain different without necessarily being hostile to one another.

Considering all this, two consequences can be drawn. *First*, there is a need-for a philosophy (of science) that can better explain, even to scientists, what really happens within science. As mentioned before, this has provoked a wide range of discussions and, perhaps, will always do so. But it shouldn't be a problem, because the important thing is to find a better argument or explanation, not the last word. Still, when scientists, even those with an interest in the role of metaphysics in science, recognize the difference between science and metaphysics, it can suggest that a philosophy that only creates confusion between science and metaphysics must come under suspicion.

Secondly, in view of the distinction between science and metaphysics, the old claim for the scientific profile of theology is called into question. That is because theology uses metaphysical notions (e.g. God, angel, demon, creation, grace, sin, etc.) or metaphysical statements to communicate, notions which are not of concern to science.

So, does it mean that theologians should simply give up the old claim? The answers can be varied. For theologians who see theology as a kind of wisdom rather than science, the objection to the old claim can leave their position intact, and instead be seen as a confirmation of their own position; although that is not a reason to exclude theology from the universities. For theologians (and philosophers of religion) who have an interest in salvaging the old claim at any cost, the objection can be considered an intellectual challenge. This can be seen as an apologetic project. For theologians who value progress, the objection can be accepted without difficulties. They, with a critical spirit, accept the idea that theology is not a science, given the available arguments, but at the same time they can show promising theological research that can bring progress.

This work deals with that last position. It searches for explanations as to why it is difficult, if not impossible, for (Catholic) theology to be (regarded as) a science; and why it is still possible to speak of rationality in the context of Catholic theology. For that purpose, this work is divided into four chapters.

First Chapter: Catholic Theology. This chapter gives a context for this work. First of all, it will be argued that it is important to refer the issue directly to Catholic theology. As a

¹⁴ See Brian W. HUGHES, Saving Wisdom: Theology in the Christian University, Eugene 2011.

consequence, some sort of essentialist approach is inevitable, as it searches for certain elements that can possibly describe Catholic theology. Only then can the claim of the scientific character of Catholic theology be critically assessed, *viz.* what makes it difficult to consider Catholic theology a science.

Second Chapter: Demarcation of Science. The argument of this chapter, in principle, lies in the need to take the demarcation problem seriously. The current debate within the theoretical physicists' community about the scientific status of their research programmes has implications for the understanding of science. And because there is still no consensus among professional scientists (in this case: physicists) themselves about what can be called science or 'scientific', assessing the claim of the scientific profile of Catholic theology is more difficult. Given that, a demarcation between science and nonscience, on the one hand, is still necessary, and, on the other hand, it should be undertaken by philosophers of science rather than by professional scientists.

Third Chapter: Popper's Critical Rationalism and Catholic Theology. Karl Popper's philosophy, *i.e.* critical rationalism, is seen here as a solution to the demarcation problem. Also, it renders the assessment of the claim of the scientific profile of Catholic theology possible. However, while proposing Popper's philosophy, it is considered necessary to discuss his philosophy together with that of other philosophers who have similar ideas and also with those who have opposite ideas. Although Popper himself is not concerned with theology, some critical rationalists bring his philosophy, (with certain interpretations, though) into theological discussions.

Fourth Chapter: Change in Catholic Theology. This chapter examines how possible 'change' is within Catholic theology as a result of the ideas presented in the third chapter. A critical philosophical analysis of 'progress' is given to provide a more satisfying understanding of 'change'. As a result, there is seen to be a close connection between 'change', or more correctly, 'changeability' and rationality. It emerges that 'rationality' is something that theologians and philosophers of religion should and, still, can fight for, rather than the scientific profile of theology which has proved very difficult, if not impossible to justify. That being said, there is only a narrow space for Catholic theologians to claim that Catholic theology is rational.

Finally, in presenting the arguments in this work, some names of theologians, philosophers and scientists are explicitly mentioned, and sometimes only their general ideas. This has been done to hopefully make the reasoning in this work clearer.

Catholic Theology

Abstract: The first chapter focuses on the description of Catholic theology. The first part of this chapter tries to show that to identify Catholic theology means here to seek better description, *i.e.* better explanation. In the quest two formal concepts of Catholic theology, namely theology practiced by Catholics *and* practiced in full communion with the Catholic Church, will be considered and critically examined. The same mechanism will be used in relation to the traditional claim of theology as *scientia fidei*. Finally, it will be shown that Catholic theology traditionally claimed as science cannot be understood without taking into account divine revelation, tradition and infallibility; although such a claim can be problematic.

Keywords: Catholic theology, Catholic Church, *scientia fidei*, revelation, tradition, infallibility

I.1. Introduction

In history it is not clear what the word theology exactly refers to. The notion is indeed quite obfuscating.¹⁵ Even though the first use of the word can be literally traced back into antiquity,¹⁶ it is still not easy to find agreement among theologians regarding how theology can or should be described. This fact, of course, has impact on Catholic theology, *viz*. what is Catholic theology supposed to mean? Or, is it even possible to talk about Catholic theology as a particular theology amongst theologies? On this account, it is necessary in the first place to give a clear idea of what Catholic theology means here in this work. In so doing, it will be argued that not only is it possible to speak specifically about Catholic theology, but that it is also important to examine its claim for scientific character.

¹⁵ Fiorenza argues that the ambiguity of the word 'theology' can be attested to etymologically, historically and systematically. Etymologically, theology means word/discourse/language of God. But it expresses either God talk, or discourse about God. In fact, both usages are present within early Christian tradition. Historically, theology referred to the pagan philosophical speculation about God, but then early Christian thinkers took the word to embrace Christian doctrine. Systematically, the present usage covers either all theological disciplines, or the specific discipline known as systematic theology, or sometimes even religious studies (See Francis S. FIORENZA, "Systematic Theology: Task and Method", in: Fiorenza, Francis S./Galvin, John P. (eds), Systematic Theology: Roman Catholic Perspectives, Vol. I, Minneapolis 1991, 1-78, 5-6). In my opinion, one must differentiate from the very beginning theology from religious studies. Whereas theology assumes particular confession, religious studies prescind from any confession. Religious studies are concerned with a diversity of religious experiences and their truth claims (see Burkhard Gladigow, Religionswissenschaft als Kulturwissenschaft, Stuttgart 2005, 34f.).

¹⁶ Plato in *The Republic* refers the word 'theology' to stories or mythical speech about gods (See PLATO, Republic II, 378-383 (translated with introduction by A.D. Lindsay, 60-65)). In Aristotle's *Metaphysics*, theology is considered a branch of science which deals with the question of "the divine", *being qua being* (See ARISTOTLE, Metaphysics, Book E. 2 1026a 10-30 (translated into English under the editorship of W.D. Ross, M.A, Hon. LL.D.)).

There are indeed numerous works that (have tried to) defend (the possibility of) the claim of the scientific character of Catholic theology. ¹⁷ Yet, it seems that some of them have situated the problem not strictly within the context of Catholic theology, but instead within that of theology in general. This means that some theologians have tried to build arguments by analyzing the possibility of the scientific character of theology in general and then imposing them on Catholic theology. But this strategy may blur the focus. Catholic theology has its own characteristics, as we will see later, that cannot be simply taken implicitly in the analysis.

I.2. Identifying Catholic theology

Any attempt to identify theology, *i.e.* Catholic theology, may suggest that theology has a kind of nature or essence that distinguish it from other kind. Such an essentialist approach has long been suspected and refused by some philosophers (and theologians), as modern times are claimed to be characterized by cultural pluralism.¹⁸ From their perspective, theology is always to be viewed in its 'pluriformity' due to its strong refusal of 'uniformity'. This means that there are only *theologies*, instead of *theology*. But this claim is problematic since the variety of theologies can only be explained, if there is something that first holds them together in a 'group' of theology. In this view, Tracy's intention to keep unity among different theologies in analogical form is understandable;¹⁹ as a kind of 'generalization', *i.e.* recognition of the unity-in-difference, to some extent, is necessary to explain something. Inasmuch as Tracy's intention is accepted, now, the question is: how can theology, *i.e.* Catholic theology be identified?

On the one hand, some believe that theology must/should not be understood by identifying and basing it on essence, as was traditionally done. It should instead be considered first and foremost as an *act*. The reason for avoiding discourse on essence as such

¹⁷ The majority of Catholic theologians, if not all, who are concerned with this theme, would be advocates of the scientific character of theology, either theology as theoretic science or practical science. As an example, I would just like to mention the three volumes of recent work: Benedikt GÖCKE (Hrsg.), Die Wissenschaftlichkeit der Theologie. Band I. Historische und systematische Perspektiven, Münster 2018; Benedikt GÖCKE/Lukas Valentin OHLER (Hrsg.), Die Wissenschaftlichkeit der Theologie. Band II. Katholische Disziplinen und ihre Wissenschaftstheorien, Münster 2019; Benedikt GÖCKE/Christian PELZ (Hrsg.), Die Wissenschaftlichkeit der Theologie. Band III. Theologie und Metaphysik, Münster 2019.

¹⁸ See Jean-François Lyotard, The Postmodern Condition: A Report on Knowledge, translation from the French by Geoff Bennington and Brian Massumi, foreword by Fredric Jameson, Minneapolis 1984.

¹⁹ Cf. David TRACY, The Analogical Imagination: Christian Theology and the Culture of Pluralism, London 1981; David TRACY, "Christianity in the Wider Context: Demands and Transformations", in: William Schweiker/Per M. Anderson (eds.), Worldviews and Warrants: Plurality and Authority in Theology, Boston 1987.

is that there is a paucity of warrants for clearly and distinctly saying that so-and-so belongs exclusively to theology. Some, therefore, hold that the search for the essence of theology is useless. Their slogan might be found in what Wolterstorff once said: "Call it what you will!" In resonance with this, many contemporary theologians believe that the actual conception of theology is insufficiently understandable in terms of a 'thing-product', but instead may be better understood in terms of a "process-method". For this reason, theologian such as Lonergan has spoken about a methodological shift in theology from logic to method, from discourse on *forma et materia* to one on fields and methods. This means that the theological enterprise would speak more about "how" than "what".

Apparently, this understanding of theology makes a good point because it criticizes traditional essentialism in theology. According to such an essentialism, theology has an inherent nature, which constitutes the "what-ness" of theology. But, the history of theology shows that it is not easy to say that ' α is the essence (meaning: nature or properties) of theology, while β is not the essence of theology', without engaging in a tense theological debate. There is indeed perennial tension within theology itself about whether God or faith in God is the subject of theology; whether theology, in the first instance, is speculative or practical/sapiential; whether its method is essentially deductive or inductive, etc.²² Hence, according to its critics, the main problem of an essentialist approach is this: if there is such a thing as the essence of theology, why are there so many "theologies" at the present time? The fact that there are different theologies would imply that talking about *the* essence of theology would be pointless.

On the other hand, prescinding from the discourse on essence will not make theology easier to explain and to understand,²³ but instead create difficulties especially in practical-

²⁰ Nicholas Wolterstorff, "How Philosophical Theology Became Possible within the Analytic Tradition of Philosophy", in: Oliver D. Crisp/Michael C. Rea (eds.), Analytic Theology: New Essays in the Philosophy of Theology, Oxford 2009, 168.

²¹ Bernard LONERGAN, Method in Theology, New York 1972.

²² Van der Ven employed the inductive method in theology. This brings consequences to the discourse of the subject/object of theology. He believed that human "experiential knowledge of God" is the direct object theology, instead of God Himself. He wrote: "if knowledge of God is conceived of as knowledge of God as God Himself, then God's theological status would be changed. He would no longer be the object, but instead the subject of theology, and theology would no longer be a human undertaking, with approximations, presuppositions, uncertainty and doubt that necessarily characterize human thought" (Johannes VAN DER VEN, Practical Theology: An Empirical Approach, Kampen 1993, 30). His "Empirical theology" – if I understand correctly— considers empirical methods and techniques as intrinsic components that make possible a quantitative and qualitative description of and explanation of religious experience or behavior. Nevertheless, theology is not simply understood as human discourse *about* God, but, emphatically, discourse about God who reveals Himself to believers. That means that there is a divine guarantee in theological certainty, which goes beyond approximations or assumptions.

²³ Actually, the position of Wolterstorff is quite unclear regarding the (im-)possibility of differentiating theology from philosophy. He seems at times to consider both the same, but at other times to maintain the

historical realms. Apart from discussion about subject or method, theology is broadly considered to be one of the academic disciplines taught in universities since the thirteenth century.²⁴ This means that there has always been a kind of recognition of what (exclusively) belonged to theology, *i.e.* the properties of theology. In other words, there is already something that essentially characterizes theology. And it follows that it is quite impossible to eradicate essence-discourse completely from any attempt to understand theology. At the same time, it must be admitted that it is not easy to single out some elements for defining theology. The problem is that any particular thing to be reckoned in the present as part of the essence of theology can bring serious consequences. It can disregard, *post factum*, theological disciplines which do not fit within the new image of theology. For instance, if someone takes seriously the thesis of 'Death of God' theologian such as Thomas J.J. Altizer,²⁵ namely theology speaks exclusively of immanent but not transcendent God, or theology is a kind of poetry, then what was previously considered theology (*i.e.* a speculative thought about transcendent God) no longer applies. From an historical and institutional perspective, the choice can be risky.

To avoid such a problem, a systematic work has been preferable, namely categorizing theologies into groups of movements.²⁶ This effort will, without doubt, respect and accommodate the diversity of theologies (or theological disciplines) already known in the

difference. He wrote a short essay with the title "To Theologians: From One Who Cares about Theology but is Not One of You" and addressed it to his colleagues and students of theology at Yale University:

[&]quot;To my young grad students who aim to become theologians I say, with all the emphasis I can muster: *be theologians*. Do not be ersatz philosophers, do not be ersatz cultural theorists, do not be ersatz anything. Be genuine theologians. Be sure-footed in philosophy, sure-footed in cultural theory, and the like. And struggle to find a voice that can be heard, if not agreed with, not just by theologians but others as well. But then: be theologians. There will be cultural theorists around to tell us how things look from their perspective; there will be sociologists around to tell us how things look from their perspective. What we need to hear from you is how things look when seen in the light of the triune God—may his name be praised!—who creates and sustains us, who redeems us, and who will bring this frail and fallen, though yet glorious, humanity and cosmos to consummation" (Citation found in Oliver D. Crisp, "Analytic Theology as Systematic Theology", in: Open Theology 3 (2017) 156-166, 165 (in: https://www.degruyter.com/downloadpdf/j/opth.2017.3.issue-1/opth-2017-0012.pdf [visited on Nov 7th 2018]).

²⁴ Cf. Gillian R. EVANS, "Patristic and Medieval Theology", in: Avis, Paul, (ed.), The History of Christian Theology, Volume 1: The Science of Theology, Basingstoke 1986, 3-103, 81; John Deely, Medieval Philosophy Redefined: The development of cenoscopic science, AD 354 to 1644 (from the birth of Augustine to the death of Poinsot), Scranton – London 2010, 178f. For a good historical highlight see Grant EDWARD, The Foundations of modern science in the Middle Ages: Their religious, institutional, and intellectual context, Melbourne 1996, 33-53.

²⁵ Thomas J.J. ALTIZER, The New Gospel of Christian Atheism, Aurora 2002.

²⁶ After having presented varied forms of theology in the 20th century, Gibellini tried to group them in four theological movements, namely dialectical theology, anthropological theology, political theology and the theology of religion. He is inspired by Habermas' attempt at grouping philosophical movements in the 20th century (Rosino GIBELLINI, Handbuch der Theologie im 20. Jahrhundert, Regensburg 1995, 504f.). See also Christoph SCHWÖBEL, "Theologie", in: Hans Dieter Betz u.a. (Hrsg.), RGG⁴. Religion in Geschichte und Gegenwart: Handwörterbuch für Theologie und Religionswissenschaft. Vierte, völlig neu bearbeitete Auflage, Tübingen 2005 (=Band 8), 255-266.

long history of theology. Nevertheless, such an effort seems to be quite insensitive to recognize a real contradiction or paradox of conception/definition among theologies. This has, indeed, provoked critical thinking about the ambiguity of the conception of theology on the part of philosophers.²⁷

Given the situation, it could be said that due to the difficulty to speak about theology in general, the choice to bring a particular theology, *i.e.* Catholic theology, into discussion might seem to be arbitrary. Nevertheless, it is important to make clear from the very beginning which theology is being highlighted in the discussion. What this work is trying to carry out here is, on the one hand, to keep in mind the fact of diversity of theologies (*i.e.* theological disciplines) in the context of the university and, on the other hand, to support the idea that it is insufficient to simply affirm the diversity of theologies without being willing to know whether there is something that holds them together. This means that even by the examination of Catholic theology the presence of other Christian theologies is unavoidable: there is something that unites them and at the same time sets them apart.

Such a consideration can be seen as some kind of 'background knowledge', ²⁸ which is considerably helpful for the examination. It suggests that one must/should be critical in the analysis of the properties of a chosen theology that is traditionally recognized. In saying that, there should be somehow an element of essentialism, *viz.* something that constitutes a theology and, particularly, a Catholic theology; though that does not necessarily mean to promote a kind of ultimate explanation discourse, but rather a so-called "modified essentialism" – borrowing Popper's terminology, ²⁹ *viz.*, the approach that seeks a deeper explanation of what is already known.

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²⁷ See Hans Albert, Das Elend der Theologie: Kritische Auseinandersetzung mit Hans Küng, Aschaffenburg 2012³, 163: "Je nach dem Stande der jeweiligen Anpassungsversuche an das moderne Weltbild gibt es in der christlichen Theologie heute alle Positionen von einem an der Barthschen Dialektik orientierten Gottesglauben, über gemilderte Versionen eines solchen Glaubens, den mehr oder weniger verschleierten Atheismus "moderner" Theologen bis zum offenen Atheismus der Theologen "nach dem Tode Gottes", die sich aber mitunter noch zu der paradoxen Formulierung durchringen, man sollte "atheistisch an Gott glauben, was immer sie sich dabei denken mögen".

²⁸ It is more and more realized that 'background knowledge' or 'background theory', which originally emerged in the discourse of philosophy of science, plays a significant role in theologizing (see FIORENZA, "Systematic Theology", 74f.).

²⁹ In his discussion about the scientific explanation, namely a deeper and deeper explanation of the structure of the world, Popper introduced a term "modified essentialism" (See POPPER, Realism and The Aim of Science, 135).

I.3. Two formal concepts of Catholic theology

Along with law, medicine, philosophy and arts, theology has been historically considered as one of the principal disciplines taught in the first universities in Europe such as in Bologna, Paris and Oxford. This can be evidence that theology possessed the scientific character required in academic or intellectual fields. Nowadays many (but not all) universities, for example, in Germany, maintain the existence of a faculty of theology and even broaden it into two different faculties such as the faculty of Catholic theology and the faculty of Protestant theology (Lutheran and Reformed Church). Thus, not only has theology been recognized as one of the academic/scientific disciplines, but its bifurcation (*i.e.* diversity) has been acknowledged as well. Some concepts have been proposed to describe Catholic theology along the history. But the question is: To what extent can those concepts be accepted given new situation?

I.3.1. Theology practiced by Catholics

First of all, it is claimed that Catholic theology is theology practiced by Catholics. Such a claim can mean that theology is the engagement of all Catholics without any exception. In view of that, Bauerschmidt and Buckley assert that

If an introduction to Catholic theology is about anything, it seems to be about Catholics and the sort of theology that Catholics do [...] we do not mean first and foremost the sort of theology engaged in by professional theologians who are Catholic. Rather, we mean the theology that shapes and informs the life of *plebs sancta Dei* – the holy common People of God.³⁰

This suggests that theology does not exclusively belong to the work or activity of professional Catholic theologians. Rather, in the first place, it is meant to emphasize the responsibility of all Catholics to seek to understand what they believe and practice. In view of this, it is easy to see that the claim resonates with the famous medieval *adagium "fides quaerens intellectum*" (faith seeking understanding) – a phrase borrowed from St. Anselm (1033-1109).

Nowadays it becomes more and more common to hold this quest as the form of theological endeavor. Theology is taken first and foremost as an *inquiry* about understanding some issues in the light of faith; or, more correctly: understanding faith (*fides quae*) within the light of faith (*fides qua*) – though it may sound tautological. This is, however, the conception of theology as traditionally understood, namely theology as *scientia fidei* – the

³⁰ Frederick C. BAUERSCMIDT/James J. BUCKLEY, Catholic Theology: An Introduction, Hoboken 2017, 2.

science of faith. Accordingly, faith is not seen as a mere horizon, but as an object as well. Therefore, in this view Catholic theology is understood as an inquiry, practiced by Catholics, about understanding their (articles of) faith within the light of their own faith. Considering this conception, it can be implied that theology presupposes faith and that theology is always a confession-based theology.³¹ What makes Catholic theology different from any other theologies is, therefore, that Catholics practice or exercise it.

However, such a conclusion is not really correct because the history of theology shows that 'professional' Catholic theologians or the ones known in Catholic tradition (*e.g.* Augustine, Thomas Aquinas, Bonaventure, etc.) have a more significant role to produce and shape actual Catholic theology than so-called 'simple' Catholics. They are entrusted by the community of believers with a distinct task: making the articles of faith intellectually and cognitively more understandable.³² Historically speaking, the task is not always peaceful. However, despite diversity of schools, methods and approaches,³³ they are all united within the same faith or confession. In view of this, as a rule of thumb, Catholic theological works

³¹ John Macquarrie, Principles of Christian Theology, London 1966, 2: "Theology, however, will always speak form a specific faith. This means also that theology implies participation in a community. No doubt theologians have their individual styles and to some extent they grapple with the problems which they themselves have found especially challenging. But if they remain theologians, they are not expressing a private faith, but have become spokesmen for their community, charged with a special responsibility within it". In the same line of thought, a Catholic theologian, Nichols, wrote: "Theology presupposes the truth of the Christian faith" (Aidan NICHOLS, The Shape of Catholic Theology, Edinburg 1991, 18). Ward criticized this sort of confessional (or absolute) theology and proposed a so-called 'comparative theology'. The former is meant for "the exploration of a given revelation by one who wholly accepts that revelation and lives by it". On the other hand, comparative theology is a "theology not as a form of apologetics for a particular faith but as an intellectual discipline which enquires into ideas of the ultimate value and goal of human life, as they have been perceived and expressed in a variety of religious traditions" (Keith WARD, Religion and Revelation: A Theology of Revelation in the World's Religions, Oxford 1994, 40). Clooney saw that Ward's intention is, by making the distinction, not to separate comparative from confessional theology (See Francis X. CLOONEY, Comparative Theology: Deep Learning Across Religious Borders, Malden 2010, 44f.). He said that "like all forms of theology, comparative theology is a form of study. Now it is true that a commitment to study religions may seem a less than urgent response to what is happening in our world today, a detour that distracts us from our own traditions, perhaps even speeding up the dissolution of particular commitments. But, in fact, the cultivation of a more interconnected sense of traditions, read together with sensitivity to both faith and reason, grounds a deeper validation and intensification of each tradition" (CLOONEY, Comparative Theology, 4). If I understand this statement correctly, Clooney believed that comparative theology is somehow a form of confessional theology. Nevertheless, I am not convinced that Ward's version of comparative theology can even be called theology because it operates in such manner that all "theologians can test the adequacy of their own initial view of religions against a wider range of human experiences and perhaps come to form new views in the light of perspectives they had not previously considered" (WARD, Religion and Revelation, 49). In his view, it is possible because "all theological thought is provisional" (WARD, Religion and Revelation, 32). Considering this, I prefer to say that Ward's version of comparative theology is a kind of philosophy of religion.

³² The role of theologians in the church historically has varied in models. During the classical period, bishops were normally leading theologians as well. In the Middle Ages, synods or councils and the pope have had an important role in solving theological problems; in the Councils theology faculties (*i.e.* doctors of theology) could exercise a teaching office and had a right to vote. In the modern times, theologians have a function to be advisors of bishops, but they cannot vote. Cf. Hubert JEDIN, "Theologie und Lehramt", in: Remigius Bäumer (Hrsg.), Lehramt und Theologie im 16. Jahrhundert, Münster 1976, 7-21; FIORENZA, "Systematic Theology", 82-84.

³³ See Yves Congar, A History of Theology, New York 1968.

can be more or less identified by first of all knowing the author's confession. It may sound trivial and simplistic, but it is helpful and important to note.

Furthermore, this Catholics-practice criterion alone is insufficient since there are examples of several Catholic theologians who are not/were not *officially* reckoned as Catholic theologians. The reason is that their personal theological position is not in accord with the official expectation. As a consequence, they had to suffer from exclusion from their academic theological activities, even though they did not give up on their confession.³⁴ That means that being Catholic is necessary but insufficient, either to make someone recognized as a Catholic theologian or to produce Catholic theological works. It needs something more than personal confession, namely conformation to official teachings.

I.3.2. Theology practiced in full communion with the Catholic Church

The second criterion begins with something that is commonly assumed, namely that Catholic theology is not simply the work or activity of a single or individual theologian. This suggests that Catholic theology is practiced intellectually or academically by theologians who are in full communion with the Catholic church.³⁵ As a consequence, Nichols makes it clear that "to be a theologian, one must share the common *fides quae*, the faith of the people of God".³⁶ And, in addition to this, the Catholic church is seen as the "*locus theologicus*"³⁷ for all (professional) Catholic theologians.

³⁴ Just to mention a couple of names: (1) Leonardo Boff. Though not *ad hominem*, it is very clear that the "Instruction on Certain Aspects of the Theology of Liberation" (Congregation for the Doctrine of the Faith 1984) is addressed to Leonardo Boff. In this Instruction the CDF holds that the theology of liberation is incompatible with the faith of the Church. He has been 'silenced' by the CDF for a year. (2) Hans Küng. Since the appearance of the Declaration (1979) from the Congregation for the Doctrine of the Faith, Hans Küng is no longer considered a Catholic theologian "nor [functions] as such in a teaching role". (3) Franz Schupp. In 1974 he was not allowed to teach theology (in Innsbruck university, Austria) due to his inclination to criticism. (4) Charles Curran. In 1986 he was fired from Catholic University of America for his moral teachings, which are considered incompatible with the magisterium.

³⁵ For example, in Germany, the foundation of a faculty of Catholic theology is associated with the Roman Catholic Church; concretely with local bishops. Cf. Peter KNAUER/Friedhelm MENNEKES, Katholische Theologie, Ratingen – Kastellaun 1975, 13; Heribert SCHMITZ, Kirchliches Recht für staatliche Katholisch-Theologische Fakultäten. Akkomodation kirchlichen Hochschulrechts an das deutsche Verhältnis, in Theologische Quartalschrift 167 (1987), 25-40. In some American colleges run by religious congregations the word 'theology' is still being used. Some universities, in reverse, use 'divinity' or even 'religious studies' to avoid a sectarian approach attached to theology. However, the definition is not uniformly and strictly adopted.

³⁶ NICHOLS, The Shape of Catholic Theology, 16.

³⁷ Melchior Cano (1509-1560) has talked about 10 *loci theologici*; **constitutive loci**: (1) Scripture, (2) oral tradition of apostles; **interpretative loci**: (3) Catholic church, (4) general councils, (5) Roman church (=Pope), (6) Fathers of the church, (7) scholastic theologians; **improper loci**: (8) human reason, (9) philosophers, (10) human history (Cf. FIORENZA, "Systematic Theology", 29; Hans WALDENFELS, Contextual Fundamental Theology, translated by Susan Johnson, Paderborn 2018, 549).

It is worthy of note that in the late Middle Ages, the term *locus theologicus* was intentionally used to emphasize the epistemological role of the church towards theological endeavor. The term expresses a kind of authority, which makes the claim for the scientific character of theology possible.³⁸ Based on this view, theology is, then, conceived of as *argumentatio ex auctoritate* – a conception borrowed from the high Middle Ages.³⁹ This can mean that the church, as one of *loci theologici*, has been claimed to possess a kind of authority to judge any theological statements, and also to explain the truth of faith from which all theological argument is inferred.

If this is the case – and it seems like it, namely that the church is believed to possess such authority, it may likely bring about a pragmatic consequence. That is, the church delineates not only what belongs to theology, *i.e.* its nature and method, but also what kind of job theologians must or ought to do. Taking this claim into account, it is understandable why some believe that theologians are mere spokespersons of the church, and, thus, must show loyalty to the community or to tradition.⁴⁰ Loyalty to the church (*i.e.* the teachings of church authority), therefore, is something that is highly required from each and every Catholic theologian.

Nowadays this claim becomes nonetheless a hot issue in scientific theological discourse.⁴¹ Some theologians have tried to understand how it is possible to bring into harmony their loyalty to the church and their freedom as scientists in theological research. The actual debate has indeed given accentuation to freedom within theological works as scientific endeavors.⁴² Accordingly, theologians are encouraged to contribute actively in any public dispute, without being simply spokespersons of church's authority. In other words, they are also expected to be critical. As such, any form of submission, as a condition of being a theologian, may put the scientific character of theology under suspicion.

³⁸ This interpretation, as Lang believed, can be traced back, especially, from the late Middle Ages. Melchior Cano was one of theologians who espoused this interpretation of *locus theologicus* (See Albert Lang, Die theologische Prinzipienlehre der mittelalterlichen Scholastik, Freiburg – Basel – Wien 1964).

³⁹ See LANG, Die theologische Prinzipienlehre der mittelalterlichen Scholastik, 167.

⁴⁰ See TRACY, The Analogical Imagination, 25: "Any theologian, after all, will function as an interpreter of the church tradition". Striet recognizes also this tendency, although he does not agree with this idea (See Magnus STRIET, "Zu wem sollen wir gehen? Über die prekäre Situation wissenschaftlicher Theologie", in: Benjamin Leven (Hrsg.), Unabhängige Theologie: Gefahr für Glaube und Kirche? Freiburg – Basel – Wien 2016, 223-233, 232).

⁴¹ In Germany it is still a highly discussed theme. See, for instance, Benjamin Leven (Hrsg.), Unabhängige Theologie: Gefahr für Glaube und Kirche? Freiburg – Basel – Wien 2016.

⁴² See STRIET, "Zu wem sollen wir gehen?", 223-233.

Although some claim that the tradition of criticism is the root of scientific enterprise, ⁴³ it is unthinkable that scientists may simply say anything they want to say in the name of scientific freedom. From scientists, instead, a critical assessment or critical attitude towards claims of reality is really expected. In saying that, freedom and criticism play a significant role in scientific enterprise, although they do not define science. It is now a challenge for theology to incorporate the spirit of freedom and criticism into the theological endeavor in order to come into harmony with the scientific tradition. Such a proposal, of course, is not easy to accept. Here, one may feel the tension between the scientific tradition of criticism, which longs for change or correction, and a full loyalty to the church, which is expressed in preserving tradition or keeping things the same.

Taking into account those two formal concepts of Catholic theology, *viz.*, a theology practiced by Catholics in a full communion with Catholic church, one can have a slight idea of what Catholic theology means here. Likewise, one can also tell, albeit minimally, what makes Catholic theology distinctive amongst other theologies, *viz.* how non-Catholic theology can be identified. Consequently, any claim to a specific characterization of theology must be seen here, first and foremost, in the context of the Catholic church. Obviously, there is an overlap in the claim of characteristics of theology amongst Christian theologians, but since the focus is on Catholic theology, the claim that is being examined will be contextually Catholic. Having said that, one of other things traditionally claimed by most Catholic theologians is that theology is a science.

I.4. Theology as scientia fidei

The Catholic church has never doubted the scientific character of theology. Although Thomas Aquinas is not the first nor the only one who treats theology as science, he is the first theologian who tries to compromise on taking seriously a profane conception of science, *i.e.* the Aristotelian conception, and its consequences when speaking about the scientific character of theology.⁴⁴ In his analysis, he admits that theology cannot be considered a proper science, but only a "scientia subalterna", since, unlike proper science, theology receives its principles from revelation, *i.e.* science of God and the blessed (scientia Dei et

⁴³ See DEUTSCH, The Beginning of Infinity, 13.

⁴⁴ See LANG, Die theologische Prinzipienlehre der mittelalterlichen Scholastik, 156-166.

beatorum).⁴⁵ Despite the innovation in approaching theology, this division has already been problematic since the fourteenth century. That is, whether subalternate science, *i.e.* theology, could be really counted as science.⁴⁶

Apart from the medieval doubt, the majority of modern Catholic theologians never stop promoting the scientific character of theology, *viz.* theology as *scientia fidei*, science of faith.⁴⁷ From their point of view, the scientific qualification of theology can be argued for based on its ability to be critical and its openness to historical-critical method. It is therefore interesting to understand and examine such a claim, especially because the conception of science has shifted in modern time.

I.4.1. Science of faith and being critical

The term "science of faith" is meant to point out the main project or the "original intention" of theology as scientific activity. It is claimed to help theologians to give an orientation in their work, *viz*. to synchronize theology and science. This claim might assume that putting theology in opposition to the critical spirit of science would be in contrast to its original intention. Critical spirit, as Seckler believes, is already a part of Christian "nature" and also a part of theological endeavor from the beginning.⁴⁸ In such a genealogical

⁴⁵ See Th. AQUINAS, Summa Theologiae, I, q. 1 a. 2 (Translated, with Commentary, by Brian Shanley, O.P., introduction by Robert Pasnau, 5).

⁴⁶ In the early 14th century Duns Scotus and William of Ware rejected this division. In their eyes, the causal relation between subalternating science (*e.g.* mathematics) and subalternate science (*e.g.* a theory of perspective) could not be a model or paradigm for the relation between the science of God and of the Blessed and theology. Cf. Lang, Die theologische Prinzipienlehre der mittelalterlichen Scholastik, 187; Antonie Vos, The Theology of John Duns Scotus, Leiden – Boston 2018, 42f. See also Gerhard Leibold, "Theologie als Wissenschaft", in Rudolf Langthaler (Hrsg.), Theologie als Wissenschaft: Ein Linzer Symposium, Frankfurt am Main 2000, 44-47.

⁴⁷ See Karl Rahner, "Theologie. II. Zum Wesen der Theologie", in: Karl Rahner (et al.), Sacramentum Mundi: Theologisches Lexikon für die Praxis. Vierter Band: Qumran bis Zukunft, Freiburg – Basel – Wien 1969, 861f.: "Theologie ist 'Glaubenswissenschaft', d.h. das reflektierende, methodisch geleite Erhellen und Entfalten der im Glauben erfaßten und angenommenen Offenbarung Gottes". In line with Rahner, Seckler, on the one hand, admitted the *Wissenschaftsfähigkeit* and *Wissenschaftsform* of theology. But, on the other hand, he recognized other forms of theology that are not scientific. In addition, he considered the question "whether theology is science" to be wrong. The right question should be: "Is it possible to think of Christian theology as science?" He claimed that the answer was affirmative (See Max Seckler, "Theologie als Glaubenswissenschaft", in: Max Seckler, Glaubenswissenschaft und Glaube: Beiträge zur Fundamentaltheologie und zur Katholischen Tübinger Schule. Ausgewählt und herausgegeben von Michael Kessler, Winfried Werner und Walter Fürst, Band I, Tübingen 2013, 3, 40). Considering the statements, does he mean to say that theology *is not* a science but has the possibility of becoming a science as such? Or, does he simply assume that theologies belong to one of two groups; one type belongs to a group of possibly scientific theology and the other to what is not scientific theology? Still in the same line, Latourelle has called theology "scienza della salvezza" (science of salvation) (See René LATOURELLE, Teologia: Scienza della salvezza, Assisi 2005⁸).

⁴⁸ See SECKLER, "Theologie als Glaubenswissenschaft", 62: "Daß die Wahrnehmung kritischer und normativer Aufgaben für die christliche Theologie nichts Peripheres oder gar Fremdartiges sein kann, ergibt sich grundlegend sowohl aus dem Wesen des religiösen Bewußtseins als auch aus der Natur des christlichen

approach, theology is conceived of as the critical or rational inquiry of the understanding of faith. Being critical (*i.e.* rational) means here being able to make arguments or judgments.⁴⁹ It implies that what makes theology critical is simply the 'fact' that theology can offer arguments or judgments. To put it differently, the scientific character of theology is assumed by the 'fact' that theology is critical or argumentative.

Given that, it is always important to keep in mind that theological arguments are strongly attached to the authority of faith and the church. And because of its attachment to the authority (divine or human), scientific claim of theology has been more or less in question. Before such a doubt, one can argue that any objection to the scientific character of theology because of its propensity for adhering to authority could be problematic, for scientists believe in a kind of authority as well, namely the authority of experiments and observations. Modern critics who are in sympathy with (traditional) empiricism have only replaced the authority of faith or of the church with the authority of experience. But that will not make any difference since, in practice they both, theologians and (some) scientists, endorse *justification*. They tend to defend what they have already believed from the beginning. Theologians try to justify God's existence and God's attributes. Scientists, in the same vein, try to justify their own theories of reality. If this were the case, then, there would be no reason to put scientific character of theology in question. Theology, as well as science, could offer a valid argument to justify its own belief. In a nutshell, theology is a kind of science that could also be critical or rational.

Nevertheless, it is rather doubtful whether it is sufficient to construe being scientific as the mere ability to make arguments as such. This kind of interpretation, presumably rooted in the Aristotelian comprehension of science or understanding,⁵¹ is incompatible with a new conception of science, which demands more than syllogism *i.e.* arguments as such. Indeed, science first has to come up with *good* arguments or *good* explanations for reality. What differentiates a *good* argument from an argument as such, according to Deutsch, is that the

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Glaubens bzw. seines Gegenstandes"; 65: "die christliche Theologie [muß] aus ihren wesenhaften Ursprüngen heraus eine Einheit von gläubigen und kritischem Bewußtsein realisieren". Grillmeier, for instance, shows quite different position. He hypothesized that Christology (*i.e.* theology) was born due to the kerygmatic need (See Aloys GRILLMEIER, Christ in Christian Tradition: From the Apostolic Age to Chalcedon (451), New York 1965). If one agrees with the hypothesis, then theology may not be in the first place concerned with the rationality problem or with being critical.

⁴⁹ Seckler, for instance, understood 'critical' as "die Fähigkeit des Unterscheidens und die Kunst des Urteils und Beurteilens und darin die 'gründliche Denkungsart'" (SECKLER, "Theologie als Glaubenswissenschaft", 65).

⁵⁰ See DEUTSCH, The Beginning of Infinity, 311f.

⁵¹ See ARISTOTLE, Posterior Analytics Book A 71b1-72a24 (translated with Notes by Jonathan Barnes, Oxford 1975).

former is "hard to vary, because all its details play a functional role".⁵² But, from that point of view, science is not meant to collect arguments and, then, give them all the same value. A good (scientific) argument needs to possess better explanation and, because of it, will have a preference with respect to other possible arguments. This means that if there are two or more possible explanations of a single natural event, then, only one explanation will offer the true explanation.⁵³

Therefore, one the one hand, being scientific cannot be regarded as simply being capable of making arguments – there are also unscientific arguments such as mythological or astrological. On the other hand, being scientific, of course, presupposes argument-forms. Even so, it must also mean offering better explanations as well as allowing for the possibility of being wrong given new data. This conception of criticism, which will be discussed in more detail in the following two chapters, will give access to a series of tests and, thus, resonates with scientific activities.

Suppose that conception of criticism is accepted because it represents the actual scientific enterprise. The question arises: can theology conceived of as a science of faith keep pace with criticism and its consequences? Is there a critical-rational method that is compatible with theological endeavors? To answer those, it is important to first consider the use of scientific historical-critical method in biblical studies.

I.4.2. Openness to historical-critical method?

Looking back upon the history of theology, it seems that theology is not really allergic to or opposed to criticism. The use of the historical-critical method in biblical study and its corrective action towards some old doctrines can be confirmed.⁵⁴ Now, it is quite common

⁵² DEUTSCH, The Beginning of Infinity, 24. A discussion of the role of 'good arguments' in science can be found in chapter II.4.

⁵³ Without doubt, having learnt from history, this word 'true', however, should not necessarily mean incorrigible. It is surely corrigible and yet one can remain on the right track. This corrigibility makes possible a deeper and deeper understanding of things. In this context, K. Popper has already spoken about truth, which is not an absolute-unchanged condition, but a "regulative principle", which enables science to be closer to truth, though there are no criteria of truth.

⁵⁴ The critical-historical method in Biblical Study has given a new comprehension of, for instance, creation or original sin. Nowadays theologians tend to avoid limiting the doctrine of creation to a mere doctrine of the origin of the world. They, instead, are more sensitive to ethical or environmental issues and include these issues within the doctrine (See David A.S. Fergusson, "Creation", in: Ian A. McFarland/David A.S. Fergusson/Karen Kilby/Ian R. Torrance (eds.), The Cambridge Dictionary of Christian Theology, Cambridge 2011, 120-122). Besides, a wide acknowledgement of heliocentrism in Christianity is also significant. Speaking about original sin, theologians tend to abandon Augustine's old doctrine of homogeneity (See Joy Ann McDougall, "Sin", in: Ian A. McFarland/David A.S. Fergusson/Karen Kilby/Ian R. Torrance (eds.), The Cambridge Dictionary of Christian Theology, Cambridge 2011, 473-475.

to say that contemporary theology must take into account the history of humankind and their concrete experience;⁵⁵ not only interpreting it, but in the sense of seeking truth as well.⁵⁶

Of note, there are always pros and cons of the use of the historical-critical method in theology amongst Catholic theologians. However, despite the tension, there is doubt about whether theologians who are not professional historians within the church, have seriously employed the historical-critical method in their work;⁵⁷ that is, whether they are really open to all possible consequences or whether they just perhaps wanted to employ the method to some extent, without intending to or being ready to give up what they have already believed.⁵⁸ In other words, most theologians, perhaps, tend to search for the most convenient interpretation of the article of faith.

Even if they do not intend to wholeheartedly employ the historical-critical method, or just simply take some advantages from it – perhaps in order to be recognized as part of scientific enterprise – they cannot escape from the consequences. They will face the fact that the historical-critical method can make articles of faith tremble. The picture of the world, or even the image of Jesus, for example, would be so different from the one the Bible presents as the manifestation of God's work.⁵⁹ Before this potential danger, some theologians were

⁵⁵ See Walter KASPER, Theologie im Diskurs, Freiburg – Basel – Wien 2014 (Gesammelte Schriften, herausgegeben von George Augustin und Klaus Krämer, Band 6).

⁵⁶ See Josef Kardinal RATZINGER, Kirche, Ökumene und Politik: Neue Versuche zur Ekklesiologie, Einsiedeln 1987, 144: "Der christlicher Theologe interpretiert nicht bloß Texte, sondern er fragt nach der Wahrheit selbst, und er sieht den Menschen als wahrheitsfähig an".

⁵⁷ There is indication where theologians do not intend to employ historical method *in toto*. See STRIET, "Zu wem sollen wir gehen?, 233: "Aber ich kenne keine Theologinnen und Theologen, vorausgesetzt, sie sind noch nicht zu rein historischen Kulturwissenchaftlern mutiert, die nicht an der Grundüberzeugung christlichen Glaubens festhielten, dass Gott selbst es war, der sich als der Jude Jesus von Nazareth in die Geschichte begeben hat, sich inkarniert und ebenso riskiert hat". As far as I understand Striet's statement, there is a boundary between theologians and historians in employing the historical method. Theologians are inclined to hold what they think as utmost fundamental, the faith. Meanwhile historians try to abstain from any particular confession. That is why theologians never followed the historical-critical method in a strict manner nor took it as the only method to explain Christian articles of faith.

⁵⁸ See Hans KÜNG, Christ sein, Freiburg – Basel – Wien 2016, 216 (Sämtliche Werke, herausgegeben von Hans Küng und Stephan Schlensog, Band 8): "Christlicher Glaube kann dem wissenschaftlich Arbeitende neue Tiefen eröffnen, vielleicht die entscheidende Tiefe"; but, historical-critical method is so limited in speaking about Jesus and his truth. "Auch die Jesusgeschichten wollen nicht nur, was eine historisch-kritische Theologie oft allein beschäftigt hat, nach Traditionen seziert und auf ihre Aussagen über historische Tatsachen befragt werden […] Es geht um *Botschaften*, die eine Verheißung oder eine Bedrohung mit sich führen. Gerade bei den Weihnachts-, Oster- und Gerichtsgeschichten steht im Vordergrund des Interesses weniger, was sich da eigentlich ereignet hat oder ereignen wird, worüber wir oft wenig wissen, als vielmehr die praktische Frage, was das für uns bedeutet" (KÜNG, Christ sein, 522f.). Commentary on Küng's theological position see KASPER, Theologie im Diskurs, 502.

⁵⁹ We can recall the thought of Alfred Loisy (1857-1940) about the differentiation between the "historical Jesus" and the "Jesus of faith". His thought was condemned, and he was excommunicated by Pope Pius X in 1907. Pope Benedict XVI tried to synchronize these two images of Jesus in *Jesus of Nazareth* (2007) by giving more credit to biblical testimonies.

ready to sacrifice the intellect and preferred to maintain the mystery of faith.⁶⁰ This means that most theologians want to confirm that faith has its own (valid) interpretation of reality that may look odd from the perspective of critical science.

Of course, this strategy would enable them to keep safe the faith as well as to maintain particularity of theology. But, at the same time, it would make the traditional understanding of theology as 'science', *i.e.* the science of faith, unsupportable. It, instead, might appear that theology is first and foremost dogmatic or apologetic in nature, rather than critical, which means that there are things in theology that cannot be critically assessed. If this is the case, then the historical-critical method might appear inappropriate to theology anyway. In this sense, the scientific historical method would be one thing and theological endeavor would be something else. The former strictly depends on objective or natural facts, while the latter depends on faith in (supernatural) revelation.

I.4.3. Institutional justification of faith

By interpreting 'scientific' or 'critical' as being able to be argumentative, theologians can of course defend their belief, *i.e.* the faith of the people of God, in front of all criticism. In practice, the use of historical-critical method can, to some extent, accommodate such a dogmatic-apologetic aim. Such an image of theology seems to be present in all faculties of theology. If so, it is not surprising that Albert concludes that theologians, who are almost all professors of theology in the universities, seem to be inclined to look for convenience for their faith within institutional structure. From that point of view, theology could be seen as

⁶⁰ See Karl RAHNER, "Über die Möglichkeit des Glaubens heute", in: Karl Rahner, Schriften zur Theologie. Band X, neuere Schriften, Köln 1962, 13-15: "Es mag viele intellektuelle Schwierigkeiten auf dem Gebiet der einzelnen Wissenschaften geben, der Religionsgeschichte, der Bibelkritik, der Geschichte des frühen Christentums, für die ich keine direkte und in jeder Hinsicht glatt aufgehende Lösung habe. Aber solche Schwierigkeiten sind zu partikular und - verglichen mit dem Gewicht des Daseins - sachlich zu leicht Gewichtes, als daß man ihnen erlauben könnte, das ganze unsagbar tiefe Leben zu bestimmen. Mein Glaube hängt nicht davon ab, ob exegetisch und kirchlich die richtige Interpretation der ersten Genesiskapitel schon gefunden ist oder nicht, ob eine Entscheidung der Bibelkomission oder des Heiligen Offiziums der Weisheit letzter Schluß ist oder nicht. Solche Argumente also kommen von vornherein nicht in Frage. Es gibt natürlich andere Anfechtungen, solche, die in die Tiefe gehen. Aber eben diese bringen das wahre Christentum erst hervor, wenn man sich ihnen ehrlich und demütig zugleich stellt [...] Das eigentliche Argument gegen das Christentum ist die Erfahrung des Lebens, diese Erfahrung der Finsternis [...] Denn was sagt das Christentum eigentlich? Doch nichts anderes, als: das Geheimnis bleibt ewig Geheimnis, dieses Geheimnis will sich aber das Unendliche, Unbegreifliche, als das Unaussagbare, Gott genannt, als sich schenkende Nähe in absoluter Selbstmitteilung dem menschlichen Geist mitten in der Erfahrung seiner endlichen Leere mitteilen" (emphasis is mine).

⁶¹ See Hans Albert, Traktat über kritische Vernunft, 5. Verbesserte und erweiterte Auflage, Tübingen 2010, 155: "Die theologische Fakultäten sind trotz interner Spannungen, die sie mit ihren Kirchen zu haben scheinen – das zeigt sich in solchen Bemühungen -, in wirklich theologischen Fragen – nicht unbedingt auch in Fragen der Kirchengeschichte usw. – nichts anderes als institutionelle Residuen des apologetischen und dogmatischen Denkens im Bereich der wissenschaftlichen Forschung und Lehre".

nothing more than an apologetic and dogmatic project in an academic-scientific environment or institutions (*i.e.* universities).

Obviously, speaking of professionality, theologians have the right to do so and legitimately consider it as part of their job, *viz*. to defend the faith of the church at any cost. And logically, no one can force them to give up their job due only to the 'inconvenient' result of some critical examinations. It's not that simple. Nevertheless, it should be realized that there can be consequences in retaining the dogmatic-apologetic image of theology in a consistent manner: it is highly doubtful that such an image of theology can adequately be regarded as science, especially from the perspective of criticism, which binds together science, fallibility and better explanations.

Given the arguments in favor of theology as a special kind of science (*i.e.* science of faith), its scientific claim seems to be only a one-sided claim, namely a Catholic institutional claim. If Catholic theologians do nothing other than retain the old Thomist-Aristotelian conception of scientific theology, it can be a downside because for someone who is not part of the same institution, the claim can be so unconvincing. And yet, the problem is that such a conception seems to correspond to the shape or image of Catholic theology, which is significantly dependent on divine revelation, tradition and a kind of infallible authority.⁶²

I.5. The role of revelation, tradition and infallibility in Catholic theology

I.5.1. It is all about divine revelation

The reason why revelation is so significant for theology is that the former is a *conditio* sine qua non for the latter. Theology is totally dependent on divine revelation that longs for an answer in the form of faith. Hence, it is said that revelation and faith play a constitutive role in theology.⁶³ Revelation, as Kasper believes, provides theology with "the final presupposition, foundation, means, and norms".⁶⁴ This may suggest that revelation is not primarily an object, but instead the only source of theology. As to what constitutes

⁶² According to Döllinger, it was Thomas Aquinas who introduced the doctrine of the pope and his infallibility into the systematic-theological system (See Brian TIERNEY, Origins of Papal Infallibility. 1150 – 1350. A study on the Concepts of Infallibility, Sovereignty and Tradition in the Middle Ages, Leiden 1972, 10).

⁶³ See Avery DULLES, "Faith and Revelation", in: Francis S. Fiorenza/John P. Galvin (eds), Systematic Theology: Roman Catholic Perspectives, Vol. I, Minneapolis 1991, 92.

⁶⁴ Kasper wrote that "Die Offenbarung ist die letzte Voraussetzung, Grund, Mitte und Norm für alles, was als christlich gelten will" (Walter KASPER, "Offenbarung Gottes in der Geschichte: Gotteswort im Menschenwort", in: Bruno Dreher/Norbert Greinacher/Ferdinand Klostermann (Hrsg.), Handbuch der Verkündigung. Band I, Freiburg – Basel – Wien 1970, 53).

revelation, the history of theology has shown different answers.⁶⁵ In the Middle Ages the content of revelation was largely conceived of as an epistemological truth system (*i.e.* propositional truth). Meanwhile, nowadays it is more common to say that the content of revelation is God Himself who acts actively in the history of mankind. The current interpretation is normally reckoned as development, *in fortiori* as 'correction' to the too strictly speculative philosophical comprehension of revelation as presented in the medieval-scholastic version.⁶⁶ But, such a claim is debatable because the current interpretation known as 'personalistic interpretation' does not provide a solution to the problem faced by medieval theologians and, further, makes the problem look uninteresting.⁶⁷ Even so, the personalistic approach to understanding revelation has become a new trend in theological enterprise.

It is not meant here to go back over the long and rich history of conception of revelation. The concern of this work is more an epistemological outlook on revelation, because it might be expected to offer an explanation about the relation between revelation and theology better than a personalistic one.⁶⁸ In the same vein, an epistemological outlook can give more access to an analysis of the claim of the scientific character of theology.

I.5.1.1. Revelation marks the boundary of theology

That theology is principally attached to revelation, presumably, none will dispute. It has become common to say that revelation marks the particularity of theology in respect to other disciplines. This does not come exclusively from the part of theologians, but from the part of many scientists as well.⁶⁹ As such, theologians and scientists seem to agree to draw

⁶⁵ See Josef SCHMITZ, Offenbarung, Düsseldorf 1988, 50-80.

⁶⁶ Despite the 'development' one can well note how the current interpretation of revelation (*i.e.* as event or encounter) has intentionally reformulated the conception of revelation of the first Christian community, *viz.* revelation as an experience of epiphany (See SCHMITZ, Offenbarung, Düsseldorf 1988, 77).

⁶⁷ See Franz Schupp, Auf dem Weg zu einer kritischen Theologie, Freiburg – Basel – Wien 1974, 88-90.

⁶⁸ Although the personalistic approach is nowadays more fashionable among Catholic theologians, the Catholic Church, in fact, has never left behind the epistemological approach in order to understand revelation. In 2011 the International Theological Commission stated that "A criterion of Catholic theology is that it should strive to give a scientifically and rationally argued presentation of the truths of the Christian faith" (See International Theological Commission, "Theology Today: Perspective, Principles and Criteria", in: http://www.vatican.va/roman_curia/congregations/cfaith/cti_documents/rc_cti_doc_20111129_teologia-oggi_en.html [visited on June 19th 2019]).

⁶⁹ Duhem, for instance, emphatically said that "in itself and by its essence, any principal of theoretical physics has no part to play in metaphysical or theological discussion" (Pierre Duhem, The Aim and Structure of Physical Theory, New Jersey 1991, 285). In saying this, he made a division of specialization between physics and metaphysics. Claims from these two disciplines, according to him, cannot be seen as contradictions as they don't have any common term. Metaphysics *i.e.* theological statements are judgements about objective reality, while the principles of physical theory are "propositions relative to certain mathematical signs stripped of all objective existence" (Duhem, The Aim and Structure of Physical Theory, 285). Of course, his idea of the

the line between theology and science. Unlike scientists, theologians, in this regard, consider revelation as their source of competence to understand and to adjudicate theological statements or religious praxis. It might follow that the theological endeavor is understandable only within the framework of revelation. Without revelation as the source and the framework, and not only as an object, theology will vanish and will become philosophy of religion or religious studies.

Beside the claim of particularity of theology, it is often claimed also that theology cannot be seen as totally isolated from science. It should be admitted that there are some theologians who keep working on the possible relation between theology and science. And yet some of them prefers to put the relation in an asymmetrical⁷⁰ way in the hope that they could avoid creating a strong boundary between these two disciplines. From this point of view, because of its concern about God and creation (*i.e.* reality), theology not only deserves recognition amongst the sciences, but also has the right to "integrate and subjugate the rest of science as its subjects". As such, an asymmetrical relation seems to suggest that theology is considered to be on a 'higher' level of the hierarchy of human knowledge and it is entitled to say something about science on a 'lower' level, but not *vice versa*. There is a reason why this strategy can be too risky.

Given that revelation is what makes the relation between theology and science asymmetrical, it should be, then, a task of theologians to (also) explain reality within the framework of revelation. If one holds the statement that the theological endeavor is aimed at truth, not only at interpretation, the recent success of science in explaining and understanding better the world, *i.e.* reality, can be a great challenge to theology. For instance, it is commonly accepted that, based on radioisotope dating, the age of earth is around 4.5 billion years; it is much older than what is claimed by fundamentalist Christians, 72 who have been inspired by biblical events, *i.e.* revelation. This example, one can argue, is not too convincing to show the deficiency of faith (*i.e.* theological explanation). But somehow, despite polemics against such a scientific claim, many theologians are now welcoming, to

principal of theoretical physics, that physics doesn't deal with objective reality but with "mathematical form suited to summarize and classify laws established by experiment", is very debatable.

⁷⁰ This asymmetrical relation looks like the following: if a is related to b, then, b is not related to a. Formally it is expressed as follows: $\forall a,b \in X(aRb \rightarrow \neg(bRa))$. It means, for all a and b in X, if a is related to b, then b is not related to a. An example of this relation: If Victor is the father of Riki, then Riki is not the father of Victor.

⁷¹ Karl RAHNER, "Die Theologie im interdisziplinären Gespräch der Wissenschaften", in: Karl Rahner, Schriften zur Theologie. Band X, Köln 1972, 99 (translation is mine).

⁷² Young Earth Creationism, for instance, believes that earth and all its lifeforms were created in 10,000 B.C. or 4000 B.C.; without evolution of form (See Henry M. MORRIS, The Genesis Record: A Scientific and Devotional Commentary on the Book of Beginning, Foreword by Arnold D. Ehlert, Michigan 1980⁵, 42-46; 72-81).

some extent, the scientific findings, *e.g.* earth is about 4.5 billion years old and it moves around the sun; life on earth emerged around three billion years ago in form of microorganisms, etc. Such an attitude, on the part of theologians, may raise some questions from other believers and also unbelievers: are theologians trying to point out to a possibly different conception of truth-claims in theology and in science? If so, could not this be a danger as it will lead to a problem of dualism, *i.e* a double-truth theory?

It is hard to say that theologians will really consider the existence of truths other than divinely revealed truth. And, even if they do consider and accept other truths, what comes next, usually, is a claim of the 'superiority' of theological truth (*i.e.* revelation) over other kinds of truth due to an asymmetrical relation between them, although they perhaps do not have any intention to make such a claim.⁷³ If this is really the case – and it seems like it, then, theologians will definitely give more credit to all that belongs to theology. Such an attitude could nonetheless tend to support a theory of hierarchical truth or a theory of double-truth conception, which can be traced in the thought of some theologians.⁷⁴

A theory of double-truth conception may seem, *prima facie*, not to be problematic. Instead, it could support a modern pluralistic worldview and provide a guarantee for the truth

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⁷³ Rahner can be the best example of such theologians. In a context of dialogue between theology and science, one important task of theology, according to him, is giving 'moral' consideration to science. Although he did not want to claim theology's superiority, one can easily have such an impression. He wrote: "Die Theologie muß, vorausgesetzt immer, daß sie sich dafür durch ihr Verhalten sich selbst gegenüber legitimiert und glaubwürdig macht, der Anwalt der Selbstkritik der Wissenschaften, ihrer Bescheidenheit, des Bewußtseins ihrer Vorläufigkeit, ihrer nie gänzlich überwindbaren Regionalität sein bei allen Extrapolationen, die jede Wissenschaft unvermeidlich, teils mit Recht, teils mit Unrecht, vorzunehmen pflegt. Die Theologie wird so zur Verteidigung jeder Wissenschaft vor jeder anderen. Sie wehrt als Anwalt des unbegreiflichen Geheimnisses, das unmanipulierbar, aber real da ist und von jeder Wissenschaft als solcher respektiert werden muß, der Versuchung jeder Wissenschaft, sich gänzlich autonom und totalitär zu setzen, die übrige Wissenschaft sich als ihre Untertanen zu integrieren und zu unterjochen. Sie, die Theologie, ist der Verteidiger eines gar nicht systematisierbaren, gar nicht vorausberechenbaren, ursprünglichen Pluralismus der Wissenschaft gegen eine Gefahr, die auch heute im Zeitalter des sogenannten Endes der Metaphysik noch nicht gebannt ist, weil statt der Philosophie andere Einzelwissenschaften ein Herrschaftsmonopol über die anderen Wissenschaften anzumelden beginnen" (Karl RAHNER, "Die Theologie im interdisziplinären Gespräch der Wissenschaften", 98f.).

⁷⁴ In Catholicism one of the promotors of the two-world thesis is Cardinal Newman. Once he wrote: "Still, allowing this interference to the full, it will be found, on the whole, that the two worlds and the two kinds of knowledge respectively are separated off from each other; and that, therefore, as being separate, they cannot on the whole contradict each other [...] If, then, theology be the philosophy of the supernatural world, and science the philosophy of the natural, theology and science, whether in their respective ideas, or again in their own actual fields, on the whole, are incommunicable, incapable of collision, and needing, at most to be connected, never to be reconciled" (John Henry Cardinal Newman, "Christianity and Physical Science: A Lecture read for the School of Medicines (November 1855)", in: John Henry Cardinal Newman, The Idea of A University, introduction by George N. Shuster, New York 1959, 392). Other theologians, such as Rahner, put the possible reconciliation between theology and science in an eschatological perspective: "Aber eine solche letzte Versöhnbarkeit zwischen Theologie und Wissenschaften ist nicht ein für allemal schon als gegeben festgestellter Tatbestand, sondern der Inhalt eschatologischer Hoffnung, der immer nur in der Bewegung dieser Hoffnung nach vorne Stück für Stück neu ergriffen und realisiert werden kann" (Karl Rahner, "Zum Verhältnis zwischen Theologie und heutigen Wissenschaften", in: Karl Rahner, Schriften zur Theologie. Band X, Köln 1972, 111).

claims of all parties. However, this theory is epistemologically bad and empirically unconvincing.

From an epistemological perspective, a double-truth theory can create a schizophrenic world-picture and endorse a closed system of thought, *i.e.* the goal of which is to protect its own system. To Consequently, such a theory is not available to any criticism and it is difficult for this theory to offer novelty or progress of understanding. It only wants to protect and justify what has been already believed from the start. In this view, what matters is to keep things the same and to keep away from influences coming from outside the system. A double-truth theory will make the relation between theology and science difficult, if not impossible, because no one can guarantee whether they are speaking about the same thing. They simply find themselves in an enclosed and isolating circumstance. And yet our daily experience shows an undeniable tension between what religion and science have explained about the world. A classic example is the tension between creationism and evolutionism. This tension cannot be well explained if one keeps insisting on the asymmetry or even "incommensurability" between theology and science. If this asymmetrical relation were taken to be true, the tension between theology and science would be considered an illusion. But that would contradict our daily experience.

Some theologians have seriously reflected on this tension. They do not negate the importance of scientific findings, but, at the same time, they must reject the asymmetrical approach to seeing the relation between theology and science. This decision has to take two things about revelation into consideration. First, the particularity of theology based on revelation must always be explicitly pointed out. The role of revelation must be well put forward in every scientific discourse that includes theology. As this section has attempted to show, revelation marks indeed the boundary of theology. Secondly, as a consequence, this explanation of revelation cannot be in isolation. This means that any explanation of revelation must include criticism and correction, which is strongly endorsed by science. But, is that really possible?

⁷⁵ See Albert, Traktat über kritische Vernunft, 124-128.

⁷⁶ I realize the complexity of the term 'evolution', 'evolutionism' and 'Darwinism' in scientific and philosophical-theological debate. But here I want to put aside that complexity. For a balanced view on this subject see Ernst MAYR, What Evolution is, London 2002. On the one hand, Mayr clearly sees the incompatibility between evolution, which he regards as fact, and the account presented in Genesis. On the other hand, he criticizes some biologists who reduce evolutionary phenomena only to the level of genes and holds that evolution deals with "phenotypes of individuals, with populations, with species".

⁷⁷ Therefore, some hold that theological work without any citation from the Bible is not really a theology. As it is once said: "A criterion of Catholic theology is recognition of the primacy of the Word of God" or "[T]he study of sacred Scripture is the 'soul' of theology" (See International Theological Commission, "Theology Today: Perspective, Principles and Criteria").

I.5.1.2. An open access to revelation?

In theological discussion, revelation is not only conceived of as an object, but first and foremost as the source or the framework – as mentioned before. However, when theologians reflect on revelation, it ineluctably becomes an object that is understandable in a particular social context. Revelation, in this regard, is always experienced within a particular culture, personally or communally. Given the fact that there is a diversity of religious traditions or experiences, the parochial conception of revelation has been a challenge for religious epistemology. Here revelation is no longer theological but also philosophical problem. The main question is: to what extent is revelation, which is personally or communally experienced in a particular culture, understandable to people coming from other cultural backgrounds? The answer to this question might give an idea about whether theology is immune to any critics or not.

In a clear statement, Clooney argues that so far as revelation is "linguistically and rationally understandable", revelation is accessible to all people coming from different religious backgrounds and, even, to philosophical or theological investigations. Hence, not only philosophers, but (some) theologians as well have claimed that it is possible to understand the revelation of other traditions, as much as possible, to better understand one's *own* conception of revelation with the help of *other* traditions. All (comparative) theologians, presumably, would share this view, albeit their different nuances. They believe that a good theologian can discern slight differences between understanding revelation (through methodology) and recognizing the truth of revelation (theological belief). This can mean that an individual Christian theologian can understand the conception of revelation, for instance, in Islam, but it should not mean that he or she must give up his or her Christian faith. In saying this, understanding something does not simply mean believing in it, for believing presupposes commitment or personal engagement with what is believed, albeit the deprivation of evidence. Hence in a religious context one may say: I believe in God, though I don't (or cannot) really understand Him – think of the technical term 'mysteries of faith'.

⁷⁸ Clooney wrote: "When theologians claim that revelation (as their community recognizes it) is *the* unique source of knowledge and privileged articulate word that illumines reality, they usually go on to assert that this revelation is (to some extent) linguistically and rationally accessible. If so, the revelation becomes a potential object of scrutiny, no longer immune to interreligious, comparative, and dialogical investigation. If revelation is not inimical to whatever is properly intelligible and verbal, then beginning to understand opens a path toward revelation and toward vulnerability to its claim. Revelation, however severely its demands may be construed, also enables interreligious conversation as theologians learn from theologians in other traditions regarding how they read revelation and from theological positions in keeping with what they read" (Francis X. CLOONEY, Hindu God, Christian God: How reason helps break down the boundaries between religions, Oxford 2001, 61).

⁷⁹ See Anthony KENNY, What is Faith? Essays in the Philosophy of Religion, Oxford – New York 1992, 31.

Given that, on the one hand, there is nothing new about this interreligious and comparative approach. In the Bible, Saint Paul employed a similar method when he was in the Areopagus and spoke about the Christian God (see Acts 17). On the other hand, it is claimed that there is a new touch to this approach or method. It now aims at harmony of intellectual inquiry and spiritual vulnerability, so that faith and inquiry can be challenged and purified by one another. Whether this effort depicts an old problem about the relation between *fides et ratio*, is debatable. But here is the bigger question: is such a comparative method possible? Or, to put it better, can such comparative theology give convincing arguments about the possibility of understanding a particular theology by using an alien theological system? There are, at least, two kinds of answers to this question. The first comes from a Lutheran theologian like George Lindbeck and the second comes from the Catholic standpoint.

Lindbeck⁸² claims that religious or theological statements are understandable only within their own cultural-linguistic system. This suggests that every culture brings in itself a unique grammar. Or, more correctly said, grammar shapes each and every culture. It does not only help the locals to reflect on and to describe linguistically their feelings or thoughts about their life or reality. It gives, instead, meaning to all of those. In this view, there is "unsurpassability" of truth-notion or truth-claim among religions. However, that should not mean that interreligious dialogue must come to a dead end. According to Lindbeck, interreligious dialogue ought to encourage all participants to better understand their own tradition.⁸³ Interreligious dialogue does not or need not necessarily aim at proselytizing or conversion of others. It is rather a matter of commitment to a lifelong dialogue and cooperation.

Although it may sound very tolerant and unpretentious, this claim is nonetheless problematic. If the cultural-linguistic system is the grand rule of conduct of how certain (own) religious statements or faiths are to be interpreted or understood and valued, then, it is questionable how and why one should maintain interreligious dialogue. In Lindbeck's interreligious dialogue it is uncertain how someone can understand better his or her own

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⁸⁰ See CLOONEY, Comparative Theology, 39f.

⁸¹ For a good outline of the problem of *fides et ratio* see Armin Kreiner, "Entstehung und Zerfall der Synthese von Glauben und Vernunft", in: Stephan Grätzel/Armin Kreiner (Hrsg.), Religionsphilosophie, Lehrbuch Philosophie, unter Mitarbeiter von Ataollah Amin, Michael Gerhard, Christoph Nöthlings und Janssen Peters, Stuttgard 1999, 11-19. Here Kreiner calls the relation between reason and faith into question because of the actual comprehension of science.

⁸² See George LINDBECK, The Nature of Doctrine: Religion and Theology in a Postliberal Age, Philadelphia 1984.

⁸³ See LINDBECK, The Nature of Doctrine, 52-55.

faith and, in this regard, why one must or should consider other religions.⁸⁴ What might be certain from such interreligious dialogue is a reaffirmation of a kind of fideism or, maybe, a manifestation of a sense of the superiority of being Christian before non-Christian adherents, especially, in matters of salvation *solus Christus*, since, in the end, it is a matter of accepting or refusing Christ as the one and only Savior of mankind.⁸⁵ Besides, one might also think that this position would lead towards a form of pluralism or relativism⁸⁶ or, even, a new form of exclusivism⁸⁷, which is surely beyond its intention. But such implications are possible because this kind of comprehension of interreligious dialogue places a strong emphasis on internal consistency.

From the Catholic standpoint, comparative theologians tend not to welcome relativism or pluralism – perhaps because pluralism has been *officially* rejected. Real Catholic comparative theologians must always insist on the one truth that is manifested within and transferred through the Catholic tradition. In this view, revelation is treated as the authoritative source where every theological endeavor begins and ends. A comparative Catholic theologian such as Clooney claims that learning from other traditions is important and it would only mean a

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⁸⁴ See Catherine CORNILLE, The Im-possibility of Interreligious Dialogue, New York 2008, 187.

⁸⁵ I think this is a consequence of Lindbeck's metaphor of a child learning a language (See LINDBECK, The Nature of Doctrine, 60f.). In the long run a growing child may learn something more than what he or she, by parroting, knew. This view assumes that there is 'something' basic which is taken to be real. In the case of a Christian, the basic and real one is Christ as the Lord and Savior. Salvation will be given to the ones who believe in Jesus Christ. In consequence, non-Christians should learn the 'Christian language' in order to "purify and enrich their heritage" (LINDBECK, The Nature of Doctrine, 61), and, most importantly, know and accept Jesus in order to, *in fide et spe*, receive salvation.

⁸⁶ See Armin Kreiner, "Versöhnung ohne Kapitulation: Überlegungen zu George A. Lindbecks 'The Nature of Doctrine", in: Catholica 46 (1992), 318f.

⁸⁷ See Klaus VON STOSCH, Komparative Theologie als Wegweiser in der Welt der Religionen, Paderborn – München – Wien – Zürich 2012, 83-85 (Beiträge zur Komparativen Theologie. Hrsg. von Klaus von Stosch. Bd. 6).

⁸⁸ The declaration "Dominus Iesus" (2000) from the Congregation for the Doctrine of the Faith can be considered an instruction for all Catholic theologians to reject a pluralistic i.e. relativistic approach. The declaration stated: "it is necessary above all to reassert the definitive and complete character of the revelation of Jesus Christ. In fact, it must be firmly believed that, in the mystery of Jesus Christ, the Incarnate Son of God, who is "the way, the truth, and the life" (Jn 14:6), the full revelation of divine truth is given: "No one knows the Son except the Father, and no one knows the Father except the Son and anyone to whom the Son wishes to reveal him" (Mt 11:27); "No one has ever seen God; God the only Son, who is in the bosom of the Father, has revealed him" (Jn 1:18); "For in Christ the whole fullness of divinity dwells in bodily form" (Col 2:9-10) [...] Therefore, the theory of the limited, incomplete, or imperfect character of the revelation of Jesus Christ, which would be complementary to that found in other religions, is contrary to the Church's faith. Such a position would claim to be based on the notion that the truth about God cannot be grasped and manifested in its globality and completeness by any historical religion, neither by Christianity nor by Jesus Christ. Such a position is in radical contradiction with the foregoing statements of Catholic faith according to which the full and complete revelation of the salvific mystery of God is given in Jesus Christ" (Congregation for the Doctrine of the Faith, "Dominus Iesus: The Unicity Salvific Universality of Jesus Christ and the Church". http://www.vatican.va/roman curia/congregations/cfaith/documents/rc con cfaith doc 20000806 dominusiesus en.html [visited on June 28th 2019]).

quest for better understanding of its own tradition.⁸⁹ Given such a claim, it is reasonable to think about a propensity of Catholic theologians to take from other traditions something that will only fit within their own belief system; even though it can also possibly mean that they could falsely interpret some notions of other traditions.⁹⁰ Or, to put it another way: the theological enterprise, as *fides quaerens intellectum*, will always aim at a better understanding of one's own religious doctrines. If this is the case – and it seems like it, then such openness will eventually become nothing more than a justification of something that has always been already taken for granted, despite its transformations or new configurations.⁹¹

But what is actually the role of other traditions within the transformative process of one's own tradition? Should other traditions, in the context of interreligious dialogue, be reckoned as source or as hermeneutical framework of transformation in one's own theology?⁹²

If one has reckoned other alien traditions as one of the sources or as a hermeneutical framework, this, then, will strongly suggest that there is something 'out there' that is considered as another authentic source of theology or as a valid hermeneutical framework. This means that such doctrinal transformation would presuppose a recognition of the existence of other theological criteria that are not Christian, *i.e.* non-Christian revelation, and from which an understanding of Christian revelation or Christian truth could be formed. If this is the case, then, comparative theology has slipped over into pluralism. Of course, Catholic comparative theologians do not have any intention of embracing pluralism – for the reasons mentioned above, *viz.* rejection on the part of Church authority. But the inclination is there.

⁸⁹ CLOONEY, Hindu God, Christian God, 162: "We return to revelation and listen to it again in light of everything we have heard, read, and learned in the interreligious conversation".

⁹⁰ See VON STOSCH, Komparative Theologie als Wegweiser in der Welt der Religionen, 81.

⁹¹ See CLOONEY, Comparative Theology, 112: "Comparative theology is rarely unambiguously definitive, but its insights, in their particularity, need not conflict with dogmatic truths. Conversely, comparative theology's contribution will not occur merely in the repetition of claims already familiar to non-comparativists. If it does not disrespect doctrinal expressions of truth, neither does it merely repeat doctrinal statements as if nothing is learnt from comparative reflection. Rarely, if ever, will comparative theology produce new truths, but it can make possible fresh insights into familiar and revered truths, and new ways of receiving those truths. Since it flourishes in the particular, it creates new configurations of concepts of words, with new implications, and by so doing subtly alters how we receive even the most important of truths". See also VON STOSCH, Komparative Theologie als Wegweiser in der Welt der Religionen, 156.

⁹² See Reinhold BERNHARDT, "Comparative Theology: Between Theology and Religious Studies", in: Religions 3 (2012) 964-972, 969 (in: https://www.mdpi.com/2077-1444/3/4/964/htm [visited on July 1st 2019]).

Given this problematic position of comparative theology, especially its Catholic version, the argument of Catholic comparative theologians or the claim that theology can be open to correction from outside is not very convincing. Changes are possible within theology, but, maybe, they are not meant to be a kind of 'correction', but simply a reinterpretation or reformulation of old doctrines. The reason for this is that theology is designed to protect what has already been believed. This, of course, presupposes hermeneutics, which normally urges familiarity with the internal logic or internal rules of a particular system.

Due to its inseparable connection to divine revelation and its logic of conservation, Catholic theology cannot be understood without tradition. In saying that, it is important to know how important tradition is to Catholic theology.

I.5.2. Tradition does matter

It is claimed that Catholic theology walks along with tradition. ⁹³ Without a doubt, tradition has an important *meaning* as much as a significant *role* within the Catholic church and Catholic theology in particular. Accordingly, tradition springs from the Word of God Who is manifested in the history of humankind. Tradition, therefore, is not first and foremost meant to be a solely human work of transferring knowledge or custom into new circumstances. It is meant to embrace both the event of God's revelation and the succession of truth through apostolic tradition that is preserved by the church as *locus theologicus*. Consequently, the theological quest for truth cannot be sufficiently carried out without taking all together revelation, church and tradition. ⁹⁴

Because of its important meaning, tradition has a significant role. It gives Catholic theology norms and criteria and shapes its structure. Along with the Bible, tradition is also considered as *norma normata* of theology; the Word of God is instead conceived as *norma suprema* or *norma non normata*. Based on *norma suprema* emerge within tradition some norms and criteria, which may help to decide what does or does not align with the tradition of faith. This depicts the structure of the tradition of Catholic theology. In this view, theology, in the first instance, serves the Word of God that is believed by and within the

⁹³ See BERNHARDT, "Comparative Theology: Between Theology and Religious Studies", 968.

⁹⁴ See Herman Josef POTTMEYER, "Normen, Kriterien und Strukturen der Überlieferung", in: Walter Kern/Herman Josef Pottmeyer/Max Seckler Handbuch der Fundamentaltheologie 4: Traktat Theologische Erkenntnislehre. Schlussteil Reflexion auf Fundamentaltheologie, Freiburg – Basel – Wien 1988, 136f.

⁹⁵ See POTTMEYER, "Normen, Kriterien und Strukturen der Überlieferung", 124f.

church. And for practical reasons, tradition should or must intervene as 'guardian' in a dispute whenever the truth of (Catholic) faith is in danger. Tradition, thus, may ensure stability if there is theological dispute concerning the truth of faith within the church.

Taking its practical function into account, tradition seems to be construed as the attitude of keeping and justifying the 'ever-true' previously given. Tradition, in other words, is understood as a kind of personal or communal commitment that binds one to specific content and context. Consequently, everyone has always been nailed down to a (particular) stance or tradition. And in accordance with this, actual thoughts on how one might solve a problem have never been very distinct from the way of the past. From the Catholic point of view, tradition would, thus, become something 'given' that must be accepted in fidelity and re-interpreted. This understanding of tradition brings out a conjuncture between ontological datum (*viz*. the existence of the given) and a methodological and epistemological outlook (*viz*. justification of the existence of the given).

Admittedly, such an interpretation of tradition does not exclusively belong to theology. There are some scientists who believe that their work has somehow already been determined by the past. ⁹⁶ They claim that tradition had an influence on science, namely in the understanding of concepts and, particularly, in the selection of problems and in the methods. Even if it is possible to set free certain concepts from tradition, *viz.* concepts can be differently understood along the course of time, this is not the case for selecting problems and methods. These last two are assumed to be attached to tradition already. In this sense, it is claimed that science has been completed. There would be nothing new in science.

This claim sounds quite deterministic. Nevertheless, it seems that it is not the way Catholic theologians understand tradition. Unlike deterministic scientists, most contemporary Catholic theologians would likely disagree with traditionalism or

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⁹⁶ See Werner HEISENBERG, "Tradition in Science", in: Science and Public Affair (December 1973), 4-10 (in: http://web.a.ebscohost.com.emedien.ub.uni-muenchen.de/ehost/pdfviewer/pdfviewer?vid=0&sid=a6b4d5b0-7397-4f6f-abaa-ebffe73cf258%40sdc-v-sessmgr01 [visited on July 18th 2019]). Heisenberg's claim about the influence of tradition in science seems to be deterministic, although his interpretation of quantum theory is indeterministic. Scientists, according to him, work only on problems that are given by historical process and try to solve them with method that is already available. As a consequence, one may have doubts about spectacular breakthroughs in science. Change, if not impossible, is extremely difficult to happen. If I correctly understood his standpoint, he is not solely a conclusivist, but also a pessimist. He believed that science had already been completed (endgültig); no one should expect something new in science. Nevertheless, how physicists of today work and understand reality or the world can be evidence of how change is still happening. They work with something that has not been thought of or known before, e.g. quarks, photons, Higgs, muon, strong and weak forces, theory of quantum gravity, etc. They face new problems and try to solve them. Heisenberg's claim is similar to Oppenheimer's in "Tradition and Discovery" (1959), as J. Mali has reported (Joseph Mali, "Science, Tradition, and The Science of Tradition", in: Science in Context 3 (1989) 143-173, 144 [in: https://www.cambridge.org/core/services/aop-cambridge-core/content/view/S0269889700000752] [visited on Oct 15th 2019]).

determinism. Catholic theologians like Dulles have clearly asserted that whereas traditionalism means "the dead faith of the living", tradition means "the living faith of the dead". 97 According to him, tradition is not an act of conserving "things of the past" or simply imitating old customs. From a Catholic hermeneutical outlook, tradition, as he explains, is understood as living bonds between believers and "the vital source of their life", *viz.* the revealed truth. And therefore, instead of imprisoning them in the past and/or in their present personal interest, tradition is claimed to liberate people. In his opinion, "tradition and creativity" are allied. Such an interpretation of tradition presupposes a definitive revealed truth that is then canonized in the Bible and is still to be accomplished through and in the church's life and her actions. 98 From Dulles' point of view, history is thus intertwined with spirituality.

Nevertheless, despite its disagreement with determinism, such an interpretation of tradition seems to share the same assumptions, namely the ontological datum and the movement from original source (*i.e.* transcendent reality) to actual state (*i.e.* experiential reality), although the notion "movement" is interpreted differently. Given this, there is recognition of a kind of definitive authority which rules and which is taken for granted. It is not surprising, then, that tradition has been understood within the form of authority, which has been conferred upon texts, utterances, and expert(s) that in the case of Catholic church may be found in the form of ecclesiastical offices. ⁹⁹ Therefore, it is understandable that the theological enterprise, from a Catholic perspective, must take tradition, which is (also) expressed in the authoritative teachings of the church's offices, seriously.

If this is really the case, then theologians cannot do other but to begin with something given or transmitted by the church. Tradition is a point of departure of every theological work. Even critiques against tradition, which brought some 'changes' or perhaps not, always accepted tradition. Hence, it is somewhat difficult to think of a traditionless standpoint. But suppose that tradition may change (or has changed) over the course of time. What does it mean to say 'tradition changes'?

⁹⁷ Here Dulles took Jaroslav Pelikan's distinction between tradition and traditionalism. See Avery DULLES, "Tradition and Creativity in Theology" (in: https://www.firstthings.com/article/1992/11/002-tradition-and-creativity-in-theology [visited on September 2019]); Jaroslav Pelikan, The Christian Tradition: A History of the Development of Doctrine, vol.1, The Emergence of the Catholic Tradition, Chicago – London 1971, 9.

⁹⁸ See Dulles, "Tradition and Creativity in Theology".

⁹⁹ See Avery Dulles, "Lehramt und Fehlbarkeit", in: Walter Kern/Hermann Josef Pottmeyer/Max Seckler, Handbuch der Fundamentaltheologie 4: Traktat Theologische Erkenntnislehre. Schlussteil Reflexion auf Fundamentaltheologie, Freiburg – Basel – Wien 1988, 153-169.

McIntyre claimed that such expression means to point out that change has been produced by auto-critics and not necessarily by other traditions, since there are distinct and incompatible forms and comprehensions of rationality among traditions. According to him, old doctrines in a particular tradition will be challenged internally by new facts perceived by its adherents. This might, then, bring about an epistemological as much as existential problem for adherents. Such circumstances indeed do not necessarily involve a revolution within the same tradition. Yet, it might suggest that the change within a particular tradition was possible only because of its internal rational process. Although this view did not espouse relativism or perspectivism, but inasmuch as this claim is considered, tradition would be seen as foundation much the same as a closed system. This kind of interpretation is problematic.

In contemporary philosophy, speaking of foundation normally refers to discourse about foundationalism. And since foundationalism has been considered to have serious logical problems, *e.g.* infinite regress, it has been boldly challenged by most philosophers. Hence, some have completely abandoned it, ¹⁰² others have needed to modify it. ¹⁰³

In the same vein, defending a closed system has been considered philosophically problematic in the world of today, where various traditions, *i.e.* various frameworks, are strongly presented in scientific debates. These frameworks are often found in conflict, especially when they speak about the image of reality – why it is so rather than otherwise. Holding that the conflict is not even real since it comes principally from a misunderstanding of an interpretation about reality in some distinct tradition or framework that is being criticized will not help much. Such an argument could perhaps calm the psychological tension, but does not solve the epistemological problem. It will only find itself in the trap of parochiality. If this is the case, then 'changing' would mean nothing more than 'staying current', namely dressing up an old language with a current one in order to be contemporarily understood. But it is debatable whether these two notions are really synonymous.

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¹⁰⁰ See Alasdair MACINTYRE, Whose Justice? Which Rationality? London 1988, 349-369.

¹⁰¹ See MACINTYRE, Whose Justice? Which Rationality?, 350: "There is no standing ground, no place for enquiry, no way to engage in the practices of advancing, evaluating, accepting, and rejecting reasoned argument apart from that which is provided by some particular tradition or other".

¹⁰² It is sufficient to recall all philosophers who align with postmodernism.

¹⁰³ Haack, for instance, coined a phrase "foundherentism" to avoid the logical problem of foundationalism as well as of coherentism (See Susan HAACK, Evidence and Inquiry: Towards Reconstruction in Epistemology, Oxford – Massachusetts 2000⁷ [reprinted]). Van Huyssteen, instead, coined the notion "postfoundationalism" (See J. Wentzel VAN HUYSSTEEN, The Shape of Rationality: Toward interdisciplinarity in theology and science, Michigan 1999).

As a better alternative, it might be helpful to seek for an interpretation of 'change' in a way that really depicts and explains changes within tradition. This effort does not necessarily mean to eradicate tradition, which is quite impossible since everything always stands on tradition. It simply suggests that tradition should be open to any critiques that make changes possible rather than allow tradition to be simply handed on or accepted uncritically. ¹⁰⁴ So, tradition, within which everyone stands is very constitutive, but it should not be considered as immune to critiques or corrections coming from inside or outside. Perhaps the birth and the development of scientific or critical thinking in the ancient Greek world can be a good example. ¹⁰⁵ At that time, there was a radical change from myth to science through critical thinking. Those ancient philosophers had tried to explain reality in a critical way, by criticizing traditional opinions or beliefs in order to give a better explanation, and this explanation was radically different from the traditional one. – This alternative interpretation of 'change' will be more discussed in chapter IV.

So far, the connection between revelation and tradition has been shown within the Catholic theological enterprise. While those two notions may not be typically Catholic, but their interpretation lies in the fact that the interpretation, even if it may sound trivial, is proposed by theologians who are recognized by the Catholic church and still in full communion with it. In connection with revelation and tradition, another element that must be considered as typical Catholic theology is infallibility.

I.5.3. Infallibility

The theological interpretation of revelation that strongly influenced the interpretation of tradition, as a revealed truth of God or God's self-manifestation that was experienced by the Apostles and, then transmitted to and promulgated by the church, plays a great role within the understanding of infallibility. The Catholic church understands that the notion of 'infallibility' refers first and foremost to the infallible (content of) truth of God, *viz*. God's intention for the salvation of all creation. Theologically speaking, all believers and the community of believers, *i.e.* church, are guided by the Holy Spirit to the truth and, at the same time, remain within truth. In this sense, the church is consequently conceived of as

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¹⁰⁴ In "Towards a Rational Theory of Tradition", Popper has proposed provocative but interesting insights about tradition that should or must be accessible to critiques (See Karl POPPER, Conjectures and Refutations: The Growth of Scientific Knowledge, London 1969³, 120-135).

¹⁰⁵ Popper has theorized such development occurred in ancient Greece in "The Myth of Frameworks" (See Karl POPPER, Erkenntnis und Evolution: Zur Verteidigung von Wissenschaft und Rationalität, Tübingen 2015, 118-156 (Gesammelte Werke in deutscher Sprache, Band 13).

"the pillar and the ground of the truth"; and the Word of God in the Bible has confirmed it. 106

The Catholic church has taken the consequences of this position much further. The omnipresent truth within the church is protected and exercised (only) within the collegial authority of Bishops and, particularly, in the primacy of the Pope. Following this line of thought, the teachings of the Bishops and, especially, of the Pope, are unanimously considered to be infallible (in the sense that they are free from falsity and cannot be abrogated, yet can be reinterpreted). Of course, not all teachings are considered to be infallible. There are special conditions under which papal teachings must be obediently accepted as infallible, *viz.* a clear intention to define a final doctrinal decision regarding faith and moral questions and *ex cathedra*, as the first Vatican Council (1870) in *Pastor Aeternus* had already taught and then the second Vatican Council (1965) in *Lumen gentium* has reconfirmed. This doctrine of infallibility, however, has raised long discussions among Catholic theologians and strong reactions from theologians to the church's authority.¹⁰⁷

The main point of the discussion is not about the infallibility of divine revelation, but more about how the presence of the truth of God within the church could be understood by modern people. This discussion has tried to clarify and explain how the infallibility of divine revelation produces its effect on the church, because the church does not generate the truth from herself, but God has granted it to her.

Some have claimed that because of divine warranty, *i.e.* the guidance of Holy Spirit, the church, and all her teachings, have been protected from falsity or deficiency. In the case that some (formulations of) teachings seem to be incorrect, this should not mean that they are false. One should first of all understand the good intentions behind all church teachings and seek for the succession of truth within them. In order to find it, regardless of unconvincing formulations, theologians must (re-)interpret the teachings in the light of the richness of Christian tradition and the mentality of their own time. Reinterpretation of church's doctrines, therefore, is the main work of all (Catholic) theologians. Accordingly,

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¹⁰⁶ 1 Tim 3,15. See also Eilert HERMS "Unfehlbarkeit: Fundamentaltheologisch", in: Hans Dieter Betz u.a. (Hrsg.), RGG⁴. Religion in Geschichte und Gegenwart: Handwörterbuch für Theologie und Religionswissenschaft. Vierte, völlig neu bearbeitete Auflage, Tübingen 2005 (=Band 8), 731.

¹⁰⁷ Hans Küng, for instance, has put the doctrine of the infallibility of the Pope in question. His book *Unfehlbar? Eine Anfrage* (1970) has been widely discussed. For Küng's comprehensive works about this theme see Hans KÜNG, Unfehlbarkeit, Freiburg – Basel – Wien 2016 (Sämtliche Werke, herausgegeben von Hans Küng und Stephan Schlensog, Band 5). His criticism is presumably influenced by J. Salaverri's interpretation of papal infallibility; *viz.* an extension of the claim of infallibility to ordinary magisterium (*e.g.* encyclical letters) "for all practical purposes" (See Richard P. MCBRIEN, [no title], in: John J. Kirvan (ed.), The Infallibility Debate, New York 1971, 35-65, 44f.).

they should clarify and explain, and then defend, how the transmission of truth within the church happened. Based on this understanding, it is not surprising why one might claim that a denial of church teachings or authority, expressed by the Pope or the Bishops in their collegiality with the Pope, may bring about the direct consequence of exclusion (or expulsion) from the Catholic church. Such reasoning, of course, is based on the argument from authority: (a certain) church teaching is true or infallible because it has been taught by the church's authority as God's representative in the world and it must be humbly and obediently accepted by all the church's members. Given this, one might ask whether such an argument might convince modern people who have been living and experiencing human freedom, free to think and free to speak critically.

Against the argument from authority, other theologians like Küng have argued for the fallibility of the church's teachings, viz. the church's authority. This does not mean that the infallibility of the content of divine revelation is in question. For Küng divine truth stands before the fallible and correctable church teachings. It is not a preposterous saying that "to err is human". Due to this fallibility of human action, God has given to the Church the 'compass', i.e. His Word in the form of human language in the Bible, in order to direct and redirect her when she has lost the way and to correct her action. Of course, even the Bible, literally speaking, contains a good many errors because it has assumed human reality. Yet, this will not necessarily make Christians stop believing that the Bible is divinely inspired. Some errors in formulation will not abolish trustworthiness. In view of this, Küng maintains a distinction between 'indefectibility of the church' and 'fallibility of church teachings'. It is, therefore, very important to him that all Christian doctrines and actions must consult the Bible as the first witness of Christian faith. In his opinion, the first Christian community becomes the role model of how divine truth should be treated. 109 They unquestionably believed the divine truth, but, at the same time, waited in fidelity for its fullness through daily struggle.

Considering Küng's idea, if the Bible, literally speaking, can contain a good many errors, this means that it needs a person or institution that legitimately possesses a kind of authority to point out the falsity and to make corrections, although this person or institution can err as well. Obviously, this reasoning can lead towards the problem of justification or

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¹⁰⁸ See Karl RAHNER, "Disput um das kirchliche Lehramt: Zum Problem nicht-unfehlbarer kirchlicher Lehrentscheidungen", in Stimmen der Zeit 185 (1970) 73-81, 76: "Unsere heutigen katholischen Raskolniken sind nur zu leicht dann für Papst und Bischöfe, wenn diese das lehren, was ihnen selbst recht erscheint. Sonst dispensieren sie sich auch von jenem unbedingten Lehrgehorsam, den sie als heiliges Prinzip ohne Differenzierung gegen die 'Modernisten' von heute verteidigen".

¹⁰⁹ See KÜNG, Unfehlbarkeit, 352-354.

foundationalism, *i.e. regressus ad infinitum*. To escape from this problem, the Catholic church seemed to choose a dogmatic solution. That is, the Catholic church has given more credit to the Pope and to the bishops for the responsibility of corresponding actual church teachings with apostolic tradition – this kind of authority also applies in practice to apostolic institutions. And this decision will obviously demand an obedience to the church's authority.

I.6. Conclusion

From a traditional comprehension of theology as "faith seeking understanding", a description of Catholic theology can be drawn. It is a Catholic enterprise. But a more fundamental feature of Catholic theology, as mentioned before, is a full communion with the Catholic church, *viz*. with the Pope and the Bishops and with their teachings of which some are considered to be infallible. As successors of the Apostles, they have the authority to interpret revelation and tradition for the good of the Church. This authority-element might seem to constrict theological endeavor, but it still could give a hint of possible freedom for Catholic theologians regarding their serious and honest work. This means that they are free to do research on some elements of church teachings that are still in need of explanation; in other words, in the case where there are no definitive words yet from church authority. However, due to this authority-dependence and its claim of infallibility, it is debatable whether Catholic theology can fit within the modern conception of science; and Catholic theology has claimed itself as science, *i.e.* science of faith.

Nevertheless, to have a clear answer to the question is not so easy, because there are still tense discussions about what science really means. This theme will be discussed in the next chapter.

Conclusion

This work has tried to show that the old claim of a scientific profile for Catholic theology is untenable. There is a demarcating line between the two disciplines. Science is characterized by conjecture and fallibility, while theology is protected by, and aimed at, certainty and infallibility. While infallibility, in general, refers to the infallible content of the truth of God, in the Catholic context, it is also applied to the Pope and his teachings.

Most theologians, in particular Catholic theologians, find it difficult to accept the idea that theology is not a science just because of its reliance on infallible authority. Accordingly, for them, the idea that theology is not a science does not do justice to theology, which has historical recognition as a science (or being scientific); and furthermore, there is still debate among professional scientists about what science really means. Consider the actual debate between elementary particle physicists and string theorists about the scientific status of their research programmes.

In that regard, the philosophy of Karl Popper (*i.e.* critical rationalism) is proposed, as it makes a clear and simple distinction between science and pseudo- or nonscience. Obviously, his proposal for the demarcation of science is not without strong resistance, not only from (some) scientists, but also from (some) philosophers of science. Reading Popper's works, it emerges that the strong rejection is mostly based on a misunderstanding of Popper's thought – what he himself referred to as "Popper legend". In order to clarify some ideas, and even to correct his previous position (*e.g.* that metaphysics was not criticizable), Popper does not hesitate to examine his own ideas vigorously by confronting them with the ideas of different thinkers. As a result, science, for him, is different from metaphysics, but both can be rationally criticizable or arguable.

Critical rationalism has had a major impact on the traditional conception of theology. Although Popper does not bring his philosophy into the theological debate, other critical rationalists do and call into question the former scientific claim of theology. Hence, from a critical rationalist point of view, theology is not a science and cannot be considered a science.

That being said, to simply call theology nonscience is not a very satisfying result of this work. Rather, there needs to be more effort to show what can be learnt from critical rationalism in relation to theology. Thanks to Popper's examination of the criticizability of metaphysical theories or statements, it is possible and reasonable to speak of the rationality

of theology. Due to the relationship between 'rationality' or 'being rational' and 'being open to discussion' suggested by Popper, theology has a chance of being called rational if and only if there are still open discussions in the theological enterprise. In open discussions, one may expect criticism and change or revision, which in turn can support the idea of progress in theological endeavors.

Apparently, such an idea of rationality is still difficult to adopt in the Catholic context, given the infallible church authority, *i.e.* papal infallibility. Infallibility gives the Pope and his teachings the definitive word on certain issues. Obviously, this can put an end to theological discussions for good. Nevertheless, it can also suggest that as long as there is still no definitive word on a particular theological issue, open discussion (*i.e.* criticism and change) can still be possible. That emerges as a narrow space for Catholic theologians to claim the rationality of Catholic theology.

BIBLIOGRAPHY

- AGASSI, Joseph, Popper and His Popular Critics: Thomas Kuhn, Paul Feyerabend and Imre Lakatos, Cham (et al.) 2014.
- AGASSI, Joseph, "Metaphysics and the Growth of Scientific Knowledge", in: Jarvie, Ian/Milford, Karl/Miller, David (eds.), Karl Popper: A Centenary Assessment, volume II, Metaphysics and Epistemology, Milton Keynes 2015, 3-18.
- ALBERT, Hans, "Science and the Search for Truth: Critical Rationalism and the Methodology of Science", in: Radnitzky, Gerard/Andersson, Gunnar (eds.), Progress and Rationality in Science, Dordrecht Boston London 1978 (Boston Studies in the Philosophy of Science, Volume LVIII) 203-220.
- ALBERT, Hans, Die Wissenschaft und die Fehlbarkeit der Vernunft, Tübingen 1982.
- ALBERT, Hans, Kritik der reinen Erkenntnislehre: Das Erkenntnisproblem in realistischer Perspektive, Tübingen 1987, 44.
- ALBERT, Hans, "The Conflict of Science and Religion: Religious Metaphysics and the Scientific Word View as Alternatives", in: Journal of Institutional and Theoretical Economics 153 (1997) 216-234.
- ALBERT, Hans, "Historiography as a Hypothetico-Deductive Science: A Criticism of Methodological Historism", in: Cheyne, Colin/Worrall, John (eds.), Rationality and Reality: Conversations with Alan Musgrave, Dordrecht 2006, 263-272 (Studies in History and Philosophy of Science, vol. 20).
- ALBERT, Hans, Traktat über kritische Vernunft, 5. Auflage, Tübingen 2010.
- ALBERT, Hans, Kritische Vernunft und rationale Praxis, Tübingen 2011.
- ALBERT, Hans, Das Elend der Theologie: Kritische Auseinandersetzung mit Hans Küng, Aschaffenburg 2012³.
- ALBERT, Hans, Kritik des theologischen Denkens, Berlin 2013.
- ALBERT, Hans, "Karl Popper, Critical Rationalism, and the Positivist Dispute", in: Journal of Classical Sociology 15 (2015) 209-219.

- ALBERT, Max, "Bayesian Rationality and Decision Making: A Critical Review", in: Analyse und Kritik 25 (2003) 101-117.
- ALBERT, Max, "Why Bayesian Rationality Is Empty, Perfect Rationality Doesn't Exist, Ecological Rationality Is Too Simple, and Critical Rationality Does the Job", in: RMM vol. 0, Perspectives in Moral Science, ed. By. M. Baurmann and B. Lahno, 2009, 49-65 (in: http://www.rmm-journal.de [visited on September 17th 2021]).
- ALBERT, Max, "How Bayesian Rationality Fails and Critical Rationality Works", in: Homo Oeconomicus 34 (2017) 313-341.
- ALLCHIN, Douglas, "Evaluating knowledge of the nature of (whole) science", in: Science Education 95 (2011) 518–542.
- ALLEN, Paul L., Ernan McMullin and Critical Realism in the Science-Theology Dialogue, Aldershot Burlington 2006.
- ALLEN, Paul L., Theological Method: A Guide for the Perplexed, London New York 2012.
- ALLEN, Paul L., "Is there Verification in Theology?", in: Open Theology 3 (2017), 417-433.
- ALLEN, Paul L., "The Elusive Illusion of Certainty", in: Areopagite (February 2019) (in: https://henrycenter.tiu.edu/2019/02/the-elusive-illusion-of-certainty [visited on May 19th 2021]).
- ALLEN, Paul, "Critical Realism Redux: A response to Josh Reeves", in: Zygon 55 (2020) 772-781.
- ALTIZER, Thomas J.J., The New Gospel of Christian Atheism, Aurora 2002.
- ANDERSSON, Gunnar, "Lakatos' methodology of scientific research programmes A progressing or degenerating methodology?, in: Methodology and Science. Interdisciplinary Journal for the Empirical Study of the Foundations of Science and Their Methodology 21 (1988) 81-87.
- ANDERSSON, Gunnar, "Test statements and Experience", in: Jarvie, Ian/Milford, Karl/Miller, David (eds.), Karl Popper: A Centenary Assessment, volume II, Metaphysics and Epistemology, Milton Keynes 2015, 177-183.
- ANDERSSON, Gunnar, "Karl Popper und seine Kritiker: Kuhn, Feyerabend und Lakatos", in: Franco, Giuseppe (Hrsg.), Handbuch Karl Popper, Wiesbaden 2019, 717-731.
- ARISTOTLE, Metaphysics, translated into English under the editorship of W.D. Ross, M.A, Hon. LL.D., Oxford 1948².

- ARISTOTLE, Posterior Analytics, translated with Notes by Jonathan Barnes, Oxford 1975.
- ARKANI-HAMED, Nima/DIMOPOULOS, Savas/DVALI, Gia, "The Hierarchy Problem and New Dimensions at a Millimeter", in: Physics Letter B 429 (1998) 263-272.
- BACON, Francis, The New Organon, edited by Lisa Jardine and Michael Silverthorne, New York Port Melbourne 2000.
- BARTLEY, W. Warren, The Retreat to Commitment, Illinois 1984⁴.
- BERNHARDT, Reinhold, "Comparative Theology: Between Theology and Religious Studies", in: Religions 3 (2012) 964-972 in: https://www.mdpi.com/2077-1444/3/4/964/htm (visited on July 1st 2019).
- BIRD, Alexander, Philosophy of Science, London 1998.
- BROWN, James R., Smoke and Mirrors: How science reflects reality, London New York 1994.
- BUNGE, Mario, Method, Model and Matter, Dordrecht Boston 1973.
- BUNGE, Mario, Doing Science: In the Light of Philosophy, Singapore 2017.
- CAMPBELL, Donald, "Unjustified variation and selective retention in scientific discovery", in: Ayala, Fransisco Jose/Dobzhansky, Theodosius (eds.), Studies in the Philosophy of Biology, London 1974, 139-161.
- CARNAP, Rudolf, The Logical Structure of the World and Pseudoproblems in Philosophy, translated by Rolf A. George, Illionois 2005².
- CHALMERS, Alan, What is This Thing Called Science? Fourth Edition, Berkshire 2013.
- CHALMERS, David J., "Why Isn't There More Progress in Philosophy", in: Philosophy 90 (2015) 3-31.
- CLOONEY, Francis X., Comparative Theology: Deep Learning Across Religious Borders, Malden 2010.
- CLOONEY, Francis X., Hindu God, Christian God: How reason helps break down the boundaries between religions, Oxford 2001.
- CRAIG, William L./MORELAND, J.P. (eds.), Naturalism: A Critical Analysis, London New York 2000.
- CONGAR, Yves, A History of Theology, New York 1968.

- Congregation for the Doctrine of the Faith, "Dominus Iesus: On the Unicity and Salvific Universality of Jesus Christ and the Church", in: http://www.vatican.va/roman_curia/congregations/cfaith/documents/rc_con_cfaith_d oc 20000806 dominus-iesus en.html (visited on June 28th 2019).
- CORNILLE, Catherine, The Im-possibility of Interreligious Dialogue, New York 2008.
- CRISP, Oliver D., "Analytic Theology as Systematic Theology", in: Open Theology 3 (2017) 156-166, in: https://www.degruyter.com/downloadpdf/j/opth.2017.3.issue-1/opth-2017-0012/opth-2017-0012.pdf (visited on Nov 7th 2018).
- DAWID, Richard, String Theory and the Scientific Method, New York 2013.
- DAWID, Richard, "Scientific Realism in The Age of String Theory" (2003), in: https://www.researchgate.net/publication/28357368 (visited on 24th Feb 2020).
- DAWKINS, Richard, "Burying the Vehicle. Commentary on Wilson & Sober: Group Selection", in: Behavioral and Brain Sciences. 17 (1994) 616f.
- DEELY, John, Medieval Philosophy Redefined: The development of cenoscopic science, AD 354 to 1644 (from the birth of Augustine to the death of Poinsot), Scranton London 2010.
- DENNETT, Daniel, Breaking the Spell: Religion as a Natural Phenomenon, New York 2006.
- DEUTSCH, David, The Fabric of Reality, London 1998.
- DEUTSCH, David, The Beginning of Infinity: Explanations that Transforms the World, London 2012.
- DIETRICH, Eric, "There is No Progress in Philosophy", in: Essay in Philosophy 12 (2011) 329-344.
- DUHEM, Pierre, To Save the Phenomena: An Essay on the Idea of Physical Theory from Plato to Galileo (1908), translated from French by Edmund Dolan and Chaninah Mashler, with an introductory essay by Stanley L. Jaki, Chicago London 1969.
- DUHEM, Pierre, The Aim and Structure of Physical Theory, New Jersey 1991.
- DULLES, Avery, "Faith and Revelation", in: Fiorenza, Francis S./Galvin, John P. (eds), Systematic Theology: Roman Catholic Perspectives, Vol. I, Minneapolis 1991, 91-128.
- DULLES, Avery, "Lehramt und Fehlbarkeit", in: Kern, Walter/Pottmeyer, Hermann Josef/Seckler, Max, Handbuch der Fundamentaltheologie 4: Traktat Theologische

- Erkenntnislehre. Schlussteil Reflexion auf Fundamentaltheologie, Freiburg Basel Wien 1988, 153-177.
- DULLES, Avery, "Tradition and Creativity in Theology", in: https://www.firstthings.com/article/1992/11/002-tradition-and-creativity-in-theology (visited on September 2019).
- EDWARD, Grant, The Foundations of modern science in the Middle Ages: Their religious, institutional, and intellectual context, Melbourne 1996.
- ETGES, Peter J., Kritik der analytischen Theologie: Die Sprache als Problem der Theologie und einige Neuinterpretationen der religiösen Sprache, Hamburg 1973.
- EVANS, Gillian R., "Patristic and Medieval Theology", in: Avis, Paul (ed.), The History of Christian Theology, Volume 1: The Science of Theology, Basingstoke 1986, 3-103.
- FERGUSSON, David A.S., "Creation", in: McFarland, Ian A./Fergusson, David A.S./Kilby, Karen/ Torrance, Ian R. (eds.), The Cambridge Dictionary of Christian Theology, Cambridge 2011, 120-122.
- FERRERO, Mario, "The infallibility of the pope", in: Economics of Governance 12 (2011) 89-99.
- FEYERABEND, Paul, Against Method, London New York 2008³.
- FIORENZA, Francis S., "Systematic Theology: Task and Method", in: Fiorenza, Francis S./Galvin, John P. (eds), Systematic Theology: Roman Catholic Perspectives, Vol. I, Minneapolis 1991, 1-87.
- FLORIDES, Petros F., "Einstein's Equivalence Principle and the Gravitational Red Shift II", in: arXiv:1310.1788v1 [gr-qc] 7 Oct 2013.
- FUDENBERG, Drew/TIROLE, Jean, Game Theory, Cambridge London 1995⁴.
- GADENNE, Volker, "The Epistemological Foundation of Methodological Rules", in: Jarvie, Ian/Milford, Karl/Miller, David (eds.), Karl Popper: A Centenary Assessment, volume II, Metaphysics and Epistemology, Milton Keynes 2015, 211-217.
- GADENNE, Volker, "Karl Poppers Basissätze und Bewährung", in: Franco, Giuseppe (Hrsg.), Handbuch Karl Popper, Wiesbaden 2019, 303-319.
- GADENNE, Volker, "Karl Poppers kritischer Rationalismus heute", in: Franco, Giuseppe (Hrsg.), Handbuch Karl Popper, Wiesbaden 2019, 751-770
- GIBELLINI, Rosino, Handbuch der Theologie im 20. Jahrhundert, Regensburg 1995.

- GLADIGOW, Burkhard, Religionswissenschaft als Kulturwissenschaft, Stuttgart 2005.
- GLASHOW, Sheldon, "Does Elementary Particle Physics Have a Future?", in: de Boer, Jorrit/Dal, Erik/Ulfbeck, Ole (eds.), The Lesson of Quantum Theory, Amsterdam 1986, 143-154.
- GLASHOW, Sheldon L./BOVA, Ben, Interactions: A Journey Through the Mind of a Particle Physicist, New York 1988.
- GLYMOUR, Clark N., Theory and Evidence, Princeton 1980.
- GÖCKE, Benedikt (Hrsg.), Die Wissenschaftlichkeit der Theologie. Band I. Historische und systematische Perspektiven, Münster 2018 (Studien zur systematischen Theologie, Ethik und Philosophie, herausgegeben von Thomas Marschler und Thomas Schärtl, Band 13/1).
- GÖCKE, Benedikt P., "Katholische Theologie als Wissenschaft? Einwände und die Agenda der analytischen Theologie", in: Göcke, Benedikt P. (Hrsg.), Die Wissenschaftlichkeit der Theologie. Band I. Historische und systematische Perspektiven, Münster 2018, 145-164 (Studien zur systematischen Theologie, Ethik und Philosophie, herausgegeben von Thomas Marschler und Thomas Schärtl, Band 13/1).
- GÖCKE, Benedikt/OHLER, Lukas Valentin (Hrsg.), Die Wissenschaftlichkeit der Theologie. Band II. Katholische Disziplinen und ihre Wissenschaftstheorien, Münster 2019 (Studien zur systematischen Theologie, Ethik und Philosophie, herausgegeben von Thomas Marschler und Thomas Schärtl, Band 13/2).
- GÖCKE, Benedikt Paul/OHLER, Lukas, "Universitäre Theologie im Spannungsfeld von kirchlicher Erwartung und wissenschaftlicher Ergebnisoffenheit", in: Göcke, Benedikt Paul/Ohler, Lukas Valentin (Hrsg.), Die Wissenschaftlichkeit der Theologie, Band 2. Katholische Disziplinen und ihre Wissenschaftstheorie, Münster 2019, Einleitung, IXXXV (Studien zur systematischen Theologie, Ethik und Philosophie, herausgegeben von Thomas Marschler und Thomas Schärtl, Band 13/2).
- GÖCKE, Benedikt/PELZ, Christian (Hrsg.), Die Wissenschaftlichkeit der Theologie. Band III. Theologie und Metaphysik, Münster 2019 (Studien zur systematischen Theologie, Ethik und Philosophie, herausgegeben von Thomas Marschler und Thomas Schärtl, Band 13/3).
- GRILLMEIER, Aloys, Christ in Christian Tradition: From the Apostolic Age to Chalcedon (451), New York 1965.

- HAACK, Susan, "Is it True What They Say About Tarski?", in: Philosophy 51 (1976) 197, 323-336.
- HAACK, Susan, Evidence and Inquiry: Towards Reconstruction in Epistemology, Oxford Massachusetts 2000⁷ (reprinted).
- HACKING, Ian, "Imre Lakatos's Philosophy of Science", in: The British Journal for the Philosophy of Science 30 (1979) 381-402.
- HACOHEN, Malachi Haim, "The Young Popper, 1902-1937: History, Politics and Philosophy in Interwar Vienna", in: Shearmur, Jeremy/Stokes, Geoffrey (eds.), The Cambridge Companion to Popper, New York 2016, 30-68.
- HAMMING, Richard W., "The Unreasonable Effectiveness of Mathematics", in: The American Mathematical Monthly 87 (1980) 81-90.
- HANSSON, Sven Ove, "Defining Pseudoscience and Science", in: Pigliucci, Massimo/Maarten, Boudry (eds.), Philosophy of Pseudoscience: Reconsidering the demarcation problem, Chicago London 2013, 61-77.
- HEISENBERG, Werner, The Physical Principles of the Quantum Theory, translated into English by Karl Eckart and Frank C. Hoyt, New York 1949.
- HEISENBERG, Werner, "The Representation of Nature in Contemporary Physics", in: Daedalus 87 (1958) 95-108.
- HEISENBERG, Werner, "Tradition in Science", in: Science and Public Affairs (1973) 4-10, in: http://web.a.ebscohost.com.emedien.ub.uni-muenchen.de/ehost/pdfviewer/pdfviewer?vid=0&sid=a6b4d5b0-7397-4f6f-abaa-ebffe73cf258%40sdc-v-sessmgr01 (visited on July 18th 2019).
- HERMS, Eilert, "Unfehlbarkeit: Fundamentaltheologisch", in: Betz, Hans Dieter u.a. (Hrsg.), RGG⁴. Religion in Geschichte und Gegenwart: Handwörterbuch für Theologie und Religionswissenschaft. Vierte, völlig neu bearbeitete Auflage, Tübingen 2005 (=Band 8), 731-732.
- HESS, Paul M.J./ALLEN, Paul L., Catholicism and Science, Westport London 2008.
- HILGEVOORD, Jan/UFFINK, Jos, "The Uncertainty Principle", in: Zalta, Edward N. (ed.), The Stanford Encyclopedia of Philosophy (Winter 2016 Edition), in: https://plato.stanford.edu/archives/win2016/entries/qt-uncertainty (visited on March 3rd 2020).

- HOHENSEE, Michael A./CHU, Steven/PETERS, Achim/MÜLLER, Holger, "Equivalence Principle and Gravitational Redshift", in: arXiv:1102.4362v2 [gr-qc] 7 Apr 2011.
- HÖHN, Hans-Joachim, "Das Lehramt der Theologie und die Theologie des Lehramtes: Warum es dem Glauben dient, sich der Vernunft auszusetzen", in: Benjamin Leven (Hrsg.), Unabhängige Theologie: Gefahr für Glaube und Kirche? Freiburg Basel Wien 2016, 179-198.
- HOLTON, Gerald, "Mach, Einstein, and the Search for Reality", in: Daedalus, Historical Population Studies, 97 (1968) 636-673.
- T'HOOFT, Gerardus, In Search of the Ultimate Building Blocks, New York 1997.
- HOSSENFELDER, Sabine, Lost in Math: How Beauty Leads Physics Astray, New York 2018.
- HOYNINGEN-HUENE, Paul, Systematicity: The Nature of Science, Oxford 2013.
- HUGHES, Brian W., Saving Wisdom: Theology in the Christian University, Eugene 2011.
- HUME, David, A Treatise of Human Nature. A critical Edition, edited by David F. Norton and Mary J. Norton, Volume 1: Texts, Oxford 2007.
- HUME, David, An Enquiry Concerning Human Understanding and Other Writings, edited by Stephen Buckle, New York 2007.
- International Theological Commission, "Theology Today: Perspective, Principles and Criteria", in: http://www.vatican.va/roman_curia/congregations/cfaith/cti_documents/rc_cti_doc_20111129_teologia-oggi_en.html (visited on June 19th 2019).
- IRZIK, Gurol/Nola, Robert, "New Directions for Nature of Science Research", in: Matthews, Michael R. (ed.), International Handbook of Research in History, Philosophy and Science Teaching, Dordrecht 2014, 999-1021.
- JACOVLJEVIĆ, Dragan, "Führt der kritische Rationalismus zu einer Ablehnung der Religion?
 Zu den Thesen Hans Alberts", in: Münchner Theologische Zeitschrift 70 (2019) 158-172.
- JACOVLJEVIĆ, Dragan, "Karl Poppers Auffassungen über Religion und den Glauben an Gott", in: Franco, Giuseppe (Hrsg.), Handbuch Karl Popper, Wiesbaden 2019, 517-536.
- JARVIE, Ian C., The Republic of Science: The Emergence of Popper's Social View of Science 1935-1945, Amsterdam Atlanta 2001.

- JEDIN, Hubert, "Theologie und Lehramt", in: Bäumer, Remigius (Hrsg.), Lehramt und Theologie im 16. Jahrhundert, Münster 1976, 7-21.
- John Henry Cardinal NEWMAN, "Christianity and Physical Science: A Lecture read for the School of Medicines (November 1855)", in: John Henry Cardinal Newman, The Idea of a University, introduction by George N. Shuster, New York 1959, 390-412.
- John Henry Cardinal NEWMAN, An Essay on the Development of Christian Doctrine, Notre Dame 2016⁶.
- JORDAN, Peter N., "Legitimacy and the Field of Science and Religion", in: Zygon 55 (2020) 792-804.
- Joseph Kardinal RATZINGER, Kirche, Ökumene und Politik: neue Versuche zur Ekklesiologie, Einsiedeln 1987.
- KANT, Immanuel, Critique of Pure Reason, translated and edited by Paul Guyer and Allen W. Wood, New York 1998.
- KANT, Immanuel, Metaphysical Foundation of Natural Science, translated and edited by Michael Friedman, New York 2004.
- KANT, Immanuel, Prolegomena to Any Future Metaphysics that will be able to come forward as science, with selection from the Critique of Pure Reason, translated and edited by Gary Hatfield, Revised edition, New York 2004.
- KANTOROVICH, Aharon, "Philosophy of Science: From Justification to Explanation", in: The British Journal for the Philosophy of Science 39 (1988) 469-494.
- KANTOROVICH, Aharon, Scientific Discovery: Logic and Tinkering, New York 1993.
- KASPER, Walter, "Offenbarung Gottes in der Geschichte: Gotteswort im Menschenwort", in: Dreher, Bruno/Greinacher, Norbert/Klostermann, Ferdinand (Hrsg.), Handbuch der Verkündigung. Band I, Freiburg Basel Wien 1970, 53-96.
- KASPER, Walter, Theologie im Diskurs, Freiburg Basel Wien 2014 (Gesammelte Schriften, herausgegeben von George Augustin und Klaus Krämer, Band 6).
- KENNY, Anthony, What is Faith? Essays in the Philosophy of Religion, Oxford New York 1992.
- KEUTH, Herbert, "Karl Popper und Immanuel Kant", in: Franco, Giuseppe (Hrsg.), Handbuch Karl Popper, Wiesbaden 2019, 135-153.

- KNAUER, Peter/MENNEKES, Friedhelm, Katholische Theologie, Ratingen Kastellaun 1975.
- KREINER, Armin, Ende der Wahrheit: Zum Wahrheitsverständnis in Philosophie und Theologie, Freiburg Basel Wien 1992.
- KREINER, Armin, "Versöhnung ohne Kapitulation: Überlegungen zu George A. Lindbecks 'The Nature of Doctrine'", in: Catholica (1992) 307-321.
- KREINER, Armin, "Demonstratio Religiosa", in: Döring, Heinrich/Kreiner, Armin/Schmidt-Leukel, Perry (Hrsg.), Den Glauben Denken: Neue Wege der Fundamentaltheologie, Freiburg Basel Wien 1993, 9-48 (Questiones Disputatae 147).
- KREINER, Armin, "Entstehung und Zerfall der Synthese von Glauben und Vernunft", in: Grätzel, Stephan/Kreiner, Armin (Hrsg.), Religionsphilosophie: Lehrbuch Philosophie, unter Mitarbeiter von Ataollah Amin, Michael Gerhard, Christoph Nöthlings und Janssen Peters, Stuttgart 1999, 11-19.
- KREINER, Armin, Das Wahre Antlitz Gottes oder was wir meinen, wenn wir Gott sagen, Freiburg Basel Wien 2006.
- KREINER, Armin, "Zwischen Fallibilismus und Dogmatismus", in: Franco, Giuseppe (Hrsg.), Handbuch Karl Popper, Wiesbaden 2019, 679-694.
- KUHN, Thomas S., The Copernican Revolution: Planetary Astronomy in the Development of Western Thought, Cambridge 1970³.
- KUHN, Thomas S., "Logic of Discovery or Psychology of Research?", in: Schilpp, P. Arthur (ed.), The Philosophy of Karl Popper, La Salle Illinois 1974 (The Library of Living Philosophers, vol. XIV, Book II) 798-819.
- KUHN, Thomas S., The Structure of Scientific Revolutions, fourth edition, with an introductory Essay by Ian Hacking, Chicago London 2012.
- KÜNG, Hans, Christ sein, Freiburg Basel Wien 2016 (Sämtliche Werke, herausgegeben von Hans Küng und Stephan Schlensog, Band 8).
- KÜNG, Hans, Unfehlbar? Eine Anfrage, Zürich Einsiedeln Köln 1970.
- KÜNG, Hans, Unfehlbarkeit, Freiburg Basel Wien 2016 (Sämtliche Werke, herausgegeben von Hans Küng und Stephan Schlensog, Band 5)

- LAKATOS, Imre, "Popper on Demarcation and Induction", in: Schilpp, P. Arthur (ed.), The Philosophy of Karl Popper, La Salle Illinois 1974 (The Library of Living Philosophers, vol. XIV, Book I) 241-273
- LAKATOS, Imre, The Methodology of Scientific Research Programmes. Philosophical Papers Vol. I, Cambridge [et al.] 1978.
- LAKATOS, Imre/FEYERABEND, Paul, For and Against Method: Including Lakatos' Lectures on Scientific Method and the Lakatos-Feyerabend Correspondence, edited and with an Introduction by Matteo Motterlini, Chicago London 1999.
- LANG, Albert, Die theologische Prinzipienlehre der mittelalterlichen Scholastik, Freiburg Basel Wien 1964.
- LATOURELLE, René, Teologia: Scienza della salvezza, Assisi 20058.
- LAUDAN, Larry, "The Demise of The Demarcation Problem", in: Cohen, Robert S/Laudan, Larry (eds.), Physics, Philosophy and Psychoanalysis: Essays in Honor of Adolf Grünbaum, Dordrecht Boston Lancaster 1983, 111-127.
- LAUDAN, Larry, Beyond Positivism and Relativism: Theory, Method, and Evidence, Colorado Oxford 1996.
- LEIBOLD, Gerhard, "Theologie als Wissenschaft", in Langthaler, Rudolf (Hrsg.), Theologie als Wissenschaft: Ein Linzer Symposium, Frankfurt am Main 2000, 39-50.
- LEPLIN, Jarrett, A Novel Defense of Scientific Realism, New York 1997.
- LEVEN, Benjamin (Hrsg.), Unabhängige Theologie: Gefahr für Glaube und Kirche? Freiburg
 Basel Wien 2016.
- LINDBECK, George A., The Nature of Doctrine: Religion and Theology in a Postliberal Age, Philadelphia 1984.
- LONERGAN, Bernard, Method in Theology, London 1972.
- LONERGAN, Bernard, Insight: A Study of Human Understanding. Collected Works of Bernard Lonergan, edited by Frederick E. Crowe and Robert M. Doran, Toronto 2005⁵.
- LYOTARD, Jean-François, The Postmodern Condition: A Report on Knowledge, translation from the French by Geoff Bennington and Brian Massumi, foreword by Fredric Jameson, Minneapolis 1984.
- MACQUARRIE, John, Principles of Christian Theology, London 1966.

- MAHNER, Martin, "Science and Pseudoscience: How to Demarcate After the (Alleged) Demise of the Demarcation Problem", in: Pigliucci, Massimo/Maarten, Boudry (eds.), Philosophy of Pseudoscience: Reconsidering the demarcation problem, Chicago London 2013, 29-43.
- MALI, Joseph, "Science, Tradition, and The Science of Tradition", in: Science in Context 3 (1989) 143-173, in: https://www.cambridge.org/core/services/aop-cambridge-core/content/view/S0269889700000752 (visited on Oct 15th 2019).
- MANTON, Nicholas/MEE, Nicholas, The Physical World: An Inspirational Tour of Fundamental Physics, New York 2017.
- MARTINI-BETTÒLO, Giovanni Battista, Discourses of the Popes from Pius XI to John Paul II to the Pontifical Academy of Sciences 1936-1986, Vatican 1986.
- MAXWELL, Grover, "Corroboration without Demarcation", in: Schillp, P. Arthur (ed.), The Philosophy of Karl Popper, La Salle Illinois 1974 (The Library of Living Philosophers, vol. XIV, Book I) 292-321.
- MAXWELL, Nicholas, "Popper's Paradoxical Pursuit of Natural Philosophy", in: Shearmur, Jeremy/Stokes, Geoffrey (eds.), The Cambridge Companion to Popper, New York 2016, 170-207.
- MAYO, Deborah G., Error and the Growth of Experimental Knowledge, Chicago London 1996.
- MAYR, Ernst, What Evolution is, London 2002.
- MACINTYRE, Alasdair, Whose Justice? Which Rationality? London 1988.
- MCBRIEN, Richard P., [no title], in: Kirvan, John J. (ed.), The Infallibility Debate, New York 1971, 35-65.
- MCCAIN, Kevin, "Explanation and The Nature of Scientific Knowledge", in: Science and Education 24 (2015) 827-854.
- McDougall, Joy Ann, "Sin", in: McFarland, Ian A./Fergusson, David A.S./Kilby, Karen/ Torrance, Ian R. (eds.), The Cambridge Dictionary of Christian Theology, Cambridge 2011, 473-475.
- McGINN, Colin, Problems in Philosophy: The limits of inquiry, Oxford 1993.
- MCKEON, Richard, "Philosophy and Theology, History and Science in the Thought of Bonaventura and Thomas Aquinas", in: The Journal of Religion 58 (1978) Supplement

- [Celebrating the Medieval Heritage: A Colloquy on the Thought of Aquinas and Bonaventure].
- MCMULLIN, Ernan, "The Fertility of Theory and the Unit for Appraisal in Science", in: Cohen, Robert S/Feyerabend, Paul K/Wartofsky, Marx W (eds.), Essays in Memory of Imre Lakatos, Dordrecht Boston 1976 (Boston Studies in the Philosophy of Science, Volume XXXIX) 395-432.
- MCMULLIN, Ernan, "Philosophy of Science and its Rational Reconstructions", in: Radnitzky, Gerard/Andersson, Gunnar (eds.), Progress and Rationality in Science, Dordrecht Boston London 1978 (Boston Studies in the Philosophy of Science, Volume LVIII) 221-252.
- MCMULLIN, Ernan, "Structural Explanation", in: American Philosophical Quarterly 15 (1978) 139-147.
- MCMULLIN, Ernan, "How Should Cosmology Relate to Theology?", in: Peacocke, Arthur R (ed.), The Sciences and Theology in the Twentieth Century, Indiana 1981, 17-57.
- MCMULLIN, Ernan, "A Case for Scientific Realism", in: Leplin, Jarrett (ed.), Scientific Realism, Barkeley Los Angeles London 1984, 8-40.
- MCMULLIN, Ernan, "Realism in Theology and Science: A Response to Peacocke", in: Religion and Intellectual Life 2 (1985) 39-47.
- MCMULLIN, Ernan, "The Shaping of Scientific Rationality: Construction and Constraint", in: McMullin, Ernan (ed.), Construction and Constraint: The Shaping of Scientific Rationality, Indiana 1988, 1-47.
- MCMULLIN, Ernan, "Values in Science", in: Zygon 47 (2012) 686-709.
- MCMULLIN, Ernan, "The Inference That Makes Science", in: Zygon 48 (2013) 143-191.
- MEßNER, Reinhold Oswald, "Über die Möglichkeit und Wünschbarkeit eines Pankritischen Katholischen Dogmenglaubens", in: Oldemeyer, Ernst (Hrsg.), Die Philosophie und die Wissenschaften: Simon Moser zum 65 Geburtstag, Meisenheim am Glan 1967, 206-227.
- MILLER, David, "Popper's Qualitative Theory of Verisimilitude", in: The British Journal for the Philosophy of Science 25 (1974) 167-177.
- MILLER, David, Critical Rationalism: A Restatement and Defence, Chicago LaSalle, Illinois 1994.

- MOODY, Todd C., "Progress in Philosophy", in: American Philosophical Quarterly 23 (1986) 35-46.
- MORRIS, Henry M., The Genesis Record: A Scientific and Devotional Commentary on the Book of Beginning, Foreword by Arnold D. Ehlert, Michigan 1980⁵.
- MURPHY, Nancey, Theology in the Age of Scientific Reasoning, Ithaca London 1990.
- MUSGRAVE, Alan, "Logical versus Historical Theories of Confirmation", in: The British Journal for the Philosophy of Science 25 (1974) 1-23.
- MUSGRAVE, Alan, Common Sense, Science and Scepticism: A historical introduction to the theory of knowledge, New York 1999 (reprinted).
- MUSGRAVE, Alan, "Metaphysics and Realism", in: Shearmur, Jeremy/Stokes, Geoffrey (eds.), The Cambridge Companion to Popper, New York 2016, 208-229.
- MUSGRAVE, Alan/PIGDEN, Charles, "Imre Lakatos", in: Zalta, Edward N. (ed.), The Stanford Encyclopedia of Philosophy (Winter 2016 Edition), in: https://plato.stanford.edu/entries/lakatos/#WorkLaka (visited on 20th October 2020).
- NAGEL, Ernest, The Structure of Science: Problems in the logic of scientific explanation, London 1971.
- NAGEL, Thomas, The View From Nowhere, Oxford 1986.
- NEWTON, Isaac, The Principia: Mathematical Principles of Natural Philosophy, a new translation by I. Bernard Cohen and Anne Whitman, assisted by Julia Budenz, Berkeley Los Angeles London 1999.
- NICHOLS, Aidan, The Shape of Catholic Theology, Edinburg 1991.
- NICKLES, Thomas, "Remarks on the Use of History as Evidence", in: Synthese 69 (1986) 253-266.
- NICKLES, Thomas, "Philosophy of Science and History of Science", in: Osiris 10, Constructing Knowledge in the History of Science (1995) 138-163.
- NICKLES, Thomas, "The Problem of Demarcation: History and Future", in: Pigliucci, Massimo/Boudry, Massimo (eds.), Philosophy of Pseudoscience: Reconsidering the Demarcation Problem, Chicago London 2013, 101-120.
- PANNENBERG, Wolfhart, Wissenschaftstheorie und Theologie, Frankfurt am Main 1987.
- PELIKAN, Jaroslav, "Theology and Change", in: Cross Currents 19, Theology in the City of Man (1969) 375-384.

- PELIKAN, Jaroslav, The Christian Tradition: A History of the Development of Doctrine, vol.1, The Emergence of the Catholic Tradition, Chicago London 1971.
- PELIKAN, Jaroslav, Historical Theology: Continuity and Change in Christian Doctrine, Oregon 1971.
- PENROSE, Roger, The Road to Reality: A Complete Guide to the Laws of the Universe, New York 2007.
- PENROSE, Roger, Fashion, Faith and Fantasy in the New Physics of the Universe, New Jersey Oxfordshire 2016.
- PIGLIUCCI, Massimo, "The Demarcation Problem: A (belated) response to Laudan", in: Pigliucci, Massimo/Maarten, Boudry (eds.), Philosophy of Pseudoscience: Reconsidering the demarcation problem, Chicago London 2013, 9-28.
- PLANCK, Max, Scientific Autobiography and Other Papers, translated from German by Frank Gaynor, London 1950.
- PLATO, Republic, translated with introduction by A.D. Lindsay, London 1958.
- POLANYI, Michael, Science, Faith and Society, Chicago 1966².
- POLANYI, Michael, "Science and Reality", in: The British Journal for The Philosophy of Science 18 (1967) 177-196.
- POLANYI, Michael, Personal Knowledge: towards a post-critical philosophy, London 1983.
- POLCHINSKI, Joseph, String Theory Volume One: An Introduction to Bosonic String, New York 2005³.
- POPPER, Karl, The Poverty of Historicism, New York 1961³.
- POPPER, Karl, Conjectures and Refutations: The Growth of Scientific Knowledge, London 1969³.
- POPPER, Karl, "Normal Science and its Danger", in: Lakatos, Imre/ Musgrave, Alan (eds.), Criticism and the Growth of Knowledge: Proceedings of the International Colloquium in the Philosophy of Science, London, 1965, Vol. 4., London New York 1970, 51-58.
- POPPER, Karl, "Intellectual Autobiography", in: Schilpp, P. Arthur (ed.), The Philosophy of Karl Popper, La Salle Illinois 1974 (The Library of Living Philosophers, vol. XIV, Book I) 3-181.

- POPPER, Karl, "Replies to my Critics", in: Schilpp, P. Arthur (ed.), The Philosophy of Karl Popper, La Salle Illinois 1974 (The Library of Living Philosophers, vol. XIV, Book II) 961-1197.
- POPPER, Karl, Objective Knowledge: An Evolutionary Approach, London 1974² (reprinted, with correction).
- POPPER, Karl, "Is it True What She Says About Tarski?", in: Philosophy 54 (1979) 98.
- POPPER, Karl, Realism and The Aim of Science: From the Postscript to the Logic of Scientific Discovery (Edited by W. W. Bartley, III), London New York 1999 (with correction).
- POPPER, Karl, Das offene Universum: Ein Argument für den Indeterminismus, aus dem Postskript zur Logik der Forschung herausgegeben von W.W.Bartley III, übersetzt von Eva Schiffer, Tübingen 2001 (Gesammelte Werke in deutscher Sprache, 8).
- POPPER, Karl, Die Quantentheorie und das Schisma der Physik, aus dem Postskript zur Logik der Forschung herausgegeben von W.W. Bartley III, übersetzt von Hans-Joachim Niemann, Tübingen 2001 (Gesammelte Werke in deutscher Sprache, 9).
- POPPER, Karl, The Logic of Scientific Discovery, London New York 2005.
- POPPER, Karl, After the Open Society: Selected Social and Political Writings, edited by Jeremy Shearmur and Piers Norris Turner, London New York 2008.
- POPPER, Karl, The Two Fundamental Problems of the Theory of Knowledge, edited by Troels Eggers Hansen and translated by Andreas Pickle, London New York 2009.
- POPPER, Karl, The Open Society and Its Enemies, New One-Volume Edition, with a new introduction by Alan Ryan and an essay by E.H. Gombrich, New Jersey 2013.
- POPPER, Karl, Erkenntnis und Evolution: Zur Verteidigung von Wissenschaft und Rationalität, Tübingen 2015 (Gesammelte Werke in deutscher Sprache, Band 13).
- POPPER, Karl R/ECCLES, John C., The Self and Its Brain, Berlin New York London 1977.
- POTTMEYER, Herman Josef, "Normen, Kriterien und Strukturen der Überlieferung", in: Kern, Walter/Pottmeyer, Hermann J/Seckler, Max (Hrsg.), Handbuch der Fundamentaltheologie 4: Traktat Theologische Erkenntnislehre. Schlussteil Reflexion auf Fundamentaltheologie, Freiburg Basel Wien 1988, 124-152.
- PSILLOS, Stathis, Scientific Realism: How science tracts truth, London New York 1999.

- PUTNAM, Hilary, "The 'Corroboration' of Theories", in: Schilpp, P. Arthur (ed.), The Philosophy of Karl Popper, La Salle Illinois 1974 (The Library of Living Philosophers, vol. XIV, Book I) 221-240.
- QUIRINUS, Letters from Rome on the Council, London (et al.) 1870.
- RAHNER, Karl, "Die Theologie im interdisziplinären Gespräch der Wissenschaften", in: Rahner, Karl, Schriften zur Theologie. Band X, Köln 1972, 89-103.
- RAHNER, Karl, "Disput um das kirchliche Lehramt: Zum Problem nicht-unfehlbarer kirchlicher Lehrentscheidungen", in: Stimmen der Zeit 185 (1970) 73-81.
- RAHNER, Karl, "Theologie. II. Zum Wesen der Theologie", in: Rahner, Karl u.a. (Hrsg.), Sacramentum Mundi: Theologisches Lexikon für die Praxis. Vierter Band: Qumran bis Zukunft, Freiburg Basel Wien 1969, 860-874.
- RAHNER, Karl, "Über die Möglichkeit des Glaubens heute", in: Rahner, Karl, Schriften zur Theologie. Band X, neuere Schriften, Köln 1962, 11-32.
- RAHNER, Karl, "Zum Verhältnis zwischen Theologie und heutigen Wissenschaften", in: Rahner, Karl, Schriften zur Theologie. Band X, Köln 1972, 104-112.
- REEVES, Josh, Against Methodology in Science and Religion: Recent Debates on Rationality and Theology, Oxford 2019.
- REEVES, Josh, "Methodology in Science and Religion: A Reply to Critics", in: Zygon 55 (2020) 824-836.
- RESCHER, Nicholas, Scientific Explanation, London 1970.
- RESCHER, Nicholas, Philosophical Progress and Other Philosophical Studies, Berlin 2014.
- ROVELLI, Carlo, Reality Is Not What It Seems: The Journey to Quantum Gravity (orig. *La realtà non è come ci appare*), London 2017.
- RUDOLPH, John L., "Reconsidering the 'nature of science' as a curriculum component", in: Journal of Curriculum Studies 32 (2000) 403–419.
- RUSE, Michael, "Response to the Commentary: Pro Judice", in: Curd, Martin/Cover, Jan A (eds.), Philosophy of Science: The Central Issues, New York London 1998, 54-61 (this article appeared for the first time in: Science, Technology and Human Values 7 (1982) 19-23).
- RUSSELL, Bertrand, "My Mental Development", in: Schilpp, Paul A. (ed.), The Philosophy of Bertrand Russell, New York 1951³ (The Library of Living Philosophers) 3-20.

- SCHAFF, Philip/WACE, Henry (eds.), A Select Library of the Nicene and Post-Nicene Fathers of The Christian Church, second series, vol. XI. Sulpitius Severus, Vincent of Lérins, John Cassian, Edinburgh Michigan 1978.
- SCHMITZ, Heribert, "Kirchliches Recht für staatliche Katholisch-Theologische Fakultäten. Akkomodation kirchlichen Hochschulrechts an das deutsche Verhältnis", in: Theologische Quartalschrift 167 (1987) 25-40.
- SCHMITZ, Josef, Offenbarung, Düsseldorf 1988.
- SCHUPP, Franz, Auf dem Weg zu einer kritischen Theologie, Freiburg Basel Wien 1974.
- SCHWÖBEL, Christoph "Theologie", in: Betz, Hans Dieter u.a. (Hrsg.), RGG⁴. Religion in Geschichte und Gegenwart: Handwörterbuch für Theologie und Religionswissenschaft. Vierte, völlig neu bearbeitete Auflage, Tübingen 2005 (=Band 8), 255-306.
- SECKLER, Max, "Theologie als Glaubenswissenschaft", in: Seckler, Max, Glaubenswissenschaft und Glaube: Beiträge zur Fundamentaltheologie und zur Katholischen Tübinger Schule. Ausgewählt und herausgegeben von Michael Kessler, Winfried Werner und Walter Fürst, Band I, Tübingen 2013, 3-74.
- SEEWALD, Michael, Dogma im Wandel: Wie Glaubenslehren sich entwickeln, Freiburg Basel Wien 2018.
- SMEDSLUND, Jan, "Why psychology cannot be an empirical science", in: Integrative Psychological and Behavioral Science 50 (2016) 185–195.
- SMITH, Peter, Realism and The Progress of Science, London (et all.) 2009 (digitally printed version).
- SMOLIN, Lee, The Roads to Quantum Gravity, New York 2001.
- SMOLIN, Lee, The Trouble with Physics: The Rise of String Theory, the Fall of the Science and What Comes Next, Boston 2006.
- SOBER, Elliot/WILSON, David S., Unto Others: The Evolution and Psychology of Unselfish Behavior, Cambridge [et al.] 1998.
- SOKAL, Alan/BRICMONT, Jean, Fashionable Nonsense: Postmodern Intellectuals' Abuse of Science, New York 1998.
- SOLOMON, Robert C., "Emotions and Choice" (1973), in: Solomon, Robert C., Not Passion's Slave: Emotions and Choice, New York 2007, 9-25.

- STRIET, Magnus, "Zu wem sollen wir gehen? Über die prekäre Situation wissenschaftlicher Theologie", in: Leven, Benjamin (Hrsg.), Unabhängige Theologie: Gefahr für Glaube und Kirche?, Freiburg Basel Wien 2016, 223-233.
- SUSSKIND, Leonard, The Cosmic Landscape: String Theory and The Illusion of Intelligent Design, New York Boston London 2006.
- SYLL, Lars Pålsson, "Why game theory never will be anything but a footnote in the history of social science", in: real-world economics review 83 (2018), 45-64 (in: http://www.paecon.net/PAEReview/issue83/whole83.pdf [visited on September 26th 2021]).
- TARSKI, Alfred, Logic, Semantics, Metamathematics: Papers from 1923 to 1938, translated by J.H. Woodger, second edition edited and introduced by John Corcoran, Indiana 1983.
- TEGMARK, Max, "Shut up and calculate", in: arXiv:0704.4024 [physics.pop-ph] 25 September 2007.
- TETENS, Holm, Wissenschaftstheorie: Eine Einführung, München 2013.
- THOMAS AQUINAS, The Treatise on the Divine Nature, Summa Theologiae I 1-13, translated, with Commentary, by Brian Shanley, O.P., introduction by Robert Pasnau, Indianapolis Cambridge 2006.
- TIERNEY, Brien, Origins of Papal Infallibility. 1150 1350. A study on the Concepts of Infallibility, Sovereignty and Tradition in the Middle Ages, Leiden 1972.
- TRACY, David, The Analogical Imagination: Christian theology and the Culture of Pluralism, London 1981.
- TRACY, David, "Christianity in the Wider Context: Demands and Transformations", in: Schweiker, William/Anderson, Per M. (eds.), Worldviews and Warrants: Plurality and Authority in Theology, Boston 1987, 1-15.
- TUTOR, Juan Ignacio Gómez, "Die Interpretation des Kantschen Apriorismus in Poppers Frühwerks", in: Studi Kantiani 2 (1989), 97-116.
- VAN DER VEN, Johannes A., Practical Theology: An Empirical Approach, Kampen 1993.
- VAN FRAASSEN, Bas C., Laws and Symmetry, Oxford 1989.
- VAN HUYSSTEEN, J. Wentzel, The Shape of Rationality: Toward interdisciplinarity in theology and science, Michigan 1999.

- VAN HUYSSTEEN, J. Wentzel, Alone in the World? Human Uniqueness in Science and Theology. The Gifford Lectures, the university of Edinburg, Spring 2004, Göttingen 2006.
- VAN INWAGEN, Peter, "Freedom to break the law", in: Midwest Studies in Philosophy 28 (2004) 334-350.
- VON DÖLLINGER, Ignaz, A Letter to the Archbishop of Munich. In explanation of his position touching the dogma of papal infallibility, London 1871.
- VON STOSCH, Klaus, Komparative Theologie als Wegweiser in der Welt der Religionen, Paderborn München Wien Zürich 2012 (Beiträge zur Komparativen Theologie. Hrsg. von Klaus von Stosch. Bd. 6).
- Vos, Antonie, The Theology of John Duns Scotus, Leiden Boston 2018.
- WAGNER, Hans, "Poppers Deutung von Kants Kritik der reinen Vernunft", in: Kant-Studien Band 67 (1976) 425-441.
- WALDENFELS, Hans, Contextual Fundamental Theology, translated by Susan Johnson, Paderborn 2018.
- WARD, Keith, Religion and Revelation: A Theology of Revelation in the World's Religions, Oxford 1994.
- WEINBERG, Steven, To Explain the World: The Discovery of Modern Science, London 2016.
- WENDEL, Hans Jürgen, "Das Abgrenzungskriterium: Das Problem der Bestimmung wissenschaftlicher Erkenntnis", in: Franco, Giuseppe (Hrsg.), Handbuch Karl Popper, Wiesbaden 2019, 263-283.
- WIEDERKEHR, Dietrich, "Das Prinzip Überlieferung", in: Kern, Walter/Pottmeyer, Hermann Josef/Seckler, Max (Hrsg.), Handbuch der Fundamentaltheologie 4: Traktat Theologische Erkenntnislehre. Schlussteil Reflexion auf Fundamentaltheologie, Freiburg Basel Wien 1988, 100-123.
- WILCZEK, Frank, A Beautiful Question: Finding Nature's Deep Design, London 2015.
- WILSON, David C., A Guide to Good Reasoning: Cultivating Intellectual Virtues, Minneapolis 2020.
- WOIT, Peter, Not Even Wrong: The Failure of String Theory and The Search for Unity in Physical Law, New York 2006.

- WOLTERSTORFF, Nicholas, "How Philosophical Theology Became Possible within the Analytic Tradition of Philosophy", in: Crisp, Oliver D./Rea, Michael C. (eds.), Analytic Theology: New Essays in the Philosophy of Theology, Oxford 2009, 155-168.
- WOODWARD, James, Making Things happen: A Theory of Causal Explanation, New York 2003.
- WORRALL, John, "Theory-Confirmation and History", in: Cheyne, Colin/Worrall, John (eds.), Rationality and Reality: Conversations with Alan Musgrave, Dordrecht 2006, 31-61 (Studies in History and Philosophy of Science, vol. 20).