

# Truth and commitment in theology and science: An appraisal of Wolfhart Pannenberg's perspective

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## ABSTRACT

Truth and commitment in theology and science: An appraisal of Wolfhart Pannenberg's perspective

The *Leitmotiv* of Wolfhart Pannenberg's work has always been his conviction that the Christian faith, and especially theology as a reflection on this faith, has a universal credibility in our age. This essay approaches this issue and sets forth a thesis in terms of the rationality of theology and of science. The shaping of rationality in both theology and science eventually forms the framework for dealing with the philosophical problems of truth, objectivity and commitment in Pannenberg's impressive and ever expanding body of thought.

In a very specific sense the *Leitmotiv* of Wolfhart Pannenberg's work has always been his conviction that the Christian Faith, and especially theology as a reflection on this faith, has a universal credibility in our age. Any discussion on issues regarding theology and science in Pannenberg's thought will therefore have to deal with this central theme and driving force behind his work.

This essay will approach this issue and set forth a thesis in terms of the problem of the rationality of theology and of science. The shaping of rationality in both theology and science will therefore form the framework for dealing with the philosophical problems of truth, objectivity and commitment in Pannenberg's

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impressive and ever expanding body of thought. I am convinced that only by clarifying this central epistemological perspective, can one eventually deal with the way Pannenberg relates theological reflection to the other sciences. Pannenberg's views on truth, on justification and objectivity - as reflected especially in his monumental work *Wissenschaftstheorie und Theologie* (1973) - is not only important but also often sadly lacking from many discussions concerning his perspective on the significance of the sciences for theology as such.

I therefore want to deal with Pannenberg's view on truth and justification in theology and then from that distil a model of rationality typifying his work. This obviously will have implications for his views on objectivity, on the relationship between theology and science, but also for progress in theology and science. With this, hopefully, I would also - at the same time - have fulfilled the complex task of having analyzed 'what it might mean for theology to demonstrate that the data as described by the sciences are provisional versions of objective reality and that the data themselves contain a further and theologically relevant dimension'.

What Pannenberg says regarding the data provided by a nontheological anthropology (1985: 18), is certainly also true of the data provided by contemporary nontheological science: Theologians should not indiscriminately accept the data provided by science and make these the basis for their own work, but rather must appropriate them in a critical way. For me this 'critical appropriation' means not asking the wrong questions, i e, where science ends and where theology begins (cf Wicken 1988: 49). It does, however, imply an analysis - from a philosophy of science point of view - of models of rationality that determine the way both theology and science works and whether these two might perhaps share a common or analogous epistemology on the level of intellectual reflection. Only in this sense could I personally understand what it might mean to lay theological claim to data described by the sciences (cf Pannenberg 1985: 19f).

Pannenberg has of course always and correctly maintained that a credible doctrine of God as creator must take into account scientific understandings of the world (cf Pannenberg 1988: 3f). Theological talk about God as creator indeed remains empty if it cannot be related to a scientific description of nature. By this statement alone the rationality of science becomes directly relevant for the rationality of theology. Pannenberg of course senses this when he states that theological assertions concerning the world, although not formulated on the same level as scientific hypotheses of natural law, do, however, have to be related to scientific reasoning as such (1988: 7). Whether this is possible or not, is what this essay is all about.

## PHILOSOPHY OF SCIENCE AND THE EPISTEMOLOGICAL CLAIMS OF THEOLOGY

In the light of the problem of rationality in theology and in science, it is quite clear that no theologian dealing with these issues can evade the question of the epistemological status and validity of theological statements in terms of contemporary philosophy of science. And yet, although there have always been theologians who questioned the nature of theological thought, only few contemporary ones has purposefully taken up the challenge of justifying theology within the wider context of philosophy of science.

In the context of current discussions of these problems the initiative was undoubtedly taken by Wolfhart Pannenberg who have opted, from a concern with problems specifically raised by the philosophy of science, for a patently argumentative theology (cf Van Huyssteen 1970) rather than any form of *dogmatic axiomatic theology* based on the preconceived and unquestionable certainties so typical of positivism. Pannenberg has always been remarkably outspoken about systematic theological models in which, given their total neglect of the critical question of theorizing in theology, a particular concept of revelation may so uncritically and ideologically assume an authoritarian character that it consciously rejects any critical examination or justification.

The fundamental reasons for his broad approach may be found in the earliest development of his thought, long before his well-known book on the nature of theological science (Pannenberg 1973). In *Die Krise des Schriftprinzips* (1967: 11-12) Pannenberg already makes the point that systematic theology is always shaped by the tension between two seemingly divergent trends: on the one hand, theology's commitment to its religious source, namely God as revealed in Jesus Christ and testified to by Holy Scripture; on the other, theology's assumption of a universal character transcending all specific themes in its striving towards truth itself, precisely because it would make statements on God. This universality emanates from the fact that reality, in its all-encompassing totality as God's creation, is not only dependent upon and committed to God but is in its profoundest sense incomprehensible without God (Pannenberg 1976,11).

In Pannenberg's view it goes without saying that theology is, ultimately, fully and most profoundly concerned with God's revelation in Jesus Christ. Precisely as God's revelation, however, that revelation can be properly understood only if we realize that all knowledge and anything we might regard as 'true' or as 'the truth' must have some bearing on that revelation. As the Creator, God is not only creatively responsible for everything in our reality, but is greater than our present, created reality. Therefore, any aspect of that reality is correctly - albeit provisionally -

understood only in relation to God's final revelation.

Given the universality of the concept of God, as logically implied in the concept of creation, Pannenberg has consistently maintained that systematic theology can never fall back on a *special* and epistemologically isolated, *revelationist position*. It has therefore always been clear to him that theology could never exist purely as a 'positive church theology', isolated from the other sciences. Although such a *ghetto theology* might ensure an unproblematic co-existence with philosophy of science and the other sciences, it would have a radical impact on the universality implicit in the concept of God.

In the broad spectrum of theological disciplines, systematic theology, in particular, is directly concerned with this universal perspective. As such, it is committed to facing the problem of rationality. This not only raises the question of the broad fundamentals that theology shares with other sciences and of what constitutes the unique character of theological reflection; systematic theology also becomes the area in which theology itself must be able to account critically for its own credibility and for the validity of its conceptual paradigm.

Specifically for the sake of the truth of the Christian message, systematic theology must take up the task of formulating and founding its concept of science in a confrontation with the perceptions of contemporary philosophy of science, and thus with alternative conceptions of the nature of science. For the sake of its intellectual integrity, theology can on no creditable grounds claim *privilege* in its pursuit of truth. If it did try to claim such a privileged position, it would be able to do so only by founding its thematics on arbitrary, irrational, or authoritarian grounds - a tactic that would in turn become the target of renewed criticism of theology itself.

In his debate with philosophy of science, Wolfhart Pannenberg (1973: 28ff) not only scrutinizes logical positivism and its pervasive effect on diverse scientific disciplines but also pointedly rejects both the positivist unitary ideal for all sciences, as well as the positivist influence that causes science to be constantly oriented and formulated on the model of the natural or 'mature' sciences.

Ultimately, however, Pannenberg's relationship with critical rationalism and with Kuhn's paradigm theory will be crucial to an evaluation of his views on theology and science. Although critical rationalism undoubtedly had a decisive influence on his thought and he consistently - as will become clear - reveals links with Popper's thought, it is Thomas Kuhn's paradigm theory, in particular, that has guided him in the later phase of his enquiry. In his reflections on the nature and identity of theology he sought to liberate systematic theology not only from the one-sided demands of a positivist concept of truth, but also from a too rigorous

falsification criterion of critical rationalism, precisely to leave room for scientific validity in theological statements and theories. Whether Pannenberg has in fact succeeded in doing so, and how these various elements of his thought are interrelated, will have to be closely examined.

First, Pannenberg (1973: 43) points out that Karl Popper, in his attempt to find a meaningful demarcation criterion that would transcend the one-sidedness of the positivist verifiability criterion, gave a central place to the falsifiability of theories in his model of the philosophy of science. In doing so, Popper was looking not merely for a criterion that would separate science and metaphysics, but also for a broad base on which the social sciences would be able to subject their hypotheses and theories to the falsification test.

Although Pannenberg (1973: 44ff), having outlined the well-known Bartley arguments, proceeds to discuss further themes from critical rationalism without coming back specifically to the demands of Bartley's pancritical rationalism, it is clear that he is very strongly concerned with Bartley's sharp criticism of theology, namely that it too readily falls back on an irrational and fideistic premise as a final base for argument. In an evaluation of Pannenberg's theoretical model we shall have to consider very critically to what extent he has in fact avoided having his own thought definitively structured by the critical rationalist model. The crucial question will be to what extent Bartley's demand for a *commitment to non-commitment* has perhaps determined Pannenberg's development of his own answer to the question of objectivity and truth in theology and science.

These problems will come to a head when we proceed, whilst examining the origin of theological statements, to ask critical questions about the role and function of the theologian's own conceptualized subjective *commitment*. At this stage we might formulate a central critical question to Pannenberg: how does he justify the role of the theologian's personal religious commitment in the process of theorizing in theology, and also in the way he eventually defines truth and objectivity in theology and science?

In a critical discussion of the possibility of justification in theology Pannenberg (1973: 53ff) examines in detail the main demands of critical rationalism. For our purposes - to determine not only the nature of the model of rationality Pannenberg adopts but also its origins - it is important to appreciate that Pannenberg follows Popper in his view that inductive reasoning and the principle of verification offer us no solutions to the question of scientific knowledge. A general rule is always applicable to an infinite number of instances: an infinity, however, of which only a limited number can be known at any given time. In Popper's view, therefore, generalizations can never claim absolute certainty, and for that reason the strict

verification of postulated general laws is also impossible.

The basic propositions that must now act as objective criteria in the process of scientific thought (and in terms of which falsification might be possible) must, however, be testable on an intersubjective level, according to the principles of critical rationalism. Any discussion of critical rationalism will show that, with Popper, the old positivist ideal of valuefree, objective knowledge has been turned into intersubjective correspondence. *Objectivity* thus becomes the characteristic of a certain group, realized by mutual criticism: a social matter that can no longer be founded purely on so-called a-theoretical, self-evident 'facts'.

In this sense, basic propositions are data accepted on the grounds of a group's decision or agreement and may therefore also be called *conventions* (Popper 1968: 106). The very objectivity operating here as a criterion is, however, dependent on the group that accepts it as objective, and would therefore also be subject to change.

Pannenberg (1973:56) makes the further point that the implications of this type of consideration make it very difficult to distinguish absolutely between scientific and metaphysical statements. In fact, if the concepts and language in which experiences are scientifically described are a matter of convention, there can be no compelling reasons for pre-excluding the concept of God from the exclusive circle of scientifically admissible statements. For Pannenberg then, it is clear that Popper's concept of the theory-ladenness of all observation, and his acknowledgement of the conventional nature of so-called objective statements, must ultimately lead to failure in his attempts to draw sharp distinctions between scientific and metaphysical statements. In Pannenberg's view, scientific statements are thus in themselves ultimately founded on general worldviews of a profoundly philosophical and/or religious nature.

This in itself implies, as Thomas S Kuhn was to demonstrate so clearly, that hypotheses cannot be empirically tested within the framework of theoretically neutral observations; that testing must form part of a process Kuhn calls *paradigm articulation*.

From a philosophy of science point of view I would put it as follows: the personal involvement of the scientist, and therefore of the paradigm from which he lives and works, always plays a role, not only in the so-called context of discovery but also in the context of justification.

This conclusion Pannenberg reached in his own fashion, and in my view correctly, as far as critical rationalism is concerned. This in fact also shows Pannenberg's (1973: 57-60) spiritual affinity with Thomas S Kuhn's thought. Kuhn (1970: 192) pointed out that even in the natural sciences the testing of hypotheses does not normally consist of direct attempts to falsify them but is, rather, a

comparison of the capacities of various theories for providing meaningful solutions to certain problems.

This clearly shows - for Wolfhart Pannenberg too - that the capacity for integrating and giving meaning to available data and thus providing solutions to puzzles, is the primary principle in the testing of both strictly scientific and theological hypotheses.

Therefore Pannenberg, partly under Kuhn's influence, opts for a rationality model that must transcend the bounds of critical rationalism to allow for a critical enquiry on a much wider front. Whether he thus succeeds in answering the question of the epistemological status and validity of theological statements, or in avoiding critical rationalistic co-determination of his own conceptual model, will now have to be examined briefly.

### **THEOLOGICAL STATEMENTS AS HYPOTHESES**

Pannenberg's debate with critical rationalism had a lasting impact on the evolution of his own thought regarding the nature of theological science. In particular, Bartley (1964: 215f) and Albert's (1968: 104ff) criticism of theology infuses his thinking on this theme. Albert's reproach that systematic theologians fall back too readily on a supposedly unique and esoteric epistemology as an ideological immunization against criticism, and Bartley's related reproach that theologians evade critical scientific questions by retreating to an irrational position of faith, ultimately become the focal points of Pannenberg's attempt to formulate a creditable theory of theology (cf Van Huyssteen 1988: 95ff).

This, together with Pannenberg's (1973: 266ff) rejection of Karl Barth's positivist revelatory response to the demands Heinrich Scholz had made of systematic theology, makes him reject out of hand any authoritarian axiomatic theology that uncritically takes its stand on prepostulated dogmatic certainties. Thus Pannenberg (1973: 271) could state that if the reality of God and His revelation or the liberating act of God through Jesus Christ is to function epistemologically as a pre-established datum in theological theorizing - and thus as a theological premise - theology can no longer be concerned with knowledge or science, but merely with the systematic description or exposition of what might be regarded as the 'true dogma' of 'proper doctrine' of a church.

If the premises of such a theology are finally exposed to criticism it is, ironically, its very conception of God and revelation that stands exposed as a subjective and arbitrary mental construct. Pannenberg rightly objects to any such reduction of the object of theology to the religious consciousness of the believer. A so-called direct theological premise in God and His revelation offers no escape from this problem.

From the above it becomes clear that for Pannenberg, creditable theological argument is possible only if one acknowledges that no theologian can formulate meaningful statements without being involved, somehow, with the epistemological question of criteria for truth. This is so because theological statements, too, attempt to be meaningful valid and comprehensible, and especially also lay a provisional claim to truth and reality-depiction.

This implies, however, that theological statements purport to be testable in principle, even if it does not imply that they must be confined to a specific form of testing (Pannenberg 1973: 277). For Pannenberg, then, the fact that theological statements claim to be true and therefore (logically) try to exclude untruth implies that such statements, too, must come within the ambit of rational criteria. And for Pannenberg the concept of hypothesis belongs in this context.

Pannenberg (1980: 171) sees hypotheses as only those assertions that, as statements on a particular issue, are distinguishable from the issue as such. The hypothetical nature of assertions implies the possibility that a given one may be true or false, and thus also the possibility of checking or testing. Pannenberg (1974: 31) maintains that logical positivism was quite correct on this point, except, of course in its one-sided restriction of examination to a particular type of test, namely that of sensory observation. In principle, however, it remains true that an assertion which cannot be tested, at least in principle, cannot be a valid assertion of something else.

Which brings us to Pannenberg's typical *realist* claims (in terms of the contemporary debate in philosophy of science): Theological statements, too - and even statements of faith - are not merely expressions of a certain religious commitment; they contain an *element of assertion*, reality depiction or reference, which is needed to make such a commitment possible. Even the simple assertion *I believe* makes sense only if there is Someone to believe in. In my view Pannenberg is therefore justified in concluding that, in this sense, all statements of faith have a *cognitive core*.

Given the logical implications of assertions, the questions philosophy of science asks about the epistemological status of theological statements must culminate in the question of the object of systematic theology. And at this point the question whether theology in fact has an object leads almost naturally to the question of the testability of theological assertions, which for Pannenberg means testability of the claims to truth in theological statements.

Pannenberg (1973: 43) rightly suggests that this confronts the theologian with the most rigorous demand of all. Conscious of Bartley and Albert's stringently rationalistic criticism, he maintains that the systematic theologian dare not evade this most stringent of all epistemological demands by retreating to an irrational



religious commitment. Any such immunization of theological premises against criticism must ultimately rebound on the systematic theologian with redoubled force, since the very statements he makes could then no longer be taken seriously.

### THE OBJECT OF THEOLOGY: GOD AS A PROBLEM

In reply to the question about a specific and coherent objectfield for theology, Pannenberg (1973: 299f) would answer without hesitation: Theology is the science of God. In fact, Christian faith obviously depends entirely on God's reality, and therefore no systematic theology could be satisfied with regarding itself as a limited, narrow *science of Christianity*; to Pannenberg this would be unacceptable in terms of both religious and cultural history. Systematic theology cannot evade the question of the implications of its statement - that God reveals Himself as a reality and as such forms the object of theology. It must examine the truth of these statements precisely because they are hypotheses.

Given the universal implications of the concept of God, theology as a science of God has no finally demarcated field of study or object-area. Furthermore, God as object provides the intrinsic structural unity of theology.

A difficult question remains, however: Is it in any way possible to test theological statements, whether as direct or as indirect assertions, about God? After all, assertions about God cannot be tested against their immediate object, not only because the reality of God has become so problematic in our time, but also because it would surely contradict God's divinity if He became a *present object*, accessible to human scrutiny. Clearly, assertions about God cannot be tested against their purported object.

Given the universal implications of the concept of God and the logical implications of the hypothetical structure of assertions, it is clear to Pannenberg that the question of God's reality, and thus also the question of the truth of Christianity, can be posed only within the broader framework of a science having as its theme not only Christianity or the Christian faith but the reality of God Himself. For Pannenberg (1973: 229) this becomes possible in the context of theology of religions that transcends the narrower bounds of theology as the science of Christianity. Therefore any theologian sensitive to the questions asked by contemporary philosophy of science realizes not only that the concept of God forms the thematic focus of all his enquiries but that God, as a problematic concept, has in fact become the object of a wider critical theology (Pannenberg 1973: 301).

It is clear that Pannenberg, in his formulation of such a premise for systematic theology, and in his identifying an object for systematic theology, consistently takes serious note of Bartley and Albert's critical-rationalist criticism of any subjectivistic,

fideistic religious commitment. The critical question that must be put to Pannenberg at this stage is whether he is convinced that making God as a problem the premise for theology really meets the criticism of critical rationalism. In my view, what we have here - especially in the co-called 'context of justification' - is, rather, a concession to Bartley and Albert's criticism (especially to Bartley's *commitment to non-commitment*): a concession that not only fails to solve the problem of a fideistic axiomatic theology, but ultimately also fails to confront the vital question of the intrinsic role of the theologian's subjectivity (his *ultimate commitment* and its conceptualization) in the theorizing of his theological reflection. These problems play a crucial role in the development of Pannenberg's model for theology and can, in my view, be referred directly to the conflicting influences of critical rationalism and Kuhnian elements in his thought.

We have seen that, for Pannenberg, the conception of God as object of theology links directly with the problematic role of the concept of God in our wider experiential world. For him - at least in the first, broad phase of his theology - God can therefore be the object of theology only as a problem, not as an established datum.

But can this problematic concept of God be defined more closely, or does it remain an abstract hypothesis in theology, untestable against the object of its statements? According to Pannenberg, that concept can in fact be defined more closely. The fact that reality - if God is indeed really God - is totally dependent on God is, after all, a minimum requirement for the concept of God. For that reason Pannenberg can give more content to the hypothesis of God, maintaining that if God is real, He must be the all-determinant reality. And although the concept of God can in itself not be tested or verified directly against its object, it is in fact possible to assess that concept in terms of its own implications. Thus the concept of God, which as a hypothesis included the idea of God as an all-determinant reality, now also becomes testable by its implications for man's experience of reality (Pannenberg 1973: 302). In Pannenberg's view, the concept of God that would ultimately be most successful and solve most problems in the meaningful integration of man's experience would be the one that had validated itself convincingly. Assertions about God are, therefore, testable by their implications for our experience and understanding of reality (cf. Walsh 1986: 248). Such assertions are testable by whether their content does indeed give maximal sense and meaning to our present, finite reality.

If that were true - and this obviously very much concerns the 'theology and science' debate - it would imply that nothing in our finite reality can be fully understood outside its relationship to the living God. Obversely, one might expect

this purportedly divine reality to have opened up a much more profound understanding of all that exists than would have been possible without it.

Inasmuch as both these demands could be met, Pannenberg maintains, one might speak of a validation of theological statements. This justification is done not by criteria alien to the concept of God, but through a kind of proof provided by God Himself. But since our surrounding reality is incomplete and unrefined, and since our experience of it is tentative and ambivalent, the concept of God remains, in terms of philosophy of science, a mere hypothesis. Given the finite and tentative nature of our theological choices, the concept of God can therefore never be finally justified by our experience of ourselves and of the world.

Pannenberg thus maintains (1974: 36) that we can never abandon 'truth' functioning as a regulative principle at the end of an indefinite process of enquiry (cf Apczynski 1982: 54). And since truth (in both theology and science) is accessible only in anticipation, then science cannot exclude the broader context of history nor, ultimately, of philosophy and theology.

This brings us to the essence of Pannenberg's thesis: since in our time access to the concept of God is no longer direct and self-evident, it can be achieved only indirectly, through man's selfconcept and his experiential relationship with his surrounding reality (cf Pannenberg 1985: 15f).

By this means Pannenberg sought to develop a problem range within which theological statements might be evaluated (therefore: the so-called context of justification of theology). Assertions about God (for instance about God as the Creator) may therefore be measured, on the one hand, by the handed-down ideas that have accumulated within a certain religious doctrine of creation, and on the other hand these assertions may be tested against the problems confronting such inherited concepts (such as the doctrine of creation) in terms of the natural sciences and of the philosophy of science in our time.

## **RATIONALITY AND ULTIMATE COMMITMENT**

The influence of Bartley's criticism and pointed rejection of any retreat to commitment is clearly evident in Pannenberg's development of his own conceptual model. For Pannenberg, divine revelation cannot be pre-annexed by any particular religion, to be set up against others as the only true one. He could therefore say (Pannenberg 1973:322) that only a religious option that had in advance immunized itself against all critical reflection could unproblematically identify God's revelation with its own religious tradition, to set it up as an absolute against all other traditions.

This brings us to the most problematic element of Pannenberg's epistemology. Although he shares Thomas S Kuhn's view of the paradigmatic determination of our

thought, he seems to remain caught up in the critical rationalist demand for a specific non-commitment in the evaluation of theories in the so-called 'context of justification'. Ultimately, this provides no means of thematizing, and even less of resolving, the problem of the role of the theologian's subjective religious commitment in the construction of his theories.

On this point Pannenberg (1973: 323) concedes that theology, like all other sciences, does not approach its object without presuppositions or values, as a kind of *tabula rasa*. Theologians obviously tackle their subject with a certain interest, which also implies opinions and presuppositions, that may relate to the religious communities to which they belong. They may even be Christians, which may either stimulate questioning or act as a restraint on the unbiased evaluation of their object and their own tradition.

Against this background, Pannenberg (1973:323) could say that the theologian's subjective religious commitment may fall in the *context of discovery*, but definitely not in the *context of justification*. His conception of discovery is the all-inclusive historic-sociological framework that produces a certain science; the context of justification, on the other hand, is the objective theoretical framework within which specific criteria have an explanatory and evaluatory function in respect of theological statements. Confusing the two contexts, for example by converting a personal religious commitment into the premise for rational argument - and at the same time claiming intersubjective validity for that argument - is in Pannenberg's view a fatal mistake.

This attempt by Pannenberg to claim objective criteria for a scientific theology's context of justification is, on the one hand, a clear echo of Bartley's (1964: 217) *people can be engaged without being committed*, and thus reveals the lasting effect of critical rationalism on the structure of Pannenberg's thought (cf also Apczynski 1982: 52ff). Nevertheless, Pannenberg himself had earlier pointed out that this would make critical rationalism untrue to its own principles: basic or objective criteria in terms of which testing - and therefore falsification - becomes possible, must surely be testable intersubjectively, according to the principles of critical rationalism. This is why it also became clear that, with Popper, the old positivist ideal of value-free, objective knowledge had been twisted into intersubjective correspondence. In critical rationalism, therefore, objectivity ultimately becomes a conventional matter, no longer dependent on so-called a-theoretical facts. In fact, Pannenberg pointed out that the purportedly objective basic propositions of critical rationalism could be seen as conventions precisely because of their intersubjective determination. He also pointed out (1973: 54ff) that the implications of that determination made it impossible to draw such sharp critical rationalistic

distinctions between scientific and metaphysical statements.

Thus Pannenberg concedes not only that the nature and origins of scientific and of theological statements are rooted in the socio-cultural context of the individual researcher (the context of discovery), but that theological statements as such (the context of justification) are founded indirectly on general worldviews. In my view such statements are also deeply rooted in the scientist's subjective religious commitment.

Therefore, in attempting to separate the theologian's subjective commitment from the theoretical *context of justification*, Pannenberg is not merely abandoning Thomas S Kuhn's concept of paradigm-articulation, for which he had formerly opted and which now confronts his own demand for a context of justification without a personal commitment; he is also shunning the problematic question - not the question of how the theologian's subjective commitment may be temporarily suspended, but the question of how the theorizing implied by that religious commitment may be laid bare and rationally accounted for, precisely to prevent its becoming an uncritical and irrational immunization tactic in critical reasoning.

Pannenberg's intentions are clear: to conceive the theological enterprise - different as it might be from the other sciences - as fundamentally continuous with empirical science. What is then needed here seems to be clear: an analysis of the shaping of rationality in both theology and in science. As far as theology goes, it would have to be credibly pointed out that a pretheoretical commitment cannot simply be equated with irrational religious choices. On the contrary, the form in which that commitment manifests itself in religious statements and viewpoints must be exposed to critical argument. In that is done, the question of the relationship between our scientific statements again becomes the focus of our enquiry. Only thus will it eventually become clear that a personal religious commitment does not necessarily - to answer Bartley and Pannenberg - imply 'unscientific' or irrational thought.

In this reaction to the way the concept of revelation is formulated and abused in most forms of confessional theology, as immunization against criticism, Pannenberg tries to follow the wider program of a comparative theology of religions. He even maintains (1973: 326) that such a theology is ultimately based on the tradition of biblical Christianity. A definitive, final vindication or justification of theological statements is, however, unattainable, and is in any event sharply distinct from the nature of pretheoretical religious certainty. On the other hand, a provisional vindication of theological hypotheses may be attained inasmuch as they may lend - at least provisionally - maximal meaning and clarity to our experiences. In my view, however, that provisional vindication of theological statements and theories is

possible only if we can think form a paradigm that enables us to handle such criteria. This may also be founded on a paradigm choice that cannot be suspended temporarily and theoretically but refers consciously to a critically responsible basic conviction or religious commitment.

From the above it follows that the theologian's personal commitment, if rightly understood and credibly accounted for in terms of contemporary philosophy of science, need not stand in the way of a scientifically acceptable model of rationality. Although Pannenberg, in my opinion - does not account for the role of the theologian's personal religious commitment in theological theorizing, his incisive and highly original debate with contemporary philosophy of science enables us to pursue this discussion with greater confidence and credibility.

### IN CONCLUSION

The theologian has to realize that the questions raised by reflecting on religion are not those raised by science. Accepting that different kinds of knowledge are involved in the practices of science and theology and that neither can provide the content of the other's knowledge, does not mean *that they do not inform the context within which their respective knowledge is to be constructed* (cf Barker 1981: 276). In this sense, also, Pannenberg rightly claims that science provides an essentially incomplete epistemology for understanding nature. Claiming that scientific data contain a further and theologically relevant dimension should, however, never beg the wrong question of where science ends and where theology begins (cf Wicken 1988: 49).

The epistemological problem of claiming a theologically relevant dimension for scientific data reveals the common adherence of theology and all other sciences to the problem of rationality, as we have seen. This problem virtually forces the theologian and the believing scientist to deal with the role and function of an ultimate religious commitment in the construction of theories in both theology and science. It also challenges us to evaluate the role of justification and explanation in both theology and science.

The epistemological problem of claiming a theologically relevant dimension for scientific data reveals the common adherence of theology and all other sciences to the problem of rationality, as we have seen. This problem virtually forces the theologian and the believing scientist to deal with the role and function of an ultimate religious commitment in the construction of theories in both theology and science. It also challenges us to evaluate the role of justification and explanation in both theology and science.

The relationship between *explanatory power* and *truth* has always been a central issue in the understanding of science (McMullin 1986: 52). Philosophers of science have also convincingly pointed out that there can be no undisputed and monolithic notions of 'reality' or of 'explanation' in science: the objects of our interest not only dictate different strategies, but also different views on what could be regarded as adequate forms of explanation. But the central question remains: does theology exhibit a rationality comparable to the rationality of science, and how plausible can an explanatory justification of the cognitive claims of theology be?

I think it could be convincingly shown that the rationality of science and theology is in each case determined by certain goals and criteria, i e, by certain epistemic values. In both theology and science, whatever their other differences might be, the supreme value that determines rationality seems to be *intelligibility*. What is real for theology and for science is not the observable but the intelligible (cf Barbour 1971: 170), and in both theology and science beliefs and practices are attempts to understand at the deepest level, where understanding can be construed as seeking the best explanation (cf Proudfoot 1985: 43). What is at stake, therefore, is not only the general epistemic status of religious belief, but especially the implications this will have for the epistemic and thus rational integrity of theological discourse as such.

At the same time the high degree of personal involvement, i e of faith and commitment, in religion and theology will present a very special challenge to any theory of rationality in both theology and science. Because of this, and because of the contextuality of religious experience and the cognitive claims that arise from this, I would argue for a theory of rationality in theology that encompasses both *experiential adequacy* and *epistemological adequacy*.

The central role of experience and explanation in the justification of the cognitive claims of theology, finally implies that the very important distinction between *commitments*, *an ultimate commitment*, *beliefs* and *religious faith* should always be maintained. I am also convinced that no strong form of justification is possible for a commitment to an ultimate commitment (i e, the search for maximal meaning in life), outside the way of life of which it forms part. This is not retreat to irrationalism, because experiential and epistemological adequacy - and not justified certainty - makes a commitment and its resulting beliefs and propositions valid and responsible. This also implies that the beliefs that are implied in a commitment should in principle always be open to criticism. This also implies that the beliefs that are implied in a commitment should in principle always be open to criticism. This does not go against what, from a perspective of religious experience, could be called the certainty of faith. It does, however, imply a highly critical sensitivity

towards the construction of theories in theology and certainly prevents any form of dogmatism in theological theorizing.

In a critical realist model the beliefs implied in a commitment to an ultimate religious commitment could never be justified by any foundationalist doctrine of justification, but it might indeed be possible to provide good or adequate reasons for *not* giving up a commitment and its implied propositional beliefs. Beliefs are therefore never just the 'frills on a commitment' (cf Trigg 1977: 36), but can in a process of explanatory progress offer good reasons why it would make more sense (i.e. be more rational) to be committed to a certain way of life than not to be committed to it. In this sense there is not contrast between scientific and religious beliefs, nor between a commitment to realism in science or a commitment to critical realism in theology.

We could therefore say that all commitments must involve beliefs (are propositional) which might eventually turn out to be true or false. On this view - which is also my own - it is therefore not enough to maintain that beliefs have a 'truth' which is relative only to a group, a society or a conceptual system. Obviously a conceptual framework or paradigm could involve beliefs which are only true within this context, but eventually we are of course confronted with the meaningfulness or provisional truth of the paradigm as such, as well as being committed to a certain set of beliefs. Such a commitment should be based on beliefs which are themselves external to the system. This is what I tried to indicate throughout as *epistemological adequacy*: beliefs that function as criteria for rationality or epistemic values in a critical realist approach to theorizing in theology and in science.

Post-Kuhnian philosophy of science has shown us that there can be no sharp line of demarcation between scientific rationality and all other forms of rationality (cf Van Huyssteen 1986: 63ff). In fact, rationality in science relates to the 'reasonableness' of a more basic kind of rationality that informs all goal-directed human action. Within this broader context, theology seeks as secure a knowledge as it can achieve, a knowledge that will allow us to understand and where possible to construct theories as better explanations. In the end this epistemic goal of theology will determine the shaping of rationality in theology. And if in both theology and science we want to understand better and explain better, then surely the rationality of science in the broader sense is directly relevant to the rationality of theology. This epistemological consonance between theology and the other sciences therefore reveals what it might mean for theology to demonstrate that the data as described by the sciences are provisional versions of reality and that the data themselves contain a further and theologically relevant dimension.



Theology, in its attempt to obtain maximum intelligibility, thus makes claims based on religious experience. And as in science, although different from the kind on which scientific statements are based, this experience is understood as a context of shared assumption interpreted within the wider framework of a continuity of metaphorical reference. In both religion and science claims are made within a context of enquiry, but this does not deprive them of their referential value and therefore is not a relativist position. Those metaphoric and interpreted expressions around which the language of the Christian religion cluster, can in this sense be said to have justified themselves as meaningful and referential to vast numbers of people throughout the centuries and across cultures (cf Van Huyssteen 1987: 7-51). It is this kind of experiential adequacy, and not a justified certainty, which makes a belief a responsible belief. And a model of rationality which can accommodate this, is already justifying its claim to epistemological adequacy.

The justification of cognitive claims in theology through the grounding of reference in religious experience is supported by the fact that scientists and philosophers of science have not turned as easily as literary critics and some theologians, to non-cognitivist views of metaphor. The most interesting metaphors in both theology and science are those which suggest an explanatory network and are vital at the 'growing edges' of our reflection (cf Soskice 1985: 101f). The crucial issue of course is: what do theological theories explain, and will form of explanatory justification in theology have implications for the cognitive claims of theological theories? I would like to argue that although there might be no epistemological short cut possible from the explanatory success in science to progress and problem-solving in theological theorizing, this explanatory progress elucidates religious experience and theological reflection in such a way that theology can indeed claim a form of truth approximation that could be directly relevant for progress in the sciences.

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