

1994 Theology, its scientific character

THEOLOGY, ITS SCIENTIFIC CHARACTER AND ITS SUPERFLUITY

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Abstract. This article is an inquiry into the scientific character of theology. The emphasis is on Karl Barth's theology, because Barth states that the nature of his object of research forces him to reject prevalent concepts of science. First the structure of the reality and knowledge at stake in this theology is analysed. Then an investigation and judgment is given of the scientific character of Barth's research programme. Next it is argued that his statement that all the sciences at their acme could be theology is correct. The article concludes with a reflection on the implications for the relationship between science and theology. The final conclusion is that a distinct theology in principle is superfluous.

Keywords: concept of science; Karl Barth's research programme; revelation; subject-object relation; theology; triune reality.

1. Introduction

Is theology dealing with some kind of reality? Is it a science so that it has a genuine place at a university? In fact many universities have theological departments, at least in the christian world. This has obvious historical reasons. However, the intriguing question today is, is that correct? There are people outside, but also inside church who deny this. For, how can there be testibility or controllability of its statements when they rest on revelation and faith. Moreover, what theologians are doing does not seem publically accessible, for it functions inside church. So theology seems not to obey generally accepted requirements of modern philosophy of science. Therefore many people say: there is only one possibility for theology to have a scientific nature and thus have a place at a university, namely when one conceives theology as the scientific investigation of the phenomenon religion; in short, theology as the science of religion. But even in that case, some people say, distinct theological departments are not necessary, because these studies can find its proper place within the departments of the social sciences, or the humanities.

Certainly, the discussion on the scientific character of theology and on the legitimacy of the existence of theological departments is not a recent one, no it has already lasted for centuries^[1]. That discussion could remain an academic one for a long time, because of the unproblematic situation of church and theology in western culture. This situation changed dramatically in the last hundred and fifty years^[2].

Moreover, in most sciences there is steady progress and knowledge production, whereas in theology, once called the queen of science, there is stagnation, internal division and disagreement on almost every issue. Disagreement on what theology is, on what its proper subject matter really is, and even on the question if it should obey modern standards of science. So one can indeed say that there is a crisis in theology, a crisis that in fact is also a crisis concerning the subject matter of theology. Therefore the debate on the scientific character of theology has grown intensively during the last decades.

For me as a philosopher of science a special reason for this investigation is, that an inquiry into this topic might shed a new light on science itself.

A peculiar difficulty of this inquiry into the scientific character of theology is that I cannot start from some (modern) concept of science, for even concerning obeying the standards or requirements of modern philosophy of science the theologians disagree. So there is only one possibility to perform such an inquiry rigorously, namely by starting the investigation by analyzing the theology which is most extreme concerning the issue of the concept of science. That is in fact the theology of Karl Barth who maintains that, forced by the proper subject matter of theological inquiry, we have to break with prevalent concepts of science. Therefore I shall focus the attention in this article to Barth's theology, and give an analysis, in fact a rational reconstruction of it.

2. Rational reconstruction of Karl Barth's theology

2.1. Barth's research programme

In studying a cognitive tradition, and especially a theological one, one is faced with questions like: does it contain a justification of its methods of acquiring knowledge and improving understanding? Therefore it is very helpful that Barth himself starts his principal work, *Church Dogmatics*, with extensive "Prolegomena", in which he gives an explicit account of the path to knowledge.[\[3\]](#)

He emphatically stresses the fact that this path to knowledge should be determined exclusively by the object of study that is known through these documents (ChD I/1, 330; KD 305). All research, including theological research, should be a "rational endeavour" (ChD I/1, 423; KD 388), unconditionally constituted and determined by the specific nature of its object. This strict demand entails Barth's being forced not to accept in advance the prevalent concept of science because of the exceptional nature of his object of research: taking the prevalent concept of science as a starting point may prevent one from gaining an insight into the object of study[\[4\]](#).

In 1932 Barth made a fresh start with his *Church Dogmatics*. Not long before, from 1929 to 1931, he had thrashed out a lengthy and thoroughgoing argument with the mathematician and philosopher Heinrich Scholz about the scientific status of theology, [\[5\]](#) so Barth knew very well what he was doing when he rejected the current concept of science. He could not a priori accept any of the requirements (e.g. the "controllability postulate")[\[6\]](#) formulated by Scholz as the minimum demanded by the theory of science (ChD I/1, 7f.; KD 7f.). The highest and, when all is said and done, only standard in the theory of science which he could accept is: doing justice to the object of study.[\[7\]](#) Yet, according to Barth, theology is justified in calling itself a science, insofar as: 1. it is a human effort after a definite object of knowledge; 2. it proceeds along a definite, self-consistent path to knowledge; 3. it can justify this path to itself and to everyone[\[8\]](#) (ChD I/1, 7; KD 6).

Therefore, Barth states, in this way theology is research in every real sense of the word.[\[9\]](#) It is a research programme not attempting to attain rigid dogmas. "The real

results of dogmatics [...] can themselves only be new questions [...]" (ChD I/1, 308; KD 284).^[10] Barth strongly emphasizes the fact that the researcher should keep an open mind as regards new knowledge, and should therefore guard against setting out from preconceived notions; the object ("der Gegenstand") should be permitted to speak for itself.^[11] This implies that we are not allowed to take all kinds of traditional theological and philosophical notions for granted. At the outset of the inquiry, we do not yet know at all what concepts like "revelation", "faith", "dogma", "church", or even "theology" mean; in a strictly scientific theology, these concepts ought to be derived from the object of study itself^[12].

One has access to that object of study through a particular collection of documents, the biblical documents: they form what is empirically given and all information will therefore have to be derived from them (which of course necessitates knowledge of the situation and the language at the time of the genesis of these documents). What these documents are records of Barth designates by the term "revelation", but it should be noted that in the first instance this is no more than a word to label something with; its content is still wholly undetermined. It is totally unjustified to associate traditional connotations with it.^[13] Its meaning will have to be brought to light by analysis of the object of study itself.

Therefore Barth emphasizes that, first of all, we have to find out from the documents how they should be understood. How to interpret them? How do we know if the knowledge derived from these documents is correct, if it is in accordance with the specific nature of the events of which the documents are the result? In order to arrive at an adequate understanding of the specific nature of each separate document, one has to have an insight into its structure, implying insight into the structural similarity of the mutually highly divergent documents. This means that we have to know the precise interrelations between the documents, the events recorded in them and the reality manifesting itself in them. So the first thing required---as couched in Barth's terminology---is "a concrete concept of revelation" (ChD I/1, 334; KD 309), demanding an analysis of the empirically given, the documents, and of what actually manifests itself in them.^[14]

2.2. The concept of knowledge and of reality

Barth emphasizes that the biblical documents are in one specific respect fundamentally different from other historical documents. For they demonstrate by their content and structure that they are the results of specific events, having occurred in a particular space at a particular time, but with this proviso, that such a document cannot be regarded as a description by an observer outside the historical event in question, because the document shows that its author is completely involved in the event; so the document is the result of the historical event itself (ChD I/1, 373f; KD 343f)^[15].

In later volumes, Barth clarifies this in various places. He states that the exceptional structure of such an event and its document requires a "radical re-orientation on the basis of the recognition [...] that the revelation which they [the biblical documents] attest does not stand or occur, and is not to be sought, behind or above them but in them" (ChD I/2,

494; KD 548). This is already seen, as Barth later explains, from the mere fact that the documents e.g. those written by the evangelists and apostles, in all their diversity and sometimes even mutual contradiction, are simply set side by side. Obviously, these authors did not at all aim at descriptions yielding a uniform, consistent picture. From the documents Barth therefore concludes that the authors depict from the past precisely what is actualizing itself ("sich vergegenwärtigt") in their own present situation.^[16] Hence each document is a result of an event in which the author is completely involved. Concerning this kind of document it is therefore inappropriate and meaningless (a "foolish pursuit" according to Barth) to attempt to reconstruct a "true, objective fact" behind the document (ChD I/2, 494; KD 548).

Furthermore, these documents express that the particular event recorded in such a document is a unique event, "as such incomparable and nonrepeatable" (ChD I/1, 374f; KD 344). As the document is a result of the event, it is therefore itself unique and non-repeatable as well. But, once the document has come into being, it is in principle permanently available, so that it can be studied time and again.

Next, one of the most central and characteristic features of these documents is that in such a unique event a certain reality manifests itself completely. So it is not a particular aspect of this reality that is known in this way; no, in the event that reality manifests itself completely, both that it is and what it is. Hence, all information about what is known has to be and can be derived from the unique and nonrepeatable event and thus from the effect that results from it and that is recorded in the document.

This forces Barth to conclude that this event coincides completely with what manifests itself in it. In other words, using Barth's terminology: the event, which Barth calls "revelation", coincides completely ("ist restlos identisch") with what manifests itself, called the "revealer" (CD I/1, 343; KD 315). Because the single effect provides all information, the revealer is also completely identical with the effect, the revealedness ("das Offenbarsein") (e.g. the effect on man). Yet, these three: revealer, event of revelation and revealedness must be distinguished conceptually, but they are wholly indistinguishable as regards their informational content. So Barth, in summary, says that the reality with which theology is concerned "in unimpaired unity ("unzerstörter Einheit") yet also in unimpaired difference ("unzerstörter Verschiedenheit") is revealer, revelation and revealedness" (CD I/1, 339; KD 311)^[17]. So, my first conclusion is that in Barth's research programme, one is apparently dealing with a kind of cognition and with a reality of a peculiar structure: the reality known is the event through which it is known and is the effect of that event. Barth emphasizes that it is exactly this triune (or trinitarian) structure of cognition "which fundamentally distinguishes the biblical concept of revelation from all other possible concepts of revelation" (CD I/1, 346; KD 318). So, on the basis of his analysis of the biblical documents, Barth found himself forced to conclude that the doctrine of the trinity is indissolubly bound up with the concept of revelation. "We come to the doctrine of the trinity by no other way than by that of an analysis of the concept of revelation. And vice versa" (CD I/1, 358f; KD 329).

All other characteristics of the triune or revelational reality can be logically deduced from the above-stated formulation of the triune structure of cognition. I can demonstrate this here only in a very condensed way.

If the revealer is completely coincidental with the event of revelation, then one cannot treat this revealer as somehow existing independently of this event. Therefore this event cannot be repeated arbitrarily, as in the case of ordinary objects. For the same reason one cannot have this reality, this revealer, at one's disposal, that is to say, one cannot objectify it and therefore it is impossible to make a picture or model of it. (This, reversely, also means that making a model or an image necessarily precludes the possibility that one is dealing with this (triune) reality. Herein must lie the significance of the fact that this impossibility is called a "prohibition of images"). Essential is also the hiddenness ("Verborgenheit") of the revealer, for one can know from this revealer only what it reveals in that irrepeatable event and unique document which results from it. Furthermore, it follows that in this irrepeatable event the revealer does not reveal a detail or an aspect, but itself, completely: that it is and what it is; in other words, its "name" (Barth: The "name" is the revealer itself, it "stands for the revelational reality itself" (CD I/2, 11; KD 13).

So much for this concise reconstruction of Barth's elaboration of the structure of revelation out of the biblical documents, We see that it is a coherent and consistent structure because all characteristics -- the triune structure of cognition, trinity, prohibition of images, hiddenness, name etc. -- are logically and indissolubly connected. And we also see that this kind of cognition (called revelation) -- though it has an unusual character -- has nothing irrational. It is a cognitive event of an exceptional but quite specific structure.

It can easily be shown that with biblical revelation which has this specific structure, we are in fact dealing with an exceptional subject-object relation.

Let us first have a look at the case of ordinary objects, where the epistemological subject and the known object can be treated as distinct. That implies that also object, the cognitive event and the effect on the epistemological subject are really distinct matters as well.

However, reversely, if these three coincide completely (and can therefore be distinguished conceptually only), it must also be true that in the cognitive process subject and object can not at all be differentiated, except conceptually. So, in that case subject and object, distinguishable conceptually, participate completely and indistinguishably in the cognitive event. In the event of revelation both are completely involved and participate; and it is only after the event that it is possible to speak of the cognized 'object' ("Gegenstand") as object and man as knowing subject.

For all these reasons Barth concludes that the knowledge we are dealing with in revelation "differs from all other kinds of knowledge" (CD II/1, 21; KD 21f).

3. Triune reality and science

3.1 The possibility of a scientific theology

The next step in the rational reconstruction of Barth's research programme is an inquiry into the question of what arguments for the feasibility of a science of triune reality can be found in the programme itself. Such an inquiry is the more necessary since on the face of the matter the fact that the cognitive event is unique and nonrepeatable, and that we are dealing with a reality that cannot be objectified, seems to preclude a science of that reality. In order to find out if that is true, I shall reverse this train of thought and take these characteristics of triune reality as my starting-point.

Therefore, my point of departure now is that the reality dealt with here is not objectifiable---but it can be known, viz. through an event in which subject and object are completely and indistinguishably involved. The result of this event is an effect and a document in which this reality manifests itself completely. The documents created in this manner are now permanently available, and can therefore become objects of scientific study.[\[18\]](#)

So, in a science of triune reality we are simultaneously dealing with two different subject-object relations. At the experiential level, to begin with, the creation of these special documents that have to furnish the primary knowledge (the empirical information) requires a concrete event in which the subject (the "instrument" in question) and object (the system to be known) participate completely. At this level the separation between epistemic subject and object is totally removed. But these documents can be studied objectively, so there we have a subject-object dualism. Since the former subject-object relation plays its role solely in the genesis of the documents and the latter solely in studying them, no conflict between these two different relations arises. This means that there is no problem on this point and that a science of this reality is in principle possible. And should such a study be performed correctly, i.e. with the aid of methods attuned to these documents, it will bring to light, among other things, that what manifests itself in those documents cannot itself be objectified.

Such a cognitive event is essentially unique and nonrepeatable, however, which might cause a problem, in the light of the Aristotelian axiom that only science of the general is possible. But this problem does not arise, because this particular uniqueness implies that in this particular event the general manifests itself at the same time. It is a characteristic of the structure of this reality that the particular is the general. Moreover, the nonrepeatability of this event does not preclude the creation of many of such documents. We have seen that in the event the system manifests itself completely and this event cannot be reproduced by an act of the epistemological subject; in that sense it is nonrepeatable. This does not mean, however, that similar unique events cannot occur. On the contrary, the system can repeatedly manifest itself (each time in a nonrepeatable event), and of course a similar system may be known in the same way. In that sense repetition does indeed occur, meaning that checking is possible too. In fact, Barth's research programme focuses on a set of documents---a set that is in principle open.

3.2. *"All the sciences at their acme could be theology"*

The nature of the reality dealt with in this research programme is such, that knowledge of this reality demands a cognitive event possessing a special epistemological structure. We have seen that this cognitive event is completely characterized by the triune structure and consequently also by the specific subject-object relation. In order to acquire knowledge of the reality in question, this subject-object relation is the only requirement, and although it possesses an exceptional structure, this relation is in no way exclusive: in principle, this kind of knowledge is not inaccessible to anyone or anything. Moreover, the nature of the relation does not in any way restrict the domain in which it may occur. In principle, this may be anywhere; in other words: the nature of the cognitive event implies the possibility of the event occurring in any domain of reality, so that neither the nature nor the domain of occurrence of this cognition have anything esoteric about them in any way. The only requirement is: attuning to this special reality and this event of cognition, i.e. making that subject-object relation possible.

The above implies that the reality in question is not only accessible to theology, but in principle to all sciences. Should events manifesting the triune structure occur in the field of some science or other, the science in question can inquire into them thanks to the documents resulting from them.

So it is indeed in accordance with his analysis of the concept of cognition in theology when, right at the beginning of ChD, Barth states:

"In reality theology does not find itself in possession of special keys for special doors! Neither has it at its disposal a basis of knowledge ("Erkenntnisgrund") which might not straightway be realised in every other science, nor is it aware of an objective area ("Gegenstandsgebiet") which is necessarily hidden away from any other science whatsoever. [...] All the sciences at their acme could be theology.^[19] [...] The separate existence of theology signifies the special measures ("Notmassnahme") upon which the church has been forced to resolve, in view of the actual refusal of the other sciences to do so. [...] The other sciences have not recognised and assumed the task of theology as their own". Should they do so, they would "render a special theology superfluous". (ChD I/1, 4-6; KD 3-5)^[20]. The other sciences "could and must and finally and ultimately will" do this work (ChD I/1, 316; KD 291).^[21]

So, contrary to prevalent opinions, Barth is not at all the champion of a sharp and essential separation of theology and secular science. He does hold such a separation temporarily necessary, due to the present deficiency in the sciences, but, as the quotation demonstrates, he emphasizes that in principle the exact opposite is true.

What then is the relationship of the sciences in their present form to theology? In section 3.1 it was found that the triune structure of cognition (and hence the special subject-object relation) concerns the system as it reveals itself viz. that it is and what it is, whereas all other kinds of knowledge concern aspects of the system. This caused Barth, in KD III/2, to make a sharp distinction between the factual sciences of man (e.g. biology, psychology, sociology) on the one hand, and theological anthropology on the other. The

sciences in their present shape only concern themselves with (real) aspects, possibilities, "phenomena of the human" ("Phänomene des Menschlichen"), which can be studied with current methods (ChD III/2, 23, 198; KD 26, 236). But that man is and what man is, man himself, the reality of man, man as he or she is called by name, that lies outside the scope of the factual sciences of man. According to Barth, "the reality of man" ("die Wirklichkeit des Menschen") cannot be known otherwise than through the kind of knowledge with the triune structure, Barth calls revelation (ChD III/2, 25, 199; KD 27, 238).

So the sciences can get to know the "reality" of man and of the entities of the world, but this would demand a new development in the sciences, viz. that they should attune themselves to that reality and to the knowledge with that exceptional structure. [22]

Hence, Barth's criticism of science does not imply that science as such is no good, that it has to be totally changed. On the contrary. What it does imply is that science will have to, and can, go through a new development. Precisely in view of the tasks proper to it (viz. to get to know its object of research to the full), science will have to change in such a way as to make knowledge of the "reality" of man and world possible. What is at stake is a further development, which is why Barth says that the sciences at their acme could be theology.

That the regular sciences, even physics, could be theology sounds absurd when taken at face value, but what does Barth mean by "theology"? Just like e.g. the term "revelation", this traditional term should not derive its meaning from traditional connotations, but solely from the object of study, i.e. from the special reality here dealt with. Theology then is the discipline occupying itself with this triune reality, which is not an isolated domain of reality, but the most fundamental structure ("the reality") of all things [23]. Once the sciences finally focus on this reality, experimentally as well as theoretically, and attune themselves to it, a special theology will indeed be superfluous, as Barth has said. [24] And then the theological terms, which only cause confusion because of their old connotations, can disappear too.

So much for the rational reconstruction of Barth's research programme, in which basic elements were examined from within with respect to their mutual logical coherence.

4. Judgment of the scientific character of Barth's programme

In judging Barth's research programme, we cannot set out from prevalent concepts of reality and science, nor can there be any dispute about what is empirically given in the research programme. The only thing to be tested is whether in its functioning this research programme has indeed demonstrated its own rational character.

In the previous sections I have shown how the programme functions as a rational endeavour and that its results are internally consistent. Now we still have to check if this research programme, in which the prevalent concept of science is rejected, does nevertheless, in some way or another, manage to satisfy intuitions like controllability and testability, like public accessibility and the augmentation of knowledge, intuitions that seem to be indispensable to scientific research programmes.

In the description of Barth's research programme we have seen that there may be many documents, all unique in themselves, from all of which one can glean knowledge of revelational reality. This is a form of repetition, which makes testing possible. That such testing is no simple matter is due to the special nature of the knowledge in question, a nature presupposing a specific subject-object relation implying, among other things, that this knowledge cannot be arbitrarily generated.

As a matter of course, testing will have to take place; but obviously on documents exhibiting the same exceptional structure. Tests on other kinds of documents would not make sense, since in those documents the (triune) reality under discussion does not manifest itself.

The knowledge in question is public knowledge, since as discussed before, all sciences can acquire this knowledge and can in that way contribute to an increase in knowledge. But as a matter of course they will then have to attune themselves to this exceptional reality and the specific cognitive event going with that reality---which is nothing special in itself, for it is a general rule in science that in order to acquire specific knowledge, one has to enter into the requisite relation to the object of cognition; otherwise, one will either learn nothing, or something totally different.

Finally, the preceding sections have shown explicitly that all kinds of traditional terms, also playing an important part with Barth, in no way involve irrationality, because Barth allots them a new content in the light of the object of study. In particular we have seen that what Barth labels "revelation" is a cognitive event with a special, but rationally transparent structure.

The fact that Barth's work is emphatically intended to be of an ecclesiastical nature, witness e.g. its title, Church Dogmatics, might also lead to problems, since this may seem to clash with the public accessibility and independence required of a rational programme. But what does "church" mean? That term too should derive its meaning exclusively from the object of study. Barth defines it as follows: wherever people focus on this exceptional reality, there the church comes into being and exists (Barth 1957, 166-170), making the object of study the sole determining factor. And because it is true of all sciences that only those can practise them who are conversant with their object of study, Barth is able to conclude accordingly that the subject of this science (dogmatics) is the church.^[25] Once "church" has thus been defined rigorously in the light of the object of study, it does not clash with general requirements of science to entitle the chief work of this research programme Church Dogmatics.

On the basis of this reconstruction and judgment I conclude:

a. This theology is a rational research programme, rigorously taking the documents as its point of departure.^[26] The documents determine precisely what is known and what cannot be known. General intuitions like controllability are valid, although their precise meaning sometimes deviates from what is prevalent.

b. One could call this theology a science, but then a science of an exceptional nature. The special kind of reality and its concomitant cognitive event necessarily involve a break with the prevalent concept of science. To repeat some disparate features: we do not have the object of knowledge at our disposal, we have to wait till it manifests itself, and the structure of the cognitive event demands the total involvement of the cognizing subject, the "instrument". As we have seen, the specific epistemological structure is completely determined by the fact that the object of cognition, the cognitive event and the effect on the subject are completely coinciding. In all other kinds of knowledge, these three do not completely coincide, with far-reaching consequences for the concepts of reality and science.

c. Although his work does allow of such things as testing, yet Barth refused to accept Scholz's minimum requirements demanded by the philosophy of science, and rightly so. Setting out a priori from such requirements would imply that not only matters like repetition and verification would be taken in the sense they have in current science, but also the documents in question and the acquisition of knowledge in general. That sense would then become the decisive determining factor for the entire research programme.

5. Conclusions

1. If Barth's analysis of the biblical documents is correct then -- as we have seen -- a break with current concepts of science is necessary. It also implies, reversely, that if one sticks to current concepts of science and reality then one cannot deal with the revelational reality. Consequently those theologians are then forced to adapt theology to these current concepts and thus making theology to e.g. the science of religion or the science of human experiences concerning ultimate meaning of life.

2. We can now also understand, that sticking in advance to prevalent standards and concepts of science is an important cause of the inner conflicts, the division we see today in theology. For, if one has accepted current concepts of science and reality -- understandable, modern science is predominant in our world-- and yet wants to deal with biblical reality in some way or another, this must result in all kinds of wriggled constructions.

3. As we have seen, the radical different position is this: There is an exceptional reality at stake to which modern science up to now has no access, as a consequence of its current methods. So what is needed in the natural sciences, psychology, sociology, etc. is an adaptation of the scientific methods to that exceptional reality. In some sense this implies a fundamental criticism of modern science. Not that science as it is today is wrong, but an essential change, i.e. a further development of science is needed, namely attuning to the triune (or revelational) reality.[\[27\]](#)

4. This development of science would probably also mean a change in the character of science. Karl Barth argues, that theology is a reflection on a reality (and thus on events) in which freedom and liberation is fundamental.[\[28\]](#) This points out the possibility that branches of science, focusing on that reality in which liberation is of basic importance, will in the same way bear the stamp of that liberation, and can therefore be called liberation science.[\[29\]](#)

5. That further development of science, namely all sciences finally and ultimately attuning to the triune reality, would make a distinct theology superfluous.

NOTES

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- [1]. At least since the 13th century. See e.g. W. Pannenberg (1976, Introduction).
- [2]. See G. Sauter (1971, 10).
- [3]. The first 1500 pages, viz. volumes I/1 and I/2, of *Church Dogmatics* (1936-1970), translation of *Die Kirchliche Dogmatik* (1932-1970). Hereafter, I shall use the abbreviations ChD and KD to cite this work.
- [4]. See T.F. Torrance (1984, IX, 292-301): "[Barth] demanded a consistent and rigorous scientific method in theology in accordance with which all unwarranted preconceptions and hidden assumptions and all antecedent conceptual systems are called into question [...]".
- [5]. As regards this discussion with Scholz, see B.F. Nielsen (1988, 180-203); see also A.L. Molendijk (1991, 129-230).

[6]. See Nielsen (1988, 191-197) for background information and for an explanation of Barth's "problematische Bemerkungen über die Regel von der Widerspruchsfreiheit".

[7]. For this appeal to the criterion of sticking to the matter in hand ("Sachlichkeit") see Nielsen (1988, 187-191). Cf. also Torrance (1984, 293): "Barth stands shoulder to shoulder with every proper scientist who insists on the freedom to develop scientific methods appropriate to the field of his inquiry and to elaborate epistemological structures under the compulsion of the nature as it becomes disclosed to him in the progress of his investigation, all untrammelled by a priori assumptions of any kind."

[8]. It is of crucial importance, as we shall see further on, that Barth adds in brackets: "Jedermann, der fähig ist, sich um diesen Gegenstand zu bemühen und also diesen Weg zu gehen" (in my translation: "Everyone capable of endeavouring to gain knowledge about this cognitive object and hence of proceeding along this path").

[9]. See ChD I/1, 11f.; KD I/1, 10f., 'Dogmatics as an inquiry' ('Dogmatik als Forschung').

[10]. Barth explicitly rejects the traditional conceptions of dogma and dogmatics; but he retains the terms. See especially ChD I/1, 304-308; KD 280-284.

[11]. See ChD I/2, 867; KD 969f. It is solely the object ("Gegenstand") that should dictate the method; that is the one supreme presupposition "without presuppositions in all other respects. [...]. Essentially dogmatic method consists in the openness to receive new knowledge".

[12]. That Barth retained the traditional terms was out of pure necessity: he was forced to retain them in order not to become unintelligible to his theological contemporaries, but this inevitably entailed the nightmare of the old connotations, the perpetual misunderstandings, particularly as regards concepts like revelation, faith, dogma, church and theology.

[13]. Barth emphatically points out that we are therefore not dealing with a general concept of revelation "commonly so called in all religions" (ChD I/1, 333; KD 308).

[14]. At this point (Chapter two), Barth in fact starts the true analysis. The first chapter, some 300 pages, functions as an introductory part. Cf. F.H.Breukelman (1986, 46).

[15]. In each of these documents we are concerned with what Barth calls a historical event ("geschichtliches Ereignis"), which should be clearly distinguished from what is commonly called "historical" ("historisch"), i.e. what is susceptible of description by an observer outside the event in question (ChD I/1, 373; KD 343).

[16]. Barth argues this at length in section 47.1 of ChD III/2.

[17]. Barth usually indicates this revealer and therefore also the triune or revelational reality with the word "God". For his use of traditional terms see note 12.

[18]. See ChD II/1, 207; KD 232: if this reality manifests itself in a particular medium, "it becomes objective to us".

[19]. "Es könnten alle Wissenschaften in ihrer Spitze Theologie sein." I translate "could" and not "might", as the English translation has it.

[20]. Obviously, Barth was well aware of what he was doing when he added these statements in 1932: they are not in the first edition of his dogmatics (1927). Thirty years

later, in 1962, Barth stresses the point anew in his discussion of the isolated position of theology in our culture; see Barth (1968, 89).

[21]. At first sight, Barth's statements seem to contradict his energetic opposition (as early as in vol. I/1 of ChD) to all forms of natural theology. However, what Barth rejects in natural theology are the attempts to bypass revelation, i.e. cognition possessing the triune structure.

[22]. See also C. Link (1982, 36, 256-260). Link belongs to the theological research tradition inaugurated by Barth. He emphasizes that the only possibility of removing the blind spot ("der tote Winkel") of science lies in criticizing and surmounting the conceptual framework of present-day science; see Link (1981, 249, 266f).

[23]. With reference to the central object of study of Christian theology, Barth emphasizes (1947, 30): "Diesen Gegenstand in seiner Wahrheit erkennen heisst in Wahrheit nicht mehr und nicht weniger als alle Dinge erkennen, auch den Menschen, sich selber, den Kosmos und die Welt". This means that a physical theory, for instance, achieving this kind of knowledge of material things, will on the one hand concern only a small part of theology (for it will deal with matter only, hence with a small part of reality), but will on the other hand bring such things to light about matter as traditional theology was barely if at all aware of.

[24]. This would mean that the set of documents in question, viz. the Bible, will then also become superfluous, in the sense of having been validated, or, to use Barth's words in a similar context, "the dissolution ("Aufhebung") of this revelation and of its written testimony -- not contradiction or abolition or destruction, but dissolution of it into itself, just as morning twilight disappears in the brightness of the rising sun itself" (ChD I/1, 367; KD 337).

[25]. Barth (1947, 10): "Subjekt einer Wissenschaft kann nur der sein, dem der betreffende Gegenstand und Tätigkeitsbereich gegenwärtig und vertraut ist. Es kann also keine Einschränkung und keine Schädigung des Begriffs der Dogmatik als Wissenschaft bedeuten, wenn wir konstatieren: das Subjekt dieser Wissenschaft ist die Kirche." At the beginning of ChD (I/1, 4; KD 3) Barth has already remarked that, if all other sciences should occupy themselves with triune or "revelational" reality, they would then all together be "working in the sphere of the church" ("arbeiten alle miteinander im Raume der Kirche").

[26]. Modern science studies stress the fact that in all sciences documents are what is primarily given. See S. Woolgar, (1988, 68ff).

[27]. In several sciences one can already find indications for this further development. Analysis of experimental results of elementary particle physics, the tracks formed e.g. in a bubble chamber, points at the fundamental new subject-object relation; see my paper (1983, 354-367). In psychology this subject-object relation is investigated in recent action research studies.

[28]. See ChD II/1 section 28.3 esp. 318-321; KD 358-361. This is also worldwide emphasized by all kinds of "liberation theology": all theology must necessarily be liberation theology, since what is at issue in the reality on which theology reflects is liberation.

[29]. See my book (1991), where this point is extensively investigated.