

Progress in Science and Theology

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Introduction

In this essay I want to propose an alternative to some recent attempts to establish Christian theology as scientific theology¹ – a claim which rests on alleged structural, methodological and material analogies between theology and science. Instead I want to insist on the irreducible difference between explaining and understanding, suggesting a way of doing theology that could be called *sapiential* rather than *scientific*.² Though I am convinced that only the interplay of explaining and understanding can provide a meaningful foundation for any intellectual discipline, it seems evident to me that the natural sciences focus on explaining measurable effects from distinct causes while theology focuses on understanding, trying to elaborate the meaning of things and the state of affairs with reference to the relationship between God and human beings. While there can be no strict separation between looking for explanation and asking for understanding, because one presupposes the other, the intentions and the directions of interrogation are significantly different. This, I want to argue, becomes apparent in the different notions of progress with respect to science and to theology.

¹ The English word 'science' originally meant 'an organized body of knowledge, or an intellectual discipline' (McGrath 2001: 24). The German term *Wissenschaft* has kept this general denotation while in modern English the meaning of 'science' shifted to 'natural science' (*Naturwissenschaft*). To avoid misunderstanding it might be worthwhile noting that I use the term in the modern English meaning, except when indicated by single quotation marks. I do not question the general character of theology as *Wissenschaft* but only the attempt to develop it in analogy to the natural sciences. I also note that the German term *Naturwissenschaften* is most commonly used as a plural referring to the wide spectrum of natural sciences from geology, zoology, biology, chemistry, etc. to cosmology, physics and so on. Thus *Naturwissenschaft* is not envisioned as a monolithic body but rather as a (not exhaustive) plurality of sciences. Cf. below, note 10.

² Thus in a sense the old question dating back to Augustine whether theology is science (*scientia*) or wisdom (*sapientia*) isn't settled yet. I am trying to think roughly along the lines of Augustine: 'striving through science towards wisdom (*tendimus per scientiam ad sapientiam*)' (Augustine 1968: 417.2 (= XIII.19)).

In modernity cultural change and dynamics are conceived in terms of progress, and it is apparent that the sciences, their technical applications and their impact on our worldviews, are among the central forces that drive these cultural dynamics. The history of the natural sciences presents itself as a progression from darkness to light, from ignorance to knowledge, from obscurity to enlightenment in whose due course comprehensive theories emerged which explain the phenomena of our physical world, form the basis of our scientific worldview and are main resources for providing objective knowledge and technological know-how. The heliocentric solar system developed by Copernicus, Kepler and others, the Newtonian classical mechanics, the theory of electrodynamics and thermodynamics, the theory of evolution and molecular biology, the theory of relativity and quantum theory: there are many well-defined and well-founded complexes of scientific knowledge which can within their limits and constraints be considered as justifiably true, as objective scientific insights that it would be irrational to reject since it is highly improbable that they would be left behind by future scientific theories. These results of scientific progress can be considered as real knowledge in the sense of justified true belief, and science can be understood as the creative progressive process which accumulates this kind of knowledge.

In contrast to this intimate connection of progress, modernity and scientific enlightenment, religion and theology seem to have suffered from a severe loss of importance and meaning. They are not considered to be a central part of progressive modernity but rather regressive and among those obstacles that modernity has overcome. Religion and theology appear to be outdated and are more or less successfully struggling to catch up with modernity. And too often their accommodation to contemporary science and its worldviews does not look like active progress but rather like a somewhat overexerted attempt to salvage what in the views of many contemporaries is atrophied and about to perish. Insofar as they are committed to authoritative ancient texts, past revelation and handed-down traditions, religion and theology apparently have a problem with the notion of progress.

But at a second glance this distinction between science and religion with regard to progress blurs and is not as clear any more. The identification of science and progress on one side and religion and traditionalist regression on the other is counteracted by the growing awareness that modernity is not necessarily a straightforward progress from the worse to the better. The progress of modern culture and the progress of science itself has revealed ambivalences that are questioning the quality and the essence of the technological and cultural achievements of modernity. Freedom does not necessarily grow in proportion to the technological means developed, and while individual self-determination has become the central ideal of Western culture we are in danger of losing overall and obligatory aims and values. And above all, the dynamics of scientific and technological progress has gained momentum in such a way that it has developed strong self-reinforcing tendencies which cannot easily be controlled by intentional steering. Thus for example we are progressing in environmental

exploitation and pollution against better insight, forced by the rule that standstill would mean death.

On the other hand although religion indeed refers to sacred texts and inherited tradition, at the same time these traditions call the believer to leave her or his previous ways and to start a new life. From the story of Abraham's exodus out of his country and his father's house to Jesus' call to prepare for and to proceed towards the kingdom of God, the Jewish-Christian tradition is full of appeals towards progress into the future. In Christian theology the history of mankind as well as the individual life of a human being was seen as the 'pilgrim's progress' from creation to consummation, from birth to death and resurrection.

So the clarification of a few points might be of use for analysing the relationship between science and theology as progressive forces of cultural dynamics: (1) What is progress in science and how is it shaped and warranted? (2) Is there a meaningful way of referring to progress in religion and theology? (3) Does theology participate in or interact with scientific progress? (4) Can a notion of 'wisdom' serve as a connective link between the two realms? (5) What then is the task of Christian theology in a modern pluralist society in contributing to the shaping and forming of its culture? While the following considerations that are arranged along the lines of these questions are developed from a Christian theological background and therefore focus on Christian religion and Western pluralist societies, they do not claim to make significant statements about religion and society *in general*, though they are hopefully open to further extension.

Progress in Science

That the history of the natural sciences shows an enormous progress in knowledge, theory and method can not seriously be doubted. But epistemologically the objective assessment of real progress is not so easily specified. On which grounds can the growth of scientific knowledge be justified as an advancing progress towards truth and objective reality? The answer of *traditional empiricism* was that all scientific knowledge is derived from experience and that all universal propositions which formulate natural laws are generalizations from a significant number of empirical data and are thus verifiable by reference to experience. As David Hume (cf. Hume 1999) convincingly demonstrated, the notion that scientific laws are empirical generalizations in some way finally confirmable by 'positive' experience is aporetic. Consequently one of the leading philosophers of science in the twentieth century, Karl Popper, has identified the interplay between conjectures and refutations as the essential means of scientific progress. Scientific theories are not inductively derived from experience but are conjectures to be tested in conceptualized experiments of which we can assume that they provide the appropriate testing of our theories. Thus even observation-statements are theory-laden and hence fallible. Scientific theories are not inferred from experience, nor is scientific experimentation

carried out in order to verify or finally establish the truth of theories. Consequently Popper identified *falsifiability* as the criterion of demarcation for science and non-science. All knowledge appears to be provisional, conjectural, hypothetical. We can never finally prove our scientific theories, we can only provisionally confirm or most probably refute them. Scientific theories are thus selected according to their *corroboration*.

Although Popper's original concept of corroboration proved too narrow with respect to actual historic developments, the basic insights seem to me unre-
futed: scientific progress can be explained roughly in evolutionary terms. Science, like other human and organic activities, can largely be envisioned as an art of problem-solving which is put to the test by confronting it with reality. Scientific progress can then be identified with reference to the corroboration of the respective theory as well as to the fruitfulness of its implication towards further conjectures.

Though we do not directly derive objective truth from reality and have no objective criteria for the identification or even quantification of scientific progress, according to Popper we can apply what he called the concept of truthlikeness or 'verisimilitude'. A better scientific theory shows a higher degree of verisimilitude than its rivals, and 'better' is understood as 'closer to the truth'. In this way Popper was able to overcome the pessimism of a Humean anti-inductivist philosophy of science which holds that no scientific theories can be *known* to be true so that truth-claims on scientific grounds are on the whole meaningless. With his concept of verisimilitude Popper was able to argue for a view of science that allows for legitimate claims of scientific progress. The scientific quest for objective truth could now be envisioned as progress *towards* the truth, and empirical corroboration could be interpreted as an *indicator* of verisimilitude (Popper 1972: 103). It is important to affirm that Popper later saw his concept of verisimilitude basically as a heuristic and intuitive principle that does not allow for formal definition. It cannot be quantified, and Popper explicitly rejects the idea that 'degrees of verisimilitude ... can ever be numerically determined, except in certain limiting cases' (Popper 1972: 59).

The discussion on the growth of scientific knowledge and its progress after Popper's project of critical rationalism did not question the notion of progress through science as such, but it threw doubts on the methodological principles which should demarcate, identify and promote scientific progress and on the assumption of an accumulative and continuous progress. Thomas Kuhn's view on paradigm shifts, for example, is still in consonance with the overall principle of progress towards truthlikeness, although the claim of a methodologically controlled and guaranteed continuous progress is given up for a discontinuous dynamics of scientific revolutions. Other strands of twentieth-century epistemology of science did not share the view of progress *towards truth* at all. As an extremist epistemological anarchist, Paul Feyerabend (1975) incriminated methodological principles as hindering scientific progress, in favour of an 'anything goes' principle of creative anarchy. But still the concept of progress as

such was not doubted, although it could not be stated according to methodological principles or objective criteria. Indeed, the pragmatic notion of science as problem-solving and of scientific knowledge as corroborated though manifold testing according to the internal standards of the respective theory can be considered as a certain consensus, although the creative changes of paradigms and theory-design are apparently subject to other, non-objective and methodologically difficult dynamics.

As another consequence, scientific progress has to be understood as not exhaustive with regard to all possible knowledge. Already Kurt Gödel's famous theorems (cf. Gödel 1931) indicate that not everything that can be known can be represented in a single theory since the criteria for truth, validity or truthlikeness have to be taken from outside any theory and cannot be reintegrated by means of the theory itself. A theory of everything is an epistemological chimera, especially when scientific progress is conceded in a meaningful way! Science provides relatively solid ground for cultivating and accumulating predictively powerful and reliable means of explanation and problem-solving with respect to concrete human quests and experiences – nothing more but nothing less.

Theology and Historical Progress

In contrast to science, the notion of progress in Christian theology has its criterion in the relationship between God and human beings. It is at the same time intimately related to history as the venue of God's revelation and to the notion of conversion as the qualitative transition from unbelief to belief as the precondition of progress towards God. Let us take a very brief look at the development of the theological understanding of progress and its conflict with modern science.

Christian theology developed its concept of progress in dispute partly with the Stoic notion of individual progress towards wisdom and virtue, partly with the classical idea of the perennial cycle of becoming and destroying. Augustine's conception of a linear world-age (*saeculum*), beginning with creation and ending with the return of Christ as the world's judge, became especially influential for the development of Western theological thought. The ages from Adam to Christ and then from Christ to the hidden end of the world resemble the stages of a human being's life, so that the history of humanity as such as well as the history of each individual can be seen as a linear development from God through Christ to eternity, structured by God's revelation.

But Augustine also pointed to the ambiguities and divergences of our finite lives and human history, designating the fate and destiny of human beings outside of space and time, namely in God's eternity. Against the Stoic concept of ideal virtue he designated the progress of a Christian as a never completed striving towards eternity. Human beings as progressing are creatures still waiting and longing for their fulfilment. Thus from Augustine through

Thomas Aquinas³ to modern times a Christian notion of progress was established that saw progress as the designation of the finite creature in its individual life as well as the human species finding its way through its stages either towards God or away from him. Progress in this perspective could be to the worse or to the better, with the latter as a movement from finite worldly existence towards divine infinity. History was the means of God's revelation and agency so that contingent historic events shaped the relation between God and human beings. At the same time nature with its physical and morally significant order provided the fixed realm in which every creature had to fill its assigned place.

With the rise of the natural sciences in the sixteenth and seventeenth centuries a new idea of qualitative progress was announced that brought about a qualitative leap and totally new perspective on human growth in knowledge and skills. The human mind proved able to penetrate the heavens and change the technical means at our disposal so that it transcends every traditional perspective and given natural potential. Consequently enlightenment saw progress, as a process of overcoming traditional prejudices by science and reason, as the emergence from immaturity. With the new science and the discovery of the capacities of reason guided by experience, the obstacles of authoritative prejudice should be removed so that light would be thrown onto all areas of human understanding. Having removed the hard shell from nature's mysteries, the path towards autonomy and ever growing progress with regard to intellectual, moral and technical growth seemed open. This also applied to religious matters or, as Immanuel Kant put it:

As matters now stand, a great deal is still lacking in order for men as a whole to be, or even to put themselves into a position to be able without external guidance to apply understanding confidently to religious issues. But we do have clear indications that the way is now being opened for men to proceed freely in this direction and that the obstacles to general enlightenment – to their release from their self-imposed immaturity – are gradually diminishing. (1923: 35)

Only in the nineteenth century 'progress' became a political slogan and thus a value as such in opposition to conservative politics preserving the status quo. Thinkers of the upcoming industrial age like Auguste Comte (cf. Comte 1830–42) or Herbert Spencer (cf. Spencer 1860–77) gave the idea of progress a new meaning: instead of intellectual enlightenment and the perfection of decent morality, the growing domination of nature and its means through scientific-technical progress became the central perspective. This coincided with the discovery of evolution and the theory of Charles Darwin, which seemed to establish progress as the universal and in itself creative tendency of nature: 'All corporeal and mental endowments will tend to progress towards perfection' (Darwin 1982: 428). Thus an ever increasing humanization of society and its

³ Thomas Aquinas spoke of the 'progress of the sinner (*progressus peccati*)' (Aquinas 1952: 707 (ST IIa IIae, q. 162, a. 4 ad 4)).

individuals was thought to be directly linked with technological progress, be it in Marxist-socialist or in capitalist terms, a presupposition which is highly questionable nowadays. But on the whole progress can be seen as the leitmotif of modernity. Progress is universal, cumulative and unlimited; standstill means death.

Confronted with progress as the all-penetrating principle of modernity, theology met a severe challenge. History was no longer the contingent place of God's authoritative revelation with its predestined stages of creation, fall, deluge, God's covenants, election of the chosen people, incarnation of the Christ, progress towards the final judgement. Since scientific-technological progress had trespassed any given limit, history itself was seen as human-made. And while human wit and knowledge can penetrate the mysteries of nature and overcome with technical means the boundaries and limits set by the natural order, nature is not normative any more. In the age of evolution and genetic engineering this includes the biological nature of plants, animals and even human beings themselves. Nature only represents the contingent status quo and thus the starting-point for technical and manipulative interference. Nature is a variable, it is unsuitable as a measure of the humane. Humanity itself as the decisive driving force has to determine the direction, pace and content of progress. Faith and religion with their sense for oral and written tradition, for sacred texts and historic revelation, seemed to be themselves obstacles to progress and were soon identified as such.

But Christian theology also tried to meet the standards of modern scientific progress. It integrated insights from the natural sciences and used the ideal of rationality developed by the Enlightenment for reformulating its doctrines. Dogmatic criticism, historic-critical exegesis, comparative religious studies, philosophy of religion, process theology, and theology in dialogue with modern cosmology and science, seem to indicate that theology itself is trying to catch up with modernity and that it participates in historical progress, leaving behind outdated theological concepts and embracing up-to-date ones. However, insofar as the relation to God is concerned the 'progress of theology' is not to be confounded with a 'theological notion of progress'. Theology as the critical and accountable explication of the Christian faith under historical conditions is basically a hermeneutical enterprise and no accumulative empirical science. Thus it can not secure its progress by methodological means. Still it shares in the standards and criteria for truth of its time and in many respects participates in the general progress of science and culture.

But at the same time its task is ever fresh and new. Theology, Karl Barth wrote in retrospect on his life as a theologian, is different in that it never can start with settled questions, compiled results or safeguarded achievements but must 'every day, even every hour, begin anew at the *beginning*' (Barth 1962: 181). Ever again theology has to take on the task of a complex intellectual, spiritual and ethical struggle in dispute with contemporary science and culture in the light of the Christian faith. As this hermeneutical and procedural intellectual discipline (*Wissenschaft*, cf. above, note 1), it significantly differs

from the empirical sciences. Theology does not accumulate knowledge for the sake of knowing.⁴ Its language is not mathematics, and theological propositions like the doctrine of justification or the doctrine of divine properties cannot be tested by standardized experiments. Its objects cannot be reduced to the means of their measurement. While the electron in physics is exactly what physical theory can know about it, God is neither data nor a theoretical term or axiom. And theological doctrine cannot be used for technical applications. The explication of faith in theology is not represented in formulas or a deductive or axiomatic formal system, just as preaching and teaching is not explaining or deducing theorems.

Furthermore, theology and religion need analogical and metaphorical language. They need history, parables and stories. They interpret reality through faith and values and seek orientation for human existence. Theology brings forth, one could say, *orientating* rather than *dispositional* knowledge. It does so in close relation to the historic progress of humankind so that theology brings forth progress only as a contingent historical phenomenon through its different traditions, ever anew dealing with the challenges that the individual, the Christian community and the society they live in encounter. While neither methodological criteria nor instrumental reasoning nor supernaturally authorized metaphysics can be considered as formal guarantors of a succeeding appropriation and application of the truth of faith, a mediating category is needed to describe the interdependence of scientific and theological thought. This is where wisdom comes in.

Wisdom

As indicated, science and theology are not strictly separate, but they interact. Insofar as the progress of science can only be defined according to pre-scientific criteria such as simplicity, relevance, rationality, universality, fertility with respect to further investigation, and so on, it shares in a hermeneutical task. And theology has to make explicit the relevance of Christian faith, referring to the most significant and up-to-date science and methods available, thus participating in the progress of general scientific knowledge. At this point a meaningful notion of 'wisdom' can be applied as a qualified description of this process of relating the significance of scientific progress with the relevance of theological thought.

Since antiquity, wisdom has been understood as the integration of theoretical knowledge and practical prudence with religious or orientating knowledge:

⁴ 'In theology we are allowed to be ignorant of things (*In theologia licet nobis quaedam ignorare*)' – a comforting remark of an outstanding exponent of theological thinking (Luther 1926: 284).

wisdom is the knowledge of divine and human things.⁵ Knowledge of natural laws and states of affairs, knowledge of practical skills, and both integrated with knowledge about human beings and their quest for meaning and purpose in their world, come together and become relevant through wisdom. There is no formal method leading to such an integration, so that according to Greek antiquity no individual can realize wisdom as such, but only the deity can be called in himself wise (Greek: *sophos*) while the highest that can be ascribed to a human being is to be striving towards wisdom, that is, being a friend of wisdom (*philosophos*). Sapiential reason is receptive rather than experimental, confidential rather than suspicious, confessional rather than sceptical, a matter not only of intellectual power but of character. Wisdom cannot be made or produced but has to happen and has to be acquired. And it is a matter of *kairos*, that is the right words at the right place and time reaching the right people, and thus it is closely linked to the spoken word in concrete encounter.

Modern culture lacks this integration of theoretical and practical knowledge with reference to human self-understanding. Science, common sense and ethical and religious value-systems are falling apart.⁶ A new ideal of sapiential knowledge is needed that might be able to shape cultural dynamics. Otherwise technically oriented and instrumental parameters and criteria for progress will shape development, such as economic profit or technical accessibility.

Since wisdom by its very nature is no technical, formal or conceptual notion but rather a hermeneutical, discursive and semantic one, it is difficult to define it in a rigorous way. Therefore I will describe its meaning by compiling some of its main aspects with special reference to theological wisdom. In one sense wisdom has to do with the acquisition and communication of human knowledge in all of its forms. But while at the same time more knowledge does not necessarily mean more wisdom, it also includes the capability to deal with ignorance and to refine knowledge to its relevant aspects. While science ideally aims at the completeness of knowledge in certain fields, wisdom does not strive towards encyclopedic perfection but wants to know what is decisive and relevant. Wisdom thus is also the skill of dealing with the unknown, the unrecognizable and the inexplicable. It does not refer to everything that is known and can be known, but it concentrates and illustrates. Therefore it takes contexts and implicit truths for granted in order to point to what is important here and now. It is thus the capability of distinction and differentiation. It discriminates and identifies issues of lasting importance and issues of momentary urgency,⁷ and in that way it incorporates remembrance and expectation into present challenges.

⁵ Cf. the stoic definition given by Cicero: 'Wisdom, moreover, as the word has been defined by the philosophers of old, is the knowledge of things human and divine and of the causes by which those things are controlled (*Sapientia autem est, ut a veteribus definitum est, rerum divinarum et humanarum causarumque, quibus hae res continentur, scientia*)' (Cicero 1821: 15 (= II.5)).

⁶ Cf. Charles Taylor's analysis of the fragmentation of modern societies due to the 'atomism' of the individual (Taylor 1991).

⁷ For this distinction cf. Ritschl 1987: *passim*.

Its place of corroboration is the *Lebenswelt*, the world of direct lived experience, not the laboratory, the experiment or the field-study. In this sense Luther could also call theology 'experimental wisdom (*sapientia experimentalis*)'.⁸ It integrates theoretical knowledge and practical prudence so that our knowledge, our experience and our ignorance can be processed according to certain guiding differences and distinctions closely linked to the convictions and beliefs at the basis of our self-understanding. In the Christian theological perspective these fundamental attitudes are owed to God by means of scripture, community and the Holy Spirit, which refer to Jesus Christ as the source of divine wisdom. Thus Christian theology as sapiential 'science' (cf. Hailer 1997) aims at something that is beyond its ultimate control, namely at the event of the good life among human beings and between human beings and God.

Theology works for wisdom without being wisdom itself. It refers to the existence of wisdom as the condition of its possibility but not as its product. Successful theology works as an eye-opener. It instructs to *discover* the truth rather than to infer it syllogistically. At some occasions it might appeal to consensus and intuition, at others it might challenge what is taken for granted, interrupt what is considered self-evident and confront it with biblical narratives and theological concepts. In any case, it does not promote neutral knowledge. Its addressees have to relate to it, be it in consent or in dissent.

To argue and to act in favour of such an open ideal of wisdom which at the same time presses towards obliging truth is to my conviction relevant especially in a modern pluralist society, to which the Christian community and its theology with its historical consciousness and its hermeneutical tools might significantly contribute. I want to explain that a little further in the next and last section.

Pluralist Societies and Cultural Dynamics

Modern societies have to integrate a plurality of concepts, theories and value-systems. No religion, no church and no science can possibly supply an overall, obliging, universally accepted interpretation of reality. Any attempt to counter the loss and decrease of the formative and orientating power of religion as such or Christianity in particular by claiming a definite and eventually superior subject, method or competence for theology will in my view rather increase the common understanding of the Christian community that it is in its exclusiveness just one particular and somewhat old-fashioned fraction of society which is now quite beyond its once triumphant heydays. And at the same time through this frustration it might provoke fundamentalist, dogmatist or irrational tendencies within religion as a counter-reaction. However, experimental science and disengaged reason alone cannot provide the common ground on which to build a civil, just and humane society. In our family bonds, in our relations between the generations, in our engagement for society and communal

⁸ Luther 1893: 98. Cf. Bayer 1994: 49.

work, in our notions of fair co-operation and mutual respect we depend on more than theoretical knowledge and instrumental reasoning.

Postmodernity has led to a radicalization of pluralism which is challenging the historical consensus our Western societies agreed upon. The diversity of lifestyles, belief-systems and value-orientations is now so advanced that the compromise of Western liberalism mediating between individual autonomy and the neutrality of the state concerning worldviews seems no longer adequate. In retrospect the liberal separation of individual conviction and common political life appears to be part of a process of differentiation within largely homogeneous cultures and societies. In the western European countries as well as in the United States which are formed by Christian religion, science and enlightenment, a common basis had been found that was not too far from what the majority of the people could integrate into their individual and group values and that was compatible with the public and the economic system.

Under the conditions of what some already call 'post-secular' modernity this situation has altered. Alongside liberal demands for liberty and individual rights of freedom of conviction are emerging calls for the recognition of the cultural identity of different groups and for a publicly and politically relevant realization of common values which go beyond the liberal moderation of opposite group interests. Confronted with fellow citizens from very different cultural backgrounds having a strong group identity and with the challenge of shaping technological progress, not only towards the maximization of effect and profit, the suspicion arises that the liberal ideal of a state that remains neutral on issues of worldview is itself the expression of merely one particular cultural tradition. A society in which worldviews and values are matters of mere private personal conviction and in which religion is considered a hobby or a private recreational activity threatens to become hollow and meaningless and susceptible to particularistic interests and uncontrolled economic and technological dynamics.

In such a setting theology in its dialogue with the natural sciences has to insist on a concept of reason that allows for its enrichment by wisdom integrating practical and orientating dimensions of human life. The task of theology is to keep alive the quest for an aim, for a *telos* of human existence, to refute the monopoly of total explanatory competence claimed by the natural sciences, but also to criticize and challenge the ambiguities of religion. This can only be fulfilled by a theology that is not designed as the continuation of the natural sciences with other or more elaborate means or simply on a different field of knowledge. What is needed is not the claim of an amended accumulation of knowledge regarding transcendent objects and states of affairs. Therefore theology must leave behind the notion of a logically sound system of the propositional truths of faith (*articuli fidei*) based on scripture and tradition as the ideal representation of revelation. In cultural dialogue theology must consequently design and present itself as theology on the way (*theologia viatorum*). It must proclaim the freedom of a Christian (*libertas christiana*) as the focus of faith and as its critical principle. It must foster and promote a culture of

communication which respects the hermeneutical interplay of understanding, perception, reflection and practice. Its location, its *Sitz im Leben* is discourse, conversation, dispute.

Theology therefore has to be elaborated as the art of interpretation, of understanding prior to and beyond explanation, of appropriate judgement, of dealing with error, doubt, temptation and heresy, not as an abstract theory but as a *hermeneutic art and skill* of moderation between the Christian faith of individuals, its public organized forms and our theoretical and practical knowledge concerning the world we live in.⁹ Only through public pluralist discourse can a process of clarification regarding the importance and significance of religious beliefs eventually be initiated. Within such a setting theology should try to strengthen the assurance of Christian faith, its expressiveness and its power to form concrete communal and individual life. For that purpose theology has to relate critically to at least the following six systems of reference (cf. Dalferth 1991: 19):

1. the concrete historic and living *Christian faith* as grounded in scripture, creed, teaching, churches and congregations;
2. the contemporary contexts, the *Lebenswelt* of human beings in our pluralist, secular and capitalist societies with their biographical and conventional value-systems and practical reasoning;
3. the relevant and up-to-date theoretical and practical *knowledge* of theories and facts of the different natural and social sciences;
4. the forms and regulations of our *societies* in their juridical, economic and political respects;
5. the historic and contemporary reflections of *philosophical thinking* which apparently share the pluralistic fate of modernity;
6. the diversity of *religious and cultural traditions* of humankind, including arts, music, literature, etc.

It is obvious that this cannot be achieved by individuals. In this concept theology has to be a discursive, a dialogical, a manifold and a context-sensitive enterprise where divergent views and different methodological means are necessary, but where the directions of purpose and the reference to the spiritual and historic sources are also coherent. Insofar as the different systems and categories of reference are mutually irreducible, theology has to be 'combinational' (cf. Dalferth 1991). Such a theology can not be regarded as 'scientific'

⁹ As a theologian thinking along these lines one could name Bernard J. Lonergan; cf. Lonergan 1972.

theology according to the standards of science in general.¹⁰ And it can not claim to be a super-science which integrates the sciences by transcending them, but it can appeal to the great tradition of practical reason and wisdom upon which the sciences themselves depend and for which they are intended. Thus it might even contribute indirectly to the progress of science itself as an integral part of human culture.¹¹ For that purpose it must uncover and communicate the fundamental conditions of human existence which cannot be technically 'produced' but are prior to all human agency, namely sympathy, confidence, mutual respect, kindness, love and mercy, linking them to God as the beginning of wisdom (Prov. 9.10).

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¹⁰ This puts my view in contrast to Alister E. McGrath's continuation of Thomas R. Torrance's project of a scientific theology (cf. Torrance 2001; McGrath 2001, 2002, 2003). Torrance sees strong parallels between progress in science and in theology. Natural science is as such 'a religious operation' through which 'the scientist as priest of creation' allows 'the basic design, the meaning, of the universe to become disclosed' (Torrance 2001: 111–12). This consequently shapes his notion of progress. The mentioned disclosure 'is a progressive operation, for the theory of model is progressively changed and refined in the light of what becomes disclosed' (Torrance 2001: 125). This also applies, *mutatis mutandis*, to 'Christological inquiry': it is 'an instrument for the progressive self-revelation of Christ to us' (Torrance 2001: 126).

¹¹ A quotation by the famous physicist and one of the founders of quantum theory, Erwin Schrödinger, may illustrate this point. Schrödinger regrets that 'there is a tendency to forget that all science is bound up with human culture in general, and that scientific findings, even those which at the moment appear the most advanced and esoteric and difficult to grasp, are meaningless outside their cultural context. A theoretical science, unaware that those of its constructs considered relevant and momentous are destined eventually to be framed in concepts and words that have a grip on the educated community and become part and parcel of the general world picture – a theoretical science, I say, where this is forgotten, and where the initiated continue musing to each other in terms that are, at best, understood by a small group of close fellow travellers, will necessarily be cut off from the rest of cultural mankind; in the long run it is bound to atrophy and ossify, however virulently esoteric chat may continue within its joyfully isolated groups of experts' (Schrödinger 1984: 478–9).

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