

THEOLOGY IN AN EVOLUTIONARY MODE

by *Karl Schmitz-Moormann*

Abstract. Evolution has become the standard way of understanding the world process. Theology has to express traditional faith in the context of the contemporary world. Since the common world view has profoundly changed, from a static world of being into a dynamic world of becoming, theology needs to change its language and its understanding of the universe as God's creation. This understanding of an evolving world is to be used as a theological source. Such a change of perspective necessitates a fundamental reconstructing of theology; for theology, such reconstructing means a renewed understanding of the Creator and of the Incarnation.

Keywords: becoming; Christian faith; natural law; revelation; science; theological method.

Evolution is often understood as a special biological theory which today is normally presented in its neo-Darwinian expression, basically limiting the explanatory arguments to the two concepts of chance-mutation and selection. While the theory has limitations and shortcomings, its refutation is of little relevance to the fact that we do live in an evolving universe. The need for a better explanation of the evolutionary process does not make the process itself less real.

It should be clear that evolution is not a purely biological phenomenon. Practically our whole universe has resulted from an evolutionary process. Starting with some kind of barely understood Big Bang,¹ the matter we are made of evolved through natural "high-energy laboratories," especially in the giant stars. Eventually it formed solar systems with planets, where chemical evolution proceeded and gave rise to biological and finally human evolution. We shall

Karl Schmitz-Moormann is a professor of philosophical anthropology in the Department of Social Work at the Fachhochschule Dortmund, Germany. He and his wife, Nicole, are preparing a critical edition of the complete works of Pierre Teilhard de Chardin. His address is: Im Ostholz 160, D 4630 Bochum-Linden, Germany. This paper was originally presented to the Chicago Advanced Seminar in Religion and Science, 27 May 1991.

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for the purposes of our discussion accept these tenets and try to understand what the apperception of an evolutionary world means for the theologian.

WHY IS EVOLUTION IMPORTANT FOR THE THEOLOGIAN?

It has become a habit in theology not to consider the knowledge gained through science as of any importance for the theologian. While the scientist has been concerned with the world of nature, governed by unchanging, eternal laws, the theologian has striven to understand the biblical message and the history of salvation. This clear separation has dominated Protestant theology ever since Schleiermacher,² finding its harshest expression in Karl Barth's *No* to any introduction of natural human knowledge into theological argument. This strict separation of natural human knowledge as unimportant for Christian faith (as Augustine stated) or as perfectly irrelevant and even undesirable within the realm of theology (a position expressed by Barth and his followers in the Protestant and Catholic churches) was under attack already in the Middle Ages, when a student who wanted to read theology first had to pass his entrance examination by writing a thesis on *De machina Mundi* (Glorieux 1933). Theologians had to be versed in the natural sciences of their time.³ Thomas Aquinas names the reason for this position quite clearly: error about God's creatures rebounds in a false knowledge of God and leads the human away from God (S.C.G. 2, 3).

Aquinas's conclusion is obvious if we take the task of theology not as the application of a certain method (the task of science is often misunderstood in the same way), but as the enterprise that tries to understand the message of God and to allow the understanding of one's faith within the world in which one lives; i.e., to relate that message to all facets of the world that is believed to be created.

CAN THEOLOGY STAY AWAY FROM SCIENCE?

One might doubt this understanding of theology and withdraw into a purely biblically founded Christology that is not concerned with this world and with the reality that surrounds us. This has been tried; typical results are Protestant fundamentalism and Roman Catholic dogmatism, according to the dictum *Roma locuta, causa finita* (Rome has spoken, the cause is closed). These movements have certainly done more to make Christianity a strange phenomenon than has all scientific atheism.

Arguments against such a stance are found within the Christian faith itself. The first is contained within the first article of the Apostles'

Creed, which states that this universe was created by God. If the Christian faith holds our world to be the result of God's doing, then it would be a very strange theological attitude to consider this work of God as irrelevant for the theologian. Of course, theologians do not possess a perfect knowledge about this world; they have to rely on the same data as anyone else who wants and needs to know more about this complicated reality we call the universe. And few theologians have the time or the capacity to gather the necessary data and organize them so as to bring new insights to the working of the universe they call creation. Like any other human beings not specializing in one of the sciences, theologians must rely on the body of knowledge—which always contains some error—created by science. By reflecting on their faith in God within the framework of this world as it is known in their time, they are doing theology. Like the Scholastics, they are making philosophy the servant of theology (*Philosophia Ancilla Theologiae*, see also Seckler 1991). This function of philosophy—that is, of science—in winning knowledge about the world we live in does not mean a supremacy of theology. Rather, it means that theology must rely on the services of philosophy in order to survive. As history shows, servants are able to survive without queens, while queens are hardly able to survive on their own as queens.

But even to be able to express their faith—and this is a second argument against fundamentalism and against a strict separation of science and theology— theologians need to speak the language of their fellow humans. In spite of the extensive philosophical and theological work on language that searches to define the relationship between the sign and that which it designates, it must not be forgotten that the human language is the way in which humans communicate about the reality of their world. No language would still be meaningful if it lost its semantic relationship with this world. One's language is linked with one's perception of the reality one is surrounded by. This perception has evidently changed during the last two thousand years, and so have the meanings of words. Before the evolutionary reality of this universe became evident, one might have thought these changes to be of only temporary importance, since the nature of reality and of the core of faith in God remain unchanged. But the situation is quite different if this world is evolving, bringing forth totally new realities that in their newness cause a different perception of the world. The evolutionary process is not limited to the emergence of new material realities, but includes as well new insights, which often create new material realities and have certainly changed the surface of the earth during the last ten thousand

years more profoundly than classical biological evolution has. Thus, one cannot escape the conclusion that the language of today is quite different from that of the time when the Bible was written. Naturally, this applies as well to the Vedanta and to the Koran.

To be understood by humans in their time, even a God's revelations have to speak the language of the time. If, as Christians believe, God addresses human beings through revelation, then God must speak the language of humans in their historical context. Using the language of another time would make the revelation useless because it would not be understandable. If one takes for granted that God created this world as it can be known, that is, as an evolving universe within which humanity continues to evolve, then at least to some extent all revelation from God must be expressed in a way that is limited by the language, and thus by the level of knowledge reached, at that time. To think of the word of God as it is revealed to humans as something fixed for eternity in its wording and to believe it to be the most essential task of the Christian tradition to conserve the pure wording presumes an eternal language. In an evolving creation such a language cannot exist. To insist on the wording of the revelation could in fact mean to lose its message. If the important point of the Christian religion is to transmit the message, and if it is correct to say that the language of a time expresses the knowledge of the time, then Christian theology is certainly concerned with transposing the content of the ancient revelations into the language of the present. (This applies, *mutatis mutandis*, to all traditional religions.) And to do this, theologians must be able to speak the language of their time, which at least to a very important extent is created through the sciences of the day.

This acknowledgment of the importance of science for the theologian does not imply that science should have the guiding role in theology. Theology is no more dependent on science than is poetry or music, even though you can find mathematical relations in the music of Bach or Mozart and the meter of Shakespeare. As far as theology is concerned, science has only the role of a servant to the society; i.e., to create reliable knowledge about this universe in all of its aspects. This knowledge is, of course, at the disposal of theologians, and they have to use it in order to speak in a meaningful way about the creation. In this theologians are like all other people; to speak meaningfully they must first have knowledge.⁴

THE IMPACT OF EVOLUTION ON THEOLOGICAL
THOUGHT: REVERSAL OF PERSPECTIVE

Up to this point, the argument for theology's need for science could have been made without referring to the notion of evolution. Most of what has been stated could have been argued within the framework of a static universe with a human history. And one should not forget that most actual theologies and actual science has developed with the assumption of such a static universe. The frantic search of physicists for an all-encompassing Theory of Everything (the big TOE) is based on a presumption profoundly rooted in the notion of a static universe: The search for the *eternal* rules governing the universe from its beginning to the present day is only meaningful if we presume an absolutely static basis for this universe.⁵ As we shall see later, there is at least some justifiable doubt as to the existence of such eternal laws. The notion of these eternal laws is a relict of the Middle Ages, when the eternal reliability of natural laws that determined everything on earth was believed to be guaranteed by an unchanging God.

Within such a framework, it was always essential to know the beginning of reality, the principle from which it derived. This attitude was expressed not only by the Greek philosophers who wanted to know the *archai*, but as well by the many myths that tell how this reality we live in came to be. In this vision, knowledge about origins—the origins of creation as well as the origins of the church—represented the highest attainable knowledge. At the same time this vision implied that there is no higher ontological status possible than that of the beginnings.

The goal of good theology within this vision has thus been understood as the faithful conservation of the original message. Theologians, it was thought, needed to close in on origins, describing the original status of the human being.⁶ They needed to elaborate the *ipsissima verba Domini* (the very words of the Lord) by applying the critical method of the New Testament. The better they succeeded, the more (they believed) they had done the most essential part of theology. The ever-returning reformers who want to recreate the original church demonstrate the same fundamental belief, most clearly formulated by Tertullian: *Id verius quod prius*, what is earlier is truer (Marcionites 4, 5 CSEL 47, 437).

In an evolutionary perspective, which has become the only scientifically possible perspective of our time, this reference to the beginnings as the state of fullness and truth has lost its persuasive power. Evolution designates the process of becoming which brings forth real newness that is not contained in the past. Therefore, the new

transcends in its reality the past, though naturally the past is the condition necessary for the new reality to come forth. But to the extent that the present is really new, the past cannot explain it.

We have great difficulties grasping this change in perspective in all its consequences. We should be aware of the very limits of our own language: our concepts of *evolution* and *development* hold us within the vision of a static universe. Both these terms present the process of becoming as the deployment of realities that have always been.

Evolution cannot be understood meaningfully in this way. The past and its persistence—most visible in cyclical and periodic events like generations—is a necessary condition for the present to exist. But the past hardly contains the present, and even less so the future, in a foreseeable manner; they transcend the past. Certainly, looking back into the past allows us, at least to a certain degree, to write the story of the evolving world. And we can recognize the conditions that had to be realized so that certain new phenomena—e.g., living beings—could appear. But even complete knowledge of the past would not inform us about the future, though we might recognize some possibility that could be realized in the near future. But we do not even recognize all the possibilities of the state of reality that has presently been reached. Further, to fully understand the past, it is not sufficient to look carefully at paleontological and other historical data; we must also observe the present.⁷ Since in an evolutionary world the later realities allow us to understand the earlier ones better, the old dictum of Tertullian needs to be reversed: by stating that *id verius quod posterius* (what is later is truer). This is a valid statement not only for the realm of science proper, the knowable world, but also for the Christian faith.⁸ This evolving world, the very object of science, is God's creation (though science is not interested in this latter quality of its subject).⁹ Christianity, at least, has always confessed this creation to be the work of God, through which appears God's self-revelation; Christian theologians have always known about the book of creation.

THE EVOLVING WORLD AS THEOLOGICAL SOURCE

Thus, by its very process of becoming, the evolving creation is an ongoing revelation. Knowledge about this revelation is limited both by partial errors contained in the human understanding of the universe and by the new realities appearing in the evolving creation. Therefore, theologians have to accept the notion of an always unfinished theology which, like any human interpretation of reality, is mixed with errors. These errors have their deepest roots in the

unavoidable human need to act and to think (if not in theory, then in praxis) as if one did know the whole.¹⁰ This need applied as well to the authors of the Bible as to any modern theory of cosmology: Either one avoids saying anything—which is overcome concretely by anything one does—or one generalizes by extrapolating or by excluding details of knowledge as irrelevant. Whatever one does, one cannot escape the fact that some error is always mingled with the understanding of reality. And theologians are not excepted from this human predicament, nor are God's revelations, which can never avoid the errors contained in human language, which is the expression of human knowledge about the universe and which must be used as the vehicle of all revelations.

Furthermore, if evolution is not an illusion, then any definitive revelation is excluded by the very structure of God's creation. This is true for the language aspect of revelation, since the revealed message must continually be translated into the language (i.e., the world vision) of the new present. Beyond the question of language, the newly appearing features of creation are part of God's ongoing revelation. In this view, one can no longer accept the classical notion of a *depositum fidei* as the unchanging content of revelation, which Vicentius Lerinus defined as that held to be true *semper, ubique et ab omnibus* (always, everywhere, and by all)—and which the Reformation reduced to *Sola Scriptura*. If there is something like an ongoing creation—not only a *creatio continua* according to which God keeps the world working and does not withdraw the creative will that holds the universe in existence—then the deposit is like a managed deposit. It not only yields interest—new insights into the classical content of the once and forever received revelation—but receives new deposits and thus grows richer.¹¹

Reference to the Holy Scriptures thus becomes relative for theologians, since the word written down in historical time is always laden with time-conditioned limitations that include obvious errors about the world (e.g., geocentrism) and ignorance about the future to come. It would have been quite meaningless if Jesus (or Buddha or Muhammad) had used the evolutionary process in one of his parables. The same applies to most of our modern knowledge about the planets, the galaxies, the Big Bang (if this theory is confirmed in the future), the curvature of space-time or about our brain functions. Perhaps there is no need to use these phenomena in a parable, but if they had been used in Jesus' time they would have meant nothing: it would have been void speech.

Naturally, this applies the other way around: quite a number of biblical texts are expressed in time-limited language that has become

very strange to modern mankind. For example, the quite central notion of the Kingdom has become more obsolete in our world: kings are hardly considered an essential part of our states; where they exist they are powerless though they might exert a certain moral influence.¹² But nobody today might claim that the Kingdom of God is an idea that would move the masses or the elites. Theologians have naturally become aware of the shortcomings of the biblical texts and they have tried to free them from errors and time-conditioned images.

As far as I can see, there is no wide theological movement¹³ which attempts to integrate the later revelations of God through the process of creation into the Christian message and to read the biblical text in its relativity within this new context. This would mean that, on the one hand, one's knowledge becomes of critical value to one's reading of biblical texts, which can no longer be considered the established, *definitive* word of God for humanity. At the same time, accepting one's human condition as an evolving being means that the possibility of God's speaking to humans is limited by this evolving condition (created by God). It would evidently be quite unacceptable to limit the self-revelation of God to the historical conditions reached by the evolutionary process two or three thousand years ago. And the notion of a God who would continue the evolving creation but not continue self-revelation in a way appropriate to the evolutionary status of the creatures there is incompatible with the notion of a good God.

POSSIBILITIES OF THEOLOGICAL THINKING IN AN EVOLUTIONARY WORLD?

If this postulate for a basic change in theological work is justified, then theology will have to work on a not-so-secure basis. So far, theology has been living within a splendidly decorated habitat, where theologians, at least for the last three hundred years, did not need to take notice of the outside world. As Karl Rahner pointed out in the fifties, the theological manuals used to teach young theologians have barely changed, essentially, during the last centuries. Certainly, some obviously impossible classical statements have disappeared, such as those concerning the great flood, which still occupied a large place in theological dissertations of the last century. Some theologians even used arguments from the scientifically known world, but only in an apologetic way, using arguments from science to defend already well-established theological "truths" like the existence of God, as was done by the physicotheologians (cf. Paley 1814;

Buckland 1824) on the Protestant side and by the apologists on the Roman Catholic one.¹⁴ One of the latest of this kind was Pius XII's claim that the expanding universe is proof of the fact of creation, with a clear beginning at point zero.¹⁵ In this kind of apologetic use of scientific knowledge, theologians try to build fences around their protected territory of eternal and unchangeable truths without taking serious interest in the materials they use that come from science. Scientific knowledge is never brought into the cozy interior of the theologian's habitat.

This becomes quite evident once one looks at modern theological manuals, especially Catholic ones (Feiner and Löhner 1965; Braaten and Jenson 1984). The age-old themes of the original innocent state of humanity and of the fall of humans are repeated, as well as the story of the good and somehow perfect creation in the beginning. Naturally, these subjects are barely treated seriously outside theological textbooks. Practically speaking, theology has lost its contact with the real world; it has become unable to assign to the human race the role it has to play in the universe that by its teaching is God's creation. But "God's creation" has become an empty formula; it does not mean the real universe of endless spaces and infinite times (at least so far as the human concepts of space and time are concerned).¹⁶

This has become very evident to me whenever I encounter people who did not grow up in a Christian tradition and are learned in modern sciences. To them, especially when they grew up in an atheist environment, Christian theology is hardly distinguishable from other mythical traditions. The relatedness of theological statements to our concrete existence in this scientifically known world is no longer credible to these outsiders. And this concerns not only secondary questions but the central core of theological statements: theology has so far not developed a language proclaiming God the Creator and salvation in Christ in a way that is reaching out to the people in today's world. The classical theory of salvation is contained within the vision of the static universe where in the beginning everything was good and where evil appeared through the fall of Adam. To accept the traditional vision of salvation as the atonement and redemption from the consequences of Adam's fall is nonsense to anybody who knows about the evolutionary background of human beings. Theology, in trying to adapt the notion of the state of integrity in order to keep the traditional concept alive, actually asks people first, to believe in the state of sin originated by an impossible Adam, and then, to be redeemed by the Savior, Jesus Christ, who is hardly related to the universe people live in today.¹⁷

It is my impression that a growing number, especially of young

people, are feeling the unrelatedness of the “proclaimed” Christian message to their concrete experience of reality in this world. Certainly, most young people are idealistic and will engage themselves if they are asked to be generous. But I am afraid that this is not a sign of Christian faith, though the tendency towards generosity might still be rooted in a Christian tradition. More often than not, there is very little content of faith in the creator, in salvation. Christian traditions are most often held in the way the Belgian poet Jacques Brel said it once in his song “*Si c’était vrai*”: “If it were true what they tell to the little children about Mary and the stable”; i.e., the tradition is believed like a beautiful dream of which we do not want to let go.

The still rapidly spreading waves of new religions are an indicator of the unsuccessfulness of the proclamation of the Christian faith. The relation to the known world necessary for the credibility of the Christian faith has been lost, and young people are seldom satisfied with dreams that have been recognized as such by their parents. Fascination with Eastern religious ideas—even those not distorted by New Age merchants—is to me more a sign of the current lack of contact between the Christian message and the concrete world than it is a sign of the spiritual superiority of Eastern religions. These religions are foreign to the Westerner’s mind and exotic in the sense that their strange religious visions are at least not falsified by the modern sciences. They are not falsified partly because of their clearly mythical language, partly because they do not claim to be concerned with the real world, with the *maya*.¹⁸ Christian theology cannot help but be concerned with the real world, and to give up speaking about this real world in adequate theological terms means finally to give up one’s faith: one cannot transport the always new Christian message in the old wineskin of classical theologies. One can barely transport the Christian message of salvation in Christ to all people, and it must be transported to the young generation if Christianity is to survive and not die out like many species during evolution.¹⁹ Therefore, one must finally decide to leave behind the cozy habitat of theology with its beautiful decorations: for all its beauty, it has become uninhabitable to the average thinking being. Repair work will not do anymore. Needed is a new solid foundation to support a sound building. This means theologians shall have to work first on the central questions of their faith. Later, one might look after some of those beautiful decorative details and keep them for a historic museum of Christian thought or even integrate them into a newly built house of faith.

PRELIMINARY ATTEMPTS TO DO THEOLOGY IN AN
EVOLUTIONARY CONTEXT

So far, we have more or less been talking about our deficits, and if what I have pushed aside as obsolete is really so, then we are not left with much to go on. Naturally, one would not be able to talk this way if there were not at least some hope that theology might live up to its task of formulating the message of Christ in the context of the world into which he came, of which he became a part in becoming human.

But how can one proceed in a world that has so little in common with the world of 2,000 years ago? As I have pointed out already, the essential point for theologians is not to discuss the details of classical theology; they must turn to the core of the Christian message. This message is naturally not without a history, and to leave one's cozy habitat does not mean that everything has to be left behind.

Christians have to build a new theology as Christians—if they believe that this world is saved in Christ, in the Word of God that has become flesh. Theology for me can only mean a Christian theology—although I am ready to admit that other religious beliefs can develop their own theologies. But does it really make a difference that a theology is specifically Christian, as opposed to Judaic or Islamic? Are not Christians only one group of believers in the Book? Is there an essential difference between Allah, the Creator of everything, and Yahweh, the Creator in the Judaic and Christian traditions? Is this not the time to forget those historical differences—to realize one great religion that would confess God the Creator and the compassionate who is common to these three traditions? In fact, certain theological developments that speak of the man Jesus rather than the Son of God seem to pave the way in this very *reasonable* direction.

The dilemma here is one proper to any theology: such a confession does not start from human knowledge established by science and philosophies (if there is, in fact, such knowledge), but from religious experience that has found its expression in the theologian's faith. From here, one starts to do theology. While one may question the expression of one's faith, there always remains some core of belief that cannot be given up without giving up one's faith. This latter kind of conversion is possible, but it would require a complete change of theology as well. To do theology, one must identify the most essential points of one's faith, or to put it more bluntly, one must answer: What are the core verities to which one must adhere to be true to one's identity and which dominate all the theological propositions that one might develop out of the texts of the two books through which God is revealed, the Holy Scriptures and the Book of Nature?

In regard to Christian faith, we may refer to an old authority (who sometimes may be right). Thomas Aquinas once stated, “*Fides nostra in duobus principaliter consistit: primo quidem, in vera Dei cognitione . . . secundo in mysterio incarnationis Christi* (our faith consists principally in two points: first, in the true knowledge of God, . . . second, in the mystery of the incarnation of Christ) (Th.v.A., S.th.22.q.174.6c. principio). This statement reduces the Christian faith essentially to two points: faith in God the Creator and faith in the Incarnation of Christ. All other beliefs—for example, in the virgin birth of Christ, original sin, the sacraments, and the written confessions of faith—must be judged in relation to these two central points. Certainly, I do not mean to say that all the traditional propositions of faith are necessarily more or less obsolete; I should rather postulate that these issues have to be discussed in regard to their relatedness to the two central points, to the core of Christian faith that one cannot give up without ceasing to be a Christian. One has to start from these two points in building a Christian theology that makes sense in the context of God’s creation. This does not mean that all theological statements must be acceptable scientifically. The Incarnation, the Resurrection, and forgiveness of sins do not make sense in the context of science and can be neither accepted nor refuted by science. Religion will always bear a certain mark of foolishness, and science is not the judge of the mysteries of faith. But theology must understand the scientifically known world as the creation into which the Word of God became incarnated. And these theological statements must make sense *theologically* in the context of this world. To provide a short look at what I mean by this, I will present a very abbreviated outline of what I consider to be essential changes in Christian theology in consequence of seeing the world as evolutionary rather than stationary.²⁰

GOD THE CREATOR AND HIS CREATION

Traditionally, Christians profess belief in “God, the almighty father, creator of heaven and earth.” In the language of the time, this evidently meant that God created everything, and did so as the almighty one. When this confession was written down by the theologians of the time, power was obviously considered a numinous quality, by virtue of which kings were considered sacred. In the world as first created, everything was good, as we are told by the author of the first chapter of Genesis. God, at least in the Judaic and therefore also in the Christian tradition, was good; what God had created was perfect, the initial state was

the best one, and having been lost, it ought to be recovered one way or another.

Science does not know about such a perfect world. The universe started, as far as we may judge by our present knowledge, in the most imperfect way imaginable: a Big Bang. Compared to this explosion, the bombs of Hiroshima were backyard fireworks. The well-ordered universe the priestly writer describes in Genesis is certainly not the world that came out of this explosion where just one part in a billion of the original input of energy got any farther than heating the background of the universe. Nothing in this beginning invokes the Creator of Genesis 1: no intention belonging to a constructive will may be recognized. One might justifiably ask, looking at the early stages of the universe, what God was playing at in those endless epochs— 35×10^9 years according to the latest hypotheses—when there was barely anything happening after the first three minutes: only hydrogen and helium spreading and whirling for billions of years before galaxies began to form. This was not a constructive mind at work, at least not in the sense of a planning mind which wants a cosmos, an orderly world, to exist. This world came out of chaos, but not by an almighty power that imposed order on it. Wherever we look in the universe, we find enormous areas of disorder—in the world of matter, in the world of life, in the human mind. Certainly some order did arise, quantitatively on a very limited scale, and always at the extremely costly price of enormous disorder. To take only one example in our contemporary world, for every species presently living, thousands of species have become extinct. A well-ordered cosmos is not God's creation. The same line of argument, which has been exploited largely by Whitehead (1929, 245, 302),²¹ makes this world an indeterministic one. In my view, the present status of the world is certainly conditioned by the past, but it is not determined by the past, nor will the future be determined by the present, though future possibilities are limited by the conditions created by the past and the present. Thus, the Creator no longer appears as the almighty power imposing divine will on creation. Lacking space for greater detail, I will rely on the theory of creative union developed by Teilhard de Chardin, in 1917, which in essence declares that substantial things come into being not through the action of some outside power, but through the unification of elements, which make up a new essential whole (e.g., atoms unite to form a molecule; people unite to form a team).²² If one assumes that everything new that appears out of the evolutionary process is realized through some form of union, then God creates by uniting elements one with another.

This is not done in an artisanlike way: God is neither the great clock builder nor the great mason who cleverly puts things together. There is no sign that God created a perfect cosmos: too much waste is around for that. Thus, one may ask if theologically, some sense may be found in the way God did create this world, or if one should join Stephen Weinberg, who as a “pure” scientist stated that this universe is utterly meaningless. For a theologian, this is not an acceptable statement; it would mean that God’s work is meaningless. On the other hand, the magnificent order seen in the Middle Ages, and seen by the psalmist who wrote of the heavens that sing the praises of the Lord, is no longer to be found. Astrophysics has not found an order-oriented creation, although some order has evolved in the conditions of future possibilities. In my view the most important feature of this evolving universe is its very indeterminate-ness, which pays off in the appearance of ever greater freedom (cf. K. Schmitz-Moormann 1987). Thus, it appears that freedom, which would be very difficult to explain within a deterministic universe, is very important to Almighty God, who refrains from imposing divine will to force the best of all possible cosmoses.

On the basis of the evolutionary process (which is too detailed to summarize here), one might describe the relationship between God and the creation not as one of commanding, but as one of calling forth in love, by a God who does not impose divine will. All of this makes sense inasmuch as God does not seem interested in demonstrating almightiness, but in calling forth a creation able to encounter and love God—something a fully determined creature could never do. There is no love that is not free.

INCARNATION IN AN EVOLVING WORLD

One might accept such a vision of the Creator and of a creation that is still underway. But what is the role of an incarnated Son of God in such a theater? It is evident that the classical theory of a redeemer who had to atone for the sin of Adam does not make sense in such an evolving universe (cf. K. Schmitz-Moormann 1969). There was no original perfect state, and thus mankind (though sinful to a certain degree) never lost an initial state of grace. Thus, the Incarnation can no longer be understood as something necessitated by the wrongdoings of the human race.²³ Furthermore, since the Incarnation did not become necessary after the completion of creation, but rather during the ongoing process of creation, it becomes an element of the all-encompassing act of creation. Let me speculate on this. We have said that this creation is called forth by a loving God. But to love,

one has to speak to the other on the other's level. This is true for all aspects of creation. If God spoke in full glory to humans or to any part of creation, this would mean self-imposition and the forcing of what God apparently wants to remain free. Therefore, God never calls forth anything on a level other than its own. God speaks to humans like parents speak to little children—in their own language (this is similar to the way that parents have to learn first the language of the baby before the children learn the language of the adults).²⁴ Love accepts the other as it is, without self-imposition.²⁵ God was always covered when speaking to humans: the Old Testament makes this clear. There is a cloud, a fire, a voice, an angel, but never a completely imposing presence. The creative call of God appears at all times to be an indirect call, coming in a human way.

Though the Incarnation cannot be deduced from the process of God's calling forth creation, it makes sense that once God's creatures could love freely, then God's word became present among humans in the form of a human, asking to be loved by those who had been created. God became present as a human being after having sustained the long process of becoming, which in our experience culminated in the emergence of human beings. This is certainly not all there is to say on Christ, but it is a starting point for further speculation. The historical immediate presence of God, who had become human, has changed fundamentally the possibilities open to the future of this evolving universe. If Christians look only at this world and the possibilities it offers, there is no way to open up a perspective to satisfy the human hunger for eternity.²⁶ But if Christ is the Son of God, then he is a very real link between this world and the realm of God where, according to the Christian faith, humans want to go and cannot reach by human means, by the means found in this universe. When Christ says that he is the way, these words mean that there is no other way, that there is no other real bridge between God and this world. This need not mean that non-Christians cannot reach God, but if they do, this is possible because God became human so as to be continually present in this world.

However, when Christ is considered in his historicity, then it appears difficult to accept his essential function as the bridge between God and humankind. How can he be the bridge for humans who have evolved further than humans at the time Christ lived? There must be some way in which his humanity has been participating in and continues to participate in human evolution. The notion of the *alter Christus* (meaning that Christ is present and living in all baptized Christians and acting through them) is a possibility. Also is the notion that human solidarity encompasses all humans, of the past

and the future, with respect to the presence of Christ through all history. The traditional notion of the church as the *corpus Christi mysticum* (the mystical body of Christ, which grows and reaches fulfillment through history), linked with the Teilhardian notions of the Christogenesis and Christic character of reality, can provide a better grasp of the transhistorical and prehistorical presence of Christ. At the same time, one must examine what Teilhard called the cosmic nature of Christ—a third nature in addition to the human and the divine natures.²⁷ If we cannot relate Christ to the infiniteness of this universe, if we cannot show him to be the *Christus Evolutor in quo omnia constant*, then we shall sooner or later have to cease to proclaim him the Savior of this universe: He would become an episode in the story of a universe that surpasses him. I am afraid we are still far from having developed an understanding of Christ's cosmic nature that would enable us to proclaim him the Son of God through whom the universe is saved.

If one wants to remain true to one's faith and to continue to do Christian theology in a meaningful way, one is confronted with an enormous task, a way full of risks and probably paved with errors. In my view, however, one does not have a choice: Either one takes these risks as a Christian, or Christians no longer exist. They may be remembered in the future as an episode in the history of religions.

NOTES

1. All the currently offered cosmological theories are forced to exclude one or another known feature of reality or to introduce new dimensions and unverifiable though calculable hypotheses such as the inflationary universe, the string theory, black matter, etc. Interestingly, a new cosmological theory (Priester 1990), calculating the universe at an age of about $34 \pm 5 \times 10^9$ and recovering Einstein's cosmological constant Λ (which most astronomers abandoned after Gamow quoted Einstein as saying this constant was the greatest stupidity of his lifetime) at the value of $2 \times 10^{-56} \text{ cm}^{-2}$ (vacuum density). According to this theory, all known data of cosmological relevance—like the big wall, the appearance of the galaxies, the carbon, silicon, and oxygen in the oldest quasars, etc.—can be integrated without the help of those highly hypothetical elements mentioned above. Thus, this new model stands quite a good chance of being accepted for a while.

2. As is well known, Schleiermacher opposed the "natural" theology of the Enlightenment, defining the real locus of religion as placed in *feeling*; religion is for him "the sensitivity and taste of infinity," while Christianity is "to save from the sinful finity" (Schleiermacher 1799).

3. It is better not to underestimate observational skills and rid oneself of the myths about medieval ignorance. These theologians were able to calculate astronomical clocks as they are still working in European cathedrals. Where is the clergy able to do this today?

4. It should be evident that there cannot be any single person who as a theologian could have at his or her fingertips all the knowledge that goes into the description of our universe. To a certain degree, we still have to learn how theologians may be able to use scientific knowledge and to train future theologians accordingly.

5. The idea of perfect symmetry is one expression of this static universe. Even though this symmetry is found in everyday physics, we cannot escape the observation that the history of the universe describes the most diverse dissymmetries; to start with, one part

in a billion of the original energy in the universe was not radiated by the matter-antimatter destruction.

6. There are numerous treatises on this subject, even in the most modern theological manuals.

7. This point should be more fully elucidated by going into the details of evolutionary history and the appearance of new realities in the course of history: new realities like chemical bonds, life, and the human mind are not explained by the past, but the significance of the past is more fully understood through these later realities.

8. This is true for all religious traditions: to live in an evolving world is part of the human predicament.

9. This was already clear to Albertus Magnus: "*Si autem quis dicat, quod voluntate dei cessabit aliquando generatio, sicut aliquando non fuit et post hoc incepit: dico, quod nihil ad me de Dei miraculis, cum ego de naturalibus disseram.*" (*De generatione et corruptione*, 1.1 tr. 1, c.22, Stift Lilienfeld Cod. 205f. 5vb) (When somebody says that by the will of God something is stopped in its development as there was a time when something was not developing and after this it started developing: to that I answer, that I am not concerned with God's miracles when I discuss nature.)

10. The modern conscience about ecological consequences of human acts has created a higher sensibility of this fact: Even if we do not consider the effects of spilling noxious matter into the sea, for example, we sooner or later have to learn that there is no such thing as total irrelevance in the closely knit net of our world. Therefore, especially where our faith in creation is concerned, we should be very careful before we declare any detail of knowledge about this universe as irrelevant for theology.

11. The parable of the good and bad servants—the good ones kept the deposited capital of talents successfully working, a way that was not without risk and probably not without some losses, and the others kept the deposit without touching it. This could be read as hinting at the dangers of keeping the *deposit fidei* untouched.

12. Thus, the Belgian king abdicated his office rather than sign an abortion bill passed by the parliament.

13. There are naturally the process theologians, some Teilhardians, and a few organizations, such as the Center for Theology and the Natural Sciences, the Chicago Center for Religion and Science, the Princeton Center for Theological Inquiry, and other promising endeavors. But quite often I see people working at delimiting their realms rather than at integrating them: as stated above, at least the theologian must integrate the world as it is recognized by science.

14. One of the more famous examples is the apologetic Joseph Bautz, who at the turn of the century taught in Münster that the existence of hell in the center of the earth was proven by volcanoes. For this he was nicknamed the "Höllenbautz."

15. This occurred in 1952, before the Pontifical Academy of Science.

16. It is interesting to note that Greswell published in 1852 the *General Tables of the Fasti Catholici or Fasti Temporis Perpetui From A.M. 1 B.C. 4004 to A.M. 6004 A.D. 2000* (Oxford University Press), giving the starting time of creation as April 24, (18h 0' 0" 0"), 4005 B.C. We are no longer able to think in this way.

17. There is certainly no sign of great faith in theologians' circles if they shy away from being confronted with this world: they are much less like the apostles proclaiming their faith than the apostles who after the crowds left Jesus, stayed with him saying: "*Domine, ad quem ibimus? verba vitae aeternae habes.*" (Lord, where should we go? You have the words of eternal life (John 6:68).

18. I do not refer to the wild mixtures of Eastern religious ideas with theories of auto-salvation, EST, Scientology, etc.

19. Currently, we may cite the Shakers as one such subspecies for which there is barely any hope of survival.

20. Actually, we should have to treat the totality of what is developed in our dogmatic manuals of "Christian Dogmatics"—to do this adequately we should need to stay together for more than one year—and even then I should have to work on this for much longer before I would be able to present a text that could claim to cover the ground somewhat.

21. Cf. Whitehead (1929, 83): "In the mere extensive continuum there is no principle to determine what regional quanta shall be atomized, so as to form the real perspective standpoint for the primary data constituting the basic phase in the concrescence of an actual entity. [. . .] This initial phase is a direct derivate from God's primordial nature. In this function, as in every other, God is the organ of novelty, aiming at intensification."

22. Let me just quote a few central statements of this theory: 1. *Plus esse = cum pluribus uniri*; 2. *Plus esse = plus plura unire*; 3. The union differentiates. See Teilhard for more details.

23. There is still an element of atonement, of redemption in the cruelty of the death on the Cross, but is this death justified by human sins throughout history? It is difficult to accept such an idea, and we are still confronted with the foolishness of the Cross.

24. Babies have their own grammar and at least to a certain extent their own vocabulary, which mothers understand while outsiders are unable to do so.

25. To search further into this field would mean to go into the details of the different personalistic philosophies, as elaborated by Martin Buber (1970), Romano Guardini (1939), Emmanuel Mounier (1952), and others.

26. This itself is something evolution has produced—to lure us into activity, or to make us strive for our real eternal future? To lure us with a trick within a meaningless environment, or to make us feel that this universe by its proper means cannot give us the fulfillment of our justified and essential desires?

27. This certainly needs elaboration: it might be indicated that in the Teilhardian vision of evolution, the physical, chemical, and biological realms, which historically arise one above the other, are the basis of the noosphere, which builds itself through human thinking and which reaches its culmination transcending into the "Christic."

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