

ENGAGING SCIENCE IN THE MODE OF TRUST:  
HANS KÜNG'S *THE BEGINNING OF ALL THINGS*

by Chris Tilling

*Abstract.* In 2006 Swiss theologian Hans Küng added his distinctive and important voice to the science/theology discussion in his work *Der Anfang aller Dinge*. I summarize here the general contours of Küng's argumentation and briefly evaluate his proposals, especially in relation to his earlier publications. English translations are provided for German citations. After summarizing Küng's response to the question of the search for a unified theory of everything, I present his answer to the question of how theology and science should be related. This leads to a summary of his extensive meditation on science and the question of God's existence from a theological-philosophical perspective. After examining his thesis concerning creation and evolution, I discuss matters more anthropological and trace the final elements of Küng's argument as they relate to eschatology and science. Finally, I evaluate the general thrust of his argumentation with special reference to his previous publications.

*Keywords:* anthropic principle; biogenesis; chance and necessity; cosmic organizing principles; creation; eschatology; evolution; GUT; intelligent design; Hans Küng; miracles; neuroscience; pantheism; Pascal's wager; the problem of freedom; psyche; relation between theology and science

---

Hans Küng's recent monograph, *Der Anfang aller Dinge*, *The Beginning of All Things* (2006),<sup>1</sup> not only is a well-written and engaging book—indeed, how could it be anything else when it concerns such a broad subject as the “origin and meaning of the universe as a whole, yes, reality in its entirety” (Küng 2006, 16)?—but its appearance also is well timed. In a season of heightened theological reconsideration of the interaction and

Chris Tilling is completing his New Testament doctorate at London School of Theology. His address is Schillerstraße 32, Gomaringen 72810, Germany; e-mail [christilling.de](mailto:christilling.de).

[*Zygon*, vol. 43, no. 1 (March 2008)]

© 2008 by the Joint Publication Board of *Zygon*. ISSN 0591-2385

relation between science and theology,<sup>2</sup> the brilliant Küng adds his own vital voice. The Tübingen-based Swiss Catholic, known as one of the world's most influential, prolific, and provocative theologians, builds, in this new volume, on his previous works<sup>3</sup> and develops numerous original lines of thought. The primary aim of this review article is to make Küng's argument available to English-language readers and briefly assess this work in terms of his previous publications.

Küng focuses on two main questions: Why does the universe exist—why does not nothing exist? and Why is the universe the way it is? (Küng 2006, 16). The book is divided into six parts including the Epilogue, and I follow this structure in my review.

1. A unified theory for everything? (*Eine vereinheitlichte Theorie für alles?*)
  2. God as the beginning? (*Gott als Anfang?*)
  3. World creation or evolution? (*Weltschöpfung oder Evolution?*)
  4. Life in the cosmos? (*Leben im Kosmos?*)
  5. The beginning of the human race (*Der Anfang der Menschheit*)
- Epilogue: The end of all things (*Das Ende aller Dinge*)

#### A UNIFIED THEORY FOR EVERYTHING?

The first section begins with a narrative detailing developments in science over the last few hundred years, from Copernicus to the proponents of quantum theory and the Big Bang (*Urknall*). This overview reaches its climax in Küng's analysis of the optimism displayed by twentieth-century scientists that a World Formula (*Weltformel*), or Grand Unification Theory (GUT), could be discovered—a complete description of all reality, with or without God. As Stephen Hawking famously suggested in the popular *A Brief History of Time*, such a theory would enable us to “know the mind of God” (Hawking 1988, 175). However, such confidence has turned out to be a great disappointment. In fact, Küng notes that Hawking himself in a recent and surprising pronouncement states that he has “given up” on the search for a GUT because, as Kurt Gödel has shown, “axiomatic systems of mathematics are not in the position to prove their own freedom from contradiction” (Küng 2006, 35–36).

An important facet of Küng's argument against the sort of scientific overconfidence that jumps in bed with logical positivism and consequently marginalizes anything theological draws on the work of Karl Popper. In particular, Küng addresses the claim that everything metaphysical must be delimited as meaningless by asking: “Is it legitimate to bracket certain questions, right from the beginning, as ‘meaningless’, when it is not possible to define what ‘meaning’ is at all from a mathematical-empirical standpoint?” (2006, 42). Indeed, science can never prove its statements in an absolute sense. According to Popper, they can only be falsified. Science has its limits.

None of this is to be understood as an attack on the whole scientific approach, however. Rather, Küng's objective is to blunt the unrealistic self-assurance and philosophical naivete of its logical positivist-infected branches. He wants to emphasize that reality cannot be defined *von vornherein* (from the start) by some kind of absolutized *Rationalität*. Reality is a multifaceted and complex beast that one should approach through a variety of means and methods. Not only that, but it is clear that everyone operates not from a detached Spock-like rationality but with desires, feelings, intuitions, and passions. Again, this is an argument not against rationality but only against the absolutization of it.

Science and theology, Küng suggest, both are legitimate perspectives from which to analyze the complexity of reality. However, just as he argued was the case for the natural sciences and mathematics, theology also cannot claim to know the truth absolutely *von vornherein*. Theologians too must always be prepared to revise old models and think new thoughts. In particular, they should not withdraw to the alleged infallibility of the pope, Bible, or any creed or pronouncement of the church. Rather, science and theology can work together over the question of reality, something for which the schools of Karl Barth (and his aversion to "natural theology") and Rudolf Bultmann (and his neglect of cosmology through his preoccupation with human *Existenz*) have generated a need. Moreover, theologians must be careful to note that this working together should not flip into a defensive apologetic stance. On the other hand, instead of a pure *integration* of science and theology, Küng suggests a *complementary* relationship. Following Immanuel Kant, he affirms that science has its focus on space-time phenomena but cannot overstep this world of phenomena. The world "in-itself" and the questions concerning the ground and meaning of reality as a whole are simply beyond science and mathematics.

So how are theology and science to relate to one another? Küng argues that there should be

- no confrontation model between science and religion, whether of a fundamentalist-premodern origin, which ignores or suppresses the results of science or historical-critical biblical exegesis, or a type of rationalistic-modernism, which from the start declares religion to be irrelevant, and
- no integration model of harmonizing tendency, but rather
- a complementary model of critical-constructive interaction of religion and science in which their own spheres of specialization are maintained, all illegitimate transitions avoided, and all one-dimensional totalizing rejected. (Küng 2006, 57)

In the next section, Küng attempts to employ this complementary model as he probes more deeply into the question of the mathematical structure of the physical world.

## GOD AS THE BEGINNING?

Küng initially asks the question “God as beginning?”—not from the perspective of cosmology but rather in light of philosophical-theological reflection.

First, through a brief analysis of the “singularity at the beginning” (*die Anfangssingularität*), Küng argues for the impossibility of explaining the absolute beginning (the  $t = 0$  moment) without some recourse to meta- or protophysics. Second, he argues that science cannot determine that God is irrelevant to such considerations. He attempts to demonstrate this based on Kant’s critique of “pure reason”: The limits of reason must be admitted, and this is not to be taken as the same thing as limiting reality. “That means: What reason doesn’t grasp can still be true!” (Küng 2006, 63). Turned around, this means that scientific proof of God, according to Kant, also is impossible.

This is all agreeable enough, but in the light of Kant, Küng turns his guns on the likes of Carl Sagan, Richard Dawkins, Peter Atkins, and other such “prophets of science” who proclaim an atheistic critique of religion in the name of science. Their scientific work, he argues, has no real relevance for the truth or falsehood of most religious claims.

Through an overview of the contributions of famous religion critics (Ludwig Feuerbach, Karl Marx, and Sigmund Freud), Küng points out that their conclusions may well be accepted, but this hardly determines the absolute truth of reality. For example, along with Feuerbach we may agree that “God” is a human projection, but *only* a projection? Küng is adamant: Science must leave God out of its considerations. It simply does not have the tools to deal with such questions. God is not an object in the observable universe to be placed under a microscope. So while atheism may be in many ways understandable, it certainly is not a necessary scientific judgment.

In all of this, of course, Küng is setting his argument against certain apologists who want to suggest that an absolute point of beginning is positive proof for a creator. Things are not so simple. Does this mean that we can forget about such questions as “What are the conditions of the Absolute Beginning?” “Certainly not!” he insists. It is simply that such questions cannot be answered by science because they overstep the boundaries of pure reason. Rather, and this is a point he expands on later, the existence of God is a question that needs to be addressed by a decision of the whole person, not just pure reason (2006, 75).

Where do the cosmic organizing principles (*Ordnungsprinzipien*) come from? Astrophysics cannot answer this. The generally accepted expanding-universe model helps to explain some things but not these basic principles. It cannot describe the conditions for the beginning of the universe. This does not mean that we should import God into a scientific lack of knowledge (a “God of the gaps”); rather, this is an invitation to think over the

fundamental conditions of the scientific world model that does not rest on scientific arguments alone.

Before Küng turns to develop his own answer to cosmic “fine-tuning,” he addresses two approaches to answering the question of how the beginning of the universe and its balanced intricacy can be properly explained. Under the title “cosmological speculation” he first overviews the claims made by those promoting alternative and self-creating universes as a way to balance equations and explicate the conditions at the very beginning. Küng’s main criticism centers on the fact that such speculation is hardly science in an empirical sense, and thus, while it may be correct, it cannot compel assent.

On the other hand, advocates of intelligent design have attempted to use the Big Bang and expanding-universe models to justify belief in the Genesis account of creation. These models point to a definite beginning, a moment of “creation” at which the universe began. However—and here he shows that he is no mere apologist—Küng notes that such argumentation “hardly manages to convince” (2006, 87), since no physical law can imply a factual endlessness. The sort of arguments Küng used against scientific arrogance (drawing largely on Kant) he now uses against an overly self-confident apologetic stance.

Science, Küng insists again, can take one only so far. Furthermore, such questions as those concerning the condition at the Absolute Beginning of all things cannot help but swerve into metaphysics. Indeed, as many scientists freely admit, the more of the universe one discovers, the less it is understood. Despite the enormous contributions and advances of scientific knowledge in the last century, room must be made for scientific humility. Indeed, the 96 percent of the universe that remains beyond human knowledge also remains, in relation to current scientific theories, beyond entirely reasonable explanation and understandability. And this is not merely the sort of mystery that can one day be resolved. Rather, quoting Blaise Pascal, Küng speaks here of the *secret impénétrable*, that which is beyond “theoretical reason” and empirically beyond scientific research.

So how *are* we to approach the question of the *secret impénétrable*?

While the arguments of physics, built upon observation, experiment and mathematics, are of a logically compelling character, the philosophical-theological arguments for the acceptance of a meta-empirical reality can, at the most, be an introduction and invitation. That means: In these last of questions, *it is not intellectual compulsion that reigns, but rather freedom.* (Küng 2006, 95)

The events of  $t = 0$  are simply beyond the reach of our physics. This does not mean that Küng merely introduces God-speculation where there exist gaps in scientific knowledge. Rather, it is about the nature and the scope of the questions about the “ultimate secret of reality,” the original ground and foundation and the original goal of all Being. It could be objected that

to speak of this ultimate reality in terms of God is simply a pious hypothesis that scientists cannot allow. “No,” says Küng: “I want to recommend to scientists to take God into consideration as at least a hypothesis” (p. 97).

An ultimate cause beyond our three-dimensional universe cannot be proved or disproved with the tools of empirical science. Thus, “God” should be respected at least as a hypothesis. Indeed, if God does exist, the questions concerning the ultimate reality, the conditions at  $t = 0$ , can all be answered. However, the big question is: Does God actually exist?

More precisely, how is one to answer this question? How is one to find access to the ultimate secret of the universe? How can we get from God as hypothesis to God as Reality? It certainly will not come through theoretical operations of pure reason, but neither will it come through irrational feelings. Rather, it comes “on the grounds of a trustworthy, rationally defensible fundamental decision and standpoint (*Grundentscheidung und Grundeinstellung*)” (Küng 2006, 98). To use Küng’s analogy, one learns to swim not by standing on the dry bank, reading a “how to swim” book, but through risk, through getting the hair wet and finding out that the body will not necessarily sink. One learns to trust the water through trying and risk. Applied to real life and the question of God’s existence, Küng is suggesting a hermeneutic of trust. Despite doubts, one can accept the secret Reality of all things and make this the basis of one’s entire experience, behavior, and actions.

For Küng, while a logical proof or disproof of God is not possible, it is viable to suggest that a (Kantian) “practical reason” can function as a guiding introduction (*hinführende Anleitung*) into the reality of God—one based on the *entire person*. This is crucial for Küng’s entire theological epistemology. He writes:

Statements about God and the basic existential questions should establish themselves and prove to be true within the experiential horizons of our lives: not in compelling deduction from an apparently evidential experience which would make a human decision superfluous, but rather in clarifying illumination of the always problematic experience, which invites the human to a free decision. (p. 99)

Indeed, only when talk of God is covered by and related to the concrete experience of the reality of humanity and the world can its believability be grounded. And although for some the “improvability” of God is enough to affirm atheism, Küng’s conviction is that saying Yes to God enables a radically grounded basic trust toward reality. Numerous existential questions can then, in principle, be answered; the human has an “Archimedean point” from which to view reality, and questions such as What can we know? and What should we do? and What can we hope for? can be approached so that it is possible to understand why such contingent creatures as humans can still be beings of unlimited expectation and hope.

## WORLD CREATION OR EVOLUTION?

About 13.7 billion years ago the universe came into being; then, 4.5 billion years ago, our own planet Earth. For about the last 3.5 billion years, complex life has existed on Earth. What does all of this mean theologically? Küng now turns attention to the question: creation or evolution?

Küng overviews the accounts of creation found in the world religions. His point is that science cannot say it all and that religion has “room” for its claims. The scientist cannot give the full picture of creation, because he cannot answer fundamental questions. However, before Küng attempts to bring the biblical story to bear on the wider questions, he turns to the complex issues of biblical criticism and the Pentateuch. He concludes that the only constant in the changing biblical records is God. Given his distillation of the biblical constant (God), and that the Bible is God’s word in human words, the biblical metaphors can be no proof for a cosmic designer but rather are an invitation to believing in the one God. This means that there should be no harmonizing or mixing of the biblical accounts of creation with science. They speak in two different ways, are two different languages: “Rather, it [science] has to promote the physical explicability of our universe as far as it can and at the same time leave space for that which is principally unexplainable physically. That is what the bible talks about” (Küng 2006, 137). Indeed, whether one wants to speak of God at all is one’s own decision, but science has nothing to say against it.

According to Küng, the real message of Genesis, which science can neither prove nor disprove, is “In the beginning of the world is God” (Küng 2006, 139). Furthermore, it is clear that creation is not just something in the past but something that continues; there is *creatio continua*, continuing creation, as well as *ex nihilo*, out of nothing.

All of this raises the question, What is the meaning of faith in a Creator God today? His answer: It should be understood that the questions addressed by the biblical authors and editors are not scientific but rather existential. The meaning of the biblical account of creation is that it gives life orientation, not scientific facts.

It leaves the human with meaning in life and in the evolutionary process. . . . The whole thing does not stem only from a “Big Bang”, but from an origin [*Ursprung*]: from this first creative foundation of all foundations, which we call God, even the creator God. . . . Even when I cannot prove this, I can still affirm it with good reason. I can affirm it in the trust which is reasonable, tested and enlightened, and in which I already affirmed God’s existence. . . . Only so, it appears to me, can the universe become plausible in its existence as a cosmos: in its mathematically organised, highly complex and incredibly dynamic being [*Wesen*]. (p. 142)

Thus, to believe in a Creator does not mean to believe this or that myth literally but involves faith in the wider meaning and orientation in life it offers, and thus concretely in God himself—and not just for our sakes but also for the good of all our fellow humans and of the environment.

In what way, then, are we to understand God's role in the evolution of life on this planet? In the next section, Küng attends to the question of what in the English-language discussion has been called *theistic evolution*.

#### LIFE IN THE COSMOS?

In a fascinating process of argumentation, Küng tackles the hotly debated question: If the shape of the cosmos and life itself can be explained with the laws of natural cause and effect, is there room for special intervention of God in this process? Küng specifically asks: If God did intervene, did it happen when life first appeared on Earth (the question of biogenesis)?

*Since when has there been life?* As the initial step in his argument, Küng asks what life is. In concluding (along with the modern scientific consensus) that life is characterized by three things—reproduction, mutation, and metabolism—he proceeds, as a second step, to ask, Where is there life? Is there alien life? He details the initially positive estimates for extraterrestrial life but notes that the search for alien life produced by such optimism returned exactly no concrete evidence. This leads him to suggest that perhaps we are in fact alone in the universe. Indeed, observation of the known universe has not yet lent itself to the notion that there are life-friendly places for life to evolve; the universe outside of our solar system appears unsuited to support any reproduction, mutation, or metabolism. Nevertheless, he is clear that “We cannot, of course, entirely exclude the notion of extraterrestrial life” (p. 153), and theology has nothing to fear were it found.

*How did life come into being?* Coming back to earth, Küng notes the astonishing success biology has had in the last decades in showing that all terrestrial life is related, having the same molecular structures, same dependency on genes, and same four fundamental building blocks. From this, he observes that the evolutionary theory of Darwin can be seen as “physically grounded and experimentally checked.” In the light of this, he asks: “Can we suppose, behind the development of life, a secret and divine act of creation? Isn't the fact that life evolves into even higher forms suggestive of a divine intervention?” (pp. 154–55)

Küng insists that the development and improvement of life should not be associated with divine intervention; rather, at the experimentally checkable molecular level, the principles of natural selection and the survival of the fittest are the driving forces. He admits that there are big holes in our knowledge of exactly how this natural evolutionary process happened; nevertheless, a plausible scenario can be presented without assuming divine intervention at any point. (Here he follows the suggested summary of the process given by the director of Tübingen's Max Planck Institute for Developmental Biology, Alfred Gierer.) He concludes: “It is certain: one can-



not see, according to the newest biochemical findings, why there would have been a necessity in these highly complex processes for a special intervention of a creator God” (p. 157). Evolved life is, in other words, “despite all unexplained questions, a physically and chemically understandable event” (p. 158). Thus, without explicitly mentioning the thesis of intelligent design, Küng firmly opposes its basic argument.

*Chance or necessity?* If the development of life is to be understood, as Küng insists, as a physical and chemical event without any divine breaking of the rules at some stage, is everything simply pure chance? Is life just an accident? *Reiner Zufall?*

Küng’s argument is multilayered. In noting the contribution of the late Jacques Monod (French molecular biologist and 1965 Nobel prize winner), he asks whether the Frenchman’s dispute with “animistic projections” into the evolutionary process really can be taken as credible polemic against a creator God per se. In his response to Monod, Küng cites the *Physiochemiker* Manfred Eigen (University of Göttingen), who writes in the foreword of the German translation of Monod’s *Chance and Necessity*, “As much as the individual form owes its origin to chance, the process of selection and evolution is also unavoidable necessity. But it is not more! There is no secret inherent ‘life-characteristic’ [*Vitaleigenschaft*—that is, animism] in material that should determine the process of history in the end! But also not less!—not *only* chance” (Küng 2006, 160).

In quoting Eigen, Küng aims to break down the inherent either/or, the either *Zufall* or (theological) necessity in the rhetoric of those who affirm, as he does, evolution as explainable within the natural process of evolution. This is, however, but the first step in his argument. Rather than positing chance *or* necessity, Küng wants to understand the notions as both/and. He thus turns to chaos theory and concludes: “For the explanation of evolution, accident or necessity, indetermination or determination, yes even materialism or idealism, are false alternatives” (p. 161). The evolution of life is therefore not chance *or* necessity. It is not an assertion of an animistic life force *or* atheism. Fascinatingly, what this means, if the logic is pursued, is that God indeed appears to throw dice, albeit within certain rules.

But is it *God* who throws the dice? Küng is clear: Certainly it would be unfair to postulate God, as Monod insists, from molecular indeterminacy or other such facets of the evolutionary process. This would merely project a God of the gaps. However, Monod’s rejection of creation-mysticism also is hardly grounds for the rejection of a Creator and Director (*Lenker*) of the world.

Küng presses his reasoning further: Either a person says No *or* Yes to an original foundation and original goal (*Urgrund, Urhalt, Urziel*) of the evolutionary process. If a person says No, he or she also must agree to the senselessness of the whole process and the loneliness of humanity. The

person who says Yes must not base the fundamental meaningfulness of the whole process of evolution on the process itself but may trustingly presuppose such meaningfulness (p. 163). Furthermore, those saying No must still answer the question of why there is something and not nothing. Indeed, there appears to be an unavoidable metaphysical element in human thinking that cannot simply be turned off. An acceptance of the physical and chemical nature of evolutionary development does not prove or disprove metaphysics. Therefore, the ball ricochets off the hard wall of evolutionary chance and lands back on our court: Will our existential stance be a Yes or No to an *Urgrund* and *Urziel*?

*Why a life-friendly cosmos?* In looking at the astonishing fact that 13.7 billion years of cosmic evolution has led to very highly developed and complex life, even “life with spirit,” Küng focuses on the question, “Is everything really chance? Is pure chance an explanation?” (p. 165). What about science? Could this discipline one day clarify how human life came to be as it is on this planet? “Perhaps one day,” says Küng, as it would be difficult to exclude any such possibility. But what of Gödel’s Incompleteness Theorem—“a finite system of axioms always contains formulas that within this system can neither be proven nor disproved” (Küng 2006, 33)? Surely that makes things more than just a little problematic.

So, if science does not give us a final explanation, what *does* explain the development of life on Earth?

What about an anthropic principle? Possibly, says Küng, if one understands the principle in its weak sense. However, how could one prove a metanature law? In fact, Küng already has laid the epistemological foundations of his thinking here, and this excludes the possibility that science could one day provide a final solution in the language of metaempirical law. Rather, for such metamatters as this, not science but philosophy and religion are responsible. Although the development of life cannot be scientifically demonstrated to be goal-oriented, or more than chance, our view of reality *can* inspire philosophical/religious thoughts in a direction—namely, that it is difficult to believe that “the great cosmic development is only a meaningless drama played before empty seats” (p. 169).

What does all of this reasoning suggest? To sum up, religion can interpret evolution as creation. Science can make the creation a concrete evolutionary process, and religion can give evolution a meaning which science cannot. Thus, at the end of the day, any such metainterpretation of reality is a matter of faith—or, better, trust.

*Miracles.* Küng now turns to the question of the intellectual credibility of miracles, a matter he has treated at more length elsewhere (Küng 1976, C II, 2). He prefaces his argument by saying, “I do not want to hurt the religious feelings of anyone who finds a literal interpretation of the

biblical miracles important. Rather, I want to give a helpful answer to those *modern people* for whom miracles are a hindrance to faith in God” (Küng 2006, 171; emphasis added).

His argument is tightly packed. First, he claims, it is necessary to distinguish between the biblical and the modern understanding of reality. In the scriptures, he argues, no one distinguished between miracles that broke the laws of nature and those that did not. Indeed, the idea that miracles break the laws of nature is a modernist conception. Second, Küng is sensitive to the results of biblical criticism. Based on these two points, he argues that biblical miracle stories are best understood as metaphors. In other words, what is important is not whether the miracles actually historically happened but what they mean.

*Can you trace the activity of God? (Wie Gottes Wirken denken?)* Küng has steadily argued throughout the book for a Yes to a reasonable trust in an Alpha, a “Ground” for all things, in that which is the “other side of science.” The evolutionary process itself cannot either shut out, or in, an Origin or Alpha or posit a final meaning in the evolutionary process. How should we understand God and God’s relation to the world in the light of these points?

To answer this, Küng develops a portrayal of a spiritualized God. An understanding of God as “up there on a throne who controls everything” does not gel well with Küng’s suggestions so far. Indeed, he points out that such a theology cannot answer why the developmental process has led to so many evolutionary dead-ends or give an answer to the endless suffering of terrestrial life and the presence of evil in the world. Hence, against crude anthropomorphized images of God, Küng advocates an understanding of God as “Spirit.” This, he argues, enables one to focus discussion in terms of God’s relation to the world in light of the evolutionary process.<sup>4</sup> And what is Spirit? “Palpable, yet also not palpable, invisible, yet mighty, important to life like the air we breathe, charged with energy like the wind of a storm—that is the Spirit” (Küng 2006, 175).

In Küng’s qualifications concerning what he means by Spirit he impressively avoids many potential exegetical pitfalls. In particular, he is clear not to buy into the peculiar tradition of German exegesis that insists on a “substantial” Spirit (see Horn 1992, for example). Furthermore, he argues that God, understood as Spirit, works in the physical laws of nature but is not identical with these laws. God acts, rather, as the absolute in the relative, as the endless in the temporary. He does not work from above, or outside, as unmoved mover, but acts from within creation—in, with, and under all things, whether human or not, directly within the suffering and random processes of life. God is himself the origin, middle, and goal of the world process. This means that God does not just work every now and then at special points, like a God of the gaps, but continually.

To qualify, this does not mean that God *is* the world (pantheism). Rather, God is *in* the world and the world in God (*ineinander*). With this theological view in mind, and following John Polkinghorne, Küng denies that it is plausible to link God to this or that event within the evolutionary process in the causal network. The relation is more complex than that; it can be grasped only by faith and is not “pin-downable,” scientifically, to this or that point of contact. Therefore it is not possible to claim, reasons Küng, that the great plan of the creation of the universe ever existed as a formal blueprint, detailed to the last issue. Rather,

The actual balance that we accept between coincidence and necessity, contingency and possibility, appears to me to cohere well with the will of a patient and subtle Creator, one who is satisfied to pursue and track his goals while he accepts, in the process he initiated, a measure of violability and precariousness, in such a way that always distinguishes the gift of his freedom and love. (Küng 1976, 177–78)

Küng nevertheless insists that an understanding of God’s activity in and with the world remains a mystery, much like the relation between grace and works in Christian theology (see, for example, 1 Corinthians 15:10).

#### THE BEGINNING OF THE HUMAN RACE

Are human beings anything other than physical stuff, and is the person more than the firing of electronic synapses in the brain? What is a human being? What is the *I*? To such questions Küng now turns.

Addressing the problem of freedom, he notes that the traditional body/spirit dualism of Plato-Augustine-Descartes is futile and that *soul* is hardly the commonly used label these days anyway. Today, one speaks of the *psyche*, thus resisting dualism. Agreeing with the general thesis of Wolfhart Pannenberg’s extensive study (1985), Küng concludes:

- The person, the *I*, is neither the soul nor the brain but the entire living, feeling, thinking, suffering, acting person.
- Body and psyche are a unity, and *soul* should be understood only metaphorically, poetically, liturgically, and so forth—never literally.
- Consciousness is a psychophysical process, not a spiritual ability outside neural substratum. (Küng 2006, 190–91)<sup>5</sup>

Does this mean, then, that *spirit* is just a secondary effect of brain functions? Moreover, does this not imply that any notion of human freedom is constrained by the neural workings of the brain? Indeed, recent studies in human sociality would emphasize that restrictions on human freedom are even more pronounced from without, not just in relation to patterns of neural synapses and the like.

Nevertheless, Küng affirms that the human is free precisely within these constraints. Yes, the human is environmentally conditioned, but surely

humans shape the environment as well. Yes, the human is genetically pre-programmed, but even here, the human is not *entirely* preprogrammed.

Discussions concerning *freedom* have come particularly to the fore recently in light of the latest brain research. Surely the soul did not fall from heaven; it is a product of evolution. Hence, one may be correct to assert that the *I* is entirely determined by physical-chemical brain processes. Thus ends the freedom debate? Indeed, no theologian should ever, Küng says, simply bring God into this debate and too quickly seek a theological resolution, because such a strategy would simply speak past the scientist. Küng wants to build bridges between theology and science and will do so by focusing on the question “Is freedom of will an illusion?” In answering, he simply insists upon more scientific humility. Physicists, chemists, and neuroscientists cannot answer such philosophical questions in their studies. They focus upon the empirical, the concrete structures of consciousness. To answer questions of freedom is to immediately color scientific research with (perhaps unintended) philosophical commitments. Especially in light of the impotence of brain research to answer questions about the reality of human responsibility and guilt, one must resist the sort of reductionism that proclaims neurological hypotheses can fully explain human freedom.

The most recent research has shown that the more closely neuroscientists analyze the functions of the brain, the less they actually understand, in light of the usual models, central aspects of consciousness. Many claim that the prophesied explanation of the relation between brain and consciousness is not to be expected at all (Küng 2006, 200–201). Indeed, “Brain research offers, at this time, no empirically provable theory about the coherence of spirit and brain, of consciousness and nervous system” (p. 202).

In terms of the freedom debate, in certain situations the decision process of our whole brain enables us to even resist limbic reflexes. In that, Küng insists, is freedom of will made clear: to set goals and values, and to follow them through, independently of external or internal influences (p. 204).

However, does an *I* exist to make these goals and follow them through? Citing neuroscientist Wolfgang Prinz, Küng maintains: “Biologists can explain how the chemistry and physics of the brain functions. But no one knows, even today, how this becomes an ‘I’ experience, nor how the brain creates meaning at all” (p. 204). Besides, the “spirit” of a human being resides not simply in the brain but in the entire bodily life of a human. The *I* is certainly a social construction, but precisely as such it is no illusion.

Furthermore, freedom is complex. One could probe around in a brain and never find “freedom.” Additionally, our freedom comes to us as an *experience*. However conditioned I am by my environment and the processes in my brain, whether I sit or stand, speak or remain silent, I am always conscious that responsibility for such decisions lies in my hands. This understanding of freedom focuses not only on this or that brain function but on the whole bodily life of the human, and in this context it makes a good deal of sense.

With all this talk of freedom on the table, what should be said about ethical responsibility? The development of human ethical behavior is linked to evolutionary and sociocultural factors. They belong together. Indeed, there has never been a people group, Küng asserts, without a religion or an ethos. Even in the earliest cultures there existed a sense of justice and respect for life. "Today's practical 'World-Ethos' is based ultimately upon a biological-evolutionary pre-given, in the time tested 'Original-Ethos' [*Ur-Ethos*]" (Küng 2006, 213).<sup>6</sup>

How does this *Ur-Ethos* relate to biblical ethics? First, those found in the Bible are not necessarily original. The accounts of the giving of the law are original not so much in the content of the morality commanded as in the fact that it is a *covenant* command involving exclusive allegiance to YHWH. What about Christian ethics? Is there a specifically Christian ethic? Actually, the only thing unique to Christianity, Küng asserts, is not morality but "the concrete and crucified Jesus as the living Christ" (p. 215). This Jesus, this Person, possesses a realizability, clarity, and audibility more than any idea or abstract principle. He becomes orientation for an ethically floundering society. He is, after all, called "the light of the world" (John 8:12).

This is not to deny that religions such as Islam, Judaism, and Confucianism can function ethically as other "lights" for many of the world's peoples. Rather, the world-ethos provides an "orienting ground" that "in no way excludes the special orientation of different religions or philosophies. Quite the opposite is true as each can contribute, in their own way, to a World-Ethos" (p. 217).

#### THE END OF ALL THINGS

Rather appropriately for the end of a book dealing with the "beginning of all things," Küng concludes by asking what will happen to the universe in the future. What is the end of all things?

Scientists have suggested two possibilities. First, the universe will continue to expand until it stops and becomes still; then it will start to contract until it collapses back in on itself in a "big crunch" that could then lead to another "big bang." Second is the majority opinion among astrophysicists: that the universe will continue to expand without ever stopping, and slowly, over millions of years, coldness will grip the universe until all that is left is death, absolute night (Küng 2006, 220).

Apocalyptic visions of the end of the world are common among conservative Christians. Indeed, they have also grabbed the imagination of the wider public in light of the power of nuclear weapons to destroy the human race and the looming threat of potential ecological breakdown.

Certain Bible passages also hint at a catastrophic end of the world (see Matthew 24:6–8, 29). But do they mean what many conservative Christians think they do? Küng thinks not. The endtime stories in the Bible are

not chronological revelations satisfying our curiosity with mere information concerning the last days, and to read the Bible in such a way is to misunderstand it. Rather, “The haunting visions of the Apocalypse are an urgent warning to humanity, and individual humans, to recognise the seriousness of the situation. . . . The bible doesn’t, therefore, speak in the language of scientific facts, but in a metaphorical picture language” (Küng 2006, 223). One should translate this language into the horizon of modern people. And what is the actual meaning? These pictures stand for the hoped-for and feared and in particular represent a faith confession about the completion of the work of God in creation. “Therefore, theologians have no motivation to prefer one or the other of the scientific world-models over the other, though truly they have an interest to portray God as Origin and Perfecter of the world” (p. 224). For if God exists, and one accepts this not in light of certain “proofs” but in reasoned trust, God is surely not only God for here and now but also God at the very end.

Ending on a personal note, Küng writes: “Personally, I have accepted Blaise Pascal’s bet, and set myself on—not on the grounds of probability calculations or mathematical logic, but on the basis of a reasonable trust—God and the Endless, over against nil and nothing” (p. 225).<sup>7</sup> For Küng, the core of the New Testament’s resurrection theology is that Jesus died not into nothing but into God. So die we, into God. And even if Küng’s Pascalian bet proves to have failed, “I didn’t lose anything in my life,” he claims. “No, I lived a better, happier and more meaningful life than if I had lived with no hope” (p. 225).

The end of all things, then, is the hope to ultimately die into the light: “And there will be no more night; they need no light of lamp or sun, for the Lord God will be their light, and they will reign forever and ever” (Revelation 22:5 NRSV).

#### CONCLUDING NOTE

Küng’s reliance on Kantian epistemology, the biblical narratives, existentialism, and an interreligious ecumenism all surfaced at numerous points and came to explicit expression in his repeated attempts to encourage epistemological humility from those in both the scientific and theological communities, while at the same time pointing toward a free and existential trust in an *Urgrund*. However, especially in relation to his eschatological arguments, the theology of God as Spirit, and his discussion concerning miracles, one could sense the influence of Hegel and trace his correlationist tendencies. This was all married to a strong, yet not superficial, confidence in the proposals of modern science, and out of this dynamic his arguments found their form. Moreover, Küng’s argumentation is consistently a tour de force of erudition and immense learning and familiarity with the most recent developments in numerous branches of scientific study and theology. Future works in relation to the questions surrounding religion and

science, even when they find themselves in respectful disagreement on certain matters, will need to engage with *Der Anfang aller Dinge*.

## NOTES

My thanks to Dr Benjamin Myers of the University of Queensland, Australia, for a critical reading of an earlier draft of this essay.

1. The book is based on a 2005 lecture series that can be viewed online on the Tübingen Internet Multimedia Server, <http://timms.uni-tuebingen.de/>. All translations from the German in this essay are my own.

2. Recent monographs include Moltmann 2002; McGrath 2004; 2006; Polkinghorne 2005; and Hodgson 2005, among others.

3. Especially as they have appeared in Küng 1976; 1980; 1984; 1987; 1988.

4. Küng's 1987 treatment is far more thorough.

5. Actually he has five bullet points. I mention what I consider the most significant for the developing argument.

6. "Heute gelebtes *Welt-Ethos* im Raum *basiert* letztlich *auf* einem biologisch-evolutiv vorgegebenen, in der Zeit erprobten *Ur-Ethos*."

7. Pascal's famous bet is one of the three "wagers" in Pascal 1941.

## REFERENCES

- Hawking, Stephen W. 1988. *A Brief History of Time: From the Big Bang to Black Holes*. Toronto: Bantam Books.
- Hodgson, Peter E. 2005. *Theology and Modern Physics*. Aldershot: Ashgate.
- Horn, Friedrich Wilhelm. 1992. *Das Angeld des Geistes: Studien zur paulinischen Pneumatologie*. Göttingen: Vandenhoeck & Ruprecht.
- Küng, Hans. 1976. *On Being a Christian*. Trans. Edward Quinn. Garden City, N.Y.: Doubleday.
- . 1980. *Does God Exist?: An Answer for Today*. Trans. Edward Quinn. Garden City, N.Y.: Doubleday.
- . 1984. *Eternal Life?: Life After Death as a Medical, Philosophical, and Theological Problem*. Trans. Edward Quinn. Garden City, N.Y.: Doubleday.
- . 1987. *The Incarnation of God: An Introduction to Hegel's Theological Thought as Prolegomena to a Future Christology*. Trans. J. R. Stephenson. New York: Crossroads.
- . 1988. *Theology for the Third Millennium: An Ecumenical View*. New York: Doubleday.
- . 2006. *Der Anfang aller Dinge: Naturwissenschaft und Religion*. München: Piper.
- McGrath, Alister E. 2004. *The Science of God: An Introduction to Scientific Theology*. Edinburgh: T & T Clark.
- . 2006. *The Order of Things: Explorations in Scientific Theology*. Oxford: Blackwell.
- Moltmann, Jürgen. 2002. *Wissenschaft und Weisheit: zum Gespräch zwischen Naturwissenschaft und Theologie*. Gütersloh: Kaiser.
- Pannenberg, Wolfhart. 1985. *Anthropology in Theological Perspective*. Trans. Matthew J. O'Connell. Philadelphia: Westminster.
- Pascal, Blaise. 1941. *Pensées; the Provincial Letters*. The Modern Library. New York: Random House.
- Polkinghorne, John C. 2005. *Exploring Reality: The Intertwining of Science and Religion*. New Haven: Yale Univ. Press.