The Future of Religion: Global Boundaries and the Fork in the Road

MARTIN SCHÖNFELD

University of South Florida, USA

Abstract

The question of how religions will look like tomorrow is speculative. But this is not the case with the boundary conditions, or limits, of the future trajectories of world religions. Answers can be found in the intersection of three disciplinary perspectives. The disciplines are anthropology, philosophical ethics (or its political equivalent, international law), and the environmental and climate sciences.

Anthropology has gained an understanding of the past development of religions, especially about its shifting functions in successive stages of civilization: among prehistoric bands and tribes, in ancient chiefdoms and medieval kingdoms, and in modern secular states. We know what social purposes religions served in the past, what kind of shifts occurred, and what the trend of religion from prehistory to today had been. Based on the empirical record, anthropology tells us what it means for religion to slide back to a less developed stage of civilization. This is one set of boundary conditions.

Ethics discusses the meaning of right and wrong, but its debates cluster around normal, middle-of-the road issues. There is little disagreement over extremes. International institutions (e.g. International Criminal Court), treaties (e.g. Geneva Conventions), and metrics (e.g. Human Development Index) give a clear picture of the limits of right and wrong. As the moral assessment of genocides illustrates, there is no confusion over what counts as evil. We also have a clear idea of what constitutes a life that is safe and dignified. In this way, ethics and international law can tell us whether the social manifestation of faith is acceptable or not, whether it is good or evil. This is another set of boundary conditions.

The environmental and climate sciences, finally, have arrived at a conclusion: civilization is maladapted to its environment. The ecological overshoot of humankind has worsened to the point that degradation of ecological integrity is tangible in accelerating extinction rates; that deterioration of environmental services is tangible in climate change; and that depletion of natural resources is tangible in rising prices (compared to incomes) of food, land, and rare earths. Since civilization relies on a global market economy whose stability needs material growth, and since our ecological overshoot makes such growth unsustainable, our species has arrived at a fork in the road. Either we keep doing business as usual and sink into crisis, or we redesign civilization and move towards sustainability. This fork in the road sharpens the anthropological sense of "regress" and "progress," and tweaks the ethical meanings of "good" and "evil". Since religion is integral to the fabric of any society, the dimension of sustainability places a fork in the developmental road of religions, too. One future trajectory of faith is a path that is hopeful. Another is a path that is terrifying. The biophysical fork in the road establishes a third set of boundary conditions.

Although we do not know what the future will bring, the environmental crisis and the opportunities for mitigating the crisis tell us what a good future will amount to, and what a bad future will boil down to.

Anthropology and ethics tell us what it will mean for civilization to move forward or to slide back, to proceed to a healthier, safer world, or to regress to a harsher, poorer world. The purpose this paper is to use the findings of anthropology, ethics, and the environmental sciences to determine the best- and worst-case scenarios of future religion—how faith may look like along an evolutionary, enlightened, and sustainable pathway, and how it would look like if events and people push faith into the opposite direction. I argue that these two scenarios are clear and justifiable. I contend that only the sustainable pathway is compatible with Chinese cultural wisdom, as in Confucianism, Lao-Zhuang Daoism, and Chan Buddhism. And I suspect that Chinese culture and its spiritual traditions will become more influential globally if and only if civilization moves towards sustainability. But if civilization failed at this project, regressed, and suffered collapse, I fear that Chinese culture would be swept away by Middle Eastern creeds.

Key Words: religion/spirituality, environmental ethics, Chinese culture, overshoot, and maladaptation/evolution

宗教的未來：全球性的界限和岔路

Martin Schonfeld
德馬丁

摘 要

明天的宗教會是什麼樣子，這個問題只能臆測。但是世界宗教的未來軌跡的邊界條件或限制則不然。我們可以從三個學科的觀點的交集找到答案。這三個學科是人類學、哲學倫理學（或它在政治的對應學科，也就是國際法）以及環境和氣候科學。

人類學曾經理解過去宗教的發展，特別是它在前後相續的文明階段裡的多變功能：史前的牧群和部落，古代的酋邦和中世紀的王國，以及近代的俗世國家。我們知道以前的宗教提供什麼社會目的，發生了什麼轉變，以及從史前到今天的宗教潮流。基於經驗性記載，人類學告訴我們，宗教如何溜回到比較低度發展的文明。這是一組邊界條件。

倫理學討論是非對錯的意義，但是它的爭辯圍繞在常態的、中間路線的問題上。對於極端的問題，則很少有歧見。國際機構（例如國際刑事法庭）、條約（例如日內瓦公約）和量度（例如人類發展指標），清楚描畫出是非對錯的界線。正如對於種族屠殺的道德評斷所證明的，關於人們認為是邪惡的事物，沒有混淆的空間。我們也很清楚什麼樣的生活是安全而有尊嚴的。如是，倫理學和國際法可以告訴我們，信仰的社會表現是否可以讓人接受，是善或是惡。這是另一組邊界條件。

最後，環境和氣候科學，則得出一個結論：文明不適應它的環境。人類的生態超載惡化到生態的完整性的毀壞從加速絕種速率上顯然可見；環境保護的墮落也可見於氣候的變遷；自然資源的耗竭則可見於糧食、土地和稀土價格（相對於收入）的攀升。既然文明依賴於

一個需要實質成長以維持其穩定性的全球市場經濟，既然我們的生態超載使得成長難以為繼，於是我們的物種來到了岔路。我們不是依然故我而陷入危機，就是重新設計文明，朝著永續發展前進。這個岔路使得人類學的「返祖」和「進步」意義益顯尖銳，也微調了倫理學上的善與惡的意義。既然宗教是任何社會的必要構造，永續發展的向度也在宗教的發展道路上設了一處岔路。我們的信仰的未來軌跡，是一條充滿希望的道路。另一條道路則是怵目驚心。生物物理的岔路設了第三組邊界條件。
雖然我們不知道未來如何，環境的危機以及緩和該危機的機會告訴我們好的未來會是什麼樣子，不好的未來結果會是怎樣。人類學和倫理學告訴我們文明的前進或倒退是怎麼回事，是邁向一個更健康、安全的世界，或是退化到一個更嚴峻的、貧窮的世界。這篇論文的目的，是要利用人類學、倫理學和環境科學的研究成果，去勘定未來宗教最好的和最壞的前景，隨著演化的、啟蒙的和永續發展的道路，信仰可以是什麼樣子，而如果事件和人們把信仰往反方向推，又會是什麼樣子。我認為，這兩個前景都是明顯而可以證實的。我主張說，唯有永續發展的道路才和中華文化智慧相容，例如儒家、老莊道家、以及佛教禪宗。而我猜想中華文化及其精神傳統在全球的影響力會越來越大，若且唯若文明是朝著永續發展前進的。但是如果文明違反了這個計畫，退化而面臨崩壞，我擔心中華文化會被中東信仰摧陷廓清。

關鍵詞：宗教、環境倫理學、中華文化、超載、適應不良和演化。

The Future of Religion:
Global Boundaries and the Fork in the Road

MARTIN SCHÖNFELD
University of South Florida, USA

At first glance, a topic such as “the future of religion” can seem presumptuous or even silly. After all, what do we know about the future? And what does the author know that we don’t? Such reservations are understandable but misleading, for there is no hierarchy between readers and author—all of us are jointly, equally, in possession of a powerful crystal ball to see the future.

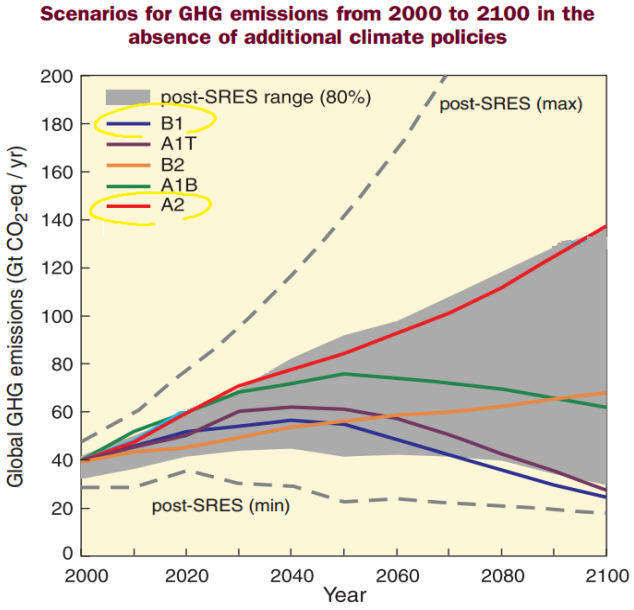
1. RED OR BLUE—GLOBAL BOUNDARIES AND THE FORK

The crystal ball is not magic. It's science. Experimental prediction is as old as scientific method, and *calculated extrapolation* is at least as old as charting the future trajectory of planetary motions. When you know the present location of a planet; its orbit, and its average orbital velocity, then you can calculate, with satisfying precision, where on its path the planet is going to be a year, a decade, or a century from now. While such knowledge of the future is specific, relevant to astronomers, and as old as Kepler's laws, there is now another foreknowledge, which is sweeping, of existential interest to all of us, and given by climatology.

In 2000, the Intergovernmental Panel on Climate Change (IPCC), at that time still merely an office in the UN Environmental Program (UNEP), released a *Special Report on Emissions Scenarios*, known by the acronym SRES, whose "Summary for Policymakers" contains a historic set of predictions. They were rendered as two graphs in the *Third Assessment Report* (TAR) 2001 and next in the Nobel Prize-winning *Fourth Assessment Report* (AR-4) 2007. In redesigned form, their substance then entered the *Fifth Assessment Report* (AR-5) of 2013- 2014.

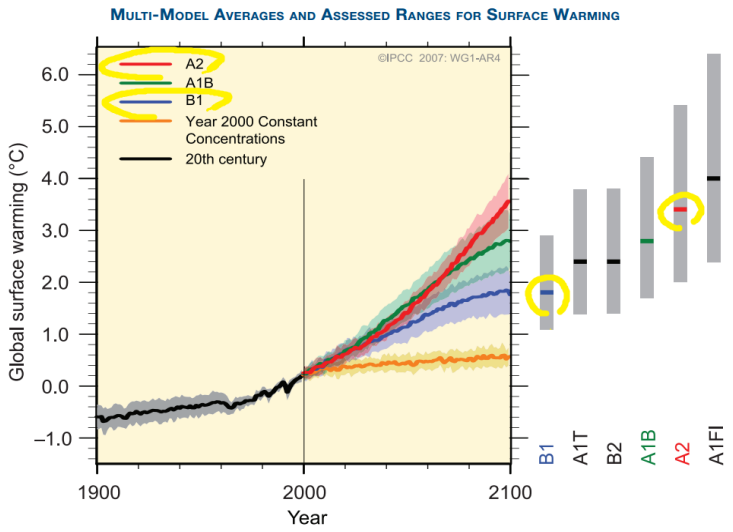
The first graph describes "scenarios for GHG [greenhouse gas] emissions from 2000 to 2100 in the absence of additional climate policies". The horizontal axis is the timeline from the start to the end of this century. The vertical axis is the scale of global GHG emissions, measured per year in gigaton CO_2-equivalents (which is a standard unit for the radiative forcing, or "global warming power," of other greenhouse cases, such as CH_4).[1] From the point of origin at the lower left, colored lines sweep out a roughly triangular shape, a conic section, that flares out as it extends into the future. If this were three-dimensional space instead of a plane, it would resemble a cone, flaring out like a trumpet's bell. This *cone of probability* shows the predicted emission pathways through the century. Its topside has a trumpet opening, curving upwards and outwards. But as trumpets go, this one looks a bit banged up, with the bottom side going first up and then down. The topside, traced out with a red line, marks the worst-case scenario, of emissions that rise higher, with the rate of the rise increasing. The bottom side, traced out with a blue line, is the best-case scenario, with emissions first rising, next leveling off, and then falling.

THE FIRST GRAPH:



The second graph describes "multi-model averages and assessed ranges for surface warming." The horizontal axis is again a timeline until 2100. The vertical axis is a temperature scale of global surface warming in centigrade. The scale ends with the 6.5 ° C mark. Again, a cone of probabilities flares out from the year 2000, when the SRES scenarios were first plotted. This cone is defined by the same colorful lines, and while there is a precise relation between CO_2 emissions and global warming, other factors in the dynamic system that is climate affect the temperature rise, smearing out the lines as colorful ribbons. The red ribbon marks the upper edge of the cone, with temperatures not only rising, but also rising faster. The blue ribbon marks the lower edge, with temperatures also climbing higher, but not *that* high, and with the climb eventually slowing down and beginning to level off around 2100.[2]

THE SECOND GRAPH:



In 2014, both of these graphs designed in 2000 are somewhat obsolete. Unfortunately, they are outdated in having turned out to be too optimistic. At the turn of the millennium, in the heady days of the just-drafted Kyoto Protocol, experts trusted it would only be a few years before binding climate legislation were passed. No one thought that only the Europeans would make drastic cuts; that the Americans would refuse to sign on; that the Canadians would first make big promises only to break them all; and that the Australians, climate-wise, would turn out to be even greater fools than the Americans and the Canadians. And that's not all. No one would have thought that China's carbon footprint would grow so big, so fast; that the pledged update of Kyoto, at the COP15 talks in Copenhagen in 2009, would end in complete disaster; and that, in the end, or at least by 2014, Germany and some neighbors, and, to some extent, China, would be the only countries serious about decarbonizing their economies.

On the political level, no one expected that big business, led by the largest corporations on Earth, the fossil fuel companies, would be so successful in weakening controls, manipulating the media, seeding doubt, and undermining democracy, especially in the United States, in Canada, and in Australia. Today, we have a new technical term to describe what happened in the English-speaking world between 2000 and 2014, namely *regulatory capture*—the phenomenon that democratically elected governments now answer more to corporations than to voters, and base legislation on what is in the immediate interest of big business, not on what is in the best interest of their populations.

Ironically, this disappointing outcome made the stated qualification of the emissions graph, *in the absence of further climate policies*, frightfully prescient. No one would have thought that by 2014, outside the EU, all we have promises but no laws. In the emissions graph, this has

put our reality squarely on the worst-case trajectory. With the exception of the economic downturn 2008, every single year emissions have gone up, and gone up ever faster. Instead of reducing the carbon load, we keep piling it on. Compared to 2000, we are redlining.

As a result, actual climate change is now playing out somewhat differently than believed at the time of Kyoto and the SRES scenarios. No one expected that the oceans would heat up so fast, and down to such depths, thus messing with the monsoon, which worsened the humanitarian catastrophe in the Sudanese province of Darfur. No one expected that marine carbon sinks would fill up so quickly; that the oceans would start souring so soon; and that marine acidification would already be noticeable to marine biologists today. No one would have believed that we'd be losing the north polar ice cap so quickly, with more than half of it already gone by 2014, and proceeding on what physicists call a "death spiral," with its complete disappearance in summers as early as 2025. No one would have expected, fifteen years ago, that the thawing tundra would add a positive feedback loop on its own, by releasing into the atmosphere its stores of previously frozen methane, a GHG twenty times more powerful than CO_2. As a result, the warming-graph is a bit obsolete now, too.

Since 2000, we've learned that a warming of global mean surface temperatures of 2 °C above the pre-industrial baseline is about all we can afford. Beyond this threshold, known as the *two degree guardrail*, nonlinear effects and cascading consequences loom. On the other side of the guardrail, humankind will be met by food insecurity, resource wars, and failed states. At present, and without a revolutionary reduction in global emissions (80% before 2020), it is now virtually certain that civilization will crash through the guardrail. It's not even a question with how much force and by what degree. The International Energy Agency (IEA) projects a middle-of-the-road temperature rise of 6 °C.[3] Worst-case predictions are over 6.5 °C. In 2000, that was literally off the charts. Again, we're redlining.

So, we *do* know what the future will bring. A cone of probabilities flares out from the present road of civilization, with the upper edge defining the worst route we can take, and the lower edge defining the best route still open to us. Compared to the two obsolete graphs, the actual cone has been pushed upwards, with both lower and upper edges having crept higher—higher in emissions, and higher in temperatures. The edges, the red and blue lines, matter, because, barring the unforeseen, they constitute the *fork in the road* that decides what tomorrow shall bring. The red line, the worst case, is a world that, according to the scientific statement released at the eve of the 2014 COP-20 talks in Lima, will be "uninhabitable". The blue line, the best case, is a world that will be "merely unpleasant." These are our choices. The blue line—life

will go on for our kids, only in a tougher and humbler way. The red line—life, for kids, will not go on.[4]

2. INSIDE THE CONE: IDEOLOGICAL CHOICES AND CULTURE

Of course, some possibilities are a matter of luck and are so random that they cannot be factored in at all. In theory, outside the cone, lurks the absolutely worst scenario: nuclear war, instant annihilation. Global nuclear stockpiles are large enough to burn the planet to a cinder. There are fail-safe devices in place, but a risk remains. But unlike the climate crisis, most nations can do nothing about the nuclear threat, so it also seems pointless to think about it too much.

On the other extreme, also outside the cone of probability that marks our fork in the road, is the absolutely excellent scenario, the *Star Trek* future, in which benevolent aliens just happen to cruise by and admit us to the galactic civilization after they notice that some mad scientist on Earth invented a truly miraculous machine, the prototype of the *Star Trek* warp drive, that will give us (a) unlimited energy, (b) faster-than-light travel, and (c) a roadmap to a bunch of virgin Earth-like planets. Of course, to really make use of this gadget we'd also need (d) infinite resources, so as to actually build the millions of interstellar ocean liners needed to air- and space-lift billions of people to these distant shores. Now that would be cool. Then we didn't have to change our ways; we could simply keep reading *The Economist*, continue to rely on a growth-based economy, and continue to keep spreading out.

These extremes, nuclear Armageddon or *Star Trek*, are not as silly as they seem, because by being *outside* the cone, they reveal what is inside. The *Star Trek* fantasy highlights the fact that *we cannot spread out*. We're stuck. Even with conceivable scientific progress and technological innovations, we have no choice but to keep making our home on this one world. And the key of being at home here is that *we face biophysical limits*.

This is implied by the two-degree guardrail, only more so, for as some limits are still in the future, others are already passed. We crossed one limit, the sustainable yield threshold of biotic resources, in 1970. This boundary-crossing has pushed us into *ecological overshoot*, which means that our annual demand is in excess of annual planetary supply. At present, it is over 150 percent, which is to say that the global economy proceeds as if it had one and a half Earths at its disposal. Climate change is a symptom of this overshoot because it is the result of excessive demands on the assimilative capacity of the carbon cycle. As with the demand on resources, the

gap between service capacity and our emissions widens. Structurally, this is as if we're living of savings, and instead of spending only the interest, we are dipping into the principal.

The *Star Trek* fantasy "to infinity and beyond," outside the cone, highlights that inside the cone is a finite world. The history of civilization has been a history of growth. But several decades ago we reached the biochemical and physical limits of further growth. Having ignored them is why we find ourselves in a crisis, with prospects for our planetary home ranging from "unpleasant" to "uninhabitable".

The nuclear doomsday scenario, outside the cone, teaches us that inside the cone are emission pathways that are completely under our control. Inside the cone *we have a choice*. Science tells us what we can expect, and what we can do. Technology hands us the tools we need. The engineers have done their job. If we wanted to, we could decarbonize the global economy starting immediately *and* draw down the excessive carbon concentrations from the atmosphere. There is no scientific or technological obstacle. We can end global warming.

The real obstacle is culture. This is how choice is essential to the crisis. One choice: how realistic the *red line* has become is visible with U.S Congress, controlled by Republican lawmakers on oil company payroll. Consider how the world would look like, ten, twenty, or fifty years hence, if the American example were to shape policies for global civilization. Another choice: how realistic the *blue line* has become can be seen when looking at Europe and Asia, especially at Germany and China, with governments that create postcarbon infrastructures for their nations; that take the goal of sustainability seriously; and that are strong enough, at least to a degree, to resist market pressures. Consider how the world would look like, a generation from now, if it followed the Sino-German example.

Inside the cone, then, are scenarios *we can control*, in the mechanical causal sense that human policies will shape the world of our common future, either to our benefit, or to our detriment. In the SRES scenarios, the blue and red lines are associated with simulations that integrate socio-economic elements, spelled out in storylines. The best-case vision, the blue ("B1") storyline describes

> A convergent world, with the same global population, that peaks in mid-century and declines thereafter … [and] with rapid changes in economic structures toward a service and information economy, with reductions in material intensity, and the introduction of clean and resource-efficient technologies. The emphasis is on global solutions to economic, social, and environmental sustainability, including improved equity …[5]

By contrast, the worst-case vision, the red ("A2") storyline describes "a very heterogeneous world":

> The underlying theme is self-reliance and preservation of local identities. Fertility patterns across regions converge very slowly, which results in continuously increasing global population. Economic development is primarily regionally oriented, and per capita economic growth and technological change are more fragmented and slower than in other storylines.[6]

Since these storylines were formulated, progress has been made in environmental economics. One new finding concerns *equity*, mentioned in the blue story. There is a strong correlation between sustainability and equity. Societies that display more socio-economic stratification tend to have worse environmental policies and are bad in crisis response, while societies whose income distribution bulges at the middle, with only little poverty and wealth at either side, tend to have excellent environmental policies and are good in crisis response. This is not coincidental. Its cause has to do with the regulatory capture mentioned above: stratified societies turn into capitalistic oligarchies that hollow out democratic institutions and steer governments towards market interests, which do *not* coincide with what is best for civilization and the planet. As environmental scholar David Orr puts it,

> Unsupervised markets work against the interests of a larger society … Markets do many things well, but for things that cannot be priced, they are inept and autistic to human needs and ecological imperatives.[7]

One milestone in this understanding is the 2006 *Stern Report* of the British Treasury, which identified neoliberal economic policies as the main driver of the environmental crisis and famously defined climate change as "the greatest market failure the world has ever seen."[8]

So, one thing we didn't know at the time of the SRES scenarios, but which we know now, is that interventionist policies are the only ones that can resolve the crisis and mitigate its consequences. Neoliberal market policies will only exacerbate the crisis. Orr continues,

> The solution is not so much new government agencies as it is … the slow implementation of better governance by weeding out corruption and ignorance. And that will require a rigorously enforced separation between money and the conduct of public business. The struggle to separate money from policy making and law will, in

time, come to be seen rather like historic battles against feudalism, monarchy, and slavery.[9]

In sum, then, and in stark contrast to all the generations before us, our generation is graced with a degree of foreknowledge. We face predictable pathways of how tomorrow will turn out. In the cards, today, are optimistic and pessimistic scenarios, and a fork in the road. It is this fork that defines the outer edges of the probability-cone. Between these edges, in between there is a horizontal axis that slices the cone into a bright half and dark half. This line is the two-degree guardrail. How we choose with regard to this line will make the all the difference between a good future and a bad future. This choice concerns policies, which in turn depend on governments. But as the onslaught of multinational corporations has weakened government institutions in much of the world, governments in the 21st century are not as functional as they had been before the crisis. This puts the ball in the court of the world's peoples, and the pressures they will impose on private companies and public institutions.

3. EVOLVING FAITH—THE GREEN FUTURE OF RELIGION

The future has structure through boundary conditions and divergent trajectories. The boundary conditions are a matter of physics and chemistry; they are fixed. The trajectories, though, are a matter of freedom; they are fluid. Which pathway will become real depends on social, economic, and political choices. The divergence of these paths is a fork of destiny, with one road leading to equity, sustainability, and safety, and another leading to deprivation, unsustainability, and violence. One road leads upwards, away from the current maladaptation and towards ecological progress and civil evolution; another leads downwards, ever deeper into reactionary politics and maladaptation, and ending in collapse.

We arrive at this fork just when governments are under siege by market forces clamoring for ever more growth, even though the overshoot demonstrates that the limits of growth have been reached and that market economies have outlived their usefulness. The regulatory capture of politicians by oligarchs means that the driver of sustainable progress and civil evolution will have to be social movements and non-governmental organizations. Outside governments, there is perhaps no cultural power greater than the phenomenon of religion. Religions have a unique ability of creating communal identities and marshalling social forces. Regardless of one's personal beliefs or non-beliefs, it is trivially true that religions have been, and continue to be, history-making forces. Just as they helped to shape the past, and play a role in shaping the present, so they will be involved in shaping our future.

That the coming decades will not be easy and may even prove to be disruptive will likely energize religious movements. Fear is a great motivator of faith. When life is good, temples and churches are rather empty, but they become crowded when life is scary. There is also another pattern: misery radicalizes. The more awful life gets, the more fundamentalist religions will tend to be. People who lost everything cling to religious identity as the one thing they've left, and as it becomes the center of life, they suffer cognitive and cultural regression.

So the two patterns—motivation by fear, and radicalization by misery—tend to generate a reactionary synergy. Instead of energizing the faithful to work for social progress and ecological goods, they can energize them into doing evil. So it stands to reason that the religions in the world will suffer polarization, with some religious movements becoming agents of progress, trying to realize the blue-line scenario, and others becoming ever more reactionary and irrational, trying to realize the red-line scenario instead. So, the future of religion, I predict, involves, first, a reversal of the secularization seen in modernity, simply because times will be harder and scarier, which always benefits religions, and, second, a growing polarization among the faithful into progressives and fanatics.

But what, actually, constitutes "good" and "evil" religions? Is it possible to arrive at reliable and reasonable evaluations of faith? I contend that such attempts are helped by three criteria. The first is the environmentalist perspective outlined above. The second is an anthropological perspective, a repository of information: the historical variability of religions and their services performed in societies over time. The third criterion, finally, is a philosophical perspective, a vantage point of enlightenment as understood both in Confucianism and by Kant. These three perspectives, I argue, give us a yardstick for measuring religion.

The environmentalist perspective is quickly summarized. The key is that "environmentalist" is now a misnomer, since the crisis has turned from a problem for nature into a problem for humankind. In doing so, it morphs from a problem with aesthetic and ethical aspects (in terms of the beauty of wilderness, and in terms of the moral standing of nonhumans as experiencing centers of life) to a problem with *existential* and *pragmatic* components. Existential, because the climate crisis is the greatest threat to civilization in the history of humankind; and pragmatic, because which pathway we choose will decide over whether civilization stands or falls. If this is fair, then we can conclude that activities, policies, and movements that steer civilization towards the "blue" road are good. Conversely, those that push it towards the "red" road are unambiguously evil.

This environmentalist—or rather, *existentialist*—perspective gives us a moral compass. But how this compass can be used for religion requires resorting to the anthropological perspective. Striking is the diversity of religion, which turns them into "moving targets" hard to pin down. This diversity is so great that it proves nearly impossible to craft a definition of religion that passes peer-review. Conceding that his own attempt at defining religion is "tortuous," but insisting that it corresponds to the empirical reality of religion, anthropologist Jared Diamond suggests this:

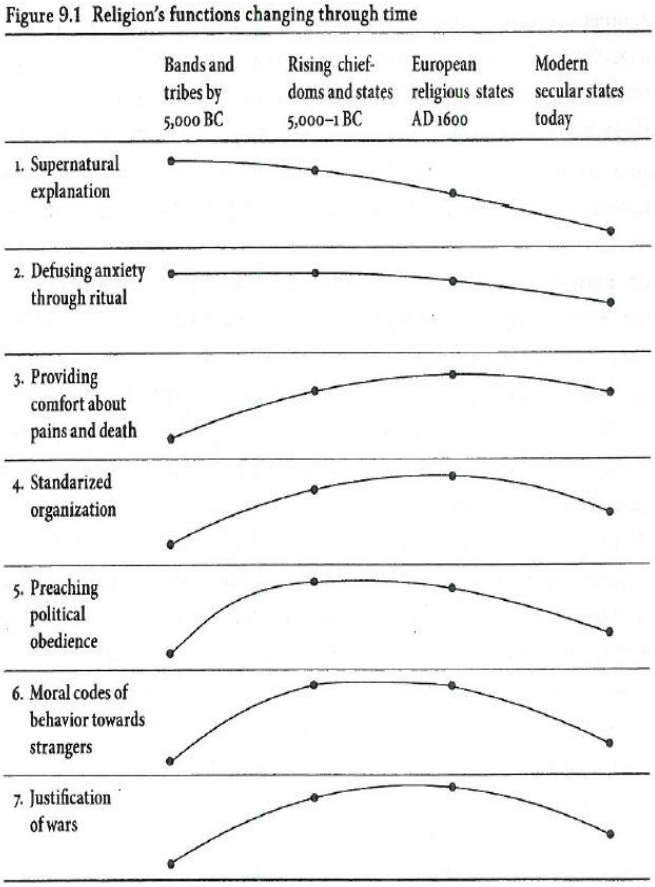
> Religion is a set of traits distinguishing a human social group sharing those traits from other groups not sharing those traits in identical form. Included among those shared traits is always one or more, often all three, out of three traits: supernatural explanation, defusing anxiety about uncontrollable dangers through ritual, and offering comfort for life's pains and the prospect of death. Religions other than early ones became co-opted to promote standardized organization, political obedience, tolerance of strangers belonging to one's own religion, and justification of wards against groups holding other religions.[10]

Diamond sees the difficulty for a unified definition of religion in its changing functions as it has evolved over time. Consider four moments in history: the era of bands and tribes by 5,000 BCE; the chiefdoms and states 5,000-1 BCE; the European religious states in 1600 CE, and the secular states in the world today. In the first era (whose conditions were accessible to anthropology in the indigenous tribes living in early 20th century New Guinea), religion had two functions: *supernatural explanation* and *defusing anxiety through ritual*.[11] As time went by, both went into decline, with supernatural explanation mostly disappearing. When this function does make the occasional comeback—as with the religious responses to the devastation of New Orleans by Hurricane Katrina in 2005—it tends taking the form of blaming the victims. In this vein, one Jewish rabbi declared that Katrina was God's punishment for America's failure to support Israel; the Islamic group Al-Qaeda declared it was God's revenge on America for, well, being America, and Christian evangelists suggested it was God's punishment for abortion (P. Robertson) and homosexuality (J. Hagee).[12] Comebacks of this prehistoric function, of course, elicit contempt and ridicule.

In antiquity, religion shifted to four other functions that it kept through early modernity: *standardized organization*, *preaching political obedience*, *moral codes of behaviors towards strangers*, and *justification of wars*. In early modernity, a new function rose to dominance, which had only played a marginal role before, namely *providing comfort about pains and death*. That function continues to matter today, while the others have either vanished or are in various stages of decline. [13]

THE EVOLVING FUNCTIONS OF RELIGION:

Figure 9.1 Religion's functions changing through time



Of these seven functions variously held by religions through the ages, the two that are most reprehensible, to our green compass, are supernatural explanation and justification of wars. The only justification of war is self-defense on one's home territory when under (unprovoked) attack; everything else is propaganda. Supernatural explanation is counterproductive because it puts religion into the same denial of scientific facts that is cultivated by neoliberal conservatives and that undermines our hopes for the blue road. The crisis is self-incurred; it is the fault of societies with the largest cumulative emissions and the biggest per capita carbon footprint. Since it is human-made, the gods don't enter the picture, hence supernatural explanation is inappropriate.

The anthropological information highlights the *ability of religion to evolve*. This lets one hope that in the coming polarization, progressive kinds of religion will gain an eighth function, which is already visible in Buddhism in the East and Roman-Catholic Christianity in the West,

namely a shift of theologies towards *eco-spirituality*—what is also called 'stewardship theology,' 'creation care,' and, using a term by the religious studies scholar B. Taylor, *deep green religion*.

Such a greening of religion will only be natural, because it reinforces the root-function of spiritual beliefs: to create higher meaning for human existence. Eco-spirituality implies that our fate on this world is to have risen to leadership, and that this leadership comes with well-defined responsibility.

The association of leadership with responsibility is a Confucian meme that entered Europe in the Age of Reason with the concept of the *enlightened sovereign* (*aufgeklärter Herrscher*) embodied by Frederick the Great and idealized by Kant in "What is Enlightenment".[14] The idea, of course, derives jointly from the *Analects* 論語 and *Book of Mencius* 孟子. In the *Analects*, its root is the rectification of names 正名.[15] A passage, which applies to religion in the climate age, is this:

> "When the people have multiplied, what more should be done for them?" said Ran You. "Enrich them," the Master replied. "And when they have been enriched, what more should be done for them?" "Instruct them," he replied. (論語 13:9: 冉有曰：「既庶矣。又何加焉？」曰：「富之。」曰：「既富矣，又何加焉？」曰：「教之。」[16]

Confucian 正名 highlights the eco-spiritual function of religion. The challenge is to guide our overpopulated world to a sustainable civilization. Socio-economic stratification undermines our chances for this transition, just as equity will boost them. Hence religions need to prioritize economic justice in the spirit of "富之" ("enrich them"). A role model, in Christianity, had been the *liberation theology* of Latin America that fuses Christian faith with Marxist ethics, so as to create fairer societies, with less poverty and fewer oligarchs. This fusion finds contemporary expression in the compassionate pronouncements by Pope Francis I.

Likewise, climate denial undermines our chances at this transition, just as "an alert, informed, ecologically literate, thoughtful and empathic citizenry" will boost them.[17] In caring for the faithful, religious institutions cannot ignore this aspect of the sustainability-transition either. Their responsibility is to preach the scientific information that will save lives if timely implemented. Hence the other priority for green religions will be to cultivate in their congregations a spiritual dimension of ecological literacy, in the sense of "教之" ("instruct them").

The enlightened future of religions will be to side with the vulnerable: with the poor, and with Creation. What religions must *not* do, if they wish to earn the respect of a posterity that will

face the crest of the crisis perpetrated by us, is to side with the powerful—with the rich, and with the market. Again, this counsel is as old as Confucianism and comes from the first words by Mencius: "孟子對曰：王何必曰利？亦有仁義而已矣。" (1.A.1 "'Your Majesty, answered Mencius. 'What is the point of mentioning the world "profit"? All that matters is that there should be benevolence and rightness.'")[18] Religions choosing the blue road will have to recognize that "利" ("profit") has no future in the overshoot.

The bottom line, for religions, is to turn their evolving functions into an asset and a duty: to keep evolving, and to join in the endeavor of a civil evolution towards a sustainable civilization. In closing, the last word should be given to Kant, who expresses just this sentiment in "What is Enlightenment":

> But would not a society of clergymen be justified in obligating itself by oath to an unchangeable symbol in order to enjoy an unceasing guardianship over each of its members and thereby over the people as a whole, and even to make it eternal? I answer that this is altogether impossible. Such a contract, made to shut off all further enlightenment from the human race, is absolutely null and void even if confirmed by parliaments. An age cannot bind itself and ordain to put the succeeding one into such a condition that it cannot extend its knowledge, purify itself of errors, and progress in general enlightenment. That would be a crime against human nature, the proper destination of which lies precisely in this progress."[19]

NOTES

[1] Figure 3.1 "Emission Scenarios," in Core Writing Team (L. Bernstein et al.) and Review Editors (A. Allali et al.), *Climate Change 2007: Synthesis Report* (IPCC, 2007), p. 44
[2] Figure SPM.5 "Projections of Future Changes in Climate," in Working Group I [*The Physical Science Basis*] of the Intergovernmental Panel on Climate Change, *Summary for Policymakers*, p. 13, in *Climate Change 2007*, loc. cit.
[3] Michael Renner and Tom Prugh, "Failing Governance, Unsustainable Planet," in T. Prugh and M. Renner, eds., *State of the World 2014: Governing for Sustainability* (Washington, D.C.: Island Press, 2014), p. 3; cf. also Jeremy Lovell, "Clean Energy Lag Puts World on Pace for 6 Degrees Celsius of Global Warming," *Scientific American* blog, 26 April 2012.
[4] "Optimism faces grave realities at climate talks," *New York Times* 1 Dec 2014, URL http://www.nytimes.com/2014/12/01/world/climate-talks.html?_r=1
[5] Intergovernmental Panel on Climate Change, *IPCC Special Report Emission Scenarios: Summary for Policymakers* (World Meteorological Organization/UN Environmental Program, 2000), p. 5
[6] Intergovernmental Panel on Climate Change, loc. cit., p. 5
[7] David W. Orr, "Foreword," in Prugh and Renner, loc. cit., p. xxii
[8] Sir Nicholas Stern, *Review on the Economics of Climate Change* (London: UK HM Treasury, 2006), "Summary of Conclusions," p. viii. See also Joseph Stiglitz, Amartya Sen, and Jean-Paul Fitoussi, *Report of the Commission on the Measurement of Economic Performance and Social Progress*, initiated by President Sarkozy of France, 2008; report delivered 14 Sep 2009, URL http://www.stiglitz-sen-fitoussi.fr/en/index.htm. For non-technical summaries, cf. Kate Raeworth, "Defining a Safe and Just Space for Humanity," 28-38, and Robert Costanza et al., "Building a Sustainable and Desirable Economy-in-Society-in-Nature," 126-142, both in Eric Assadourian and Tom Prugh, eds., *State of the World 2013: Is Sustainability Still Possible?* (Washington, D.C.: Island Press, 2013)
[9] David W. Orr, loc. cit., p. xxiii
[10] Jared Diamond, *The World until Yesterday: What Can We Learn From Traditional Societies?* (New York: Penguin/Viking, 2012), chapter 10, "The evolution of religion," p. 368
[11] Diamond, loc. cit., p. 367
[12] "Hurricane Katrina as Divine Retribution," *Wikipedia*, URL http://en.wikipedia.org/wiki/Hurricane_Katrina_as_divine_retribution , accessed 1 Dec 2014
[13] Diamond, loc. cit., p. 367
[14] M. Schönfeld, "From Confucius to Kant: question of information transfer," *Journal of Chinese Philosophy* 33 (2006): 67-81; transl. as "從孔子到康德：信息的傳承如何可能" by Jauwei Dan 但昭偉 and Wanqing Shao 邵婉卿, in Haiming Wen 溫海明, ed., 康德與中國哲學智慧 [*Kant and Confucianism*], (Beijing: Renmin University, 2009), p. 68-83
[15] Famous examples are 論語 12:11 "君君，臣臣，父父，子子"; 12:17 "政者，正也"; and 13:3 "必也正名乎！"
[16] Translation by Raymond Dawson in Confucius, *The Analects* (New York/Oxford: Oxford University Press, 1993), p. 50
[17] Orr, loc. cit., p. xxiii
[18] Translation by D. C. Lau in Mencius, *Mencius* (London: Penguin, 2004), p. 3
[19] Immanuel Kant, "What is Enlightenment?" (1784) translated by Lewis White Beck, in I. Kant, *Foundations of the Metaphysics of Morals* (New York: Macmillan, 1959), p. 80. Please note that I slightly condensed Beck's translation. For the original, cf. *Akademieausgabe* 8:39.