Religion, Evolution, and the Revival of Functionalism

Religion is often defined in terms of belief in supernatural agents, but Emile Durkheim offered a different definition in *The Elementary Forms of Religious Life* (1912/1995:44).

A religion is a unified system of beliefs and practices relative to sacred things… which unite into one single moral community called a Church, all those who adhere to them.

Durkheim’s definition emphasizes the functional nature of religion, in which supernatural agents and all else sacred figure as proximate mechanisms, the means to an end of a united community. More generally, Durkheim helped to initiate the tradition of functionalism in the human social sciences, which interprets all cultural systems as largely adaptive for their members. As he put it, “In all its aspects and at every moment of history, social life is only possible thanks to a vast symbolism (1912/1995: 233)”.

Functionalism flourished during the first half of the 20th century but then fell upon hard times. Part of the problem was that group-level functionality was assumed, rather stated as a prediction that could be falsified. Functionalists also had a static view of society that seemed to deny the possibility of change or the importance of individual agency. Finally, holistic conceptions of society seemed unscientific and even mystical,
compared to more reductionistic conceptions, which became known as methodological
individualism (see Wilson 2002, ch 2 for a review).

Despite these failures, developments in evolutionary biology suggest that the
rejection of functionalism in the human social sciences was premature. Natural selection
proceeds not only by small mutational steps, but also by social groups becoming so
highly integrated that they become higher-level organisms in their own right (Maynard
Smith and Szathmary 1995). This phenomenon is called a major transition of evolution
and has occurred repeatedly throughout the history of life, perhaps including the origin of
life itself as groups of cooperating molecular reactions. The individual organisms of
today are not only the groups of past ages, but the groups-of-groups-of-groups of past
ages!

The evolution of social insect colonies such as ants, bees, wasps and termites also
fall within the paradigm of major transitions. The members of a honeybee colony are
physically separate, unlike the cells of a multi-cellular organism, but their activities are so
well coordinated for collective survival and reproduction that they qualify as a
superorganism. They even possess a collective mind, in which single bees play the same
kind of limited role in a social network that single neurons play in a neural network. The
concept of a group mind might have appeared unscientific and mystical to those who
rejected functionalism in the mid-1900’s, but it has been demonstrated in exquisite detail
by social insect biologists such as Thomas Seeley and his colleagues (e.g., Seeley 1995).

It is becoming increasingly certain that human evolution represents a major
transition of evolution, turning our ancestral groups into the primate equivalent of bodies
and beehives. These groups had their share of internal strive (which also exists in bodies
and beehives) but they succeeded primarily on the basis of their teamwork in competition
with other groups, other species, and their challenging physical environment. Teamwork
included not only physical tasks such as gathering, hunting, warfare, and childcare, but
also mental tasks such as perception, memory, and decision-making. The capacities for
symbolic thought and the social transmission of behavior, two hallmarks of our species,
are fundamentally communal activities that require mental teamwork. Cultural evolution
enabled our ancestors to spread out of Africa, inhabiting all climatic zones and occupying
hundreds of ecological niches, harvesting everything from seeds to whales. Then the
invention of agriculture initiated a positive feedback loop with respect to the production of resources and population growth, leading to our current large-scale societies. Against this background, Durkheim’s statement that “In all its aspects and at every moment of history, social life is only possible thanks to a vast symbolism” acquires a modern ring.

Implications of the New Functionalism for our Understanding of the Golden Rule

These broad developments are described in more detail elsewhere (Wilson 2002, 2005, 2007; also visit this website designed to establish Evolutionary Religious Studies as a new discipline: http://evolution.binghamton.edu/religion/). Here I will focus on the implications of the new functionalism for our understanding of the Golden Rule. A number of points can be made which are so elementary from a modern functionalist perspective that they are unlikely to be wrong.

1) To the extent that religions are adaptive at the group level, they must encourage cooperation and inhibit exploitation among their members. If we equate the Golden Rule very loosely with “in-group cooperation,” then it can indeed be said to lie at the core of all religions—to the extent that they are adaptive at the group level. See point 6 for a discussion of when religions are not adaptive at the group level.

2) For a religion to be adaptive at the group level, it must do much more than exhort its members to be cooperative in an undifferentiated fashion. It must provide a more detailed set of if-then rules for how to behave in particular contexts. The metaphor of society as an organism becomes highly instructive in this regard when taken seriously. Single organisms are mind-bogglingly complex in their genetic replication machinery, anatomy, physiology, and behavior—and must be—to survive and reproduce in their respective environments. If cultural systems are even remotely like single organisms in their functional organization, then they must provide something comparable for their members. There is no single Golden Rule of religion, but Golden Rules, and lots of them.
3) One of the most profound implications of the new functionalism is that human cultural diversity is comparable to biological diversity. Genetically we are a single species, but culturally we are more like a multi-species ecosystem. Evolutionary biologists don’t spend a lot of time studying what all species share in common. Their main challenge is to explain why species are so different from each other. Similarly, the study of religion must go beyond the search for universals to include the interpretation of differences. Not only does a single religion have many Golden Rules, but different religions have different Golden Rules—and must—to become adapted to their respective environments. Pointing out that all religions are internally cooperative (to the extent that they are adaptive at the group level) is like pointing out that all organisms have an internally harmonious anatomy and physiology. It is a true statement, but it doesn’t get us very far. We need to know about the anatomical and physiological adaptations of particular organisms—and their analogs for religious (and other cultural) systems.

4) The many Golden Rules of any particular religion are not necessarily derivable from a single rule such as the Golden Rule. In his contribution to this volume, philosopher Harry Gensler shows how some applications of the Golden Rule lead to pathological outcomes (“fool’s gold”) and attempts a general formulation that avoids these problems. His goal is to make the Golden Rule a single principle that, properly understood, can be used to derive specific behaviors in any particular situation. This is a worthwhile philosophical exercise, but most religions are not designed that way. As an alternative, consider the two proverbs “A stitch in time saves nine” and “If it ain’t broke, don’t fix it.” They are the opposite of each other, but each prescribes a useful behavior in a given context. Precaution is great when we have the time for it, but sometimes it must take a back seat to more pressing concerns. People who use these proverbs don’t puzzle over the fact that they are inconsistent with each other, or try to create a single general rule from which both proverbs can be rationally derived. They simply invoke the appropriate proverb in the appropriate context. Religious systems are more like collections of proverbs than philosophical systems that strive for consistency across contexts. Cultural systems in general are partially the product of blind variation and selective retention (Campbell). They work without being consciously designed and without anyone
knowing how they work. Alexis d’Toqueville (1835/1990) pointed out that the Mexican Constitution was copied from the American Constitution, but Mexico is not at all like America. Something makes them different, which in our ignorance we call “custom,” that we don’t understand but makes a huge different in how well these societies function as corporate units. The same can be said for the adaptive organization of religions. Moreover, even when elements of religion are consciously designed, they do not necessary take the form of a system that can be rationally derived from a small set of rules, as I will show for the example of Calvinism below.

5) The Golden Rule is often described as capturing the true spirit of religion, as if religion in its purest sense is about universal brotherhood, even if most religions fall short of the ideal. The contribution to this volume by philosopher Jeffrey Wattles is in this spirit and shows how The Golden Rule might be used as the basis for a global value system of the future. I share Wattles’ desire to foster universal brotherhood, but it is also important to distinguish this normative project from the more descriptive project of understanding the nature of religions of the past, present, and near future. Descriptively, it must be acknowledged that most religions are designed to promote, not universal brotherhood, but the collective interests of their members. There is nothing that makes the Golden Rule more essential than other rules prescribed by a religion. It is employed selectively within the group and even more selectively toward outsiders. The details are expected to vary greatly, depending upon environmental circumstances. Once again, an analogy with biological species is instructive. Interactions among species span the full range, from ruthless competition and predation, to coexisting without direct interactions, to obligate mutualisms. We should expect the same spectrum of interactions among cultural systems, each requiring their own sets of if-then rules.

6) The five points listed above are based upon a conception of religion as a group-level adaptation. However, the elements of religion are not invariably adaptive at the group level. They can also benefit some individuals at the expense of others within the same group, benefit cultural traits at the expense of both individuals and groups (similar to a disease organism), or have no function at all, since there is more to evolution than
adaptation, as the late Stephen Jay Gould tirelessly pointed out. It is a strength of the new functionalism that group-level adaptation is not assumed, but is predicted to occur only when certain conditions are met. For example, consider the Catholic practice of indulgences and other abuses that led to the Protestant Reformation. They were clearly exploitative practices that benefited some members of the religion (the elites) at the expense of others (the rank and file). More generally, many religions exhibit a cycle of corruption and renewal that is predicted from a fully rounded theory of natural selection as a multilevel process (Wilson 2002, p 182-187). When we consider elements of religion that are not adaptive at the group level, then the importance of the Golden Rule diminishes still further and even disappears altogether.

Three Case Studies

It is beyond the scope of this article to expound upon these six points in detail. Instead, I will briefly illustrate them with three case studies.

The Origin of Calvinism. In my book *Darwin’s Cathedral* (Wilson 2002, Ch. 3) I chose Calvinism as an example of how a specific religion can be studied from an evolutionary perspective. The origin of Calvinism represents a natural before-and-after experiment. The City of Geneva had expelled the Catholic Church and was trying to function as a corporate unit on the strength of a democratically elected civic government and undifferentiated Protestant zeal. It was failing; factionalism was called “the Genevan disease.” Calvin and his colleagues established a more differentiated religious system that helped Geneva function better as a corporate unit and became a model for religious reform elsewhere. What were the specific ingredients that caused Calvinism to work in this practical sense (what Durkheim called “secular utility”) and what was the role played by the Golden Rule?

Calvinism is especially useful as a case study because Calvin insisted on writing the catechism and set of rules (The Ecclesiastical Ordinances) as a condition for coming to Geneva. He also elaborated on his religious views in great detail elsewhere throughout
his lifetime. Thus, if any religion has a chance of qualifying as an internally consistent philosophical system derivable from a few general rules, it is Calvinism.

The first time that the Golden Rule appears in the Calvin’s catechism is in section 9 (out of 33 sections; passages and page numbers are from Hesselink 1997):

The direction in which all the commandments of the law tend, Christ our Lord sufficiently declared when he taught that the whole law was comprised under two heads: “We are to love the Lord our God with our heart, all our soul, and all our strength. Then we are to love our neighbor as ourselves (15).

Like Rabbi Hillel, who used The Golden Rule to summarize the Torah as briefly as possible, Calvin uses the phrase “Love thy neighbor as thyself” as the briefest possible summary of God’s commandment. The essence of the religion is to promote cooperation among members of the Church, as I stressed in point 1 above. However, just as Jacob Neusner’s contribution to this volume reveals that the Golden Rule was not treated as a foundational principle of Judaism from which specific prescriptions could be derived (and wasn’t even the main point of the parable of standing on one foot!), “love thy neighbor” does very little useful work in Calvin’s catechism. Much more important is the cultivation of a state of mind that combines fear of damnation with gratitude for the prospects of being saved, resulting (if the belief system is taken seriously) in a permanent state of contrition. Calvin also works hard to stress that the human intellect is so feeble that it is impossible to know God’s will and blasphemy to try, paving the way for specific prescriptions that do not require rational justification.

In point 2, I stress that adaptive religions must go beyond generic cooperation and provide specific if-then rules for how to behave in particular situations. As an example, Calvinism was impressively designed to control deviance in its own leaders, which is reflected in the following passage from the catechism:

Therefore, pastors may dare boldly to do all things by God’s Word, whose stewards they have been appointed to be…But let them turn aside from
this to their own dreams and figments of their own brains, then they are no longer to be considered to be pastors but rather as pestilential wolves to be driven out. For Christ does not command others to be heard than those who teach us what they have taken from his word (36).

In contrast, Calvin’s church was in a subordinate relationship with the civic government and was not in a position to punish secular rulers, which is also reflected in the catechism:

Not only should we behave obediently toward those leaders who perform their office uprightly and faithfully as they ought, but also it is fitting to endure those who insolently abuse their power, until freed from their yoke by a lawful order. For as a good prince is proof of divine beneficence for the preservation of human welfare, so a bad and wicked ruler is his whip to chastise the peoples’ transgressions (38).

These two passages are much like the two proverbs described in point 4. They make opposite prescriptions for how to behave, but each is appropriate in their given context. There is no need to make them logically consistent or derivable from a single rule such as the Golden Rule. They merely need to be separately invoked whenever appropriate. The world is full of injustices that cannot be controlled. What better way to cope with them and turn them to advantage than by portraying them as God’s way of punishing us for our own sins!

The second passage provides an example of what rationalists love to hate about religion. If all blessings are attributed to God’s beneficence and all misfortunes are portrayed as God’s way of punishing us for our own sins, then religion becomes immune from skeptical inquiry. This seems weak-minded from a rationalist perspective, but the rationalist is weak-minded for failing to evaluate religious belief by the appropriate criterion— as a set of specific if-then rules for how to behave. Calvin’s religion was highly sophisticated and adaptive when judged by the appropriate criterion, even if it
doesn’t take the form of a logically consistent system that enables a diversity of behaviors to be derived from a small set of rules.

The problem with extending the Golden Rule to everyone: Fast-forwarding to the present, Carlton Pearson can be regarded as a modern-day Calvin attempting to establish his own vision of Christianity—so far without much success. As reported in National Public Radio’s *This American Life* (http://www.thisamericanlife.org/Radio_Episode.aspx?episode=304) and in his own words (Pearson 2007), Pearson grew up in a Pentecostal community and gained an early reputation for being able to cast out the devil. He attended Oral Roberts University and became a protégé of Roberts himself, who regarded Pearson as his “black son,” capable of reaching an African-American audience. Before long he had become a Pentecostal Bishop, traveling the world and presiding over his own megachurch in Tulsa, Oklahoma. He also became knowledgeable about religious traditions other than his own. Then one day he had an epiphany while watching television with his infant daughter on his lap. A news program showed footage of an African famine, including starving babies with their swollen bellies. Suddenly his own belief that these babies would be sucked into hell if they didn’t convert to his particular religious faith struck him a monstrous. In his own mind he had a conversation with God and realized that hell is not a place we might go after we die, but the misery that we create for each other on earth.

Pearson’s revelation caused him to question other major tenets of Pentecostalism, such as the inerrancy of the Bible. Unfortunately, when he tried to preach his new gospel, he ended up losing his congregation and being branded a heretic. Slowly he began to acquire a new congregation, in much smaller numbers, of people from a Pentecostal background and who had been victims of intolerance and therefore resonated to Pearson’s new “Gospel of Inclusion.”

In point 5, I stressed that The Golden Rule is often described as capturing the essence of religion, as if religion in its purest sense is about universal brotherhood, even if most religions fall short of the ideal. By this criterion, Pearson took a giant step forward with his revelation, so why did he take a giant step backward by losing his congregation? Because fear of disobeying God and certainty about what it means to obey
God’s will perform vital functions in Pentecostalism, no less than Calvinism. As one person who left Pearson’s congregation put it, “We need to find another church that’s solid in the word.” As one of the youth pastors who stayed with Pearson humorously put it: “What’s the best way to get the kids’ attention? We’ll scare ‘em! We’ll say, do you like to burn? … That’s how most of us got saved. We chose because the alternative was scary! … Threat of judgment day sure is easy to pack a church out. That fear factor is definitely effective. If we take away the requirements of coming to church and paying your dues…you can put some guys out of a job!”

In point 4, I stressed that cultural systems can be regarded as like biological species that coexist by inhabiting separate niches. Pearson’s new Gospel of Inclusion was poorly suited for his old congregation but well suited for a different set of people who had experienced intolerance. He still occupied a niche, albeit a much smaller one. Another interesting point is that Pearson’s Gospel was new only against the background of Pentecostalism. Liberal Protestant denominations gave up believing in hell and Biblical literalism long ago. Yet, when Pearson had his revelation, he didn’t convert from Pentacostalism to an existing liberal denomination, but felt the need to create a liberal Pentecostal denomination of his own. In this fashion, religions diversify in parallel in different cultural traditions, much as species diversify in parallel on different islands. None of these fascinating trends can be understood by portraying the Golden Rule as somehow capturing the true spirit of religion.

**Liberal and conservative Protestant denominations as separate cultural species.** A recent analysis by Ingrid Storm and myself illustrates the degree to which different religions can cause their members to behave as if they were different species (Storm and Wilson, 2008). The analysis makes use of a large representative sample of American teenagers, who were studied by Csikszentmihaly and Scheider (2001) to see how young people prepare themselves to enter the work force. In addition to completing a large number of one-time survey items, data was also taken using the experience sampling method (ESM) which involves being signaled at random times during the day and reporting both external (where you are, who you are with, what you are doing) and internal (what you are thinking and how you are feeling on numerical scales) experience.
The ESM is as close as psychological research gets to field studies of nonhuman species in their natural environments.

Our analysis focused on a comparison between students who belonged to liberal vs. conservative Protestant denominations. Thus, everyone was American, a teenager, and belonged to the same major religious tradition. In these respects they were culturally uniform. However, some belonged to liberal denominations (Episcopal, Methodist, Presbyterian and the United Church of Christ) and others belonged to conservative denominations (Southern Baptist, Nazarene, Assemblies of God, Seventh Day Adventists, and Mormon). This particular cultural difference had a transformative effect on their values and behavioral response to their environments, as shown in the following figures from Storm and Wilson (2008).

In figure 1, the survey item “Do you think of yourself as a religious person?” is related to the survey item “In my family, we express opinions even when they differ.” The more liberals agreed with the first item, the more they agreed with the second. The more conservatives agreed with the second item, the less they agreed with the second. Their respective religions were pulling them in completely different directions.

In figure 2, the survey item “In my family, I am the one to decide which friends I can spend time with” is related to the survey item “Do you usually feel stressed?” Liberals felt stressed when they couldn’t make their own decisions and became less stressed when provided elbowroom. Even at their most mellow, however, liberals felt more stressed than conservatives, who evidently didn’t require elbow room! This figure also illustrates the important point that even though fear plays a critical role in the belief systems of religious conservatives, they do not spend most of their time in a fearful condition, but rather in the more benign psychological state of feeling saved and in control of their environment.

The differences become even more interesting when we consider the moment-by-moment data from the ESM. Liberals spend considerably more time alone than conservatives. Moreover the positive mood of conservatives is highly dependent upon being in the presence of others, in contrast to liberals, who often prefer being alone, as shown for a sample of variables in figure 3.
In the biological literature, figures 1-3 would be called “norms of reaction,” which describe the phenotype of the organism (y-axis) across a range of environments (x-axis). Different species have different norms of reaction—and must—to survive and reproduce in their respective niches. The liberal and conservative teenagers in our sample obviously belong to the same biological species and mingle with each other in the same schools, but their respective cultures cause them to be profoundly different from each other in their norms of reaction at the phenotypic level, which is all that natural selection ever sees.

What are “niches” to which liberal and conservative cultural systems are adapted? Liberals place a high value on individual autonomy and decision-making. Individuals are expected to internalize the norms of their culture and do the right thing on a case-by-case basis after thinking about it. This strategy can be highly successful but can also be costly in the time required for information processing, in making mistakes, and in ignoring successful behaviors winnowed by tradition that work without anyone knowing why they work. Liberalism tends to thrive in safe, stable, affluent societies such as current-day Western Europe.

Conservatives place a high value on obedience to authority. This strategy might stifle creativity but has a number of advantages, such as easing the burden of information processing, retaining successful behaviors winnowed by tradition, and coordinated action. Conservatism tends to thrive in dangerous, unstable, and impoverished societies such as the Middle East. One reason that America is diverse with respect to liberalism and conservatism is because it is so stratified with respect to the safety, stability, and affluence of its citizens.

See Storm and Wilson (2008), Norris and Inglehart (2004), Lakoff (1996), and Jost et al (2001) for a more detailed discussion of liberalism and conservatism, in both their religious and non-religious manifestations. For the purpose of this article, the most important point to make is that the Golden Rule contributes nothing whatsoever to our understanding of these profound cultural differences. As an undifferentiated appeal to cooperate, “Do unto others” is universal and therefore powerless to explain the nature of religious and cultural diversity.
Conclusion

Prosocial values such as altruism and the Golden Rule are often portrayed as at the heart of all religions. In a previous symposium and edited volume on altruism across world religions (Neusner and Chilton 2005), William Green began by making the shocking claim that when altruism is defined as “intentional action ultimately for the welfare of others that entails at least the possibility of either no benefit or a loss to the actor,” it is foreign to the imagination of all the major religious traditions. Subsequent chapters by scholars of the major religious traditions confirmed Green’s claim. This does not mean that religions are bastions of selfishness, but rather that they do not conceptualize helping others as requiring sacrifice on the part of the individual. As Green put it in his summary statement, “only by a rigid secular calculus is benevolence less benevolent because the actor benefits.”

A similar shock seems to be in store for us in the case of the Golden Rule. It does provide a tidy summary of the core fact that most enduring religions are designed to foster cooperation among their members. It does not appear to serve as a core principle that is consulted to derive specific predictions for how to behave. To understand how religions actually work, we must think about Golden Rules, not a single Golden Rule.
Literature Cited


Do you think of yourself as a religious person?

Figure 1. Response of American teenagers from Liberal and Conservative Protestant denominations to two survey items. See Storm and Wilson (2008) for details.
In my family, I am the one to decide which friends I can spend time with.

Do you usually feel stressed?

[Graph showing response of American teenagers from Liberal and Conservative Protestant denominations to two survey items. See Storm and Wilson (2008) for details.]
Figure 3. Response of American teenagers from Liberal and Conservative Protestant denominations when asked to assess their mood on a moment-by-moment basis, when alone and in the presence of others. See Storm and Wilson (2008) for more information.