The Religious Violence Project

A Report to the 2010-2011 Edition of the
Boston University Religion Fellows Program

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Introduction

Asking Hard Questions
Extremist political violence takes many forms, from systematic war to surprise terrorist attacks. Sometimes the violence is religiously rationalized, sometimes religiously motivated, and sometimes both. Sometimes the violence reaches across national and cultural boundaries (as in 9/11/2001 in the United States), and sometimes it arises from within a nation when homegrown extremists attack their own government and fellow citizens (as in 7/22/2011 in Norway or the Oklahoma City bombing in the United States).

When violence hits, we naturally want to know whether there is something wrong with our nation that might have contributed indirectly to the attack, whether we can learn from other nations where foreign or homegrown extremists attacked, whether we can expect more of the same in the short-term and long-term future, and whether there is something we can do to mitigate the problem of extremist violence. When the homegrown extremists are (nominally or enthusiastically) Protestant Christians deploying deadly violence strategically (as in 7/22 and Oklahoma City), we naturally want to know whether something about the Protestant religious heritage indirectly contributed to the extremist violence, or whether that religious heritage includes resources for making violent religious extremism rare. We may even wonder whether that religious heritage has to be weakened or overthrown in order to defend ourselves from violent religious extremism; the boosters of the “religion is inherently morally bankrupt” argument of New Atheists such as Dawkins, Harris, and Hitchens make this case forcefully.

It is tempting to dismiss violent religious extremists as psychologically deranged, resentful loners with no social skills, or gullible and vulnerable to manipulation. But research shows that this is a risky and ultimately misleading path, as we shall see. It is more useful to seek to understand violent religious extremism. As it happens, this is a realm where opinions and analyses are plentiful and evidence-based theories are rare. Can the scientific study of religion help?

Framework: Constraint without Determination
The scientific study of religion is pursued using a variety of philosophical frameworks for interpreting the significance of results. Some approaches are quite reductive, in the particular sense that religion is assumed to be without any cognitive reference or value, after which the only task is to explain the various psychological and social functions of religion. The approach taken here is neutral to evaluative questions about religion, understanding them as open questions that could be pursued in a suitably framed process of inquiry, even though the particular inquiries described in this paper do not pursue that type of inquiry.

Other approaches are reductive in the sense of assuming that biological factors essentially determine social consequences, or social realities determine individual behavior. The approach adopted here rejects both forms of determinism in favor of a constraint-without-determination framework for interpreting the significance of the results of the scientific study of religion. The constraint-without-determination framework involves acknowledging the constraints on behavior and sociality that derive from evolutionary biology, as diagnosed in cognitive science and experimental psychology, but also
accepting that individuals can contest their cognitive defaults and that cultures can develop novel forms that spin creatively outwards from the cross-culturally shared, evolutionary stabilized core of human cognition. The illustration below ("Spectrum GI" by Calzinger) is a visual metaphor for the point. The evolutionary stabilized core of human cognition is the glowing sphere and the arms spiraling outwards express the creative possibilities for behavioral and cultural expression: constrained but diverse.

**The Religious Violence Project**

The Religious Violence Project is an initiative of the Institute for the Biocultural Study of Religion ([www.ibcsr.org](http://www.ibcsr.org)). The aim of the project is to understand the dynamics of religiously motivated and religiously legitimated violence using tools from evolutionary biology, complex adaptive systems, social simulations, and a variety of other natural-science and human-science resources.

Active personnel on the project include the following:

- Jeffrey Edmonds (doctoral student, Religion and Security Studies, Boston University)
- Luke Matthews (postdoctoral fellow, Biological Anthropology, Harvard University)
- Patrick McNamara (Neurology, Boston University School of Medicine)
- Charlie Nunn (Biological Anthropology, Harvard University)
- Richard Sosis (Evolutionary Anthropology, University of Connecticut)
Waiting in the wings if funding materializes are several specialists who can help us develop the all-important datasets for analysis:

- Thomas Barfield (Anthropology, Boston University)
- Christine Fair (International Relations, Georgetown University)

This report discusses the work of the Religious Violence Project while at the same time furnishing a survey of a variety of contributions from the scientific study of religion to the understanding of religiously motivated and religiously rationalized violence.

Key Terms
We begin here with some definitions to clarify the meaning of key terms in the study of violent religious extremism.

**Ideology**
Ideology here means a person’s ideas insofar as they give structure to beliefs and behaviors in the political, cultural, religious, and moral domains of life.

It is important to note that this is a neutral and descriptive usage, from which it follows that ideology is properly ascribed to everyone, not just to our political enemies or to political true believers or to the irrationally biased. It is also important to note that this definition extends beyond the political domain into other idea-driven domains of life.

**Extremism**
Extremism here means ideological beliefs and behaviors well beyond the boundaries of the “normal” in a political, cultural, religious, or moral context.

The complexities here bear on how the “normal” is defined in any given setting. This definition is context-dependent, in the sense that people in different cultures understand normality differently to some degree. It is group-dependent, in the sense that even in a single cultural setting, groups of different perspectives on the normal. It is power-dependent, in the sense that controlling narratives often determine what counts as normal. It is history-dependent in that groups that become dominant over historical time get to establish the narratives that control perception of the normal. It is also important to acknowledge that extremist groups are typically internally diverse, including in respect of their advocacy of violence in pursuit of their goals.

Despite these complications, proper attention to contextual variations allows for a meaningful definition of the normal, and the associated definition of extremism.

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Religious Extremism
Religious extremism is simply extremism when ideological beliefs are religious in nature and ideological behaviors are religiously motivated and rationalized.

The complexities in this case are that contextual variations matter (e.g. fundamentalism is not extremism in a culture where it is normal; but in a large cosmopolitan context it may be extremism), that religious extremism as defined may or may not extend into the political domain, and that it may or may not involve advocating or using violence.

Violent Religious Extremism
Violent extremism is ideological action by extremists that harms people or property. Violent religious extremism is ideological action by religious extremists that harms people or property.

Of course, it is not always clear what counts as violence and it is not always clear the degree to which violence is religiously rather than purely politically motivated.

Secularism of a State (or Institution)
Secularism (ideally) is a form of society (or a type of institution) in which there is:

- no religious qualification for leadership,
- no formal relationship between religious groups and state (institutional) structure or purpose,
- no coercion by the state (institution) in regard to religious beliefs and behaviors, and
- no coercion by religious groups in regard to political (institutional) beliefs and behaviors.

It is important to note that secularism has other meanings. To begin with, there is a weaker version in which secularism refers simply to religion not being widely practiced in a society (or an institution). There are also stronger versions, in order of increasing restrictiveness, as follows:

- stronger version: the definition above plus religion not permitted political influence;
- even stronger version: additionally, religion is cognitively useless; and
- stronger version still: additionally, religion is socially dangerous.

The definition of secularism adopted here is consistent with the principle announced above of neutrality toward religious truth claims, which is violated at least by two strongest versions and possibly also by the third-strongest definition.

Religion
Religion is a form of corporate life having most or all of the following features:

- a way to relate every aspect of life to something ultimate and fundamental, in terms of ideas, values, and practices
- an answer to concerns about death and immortality, including the ultimate origins, fate, and meaning of life
- a means of bonding human beings tightly together through obligation, responsibility, and ritual
• a solution to the problem of human evil and a means of healing, social transformation, and personal self-cultivation
• a source of cosmological narratives by which we discern our place and orient ourselves to moral decisions

Note that this is a family resemblance definition, and does not presume any essence of religion. This mitigates the problems associated with positing such an essence, which has not fared well in the academic study of religion. Note, too, that this definition does not presuppose that religion necessarily has to do with supernatural entities or forces, as do so many functional definitions of religion used in the scientific study of religion. This definition is certainly consistent with supernaturalism in the religious interpretation and expression of beliefs, behaviors, and experiences, but the definition also allows for the inclusion of non-supernaturalist forms of religiosity.

Key Questions Using These Terms
With these terms in place, the following types of questions take on more determinate meanings. These are the sorts of questions that are important in the Religious Violence Project.

• Are violent religious extremists irrational, immoral, or psychologically deranged?
• Generally, does religion (or some aspect of religion) make extremist violence more or less likely?
• Specifically, does the Reformation religious heritage (or some aspect of it) make extremist violence more or less likely?
• Does secularism (or some aspect of secularism) mitigate or provoke violent religious extremism?

Disciplinary Perspectives
Diverse experts have attempted to shed some light on the varied phenomena of violent religious extremism. The disciplines involve include the following:

• Political Science
• Sociology
• Cultural Anthropology
• Biological Anthropology
• Psychology
• Cognitive Science
• Neurology
• Theology

In what follows, the discussion focuses on a few disciplines that are particularly relevant to the leading questions of the Religious Violence Project. Each disciplinary effort is described in the rest of this section.

• Clinical Psychology/Anthropology
• Economics
It is tempting to think that violent religious extremists are psychically disturbed or abnormal, but studies from anthropologist Scott Atran (pictured at right) and a number of other researchers show that this is a misconception, at least regarding violent Islamic extremists. Violent religious extremists appear to vary across the same range of mental health possibilities as people in the wider population. As Atran says, “We will never properly understand violent religious extremism if we pathologize it.”

When we don’t fall thoughtlessly into pathologizing violent religious extremism, here is what emerges as a “profile” of violent religious extremist groups and individuals. They:

- are closely bonded, often from childhood,
- often played sports together, worshipped together, did religious or military training together,
- have a high degree of trust in one another,
- are very difficult to penetrate from the outside,
- have personal experiences of grave injustice that inspire their hatred of a shared enemy,
- construct and ritually repeat (often coded) religious rationalizations for hatred and violence, and
- use religious resources as means of comfort and courage in the face of the associated stress.

Economics

A good example of a theoretical approach to violent religious extremism deriving from economics is the work of Laurence Iannaccone and Eli Berman. They apply rational choice theory from economics to understand religion. Their work assumes that religion’s defining characteristic is supernaturalism and that there is both universal scarcity to worry about and that people make rational judgments in figuring out how to behave and what to believe.

As is typical for economic theories, Iannaccone and Berman’s theory describes both the “demand” side and the “supply” side of religion. Analysis of the demand side derives from two key premises:

- people create culture and technology to handle scarcity and to enhance individual well-being and corporate welfare, and

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supernatural entities function as an alternative technology for achieving precisely the same ends of individual well-being and corporate welfare.

With these premises in mind, Iannaccone (below, left) and Berman (below, right) conclude that “Demand for the supernatural can be viewed as a reasonable response to inescapable scarcity, insatiable wants, and irrepressible hope.”

They believe that their approach—treating the supernatural as a class of goods—helps to explain what went wrong with secularization theory. Sociologist of religion (below, left) was instrumental both in establishing the theoretical framework for the prediction of secularization theory that religion would decline, and for recognizing and theorizing the reasons for this failure. This recognition of failure, and the resolve to find a more realistic appraisal of the social and political significance of religion, is evident in The Desecularization of the World (below, right).

Iannaccone and Berman analyze the supply side turns on an economic market analysis, but with a few differences. They argue that, given the perpetual demand for supernaturalism, markets for supernatural

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goods develop like any other markets. Such markets specialize, advertise, and sell products. But they are also different from ordinary business markets because they are naturally competitive, there are few barriers to entry, and there is a wide range of products. Moreover, markets for supernatural goods are particularly vulnerable to uncertainty due to the difficulty of falsifying any claims made on behalf of products, so the markets display a double emphasis on reducing fraud (through low salaries for religious leaders and the use of many volunteers) and on increasing information availability (through using the information-efficient congregational form and stressing the importance of testimony as product endorsement).

A key aspect of the supply-side analysis is the distinction between the congregational and sect form of religious group organization. These are analytically distinct forms of religious organization because congregations arise for information efficiency and sects arise as a reaction to congregations. The way this sect-type reaction emerges is important. Congregational forms are vulnerable to free riders (people benefiting from the group without contributing sincerely) so there is room for diversification in the direction of sect-type sociality, which impose costly demands on members to ensure loyalty. For Iannaccone and Berman, sect-type religious sociality is by definition extremism. As they say,

> Traditional academic theories of religion have no way to explain the persistence of extremist groups except to view their adherents as victims of ignorance, coercion, deception, or psychopathology. Economic theory does better. Without resort to irrationality, it explains on-going demand for supernaturalism ... [and] accounts for religious extremism (sects).^4

How does Iannaccone and Berman’s account help to explain extremist religious violence? They acknowledge that violence is not a meaningful option for mainstream congregational groups because congregational bonding is not tight enough and costs not high enough to eliminate dangerous free-riders. However, violence is a meaningful option for sects because sect-type groups build exceptionally high mutual trust through exercising tight control over group members, and often also through supplying valuable social goods. Furthermore, they argue that secular “markets” minimize violent religious extremism through increasing inter-religious competition and limiting the influence of any particular religious group, and especially a violent religious group.

In summary,

Sects are high-powered religious organizations, run by credible leaders and peopled by active members carefully screened for commitment. Sad to say, these same institutional attributes are also keys to the successful “production” of organized violence, especially clandestine violence. A soldier running toward a target under fire must be absolutely certain that his comrades are “covering him” with simultaneous fire toward the target. A terrorist’s worst nightmare is the comrade who chickens out, sells out, or proves incompetent. A terrorist working within a sect can thus sleep a little easier. The leaders have established their reputation for honesty, and so are unlikely to sell out, and the comrades have been carefully selected for commitment to the cause. Moreover, the sect’s diverse

^4 Iannaccone and Berman, “Religious extremism.”
bundle of social services reinforces the commitment of comrades. Who would defect from the very organization that feeds, educates, and protects one’s family?^5^

**Moral Psychology**

Another discipline that is relevant to understanding violent religious extremism is moral psychology, and here the work of Jonathan Haidt (at right) is particularly valuable. Though Haidt himself hasn’t spent a lot of time on violent religious extremism as such, his work can be extended to just such an application.

In “The new synthesis in moral psychology,” Haidt presents his evidence for the intuitive primacy (but not dictatorship) of moral intuitions. His experimental work shows that people use moral reasoning to justify and explain more fundamental moral intuitions. It is these moral intuitions that underlie decisions about social action, and that bind people together and build up the kinds of moral consensus that define groups and even civilization-sized projects.

According to Haidt and other moral psychologists, allowing for some minor skirmishes over wording and count, there are five evolutionarily stabilized domains of moral intuition, each with a fundamental intelligibility in the era of human evolutionary adaptation.

- **Harm/suffering** is crucial for kin altruism,
- **Fairness/justice** is crucial for reciprocal altruism,
- **Ingroup/outgroup** awareness is crucial for group definition,
- **Authority/hierarchy** is crucial for group stability, and
- **Purity/sanctity** is crucial for health and for consolidating group authority and definition.

The promise of this way of understanding human moral intuitions is extraordinary. For example, Haidt uses this framework to make sense of characteristically liberal and characteristically conservative moralities.

Conservative moral styles are well suited to tribal or village environments with consistent social patterns and greater intricacy of social interactions. This type of morality gives free rein to all five domains of moral intuition, weighing them roughly equally in moral decisions. By contrast, liberal moral styles are well suited to cosmopolitan environments where people have to relate to and trade with people having very different social conventions. To make social life work in such settings, it is necessary to suppress instinctive moral intuitions in the ingroup/outgroup, authority/hierarchy, and purity/sanctity domains, and to emphasize intuitions in the domains of harm/suffering and fairness/justice. Harm/suffering and

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^5^ Iannaccone and Berman, “Religious extremism.”

fairness/justice are more easily generalized to complex, diverse groups of people, whereas the other three domains don’t generalize as easily.

Haidt’s research has produced compelling evidence for this interpretation of characteristic liberal and conservative forms of morality in terms of the five domains of moral intuition. With others, he developed a survey that asks people both how they see themselves politically on a seven-point scale from “very liberal” to “very conservative” as well as identifying which domains of moral intuition are most important in the making of moral decisions.

The result, after tens of thousands of participants, is presented in the graph above. The graph depicts an impressive correlation that offers tremendous support to Haidt’s interpretation of conservative and liberal forms of political life.

In the Religious Violence Project, we hypothesize that violent extremists can be analyzed in the same categories. The graph on the top of the next page expresses the core hypothesis.
For social groups with ideologically extremist sociality:

- the harm/suffering domain is greatly contracted, so that only group members are worthy of empathy and even group members can be severely punished for violating group norms,
- the fairness/justice domain is contracted, so that fairness within the group matters, but only at the same level of a hierarchy; meanwhile, fairness beyond the group is not as important,
- the ingroup/outgroup boundary monitoring is intense, with extremely high costs imposed on would-be members before trust can be established and information shared,
- the authority/hierarchy domain is intensified with absolute deference and obedience demanded in exchange for the benefits of protection, inclusion, and hard-won honor, and
- the purity/sanctity domain is intensified with insider identity explicitly formed around purity of behavior and belief, while outsiders are interpreted as disgustingly impure.
There is strong evidence for this hypothesis about religious extremism, deriving from two sources. First, evidence from terrorists, as portrayed by Atran, shows this transformation in the relative importance of the five domains of moral intuition. Second, our study of violent youth gangs also supports the hypothesis. The difference between to two situations lies especially in the domain of purity/sanctity. In the violent religious terrorist group, purity/sanctity seems to have an independent reference to religious concerns, whereas in violent non-religious gang, purity/sanctity is present without any native religious connotations but it strengthens the ingroup/outgroup and the authority/hierarchy domains.

**Social Simulations**

Artificial societies and social simulations are computer models of human groups and behavior. These models are diverse in technique and approach. Typically they simulate social dynamics by representing individuals or social groups as code objects with properties, and communicative interactions between individuals and social groups as chunks of code that change the properties of those code objects. Running the code simulates social dynamics in the sense and within the limits of the design.

*The Journal of Artificial Societies and Social Simulation* (below) publishes such computer simulations, including the simulation reported on from the Religious Violence Project in what follows. 7

Social simulations can generate insights into the structural features of complex social systems in a number of ways. They are particularly well suited to:

- producing results that confirm the stability of certain types of social groups or dynamics,
- discovering transition dynamics between regimes of social behavior, and
- identifying factors that condition the behavior of individuals and groups.

In what follows, I describe a social simulation that helps to explain why and how violent religious extremist groups can survive in a diverse social-cultural environment.

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Groups endorsing religiously inspired and rationalized violence impose high psychic costs on members and sometimes demand extreme personal sacrifice. This has been described by Iacconne and Berman (above) and many other theorists. Indeed, human and non-human species use costly signaling for intimidation, competing for mates & resources, building trust, supporting cooperation, eliminating free riders, and so on. Costly signaling theory is a framework for understanding how these groups function and why they survive. Costly signaling theory is a key conceptual element of the simulation used to demonstrate group stability.

In an important paper, Joseph Henrich gave a theoretical demonstration of a high-cost equilibrium for an entire population (no subgroups).\(^8\) The diagram below expresses the core hypothesis of Henrich’s argument, which turns on the costly-signaling concept of credibility-enhancing displays (CREDS).

The performance of a CRED causes other people in a group to trust the one performing, enhancing that person’s credibility in the group and ratcheting up everyone’s commitment to characteristic group

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beliefs. With CREDS in the group dynamics, the group’s identity is more clearly articulated and its unity more pronounced, with the result that the group can achieve its goals in a more focused and efficient way.

What Henrich did with this CRED setup was to prove a stability result for high-cost groups. This was the first formal demonstration that an entire population could, under certain circumstances, achieve stable equilibrium around a high-cost practice. The diagram below expresses the stability result.

Suppose there is a population in which some members perform the CRED and some don’t, and some believe what the CRED proposes and others don’t. Let $\phi$ is the proportion of people believing in the CRED and $q$ is the proportion of people practicing the CRED. Suppose, further, that on each iteration of this model, people meet one another and are persuaded to change their beliefs one way or another according to certain plausible rules. Then the question becomes what happens after a large number of iterations. Does the CRED die out and the population stabilize on a no-cost existence? Of does the CRED catch on until everyone is doing it? Henrich proved that, under certain initial conditions and a wide range of settings for the model, there is a stable equilibrium for this system in which everyone in the population believes in the CRED and everyone practices it. The arrows on the diagrams above show what happens to $\phi$ and $q$ when the model is iterated. When the conditions are right, the model moves toward the top right, which is a high-cost stable equilibrium.

The problem here is that Henrich’s stability result is for an entire population. The question within the Religious Violence Project was whether Henrich’s result can be extended to the far more realistic situation where a large population is peppered with high-cost subgroups. Can those high-cost groups achieve stability within the wider population?

To explore this we created a computer simulation of a communicating society where:
• people communicate with another person on each iteration of the model, influencing them,
• people can join and leave high cost groups based on how frustrated they feel and whether group members and charismatic leaders practice what they preach,
• groups die when they get too small and split when they get too large, getting a new high-charisma leader, and
• the population may contend with the presence of an enemy (such as an occupying military force).

We analyzed total population in high-cost groups as it varies over time for multiple runs of the simulation. A screen shot of the computer simulation is below.

When the statistics are collected, the question about the stability of high-cost subgroups within a wider population translates to whether the purple line, which represents the number of population members in high-cost groups at any given time, essentially flattens out and becomes a permanent state of affairs.

Of course, the model has many settings and there were many runs of the model for each combination of settings, so the result is a large and complex data set. The key variables for understanding the central stability result we produced are as follows. The model supported four scenarios: the basic scenario (H) that was as close as possible to Henrich’s original model, the basic scenario with Enemies (such as an occupying military force; H-E), the basic scenario with a variable called Sensitivity activated in the model
(H-S), and the basic scenario with both Enemies and Sensitivity (H-ES). The model supported a setting for how frustrated people need to be with ordinary life (outside high-cost groups) before they join a high-cost group; this is the Affiliation Threshold and it varies from 50-100. Similarly, the model supported a setting for how frustrated people need to be with life in a high-cost group before the quit and return to normal life; this is the Apostasy Threshold and it, too, varies from 50-100.

A multivariate linear analysis, with the scenario as factor, Affiliation and Apostasy Thresholds as covariates, and the total count of population members in high-cost groups as the dependent variable, yielded an astonishing linear relationship (p<.00001). You can picture the linear relationship by choosing a colored column (say the blue column) from the group below and imagining a plane lying neatly on top of the five blue columns. This is a compelling indication of long-term stability of costly subgroups within a larger population, and thus the result does extend Henrich’s result.

The stability result by itself is very important. But it is also possible to ask what properties of groups and leaders predict long-term stability of a high-cost group? An answer to this question could have important strategic implications for both protecting high-cost groups of the sort that yield violent religious extremism, and for interfering with the stability of such groups. The answer is that the model discloses several of pathways to emergent stability, and the best predictor is, roughly, group power. Group power combines leader charisma, consistency of the leader and followers in a high-cost group, and the costs imposed within the group. So high power groups (i.e. highly charismatic leaders, followers who consistently practice what they preach, and groups that impose high costs on members) have excellent long-term survival prospects, while others get wiped out.
This part of the Religious Violence Project is expanding the flexibility of the model and also seeking to test the simulation results against real-world data sets.

**Phylogenetic Analysis**

In biology, phylogenetic trees depict the lineage of evolutionarily related species (see the diagram below). In the past, trees were based on morphological and functional similarities. These days, trees are based on genetic analyses. Computer analysis of DNA base pair sequences can disclose evolutionary lineages of species.

This genetic approach is generalizable to social applications. Generalizing the technique requires the analogue for human social groups of genetic data sequences. This type of analysis works best for situations of rapid diversification where groups compete with one another, just as species do. The diagram (below) shows a set of genetic sequences, with the genetic sequences for species in the rows.
For the application to social groups, there must be a variety of characteristics for each group so that the data can be arranged in a table called a character matrix (as below).

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<th>Groups</th>
<th>secular authority</th>
<th>ecclesial authority</th>
<th>pedeobaptism</th>
<th>believers baptism (Rebaptism)</th>
<th>sword</th>
<th>mass</th>
<th>eucharist</th>
<th>ultimate authority</th>
<th>invoking Mary</th>
<th>attitude to reformers</th>
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Of course, the extremely challenging aspect of this type of analysis is generating the data set itself. This requires a lot of work and the focus has to be tightly constrained to an historical setting where religious groups compete with one another.

The Religious Violence Project adopted for its focus of analysis the post-Reformation Anabaptists because they display rapid splitting and diversification of groups and because some groups endorsed violence while others rejected violence or embraced strict pacifism. This supplies the basis for using phylogenetic analysis for detecting the kinds of group characteristics that lead toward and away from violence.

The character matrix for the post-Reformation Anabaptists has the following items as group characteristics:

- secular authority, ecclesial authority, pedeobaptism, believers baptism (Rebaptism), sword, mass, eucharist, ultimate authority, invoking Mary, attitude to reformers, polygamy,
escatological imminence, communitarian, mystical, millennialist, sabbatarian, immersionist, egalitarian, separation from congregationally banned, conventionally trinitarian, Christo-centric Unitarian, celestial flesh of Christ, territorial, belligerent, psychopannychism, only baptism and eucharist, literal hell, purgatory, elect Friends of God, freedom of the will, original sin, predestination, finance, biblical literalism, tithe to monasteries, sola fides, sacramentarianism, universal salvation, persecutory entity, persecutory reason, special greeting, dwelling marks, propaganda, restitutionism,…

And the following groups were rated on each one of the characteristics:

Swiss Brethren, Mennonite, Hutterite, Gabrielites, Kautz, Denck - South German Anabaptists, Hut - Austrian Anabaptists, Marpeck, Hubmaier, Melchiorites – Hofmannites, Philippites, Romer, Sabbatarians, Schnabel, Staff Bearers, English Anabaptists, Batenburgers, Krechting,…

For example, a few characteristics for the group known as the Swiss Brethren are as follows.

<table>
<thead>
<tr>
<th>Group Characteristic</th>
<th>Actual Value</th>
<th>Possible Values</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>secular authority</td>
<td>0</td>
<td>0,1</td>
<td>Don’t recognize government authority</td>
</tr>
<tr>
<td>ecclesial authority</td>
<td>0</td>
<td>0,1</td>
<td>Don’t recognize church authority</td>
</tr>
<tr>
<td>pedeobaptism</td>
<td>0</td>
<td>0,1</td>
<td>Don’t recognize infant baptism as authentic baptism</td>
</tr>
<tr>
<td>believers baptism</td>
<td>1</td>
<td>0,1</td>
<td>Do believe in believers baptism as an adult (including rebaptism)</td>
</tr>
<tr>
<td>sword</td>
<td>0</td>
<td>0,1</td>
<td>Don’t believe it is acceptable to use violence</td>
</tr>
<tr>
<td>mass</td>
<td>0</td>
<td>0,1</td>
<td>Don’t recognize the need for mass</td>
</tr>
<tr>
<td>Lord’s Supper</td>
<td>1</td>
<td>0,1</td>
<td>Do celebrates the Lord’s Supper</td>
</tr>
<tr>
<td>invoking Mary</td>
<td>0</td>
<td>0,1</td>
<td>Don’t believe in Mary’s intercession on the behalf of believer</td>
</tr>
<tr>
<td>attitude to reformers</td>
<td>0</td>
<td>0,1</td>
<td>Not antagonistic towards Protestant reformers (Calvin, Luther)</td>
</tr>
<tr>
<td>polygamy</td>
<td>0</td>
<td>0,1</td>
<td>Do not practice polygamy</td>
</tr>
<tr>
<td>eschatological imminence</td>
<td>0</td>
<td>0,1</td>
<td>Don’t believe in the imminent end of the current cosmic order</td>
</tr>
<tr>
<td>communitarian</td>
<td>1</td>
<td>0,1</td>
<td>Do form small cooperative groups practicing communism</td>
</tr>
<tr>
<td>mystical</td>
<td>1</td>
<td>0,1</td>
<td>Do believe in personal, internal relationship to the divine</td>
</tr>
</tbody>
</table>

Another important data set is the association matrix. This describes the relationships between religious leaders of the time and enables the analysis to track the influence of others on a given group's beliefs and actions. For the Anabaptists, a portion of the association matrix is shown below, with an “x” indicating that the two people had a significant relationship.
Finally, there is the phylogenetic tree itself for the post-Reformation Anabaptist groups, which shows which groups split from which and how long they survived.

That makes three types of data, each with a specific purpose.

- Phylogeny tree tells about vertical transmission through a congregational lineage.
- Association matrix tells about horizontal diffusion of ideas via charismatic personalities.
- Character matrix documents which theological beliefs and practices are present in each group.

The kinds of questions that become answerable using these techniques include the following:

- Is vertical or horizontal transmission stronger?
- What group characteristics make the support and use of violence, or its rejection, more likely?
- Does the support and use of violence, or its rejection, make groups more or less likely to survive?

The results of this analysis are complex but extremely illuminating. Keep in mind that historians have been arguing for centuries over why some Anabaptist groups turned to violence and others were pacifist. The phylogenetic analysis of these data sets promises to support some historical interpretations and to put pressure on others. This makes it controversial among historians, naturally; historians don’t usually use quantitative techniques in their work. But shaking up the world of academic historians might not be a bad idea.
The basic results can be expressed in terms of what the analysis showed about several double-sided hypotheses.

**Hypothesis 1:** Advocating violence or pacifism...

- 1a. spreads via cultural diffusion [Result: NO]
- 1b. is inherited along congregational lineages [Result: YES]

Already this is an important result that challenges any historical interpretation asserting that influence among associates explains the drift of Anabaptist groups toward violence. Interestingly, the way transmission works for characters other than violence is different, as the following result demonstrates.

**Hypothesis 2:** Theological beliefs and practices about matters other than violence...

- 2a. spread via cultural diffusion [Result: STRONG YES]
- 2b. are inherited along congregational lineages [Result: YES]

It is important to note that the inheritance of attitudes toward violence along congregational lineages could occur in one or both of two ways.

**Hypothesis 3:** Inheritance of attitudes toward violence along congregational lineages...

- is socially learned directly from the congregational lineage [Result: LESS FAVORABLE]
- is inherited some other traits that are functionally linked to violence even though violence itself is not directly socially learned [Result: MORE FAVORABLE]

The case regarding hypothesis 3 is more complex because there is no direct evidence from the phylogenetic analysis. But there is an indirect case to be made, as follows: because theological characters in general were not strongly inherited by congregations, the first alternative is somewhat less favorable.

So if direct learning of violence through congregational lineages does not occur, what other factors that are learned directly might predispose a congregational lineage toward advocating violence? We had data sufficient for testing several possibilities but none significantly predicted a congregation advocating violence.

**Hypothesis 4:** Factors (non-violent factors) learned directly that might predispose a congregational lineage toward advocating violence are...

- being socially peripheral [Result: NO]
- experiencing more religious schisms [Result: NO]
- displaying more theological divergence [Result: NO]

What other options are there for factors that could be learned and that predispose a congregation to advocate violence?
Hypothesis 5: Congregations performing rituals that consolidate in-group identity while indirectly demonizing out-group beliefs and practices predispose a group to violence [RESULT: INCONCLUSIVE]

- Available data (on the ritual of baptism) does not support this.
- Data on other ritual practices is difficult to produce.

Unfortunately, hypothesis 5 is inconclusive because we don’t have the data to test it properly in relation to most rituals, and the one ritual for which we can run tests produces a negative result.

With this trail of results in place, including ruling out a series of possibilities, it seems most likely that congregations inherit a social or economic situation that makes violence an economically rational means for bettering their group’s standing. This is supported at the theoretical level by Iacconne and Berman’s economic analysis, considerations from the cognitive science of religion (such as the arguments of Atran), and considerations from ritual theory (such as the arguments of Rappaport). And most alternative hypotheses are ruled out by the data.

The Religious Violence Project plans to extend the application of phylogenetic techniques from European Anabaptists to religious extremist groups in Eastern Afghanistan. Naturally, this involves the construction of another complex data set.

History and Political Science
To illustrate the ongoing power of the disciplines of history and political science in the analysis of extremist religious violence, let us consider the controverted question of the influence the Protestant Reformation on violence beliefs and behavior. It is important to remember that general scientific insights of the sort discussed above do not utter the last word on violent religious extremism, and that the particularities of intricate contexts matter as well. Handling such intricacies is the business of the historically oriented human sciences. The focus here will be on the influence of the original Reformer, Martin Luther (right).

There are many points of debate concerning Luther’s attitude to, and advocacy of, violence, as well as lines of possibly unintended influence spinning outwards from his writings and public actions. Area of controversy and debate include:

- his personal beliefs about God, suffering, afterlife,
- his political theology of the “two kingdoms,”
- his siding with princes and nobility against peasants in the uprising of 1524-1526 to overthrow the feudal system,
- his shift to virulent anti-Semitism after about 1536, and
- his view of war.

I will discuss each of these briefly before drawing conclusions about the long-term influence of Luther and the Reformation on violent religious extremism.
Luther’s Personal Beliefs

Given our contextually sensitive working definition of religious extremism, it is important to acknowledge plainly that Martin Luther held beliefs that are extreme relative to our context, though probably common among fervent monks of his period. For example, he preached that:

- bad events are divine punishment, not for particular sins, but merely because we are sinful,
- people strong in faith can do extraordinary things; for example, they are protected from illness and the plague, and they can even walk on water,
- dying is a small thing in the larger scheme of reality because the world is decaying anyway so it is the afterlife that matters, and
- the end of the world and the final judgment are near so people should concentrate on spiritual realities and working out their own salvation.

These extreme theological views, when interpreted in context, may well not be as extreme as they can sound to many modern ears. Nevertheless, his view about violence may well have been influenced by them.

Luther’s Political Theology

Luther espoused the “Two Kingdoms” viewpoint, which asserts that God rules in two ways:

- Earthly (left hand) rule: secular (and also churchly) authority, using law of sword, and
- Heavenly (right hand) rule: over faithful Christians, by the law of grace, under the Holy Spirit.

Luther’s On Secular Authority (1523) lays out this viewpoint, along with the Principle of Liberty of Conscience. His motivation here is that spiritual transformation can never be forced so each individual must have the freedom to hear and respond to the gospel without any coercion.

The “Two Kingdoms” viewpoint is a precursor of separation of church and state and it is frequently held by historians to be a factor driving Europe toward modern secular societies. Evidence for this is seem in the fact that this view is endorsed not only by religious leaders such as John Calvin but also by key Enlightenment intellectuals such as John Locke, John Milton, and James Madison.
Luther and the Peasants’ Revolt

Luther’s attitude to the suffering of the poor in his own age has been a point of great controversy, particularly in respect of the attempt of the peasants to liberate themselves from their oppressive social and economic circumstances. Many peasants wanted to transform feudal arrangements, which were exploitative. Meanwhile, princes and nobles wanted to keep things just the same because it worked out well for them. For his part, Luther had a complex position that shifted with time.

- He acknowledged the validity of peasants’ complaints.
- He urged princes & nobles to pay attention to complaints.
- He insisted that violence was out of the question.
- He realized that continuation of the Reformation depended on choosing the side of the princes because everywhere in Europe peasant revolts had been put down.
- So he attacked peasant violence and supported the princes.
- Eventually he even encouraged state violence against peasants to maintain social order.

Luther and Anti-Semitism

Luther’s view about Jews prior to about 1536 were that Christians should be kind to Jews for evangelical reasons because they won’t convert if you treat them harshly. After about 1536, however, Luther concluded that the Jews were never going to convert to Christianity, no matter how they were treated. In his frustration, he wrote On the Jews and Their Lies (1543), in which he argued for the following clearly anti-Semitic and violence-inducing propositions.

- Jews (the entire “race”) were stubbornly refusing to convert to Christianity.
- Jews are immoral and dangerous (for example, though Luther presents no evidence for this, he asserts that Jewish doctors poison patients and can control the speed of death to make it difficult to detect their actions).
- Jews are disgusting (Luther uses horrible imagery to express what he means, though again he presents no evidence).
- Appropriate political and social treatment of Jews include forcible expulsion, retraction of safe passage guarantees, and forced labor camps; Luther even says that the refusal to kill Jews can even be regarded as a mistake.

Luther’s type of anti-Semitism was medieval in type and resonances but it did heavily influence later anti-Semitism. For example, Luther is frequently quoted by 20th-century anti-Semites in Germany, not all of them Christian in orientation.
Luther and War

Luther had a complex view of war. He wrote and preached against the pope and the Catholic Church in the most aggressive terms, so it is no surprise that he viewed the militaristic Islam of his time as God’s scourge to punish the anti-Christ, who for him is the Catholic Pope; nor that he encouraged forms of political war that would harm the pope and the Catholic Church. He also consistently rejected Holy War on the grounds that religious war had to be waged in prayer only. Yet he affirmed war waged by secular governments to protect social stability and the conditions necessary for preaching and responding to the Christian message.

Social Conservatism

In all, it is obvious that Martin Luther was a social conservative by almost any standards. He:

- believed the world was degenerating and that it was vital to convert people to faith in Christ,
- always rejected violence in the spiritual realm, which was ruled by the principle of free conscience,
- accepted that violence was sometimes necessary in the secular realm, but usually sought to minimize it,
- at times supported violence in the secular realm when he thought it could bring spiritual benefits, and
- sometimes supported secular violence when he believed it would express God’s spiritual judgment.

Long-term Impact of Reformation

The Reformation was a complex political and religious movement, with different, sometimes contradictory, long-term influences on religion and politics. Because of this complexity, disputes can seem intractable if treated too simply. For example:

- The Reformation gave birth to secular forms of socio-political organization, yet (ii) Luther and other Reformation writers clearly oppose secularism in the modern sense.
• Liberal-democratic political ideology is (i) a secular extension of Reformation ideas (Comte, Weber), or (ii) contingent upon contesting Reformation theology (Zaret).
• The key to Scandinavian economic prosperity and social harmony is (i) overcoming the Reformation’s religious influence (Zuckerman’s *Society without God*), or (ii) an instance of the Reformation’s influence (Lejon & Agnafors).

This pattern of conflicting interpretations from historical and political-science work indicate that it is wise to take a multi-dimensional approach, informed by the scientific study of religion, and sensitive to historical and cultural contingencies. In doing this, it can become clear that both sides of apparently intractable historical disputes in this area are often simultaneously correct, but in different respects. For example,

• in respect of political form, the Reformation overcame the Catholic view of superiority of church over state and instilled the expectation of separation of Church and state and corresponding ideals of democracy and equality;
• in respect of theological ideas, the Reformation impeded full-blooded secularism because it insisted that the state finally serves divine interests and derives its authority from God’s administration of the world.

The same applies to violent religious extremism, where we need to accept that there could be both trajectories arcing outwards from the Reformation that encourage conditions for violent religious extremism and also trajectories that inhibit conditions for violent religious extremism.

Reformation trajectories encouraging conditions for violent religious extremism include:

• emphasizing individual religious belief, unshakeable conviction, and perfect belief-behavior consistency;
• externalizing authority in vernacular Bible with hermeneutics of plain-sense reading;
• making a place for charismatic preachers who catalyze enthusiasm and inspire loyalty;
• stimulating sect-type religious sociality with high costs, high scrutiny, high transparency, high conformity, high loyalty;
• rooting out freeloaders who diffuse intensity of group commitment and dilute conviction and consistency; and
• demonizing outsiders as spiritually obdurate and disgusting, fusing outsider status with divine judgment against them.

Reformation trajectories discouraging conditions for violent religious extremism include:

• promoting the “two kingdoms” view that the spiritual realm can admit of no violence but only “liberty of conscience”;
• sponsoring a partial separation of church and state, which eventually takes violence out of the hands of organized Protestant churches;
• tolerating religious pluralism, which eventually flowers into a cacophony of religious voices that limits the influence of any one of them;
focusing on church-type sociality in denominations, which interferes with conditions for religious extremism; and

inspiring a kind of secularism, including universal human rights, which makes supernaturalism less plausible and supernaturally authorized religious violence less feasible.

Conclusion: Synthesis and Summary

The central methodological thesis of this paper is that:

a multi-disciplinary approach drawing on the scientific study of religion can furnish evidence to help resolve seemingly intractable debates swirling around violent religious extremism.

The central content thesis of this paper is that:

Violent religious extremists and groups have a characteristic profile that does not require pathologizing the individuals.

Analysis of the structural features of a given social setting (such as the European Reformation) typically supports the conclusion that the social setting both encourages and discourages (in different respects) conditions for violent religious extremism.

In addition to these structural relationships, contingencies of history and personality matter, so there can be no formula for perfect peace.

Nevertheless, we can mitigate violent religious extremism by limiting stimulating factors and emphasizing inhibitory factors, at least where one can be done independently of the other.

All of the disciplinary perspectives discussed in this paper jointly yield a fragmentary but coherent picture of violent religious extremists.

They are no more psychologically unbalanced than average, at least when participating fully in extremist groups (loners may be less psychologically healthy).

They display a distinctive profile of moral judgments by subordinating harm and fairness domains to group loyalty and authority and cultivating insensitivity to out-group altruistic impulses.

They participate in sect-type religious groups, which are supernaturalistic, authoritarian, hierarchical, and purist, which eliminate free-riders through imposing costly demands, which combine a political agenda with religious legitimation, and which can achieve long-term stability despite high costs.

They tend to be hostile to religious pluralism, because it reduces their influence, and so also hostile to secularism that promotes religious pluralism and to mainstream religion that tolerates religious pluralism.

This rough portrait leads to a working hypothesis:
• religious violence arises not from a group’s theological beliefs and practices explicitly supporting violence, passed from generation to generation through learning processes in a congregational lineage, but
• from some set of socio-economic factors that are inherited at the group level and that predispose a group to promote the use of violence in support of group aims.

And, of course, the basic conditions for violence remain:

• tight, sect-like group identity with costly signaling that builds trust and roots out freeloaders,
• extremist profile for moral intuition and reasoning, and
• high group power (charisma x consistency x cost).