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## Four Lessons from the Study of Fundamentalism and Psychology of Religion

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### Recommended Citation

Savage, Sara. "Four Lessons from the Study of Fundamentalism and Psychology of Religion." *Journal of Strategic Security* 4, no. 4 (2012) : 131-150.

DOI:  
<http://dx.doi.org/10.5038/1944-0472.4.4.6>

Available at: <https://digitalcommons.usf.edu/jss/vol4/iss4/7>

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# Four Lessons from the Study of Fundamentalism and Psychology of Religion

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## Abstract

What lessons can the study of fundamentalism and the psychology of religion teach the newer field of Radicalization and Involvement in Violent Extremism (RIVE)? Four lessons and an intervention are offered in this article: (1) Religion is a robust human experience and cultural product that adopts a defensive shape when its worldview is threatened. (2) This does not mean that all "fundamentalisms" or radical versions of religion are somehow linked or perform similar functions; rather, they reflect the limited human repertoire to threat, yet within different cultural and historical contexts. (3) Causal explanations on the level of the individual are insufficient to understand these movements. (4) There is a modernist trend to elevate word-based, rational knowing over more implicit, symbolic knowing in both fundamentalism and radical discourses. Fundamentalism and radicalized religion seem to be the left brain's attempt to "do" religion. And, it does this now even more separately from the right brain compared to previous eras.<sup>1</sup> (5) An intervention addressing violent extremisms through value complexity draws the above lessons together in an emergentist model that has an empirical track record of success.

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## Introduction

The lessons to be learned for RIVE are an examination of how religion is being used, by whom, and for what purpose. Complex, interactionist, or emergentist research models that go beyond binary cause and effect are more adequate here, but they are less attractive to governments because they seem to be incapable of prediction and control. However, by the end of this article, it will become evident that reliable intervention can arise from an emergentist approach.

## Lesson 1) Expect That Sacred Worldviews Will Be Defended

In the 19th century, the traditional Christian worldview was felt to be under threat, and Princeton theologians rose to defend the "fundamentals" of the faith. American Protestant fundamentalism, from which all other fundamentalisms are named, sought to counter the challenge of Darwinism and higher biblical criticism. The central belief of Protestant fundamentalism is also its primary defense: the plenary inerrancy of Scripture. It is the words, not just the ideas, of Scripture that are deemed inerrant, and thus beyond the dismantling forces of higher criticism, Darwinism, and the liberalization of the modern age. Separatist and quiescent for fifty years after the humiliating Scopes trial in 1925, fundamentalist movements such as the New Christian Right began to emerge from 1979 onwards, along with Islamic, Hindu, Jewish, and other mobilizing religious ideologies.

Recent work in Terror Management Theory helps us to understand how a shared worldview provides individuals, in their day-to-day experience, with a defense from inevitable existential anxiety: the fear of death.<sup>2</sup> A large body of research shows that subtle reminders of death increase the way people defend their cultural worldview.<sup>3</sup> Cultural worldviews transcend the individual and provide existential buffering, a sense of meaning, and continuation after death. Given how vital cultural worldviews are to ward off existential anxiety, if the validity of a cultural worldview is threatened or damaged in the arena of ideas, this will foment an urgent search for a solution to reaffirm the worldview. This account maps on well to the rise of Christian fundamentalism, particularly in its early manifestation, despite the predictions of secularization theorists.<sup>4</sup>

The Fundamentalism Project directed by Martin Marty and Scott Appleby is a multi-disciplinary army of scholars to understand conservative, ideologically-driven religious movements springing up around the world. Commonalities across the different fundamentalisms were urgently sought, and some were found:<sup>5</sup>

- Traditional gender roles ensure a firm family structure
- The rules of religion are deemed as literally binding, leading to a tendency to separatism (for example, a rise in home schooling or faith-based schools)
- A binary cleavage carves the world into the saved in-group versus the shunned out-group, and
- A yearning for a golden era of religious purity creates a reinterpreted past, or is cast into an eschatological future, requiring an apocalypse to trigger the new era<sup>6</sup>

There is an armored structure to fundamentalisms: they are hierarchical (in regard to gender and religious leaders), centrally organized (around an authority belief), clearly demarcated against outsiders, and goal-driven towards a sacred past or future. What can be said of these varied fundamentalisms is that fundamentalism is not one "thing," but rather it is the shape that religion takes when it is under threat.<sup>7</sup>

## Lesson 2) Avoid Over-Generalizing

Has the label fundamentalist been properly applied to Muslim contexts? Here, a different story is told. The failure of the modern nation-state (either through totalitarianism or a failed Marxist past) and the humiliation of colonial experience entangled with rampant ongoing corruption created the context for radical discourse to arise. Current economic and political conditions compare poorly with life in Muslim lands long ago during the idyllic Golden Age of Islam. The answer: return to a pure Islam shorn of contemporary ethnic heritages shoe-horned into Western-appointed states. The poetic writings of Qutb and others in the 1960s echoed earlier Salafist writings, and rang true: only Islam can leverage an overturning of the status quo, unify diverse Muslim populations, and free them from Western influence. A highly selective and simplified version of the much-loved religious tradition was deployed. A confluence between the utopian, radical vision of Qutb was combined with the Wahabi Salafi version of Islam promoted by Saudi Arabia. Thanks to Saudi petrol dol-

lars, the marketplace of ideas was flooded with Saudi religious resources serving the dual purpose of defending its own regime while mobilizing Western-diaspora alienated youths to jihad.

This movement is not about conserving a religious tradition, as in Christian fundamentalism. The newer term *radicalization* better describes this leveraging of *change*, religious and socio-political—via the selective Islamist narrative—a story that can give direction and meaning to oppressed or marginalized lives.

Historian Olivier Roy contends that political Islam has failed in its aim to achieve a purely Islamic polity.<sup>8</sup> What remains of radical Islam has no practical agenda at all, says Roy.<sup>9</sup> As the Taliban demonstrates, radical piety can lead to violence—a violence that is more symbolic than purposeful. Frustration, utopian thinking, unemployed former mujahideen, and responses to real and perceived injustice have all combined to allow Al Qaida to export their jihadi tactics to western converts and western Muslim youths with conflicted identities. The social and cognitive shape these movements have taken, like fundamentalism, reveals a similar structural firmness: hierarchical in regards to gender, centrally organized (around an authoritative *narrative* and around the extremist group leader), clear demarcation against outsiders, and goal-driven towards a sacred future. This does not mean that Islamist radicalization is the *same* as fundamentalism. The second lesson for RIVE is to beware of over-generalizing from one religious movement to another.

Rather, the similarities in the social, cognitive shape represent the limited human repertoire to address threat. This firm social, cognitive shape is the easiest means by which a movement enables itself to confront insuperable odds. (Other options, such as Ghandi's *satyagraha* are also possible, but so far, quite exceptional.) The purpose here is radical change, not the conserving of a current traditional worldview. Architects of radicalization aim to overturn the traditional Muslim worldview, with themselves at the helm, although this desire for power is masked with Islamic rhetoric. A different kind of desperation for change in Muslim lands is suggested by the courage of ordinary people who are fomenting the Arab Spring.

### Lesson 3) Simple Explanatory Models Will Not Suffice

Mono-causal explanations of a "medical model" kind have pervaded research into both fundamentalism and radicalization: find the cause in order to eradicate the disease. Given the security risks, governments, who

are key funders of this research, seek categorical answers to solve the problem of religious violence and terrorism. And clear-cut answers must be sought, in case they do exist. But fundamentalism and radicalization have turned out to be flames arising from more complex, shape-shifting wholes, rather than properties of deviant individuals.

The early study of fundamentalism in the psychology of religion was marked by a search for what was wrong with fundamentalists as individuals. These studies were mainly carried out on Protestant Christian fundamentalists in the USA, and sought to explain fundamentalism through individual deficiencies, such as lower levels of moral reasoning, greater punitiveness, prejudice (in regard to race, gender, political or sexual orientation), authoritarianism, dogmatism, and occurrence of mental health problems.<sup>10</sup> A binary mindset, similar to a fundamentalist mindset, seems to underpin this research: we are good (tolerant); they are bad (intolerant). Perhaps psychologists, who are among the most non-religious of academics, were feeling under threat themselves when faced with this religious upsurge. There was early support for these hypothesized relationships, but research on fundamentalism has been qualified as it has progressed. The bigger picture now shows that when social class is held constant, religious items are neutral, and the intrinsic-extrinsic dimensions of religiosity are accounted for, the correlations become negligible.<sup>11</sup> In fact, fundamentalists enjoy similar mental health benefits to other religious people: protection from depression, greater optimism, marital happiness, and purpose in life.

There is a trade-off. Fundamentalist discourse does not allow people to improvise or to develop their religious thinking, and this lack of development can mean the initial helpfulness turns sour. It is important to distinguish between those for whom fundamentalism is currently providing a "sacred canopy" that is adaptive from those for whom fundamentalism has become maladaptive. When a fundamentalist feels he or she has outgrown fundamentalism, the process of leaving the fundamentalist "sacred canopy" is often de-stabilizing. Yao has dealt with people exiting fundamentalism who report extreme guilt and confusion, as well as loss of a valued social group.<sup>12</sup> When a person's relationships within the fundamentalist church break down, that person's entire worldview can be dismantled. This can contribute to depression, anxiety, and other clinical disorders. Pargament's research shows how spiritual trauma (trauma involving religious disappointment) levies high costs in terms of breakdowns, illness, and even death, unless there is sufficient social support on hand to help people integrate their trauma into new religious understandings and identities.<sup>13</sup>

Apart from studies of those exiting fundamentalism and some congregational studies, little attention has been paid to the group level of analysis. The study of fundamentalism gravitated towards the macro-sociological level, or to the level of the individual.<sup>14</sup> RIVE has already learned this lesson, thanks to in-depth interviews with incarcerated terrorists that focused on the group level of analysis.<sup>15, 16</sup> These studies examine the power of the social group to shape thinking and behavior. Most studies of radicalization leading to violence show there is a period of immersion, at some point, in an extremist group. People are rarely radicalized in a vacuum. A social network links most violent extremists.<sup>17</sup> Tightly bounded groups requiring high levels of conformity and obedience are particularly effective at warding off feelings of uncertainty, and at presenting a reality that is beyond critique. The extremist, authoritarian group leader becomes the prototype around which vulnerable identities can model themselves. Groups reliably tend to polarize towards the more extreme views within the group.<sup>18</sup> Fusion with the idealized group and separation from former ties can lead to de-individuation and resultant diffusion of moral responsibility. Dehumanization of the out-group helps to erode the normal barriers to killing, legitimated by an unquestioned religious discourse.

Leaving extremist groups after intense immersion and sequestering bears similar costs to leaving fundamentalism: the loss of status within the group, the loss of belonging to a valued group, the shattering of meaning and a sacred worldview. People who leave extremist groups do so because of disillusionment with the totalist group leader, frustration with the low level of effectiveness in terms of achieving the group's aims, the high cost of an arduous lifestyle involving separation from family, and the forgoing of marital or employment prospects. Lessons for de-radicalization include understanding the way religion and social psychological processes have become entwined. Prison chaplains need theological understandings that enable growth beyond the radicalized version to the broader tradition. They also need to be resourced with social-psychological understandings of group behavior. This should be a top priority, as belonging to a group in prison is a necessary means of survival for inmates. Group processes in prison provide a ready-made vehicle for radicalization. De-radicalization initiatives in places such as Saudi Arabia, Singapore, Yemen, and Pakistan have learned that to enable detainees to disengage from violent extremism, they need to build new social networks, rebuild their family relationships, and rebuild their capacity to live and work in society. They need a mixed-method approach that includes job training, religious re-education, family involvement, psychological counseling, rigorous



assessment, and ongoing surveillance after release. De-radicalization is necessarily multi-dimensional: practical, social, cognitive, and theological.

Individualist approaches marked the effort to find a terrorist profile in response to 9/11. But this research has foundered, and the lesson has been learned that individual pathology or demographics will not predict who turns to violence.<sup>19</sup> One of the few recurrent findings is that those who engage in extremist violence usually have little if any traditional religious background. It seems that those without a religious background are taken in more easily by the selective, literalist version of Islam.

Religion does play a role. Scott Atran argues that terrorists are morally and religiously driven.<sup>20</sup> Yet, religion is highly complex, and serves multiple purposes in people's lives, both extrinsically and intrinsically. We need to disentangle the religious rhetoric of radicalizers from the deeper levels of religious motivation in people's lives. Youths abducted or lured into Taliban violence in Swat, Pakistan, or similarly in extremist movements in other parts of the developing world, are mainly motivated by poverty and the hope for a meal.<sup>21</sup> The Taliban's religious narrative is used to legitimate orders given by commanders. It is important to not essentialize religion as if it is a singular causal agent.

## Lesson 4) Words Rule

What becomes dangerous in either fundamentalism or radicalization seems to arise from the interaction of modernity with ancient religious traditions. Shepherd noted that an "engineering," "black and white" mentality exists among Christian fundamentalists.<sup>22</sup> Gambetta & Hertog's research demonstrates that engineers, graduates from a discipline that proceeds on correct mathematical answers to well-defined problems, are vastly over-represented among violent extremists.<sup>23</sup>

While many Christian fundamentalists are anti-evolutionist, they display a preference for hard facts and proper rational techniques. Barr noted how Christian fundamentalism stresses the material-physical accuracy of the Bible, and how it takes its method from a Newtonian model of science.<sup>24</sup> Biblical authority will always supersede scientific authority, and if that entails denying evolution, so be it. But objective truth is preferred, and this is what the Bible is considered to be. This is achieved through the fundamentalist belief system being structured around a central authority belief—the belief in scriptural inerrancy. Inerrancy is deemed sacred and inviolate, and serves to legitimate all other fundamentalist beliefs in a

one-way direction, with no "back talk" returning to modify the authority belief.<sup>25</sup> Once this admittedly circular premise is accepted, fundamentalist thinking then proceeds logically and systematically.<sup>26</sup>

In this way, fundamentalists argue for a truth that is considered "objective," an object in the material world—just as science is the pursuit of "objective truth." To defend the faith, it borrows from science, as if to say: "If you have a materialist conception of truth with a commitment to rational procedures, so do we." Ironically, Islam, which unlike Christianity, suffered no historical conflict between science and religion, seems now to be adopting a similar stance with its own version of creationism promoted worldwide from its base in Turkey.<sup>27</sup> This new Islamic creationism borrows heavily from the "science-like" arguments in contemporary Christian creationism concerning Intelligent Design.<sup>28</sup> Islamic tracts handed out on university campuses typically stress the rationality of Islam, and radical versions of Islam deploy their most scathing attacks against traditional Muslim *symbolic* ritual practices. Sufi brotherhoods, once the dominant means of the spread and practice of Islam, are considered "bida" (reprehensible innovation) by radical Islamists.

There is a modernist trend to elevate word-based, rational knowing over more implicit, symbolic knowing in both Christian fundamentalism and radical discourses. Monotheistic religion has always had a doctrinal (word-based) element, but prior to the Enlightenment, religious knowing involved a balance between word-based propositions and more symbolic, implicit forms of knowing that comprised the bedrock of traditional ritual practice.<sup>29, 30</sup> As science has become the main model to which other sources of knowledge aspire, western and now Islamic societies have been losing the capacity to read their texts in a metaphorical-symbolic sense. Instead, they have become preoccupied with the empirical "veracity" of their content. A dearth of symbolic, implicational processing seems to make religious knowing more literalistic and inflexible.

A number of dual-process cognitive models make a similar distinction between "head" (rational word-based) and "heart" (emotional, implicit) processing. There is now huge empirical support coming from neuroscience for these two different ways of processing information. McGilchrist argues that, among primates, it is only in humans that the right and left hemispheres of the brain operate quite independently: humans have, as it were, two brains.<sup>31</sup> Further, McGilchrist argues that the two hemispheres are operating more independently now than in previous human history.

Four Lessons from the Study of Fundamentalism and Psychology of Religion

In most people, the left brain, dealing with language, abstract reasoning, categorization and focused attention, is the dominant hemisphere. The left brain is focused on what it already knows and is not interested in what it does not know. Consistent with cognitive studies that demonstrate that most humans are "cognitive misers" and will protect existing knowledge systems against dissonance, the left brain is somewhat closed to new information.

In contrast, the larger, heavier, more powerful right brain seeks what it does *not* know. It is interested in the "other," and is highly connected with the rest of the nervous system, and thus with bodily states and emotions. The right brain is interested in faces and individuals; it is the seat of empathy, moral sense, and self-awareness. The right brain takes the broad view, considering the wider context, and puts things into perspective. The right brain is crucial to living in the real world (for example, stroke patients can continue to function with an impaired left brain, but they can not function at all with an impaired right brain). The right brain deals with particulars, not abstractions. But the word-based left brain drives modern culture with all its phenomenal technological achievements, and the right brain is now marginalized in education and culture.

Both right and left brain can do many of the same things. Both hemispheres can "do" religion, but they do religion in a different manner. Fundamentalism and radicalized religion seem to be the left brain's attempt to "do" religion. And, it does this now even more separately from the right brain, as compared to previous eras.

Living in an increasingly left-brain, word-based dominated world has implications for moral values. In a recent study of Catholic Christians, Fontaine, Duriez, Luyten, Corveleyn, and Hutsebaut used Schwartz and Huisman's cross-culturally validated human values scales to examine which values participant used in their symbolic approach to their belief system in comparison with a literal approach to the belief system.<sup>32, 33</sup> They found that the symbolic approach highly correlated with the self-transcending, pro-social values of benevolence and universalism (that all humans are equal in spiritual worth). In contrast, participants taking a literalist approach to their belief system showed high correlations with the values of power and security. Overall, there was a near perfect correlation of 0.95 for this "self-transcendent" versus "self-enhancement" pattern of values.

Why would there be such a strong correlation between symbolic thinking and pro-social, altruistic values, while the literal approach correlates instead with self-protective values of power and security? The study's

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post-hoc explanation for this finding is that perspective-taking, the cognitive component of empathy (the tendency to spontaneously adopt the psychological point of view of others), enables pro-social behavior such as benevolence.

I now turn to a radicalization prevention program in the UK that addresses these factors (perspective taking and values) in a group context. This program shows that when participants achieve higher levels of complexity in values and thinking (the ability to perceive multiple perspectives), the radical binary mindset and approval for violent mobilization drops away. What emerges for participants is a more integrated British Muslim identity and a desire for pro-social methods to solve injustice.

## 5) An Intervention Addressing Violent Extremism through Value Complexity

Most research now acknowledges that there are multiple roads into radicalization, multiple roads out, and that only a few radicals go on to commit acts of terrorism. Whatever pathway in or out, all radical discourses have in common a simple binary structure with black and white contrasts: we are right, they are wrong; we are the in-group, they are the out-group. This is the place we can intervene for prevention purposes.

Underlying this binary structure is the magnetic pull of one dominant moral value that has been promoted by the radicalized religious discourse. Extremist ideologies, whether right, left, secular, or religious, tend towards value monism. They reduce the complexity of the social world in order to mobilize action to one dominant moral value, in order to maximize the in-group's aims.

In contrast, all mainstream religious traditions are value plural, and thus more complex. In responding to different challenges over history, mainstream religious traditions, such as Judaism, Christianity, or Islam, evolve to maximize, within historically imposed limits, the multiple competing values of their constituencies.<sup>34</sup> By this we mean that religious traditions take into account the multiple priorities of their communities. For example, when judging the appropriateness of the use of alcohol for pharmaceutical reasons, Islamic jurisprudence usually rules that alcohol is allowed to sterilize instruments or skin, even though it is normally proscribed. In this way the precept of prohibiting alcohol is balanced against the modern benefit of its pharmaceutical use, exemplifying how the

underlying value of purity (from contamination through contact with something considered *haram*, or off limits) is not an absolute when positioned relative to the value of health.<sup>35</sup>

Fundamentalist and radical groups are much less inclined to work out value tradeoffs. In an effort to offer simple solutions to a complex world, those overwhelmed by modernity, including most radical Islamists, become highly selective within their own traditions, emphasizing certain texts and interpretations while suppressing others.<sup>36</sup> In this process, they radically alter traditional underlying value hierarchies by increasing some values' importance while dramatically decreasing that of others. Consequently, these extreme versions of the tradition become less value plural to the point of absolute value simplification (value monism). This value monism is what constitutes the "radical" element in extremist Islamic groups and ideology.<sup>37</sup> The example of jihadism is a clear example: (falsely) promoted as the most important "pillar," it is supposed to supersede the practices of the traditional pillars of Islam. In view of this, we argue that the appeal of radical groups can be *countered* by developing value complexity in line with the mainline tradition of the participants.

In 2010, our research group, the Psychology and Religion Research Group at the University of Cambridge, developed, and evaluated through pre- and post-testing, a prevention program in the UK entitled *Being Muslim Being British*, designed for young Muslims aged fifteen plus.<sup>38, 39</sup> Through eight sessions using DVD films and guided group activities, we operationalized the raising of complexity in the domain of moral values, using Suedfeld's concept of integrative complexity (IC). Integrative complexity involves two steps. The first is to be able to differentiate different perspectives on an issue, to perceive other viewpoints, and to find some validity in them through perceiving the underlying values for each viewpoint, thus laying the groundwork for perspective-taking. The next step is to integrate the differentiated viewpoints together in some kind of overarching framework. This could involve, for example, finding trade-offs between different perspectives or values in tension, being able to identify shared values between conflicting viewpoints, being able to find win/win solutions to opposing groups' goals, or finding some context that makes sense of why reasonable people can maintain opposite views.<sup>40</sup>

Low integrative complexity (IC) means only one perspective is considered valid: the world is cast in black or white, groups are good or bad, right or wrong, seen from one single evaluative viewpoint. Moderate levels of IC mean that a multiplicity of viewpoints can be considered, and some validity is seen in them, yet without the ability to see any overarching framework. High levels of IC mean that thinkers are able to find integrating

frameworks for differing perspectives.<sup>41</sup> In the field of political psychology, the study of integrative complexity enjoys a robust empirical literature in dozens of studies over decades. These studies show that when political actors' level of integrative complexity drops (measured by coding speeches, parliamentary proceedings, press releases, letters, and so forth) from that actor's normal baseline, that sudden drop in the complexity of the structure of thinking predicts intergroup conflict, violence, and even military action.<sup>42</sup> What causes IC to drop? Research shows it is prolonged stress and threat to important values, and this in turn predicts intergroup conflict—just as Christian fundamentalism created a binary discourse to counter liberalizing forces in order to protect its sacred worldview. What promotes higher levels of IC is the motivation to maximize a wider array of one's own important values; and for religious people, this must include sacred values.<sup>43</sup>

In short, *Being Muslim Being British* is a primary prevention initiative that raises participants' levels of integrative complexity (IC) and increases the spread of values to include both traditional religious and modernist secular values as a means of preventing violent extremism and promoting social cohesion in a globalized context. It is reputedly one of the first prevention programs with empirically measurable outcomes benchmarked against extremist violence using the non-fakable measure of IC coding, which codes the less-than-conscious structure of thinking, based on verbalizations arising from activities at the very beginning and at the end of the course.<sup>44</sup> The two hypotheses we advanced and tested were that as a result of the intervention, participants will think in more complex ways about social issues underlined by conflicting values, and that participants will deploy a greater range of values. Research based on eighty-one participants across seven pilot courses around the UK (each course comprising sixteen contact hours) shows that IC rises significantly in each pilot group by the end of the course, and that the spread of values increases significantly, in comparison with levels before the course. Our post hoc analysis results also show that high IC significantly correlates with participants' choosing pro-social activism rather than violent mobilization. Religious identity is affirmed and strengthened through the course.<sup>45, 46</sup>

Both word-based—rational—and symbolic, implicational processing are needed to scaffold the ability to think more complexly. To operationalize value complexity in the eight-session course, we help participants to discover some validity in a range of viewpoints (evenly weighted and neutrally labeled) on eight contested topics in radical discourse, using DVD film. Participants are enabled to achieve differentiation by "laddering down" to explore the value spectrums that underlie and make sense of the different viewpoints. This is done verbally and through activity, for exam-

ple "voting with your feet" to explore the implications of standing at various points along a value spectrum laid out on the floor. This shift from the concrete level to the abstract level of values enables a cognitive bridge to new ways of thinking.<sup>47</sup>

Through carefully structured group activities (debates, dramas, games, tasks) for each topic, we evoke symbolic, implicational processing employing action learning through movement, emotions, social interaction, and visual symbols. This embodied, implicational processing supports tolerance of the topic's multi-valence, promoting openness to perceiving some validity in both seemingly conflicting value poles.<sup>48</sup> Participants thus engage in multiple-level processing. This leads towards a sense of "gestalt" underlying the viewpoints in tension and provides a bridge to enable rational, word-based integration of viewpoints into their existing belief systems.<sup>49</sup> Through the group activities, we draw on the body's implicit way of knowing. The mind needs the body for successful engagement with the world, and body sensations help us to know what is important to us—what are our own values, and how to understand another's values.<sup>50, 51</sup> Group tasks that use some "everyday" movement effectively switch off the conceptual mode of mind.<sup>52</sup> This helps with precision in thinking and enables people to get beyond bluntly categorizing into black and white, and to attend with greater specificity to the complexity of the present, indicating greater right-brain activity.<sup>53</sup> For example, when participants in our intervention were asked to verbally describe two different modes of political decision-making (one democratic, and the other under a Caliphate), no commonalities or ways of relating the two could be found; the two means of decision making were seen in terms of black and white contrasts. But when the participants created non-verbal mimes (and performed them for "a visiting Martian") to describe both modes of decision-making, their mimes enabled them to see with greater detail the areas of commonality shared between democratic and religious modes of decision-making. Participants were enabled to overcome the binary black-and-white structure that governed their thinking about the Caliphate and democracy. Some typical participant responses to the *Being Muslim Being British* (BMBB) course are:

"This course has made me proud of myself as a Muslim and proud of myself to live in this country. And I can say, in an authoritative way, I can be a Muslim and I can be British as well and contribute to this society."

– BMBB Participant

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"I realized how strong my actual beliefs and values are in all the situations we were put through. It's also helped me... to break away from a kind of tunnel-vision thinking, that everything is kinda straightforward: all or nothing... I would have just dismissed things very quickly. This course has helped me say, 'Okay, let me just take a look at that thing and settle my mind a bit.' It has helped me understand how different people think."

– Participant

"This course has reminded us of the very basic points the Prophet has taught us: that Islam is the middle way. We shouldn't be extreme in any way, we should come halfway to understand whoever is opposite to us... We are not the only people to live on this earth, we have to always find common ground, to come together with other communities where we live."

– Participant

"The [local] BMBB experience showed that at the beginning the whole group ...aligned with the *Hizb ut Tahrir*. But at the end of the course all of them had significantly changed their position."

– Local course facilitator (leader)

For the purposes of prevention, the group activities are designed to recreate the social-psychological processes that shape thinking in extremist groups. We do this so that the social processes that constrict cognition (such as group polarization, groupthink, in-group/out-group dynamics) become "live" in the room.<sup>54, 55, 56</sup> By making these processes conscious through experiencing them, and then talking about them, participants are free to think for themselves according to their own range of values, and to avoid a collapse into a binary way of thinking influenced by group processes. Participants' religious commitment remains statistically unchanged; in fact, it is slightly enhanced. Participants who scored highest on identifying with their (chosen) social group in the post-test condition also showed higher IC.

This intervention will be adapted for use in Pakistan's only deradicalization program for young people under age eighteen in autumn 2011 (at *Sabaoon* in Swat, Pakistan, directed by Dr. Peracha of the Hum Pakistani Foundation). A pilot will be run with thirty-five of the most extreme ex-Taliban youths at Sabaoon, and ongoing assessment will provide longitudinal data on the impact of the intervention before being more widely deployed for prevention purposes for Pakistani youth.



## Conclusion

To summarize, developing high integrative complexity thinking in the domain of moral values can serve as a preventative inoculation against uncertainty states that can be potentially exploited for violence. At higher levels of complexity in values and thinking, new possibilities *emerge* for participants. The program is not focused upon individual pathology and trying to correct it. We do not train facilitators to confront maladaptive thinking, nor do we promote a particular "correct religious understanding." That would risk replacing one binary with another, and the underlying condition would remain: simplified, binary, impoverished cognition in the religious domain. Our emergentist model posits that at higher levels of complexity in thinking and in the moral domain, powerful changes occur for participants that enable personal integrity and strongly correlate with eschewing violence and choosing pro-social means of activism to address grievances.

## About the Author

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## References

- 1 McGilchrist, Iain, *The Master and His Emissary: The Divided Brain and the Making of the Western World* (Boston, MA: Yale University Press, 2009).
- 2 V. Florian and M. Mikulincer, "Fear of death and the judgment of social transgressions: A multidimensional test of Terror Management Theory," *Journal of Personality & Social Psychology* 73:2 (1997): 369–380.

- 3 J. F. Bassett, "Does threatening valued components of cultural worldview alter explicit and implicit attitudes about death?" *Individual Differences Research* 3:4 (2005): 260–268.
- 4 Wilson, B., *Religion in Sociological Perspective* (New York: Oxford Press, 1982).
- 5 Marty, Martin E. and R. Scott Appleby, eds., *Fundamentalisms Observed: The Fundamentalisms Project*, Vol. 1 (Chicago: University of Chicago Press, 1991); Marty, Martin E. and R. Scott Appleby, eds., *Fundamentalisms and Society: The Fundamentalisms Project*, Vol. 2 (Chicago: University of Chicago Press, 1993); Marty, Martin E. and R. Scott Appleby, eds., *Accounting for Fundamentalisms: The Fundamentalisms Project*, Vol. 4 (Chicago: University of Chicago Press, 1994); and Marty, Martin E. and R. Scott Appleby, eds., *Fundamentalisms Comprehended: The Fundamentalisms Project*, Vol. 5 (Chicago: University of Chicago Press, 1995).
- 6 Strozier, Charles B., *Apocalypse* (Boston, Massachusetts: Beacon Press, 1994).
- 7 Sara Savage and Jose Liht, "Mapping fundamentalisms: the psychology of religion as a sub discipline in the prevention of religiously motivated violence," *The Archive for the Psychology of Religion* 30:1 (2008): 75–91.
- 8 Roy, Olivier, *The failure of political Islam*, trans. C. Volk (London: New York: I. B. Tauris & Co., 1994).
- 9 Roy, Olivier, *Globalised Islam: The Search for the New Ummah* (London: Hurst & Company, 2002).
- 10 Wulff, David M., *Psychology of Religion*, 2nd ed. (New York: John Wiley & Sons, 1997).
- 11 Intrinsic religiosity is an end in itself; the whole of life is lived out and made meaningful by the religion. Extrinsic religiosity is motivated by the external benefits that the religion can provide: social acceptance, belonging, prestige and other life-enhancing benefits. See: G. W. Allport and J. Ross, "Personal religious orientation and prejudice," *Journal of Personality and Social Psychology* 5 (1989): 432–43.
- 12 Yao, Richard, *Fundamentalists anonymous: There is a way out* (New York: Luce Publications, 1985).
- 13 Kenneth I. Pargament, "On the meaning of spiritual transformation," in J. D. Koss-Chiokino and P. Hefner (eds.), *Spiritual transformation and healing: anthropological, theological, neuroscientific and clinical perspectives* (Lanham, MD: Altamira Press, 2006), 10–24.
- 14 Ammerman, Nancy T., *Bible Believers* (London: Rutgers University Press, 1988).
- 15 Martha Crenshaw, "Questions to be answered, research to be done, knowledge to be applied," in W. Reich (ed.), *Origins of terrorism: Psychologies, ideologies, theologies, states of mind* (Cambridge: Cambridge University Press, 1990).
- 16 Hogg, Michael A. and Dominic Abrams, *Social identifications: A social psychology of intergroup relations and group processes* (London: Routledge, 1988).
- 17 Sageman, Marc, *Understanding terror networks* (Philadelphia, PA: University of Pennsylvania Press, 2004).
- 18 Colin Fraser, "Group risk-taking and group polarization," *European Journal of Social Psychology* 1 (1971): 493–510.

Four Lessons from the Study of Fundamentalism and Psychology of Religion

- 19 John Horgan, "Understanding terrorist motivation: A socio-psychological perspective," in M. Ranstorp (ed.), *Mapping terrorism research: State of the art, gaps and future direction* (London: Routledge, 2007).
- 20 Scott Atran, "Genesis of Suicide Terrorism," *Science Magazine* 299: 5612 (2003): 1534–39; and Atran, Scott, *Talking to the Enemy: Faith, Brotherhood, and the (Un)Making of Terrorists* (London: Harper Collins, 2010).
- 21 Mirjana Rakela, "Child Warriors around the World, Manipulation without End," *Radio Free Europe, Radio Liberty*, November 16, 2008, available at: <http://tinyurl.com/5wz5fx> ([www.rferl.org/content/Child\\_Warriors\\_Around\\_The\\_World\\_Manipulation\\_Without\\_End/1349622.html](http://www.rferl.org/content/Child_Warriors_Around_The_World_Manipulation_Without_End/1349622.html)).
- 22 William E. Shepard, "Fundamentalism," *Christian and Islamic, Religion* 17 (1987): 355–78.
- 23 Diego Gambetta and Steffen Hertog, "Why are there so many engineers among Islamic radicals?" 2010, available at: <http://tinyurl.com/7cf5um5> ([orientemiedo.files.wordpress.com/2010/01/diego-gambetta-steffen-hertog-why-are-there-so-many-engineers-among-islamic-radicals.pdf](http://orientemiedo.files.wordpress.com/2010/01/diego-gambetta-steffen-hertog-why-are-there-so-many-engineers-among-islamic-radicals.pdf)).
- 24 Barr, James, *Fundamentalism*, 2nd ed. (London: SCM Press, 1981).
- 25 Milton Rokeach, *The open and closed mind: Investigations into the nature of belief systems and personality systems* (New York: Basic Books, 1960).
- 26 R. W. Hood, P. C. Hill and W. P. Williamson, *The psychology of religious fundamentalism* (New York: Guilford Press, 2005).
- 27 Taner Edis, "Islamic Creationism in Turkey," *Creation/Evolution* 34:1 (1994), available at: <http://www2.truman.edu/~edis/writings/articles/islamic.html>.
- 28 Yahya, Harum, *The Atlas of Creation*, Vol. 1 (Istanbul: Global Publishing, 2006); and Yahya, Harum, *The Atlas of Creation*, Vol. 2 (Istanbul: Global Publishing, 2007).
- 29 Armstrong, Karen, *The Battle for God*, 1st ed. (New York: Alfred A. Knopf, 2000).
- 30 Sløk, Johannes, *Devotional language*. (Berlin: W. de Gruyter, 1996).
- 31 McGilchrist, Iain, *The Master and His Emissary: The Divided Brain and the Making of the Western World* (Boston, MA: Yale University Press, 2009).
- 32 J. R. J. Fontaine, B. Duriez, P. Luyten, J. Corveleyn and D. Hutsebaut, "Consequences of a Multidimensional Approach to Religion for the Relationship between Religiosity and Value Priorities," *The International Journal for the Psychology of Religion* 15:2 (2005): 123–43.
- 33 S. H. Schwartz and K. Boehnke, "Evaluating the structure of human values with confirmatory factor analysis," *Journal of Research in Personality* 38:3 (2004): 230.
- 34 Jinkins, Michael, *Christianity, tolerance, and pluralism: A theological engagement with Isaiah Berlin's social theory* (London: Routledge, 2004).

- 35 J. Liht and Sara Savage, "Identifying young Muslims susceptible to violent radicalization: Psychological theory and recommendations," in M. Sharpe (ed.), *Suicide Bombing: psychological and other imperatives* (Netherlands: IOS Press, 2008).
- 36 Marty, Martin E. and R. Scott Appleby (eds.), *Fundamentalisms and Society: The Fundamentalisms Project*, Vol. 5 (Chicago: University of Chicago Press, 1995).
- 37 Sara Savage and J. Liht, *Being Muslim Being British: A multimedia course for young Muslims* (University of Cambridge, UK: DVD, 2010).
- 38 Ibid.
- 39 J. Liht and Sara Savage, "Being Muslim Being British: A multi-media educational resource for young Muslims," in G. Joffe (ed.), *Radicalisation* (London, UK: IB Tauris, 2011).
- 40 P. Suedfeld, D. C. Leighton, and L. G. Conway, "Interactive complexity and decision making in international confrontations," in Mari Fitzduff, Chris E. Stout (eds.), *The psychology of resolving global conflicts: From war to peace, Vol. 1: Nature vs. Nurture* (New York: Praeger Security International, 2005), 211–37.
- 41 G. Baker-Brown, E. J. Ballard, S. Bluck, B. de Vries, P. Suedfeld and P. E. Tetlock, *Coding manual for conceptual/integrative complexity* (University of British Columbia and University of California-Berkeley, 1992).
- 42 P. Suedfeld, K. Guttieri, and P. E. Tetlock, "Assessing integrative complexity at a distance: archival analysis of thinking and decision making," in J. M. Post (ed.), *The psychological assessment of political leaders with profiles of Saddam Hussein and Bill Clinton* (Ann Arbor: The University of Michigan Press, 2003), 246–72.
- 43 P. E. Tetlock, D. Armor, and R. S. Peterson, "The slavery debate in antebellum America: Cognitive style, value conflict, and the limits of compromise," *Journal of Personality and Social Psychology* 66:1 (1994): 155–26.
- 44 G. Baker-Brown, E. J. Ballard, S. Bluck, B. de Vries, P. Suedfeld, and P. E. Tetlock, *Coding manual for conceptual/integrative complexity* (University of British Columbia and University of California-Berkeley, 1992).
- 45 Sara Savage, J. Liht, and R. J. Williams, "Being Muslim Being British: Preventing Extremist Violence Through Raising Integrative Complexity," in M. Sharpe and F. Gere (eds.), *The Intangibles of Security* (Netherlands: IOS Press, 2011).
- 46 J. Liht and Sara Savage, *Being Muslim Being British: Assessment of an Integrative Complexity-Based Intervention* (Cambridge, UK: Forthcoming).
- 47 Harvey, O. J., David E. Hunt, and Harold M. Schroder, *Conceptual systems and personality organization* (London: John Wiley & Sons, 1961).
- 48 McMullin, R. E., *The New Handbook of Cognitive Therapy Techniques* (New York: Norton, 2000).
- 49 Ibid.
- 50 Damasio, A. R., *The feeling of what happens: Body and emotion in the making of consciousness* (New York: Harcourt Brace, 1999).
- 51 G. W. Hohmann, "Some effects of spinal cord lesions on experienced emotional feelings," *Psychophysiology* 3 (1966): 143–56.

Four Lessons from the Study of Fundamentalism and Psychology of Religion

- 52 Ed Watkins and John D. Teasdale, "Adaptive and maladaptive self-focus in depression," *Journal of Affective Disorders* 82 (2004): 1–8.
- 53 J. M. G. Williams, John D. Teasdale, Z. V. Segal, and J. Soulsby, "Mindfulness-Based Cognitive Therapy reduces overgeneral autobiographical memory in formerly depressed patients," *Journal of Abnormal Psychology* 109 (2000): 150–55.
- 54 C. Fraser, "Group risk-taking and group polarization," *European Journal of Social Psychology* 1 (1971): 493–510.
- 55 Janis, I. L., *Groupthink: Psychological studies of policy decisions and fiascos* (Boston: Houghton Mifflin, 1982).
- 56 Tajfel, Henri, *Social identity and intergroup relations, European studies in social psychology* (Cambridge: Cambridge University Press, 1982).

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