

For Cause and Comrade: Devoted Actors and Willingness to Fight

Scott Atran,^{1,2,3,4,5} Hammad Sheikh,^{1,6} Ángel Gómez^{1,7}

¹ *ARTIS Research*

² *Centre National de la Recherche Scientifique*

³ *University of Oxford*

⁴ *City University of New York*

⁵ *University of Michigan*

⁶ *New School for Social Research*

⁷ *Universidad Nacional de Educación a Distancia*

This report provides initial evidence that “devoted actors” who are unconditionally committed to a sacred cause, as well as to their comrades, willingly make costly sacrifices, including fighting and dying. Although American military analysts since WWII tend to attribute fighting spirit to leadership and the bond of comradeship in combat as a manifestation of rational self-interest, evidence also suggests that sacrifice for a cause in ways independent, or all out of proportion, from the reasonable likelihood of success may be critical. Here, we show the first empirical evidence that sacred values (as when land or law becomes holy or hallowed) and identity fusion (when personal and group identities collapse into a unique identity to generate a collective sense of invincibility and special destiny) can interact to produce willingness to make costly sacrifices for a primary reference group: by looking at the relative strength of the sacred values of Sharia versus Democracy among potential foreign fighter volunteers from Morocco. Devotion to a sacred cause, in conjunction with unconditional commitment to comrades, may be what allows low-power groups to endure and often prevail against materially stronger foes.

Introduction

What determines the “political pull” and “fighting spirit” that motivates people to knowingly risks lives, and even probable death, in joining revolutionary and insurgent groups battling against much greater material forces? In this report, we provide arguments and initial evidence that “devoted actors” who are unconditionally committed to their sacred cause, as well as to their comrades, willingly make costly sacrifices, including fighting and dying. And, we surmise,

Corresponding author's e-mail: satran@umich.edu

Citation: Atran, Scott, Hammad Sheikh, and Ángel Gómez. 2014. For Cause and Comrade: Devoted Actors and Willingness to Fight. *Clodynamics* 5: 41–57.

this commitment may well be what allows low-power groups to persist and often triumph over materially stronger adversaries (Atran & Ginges, 2012).

“The Devoted Actor” is a theoretical framework that our group of scholars and policymakers at ARTIS Research (ARTIS Research, 2010) has been developing to better understand the psychological mechanisms underlying the willingness of humans to make costly sacrifices for a cause (Atran, Axelrod & Davis, 2007; Atran, Sheikh, & Gómez, 2014; Atran & Ginges, in press). This framework now integrates two hitherto independent research programs in cognitive theory, “sacred values” (Ginges, Atran, Medin, & Shikaki, 2007) and “identity fusion” (Swann, Jetten, Gómez, Whitehouse, & Bastian, 2012). These two programs account for different aspects of intractable intergroup conflicts; however, here we show empirically for the first time that sacred values and identity fusion can interact to produce willingness to make costly sacrifices for a primary reference group. To demonstrate, we look at the relative strength of the sacred values of Sharia versus Democracy among potential foreign fighter volunteers from Morocco.

These issues bear directly on some of the world’s most pressing concerns. Indeed, in recent remarks, President Obama (Payne, 2014) endorsed the judgment of his U.S. National Intelligence Director: “We underestimated the Viet Cong... we underestimated ISIL [the Islamic State] and overestimated the fighting capability of the Iraqi army.... It boils down to predicting the will to fight, which is an imponderable” (Ignatius, 2014). Yet, if the methods and results suggested by our research ultimately prove reliable, then predicting who is willing to fight and who isn’t, and why, could be ponderable indeed, and important to the evaluation and execution of political and military strategy.

Theoretical Framework: For Comrade and For Cause

Among American military historians, psychologists, and sociologists, the conventional wisdom on why soldiers fight is that ideology is relatively unimportant. Most of the studies focus on measures of “fighter spirit” among American soldiers in World War II, Korea, and Vietnam (Smith, 1983a). Only leadership and group loyalty seem critical in these examinations. In World War II, for example, solidarity and loyalty to the group helped mightily to sustain combat soldiers, whereas personal commitment to the war and ideology were much less meaningful. American soldiers “ain’t fighting for patriotism” and the British soldier “never gave democracy a thought” (Stouffer, et al., 1949), although the British did give strong confirmation of sacrificing for their homeland: “It can hardly be described to those who did not experience it; it must lie very deep down among human emotions, giving the individual a strange, subdued elation at facing dangers in which he may easily perish as an individual but also a subconscious knowledge that any society which has a high

enough proportion of similar individuals is all the more likely to survive because of their sacrifice” (Jones,1978:181-182). Soldiers’ belief in the legitimacy of a cause worth fighting for steadily increased during World War II and steadily decreased during the Korean War, yet fighting spirit remained fairly constant (Smith, 1983b).

In *The Deadly Brotherhood*, John McManus (2003) argues that the American combat soldier in WWII did not fight and die for abstract concepts, such as democracy or love of country, but for his “devoted fraternity” or band of brothers with whom he shared dangers and hardship on the front line. A rifleman in the 32nd Infantry Division, McManus wrote: “Survival for one’s self was the first priority by far. The second priority was survival for the man next to you and the man next to him. So, right or wrong, love of country and pride... was a good bit behind.” As William Manchester (1988) put it in his memoirs of U.S. Marine Corps service in World War II: “Those men on the line were my family, my home. They were closer to me than... friends had ever been or would ever be. They never let me down, and I couldn’t do it to them.”

American military analysts tend to chalk up camaraderie to rational self-interest, and to dismiss the notion of sacrifice for a cause as a critical factor in war:

[T]he intense primary-group ties so often reported in combat groups are best viewed as mandatory necessities arising from immediate life-and-death exigencies. Much like the Hobbesian description of primitive life, the combat situation can be nasty, brutish and short... one can view primary-group processes in the combat situation as a kind of rudimentary social contract which is entered into because of advantages to individual self-interest. Rather than viewing soldiers’ primary groups as some kind of semi-mystical bond of comradeship, they can better be understood as pragmatic and situational responses. (Moskos, 1975:36-37)

In Vietnam, falling morale, desertion, and fragging (killing officers) increased long after popular support for the war collapsed, and only after soldiers began feeling that “Vietnamization” (handing over security to South Vietnamese forces) was a lost cause that no soldier wanted to be the last to die for. American soldiers said that the cause of democracy was “crap” and a joke” in Vietnam (Moskos, 1970). And yet they described the selfless bravery of the North Vietnamese “because they believed in something” and “knew what they were fighting for” (Spector, 1994:71). So, maybe others would die for a cause and not only for comrades.

In *For Cause and Comrades*, James McPherson (1997) notes that, unlike later American armies of mostly draftees and professional soldiers, Civil War armies on both sides were both composed mainly of volunteers who often joined up and fought with family, friends and neighbors from the same communities. Unlike the letters of WWII or Vietnam vets, they went back to the same affinity groups of those they had fought with.

A large number of the men in blue and gray were intensely aware of the issues at stake and passionately concerned about them. How could it be otherwise? This was, after all, a civil war. Its outcome would determine the fate of the nation... the future of American society and of every person in that society Civil War soldiers lived in the world's most politicized and democratic country in the mid-nineteenth century. A majority of them had voted in the election of 1860, the most heated and momentous election in American history. When they enlisted, many of them did so for patriotic and ideological reasons—to shoot as they had voted, so to speak. These convictions did not disappear after they signed up... They needed no indoctrination lectures to explain what they were fighting for, no films like Frank Capra's *Why We Fight* series in World War II. (McPherson, 1997:91-92)

In the Civil War, ideology was given a particularly religious cast: “Civil War armies were, arguably, the most religious in American history. Wars usually intensify religious convictions.... Many men who were at best nominal Christians before they enlisted experienced conversion to the genuine article by their baptism of fire.” (p. 62)

In *Fear in Battle*, John Dollard (1944:40-41) interviewed veterans from the Abraham Lincoln Brigade, composed of Americans who fought in the Spanish Civil War against Franco and Fascism. In response to the question: “What would you say are the most important things that help a man overcome fear in battle,” 77 percent cited belief in their ideology and “the aims of war” versus: leadership (49 percent), esprit de corps (28 percent), hatred of enemy (21 percent), and distraction and keeping busy (17 percent). The Lincoln Brigade was not religious, far from it, but it was motivated by a transcendental cause of socialism as a historical necessity opposed by the evil of fascism.

It appears, then, that, despite U.S. patriotic propaganda and the studies that discount it, American warfare from WWII to today may be an exception to the heartfelt sense of war as a noble cause. Perhaps some people do actually fight and die for a cause, as well as comrades, and that is why they sacrifice for seemingly lost causes yet sometimes win wars.

Background: Aspects of the Devoted Actor

Our prior research indicates that when people act as “Devoted Actors” they act in ways that cannot be reliably predicted by assessing material risks and rewards, costs and consequences. This feature holds even when taking into consideration modifications and constraints on instrumental rationality, such as: cognitive limitations on gathering and processing information (Simon, 1997), desire to avoid cognitive dissonance (Festinger, 1962) or conform to group thinking (Asch, 1987), lack of cultural awareness (Schelling, 1960), intrinsic indivisibility of resources (Fearon, 1995), or other psychological biases and ecological constraints (Kahneman, 2011). Of course, concern with instrumental and deontic (i.e., rules and obligations) matters interact in the real world to motivate the actions of individuals and groups, and any explanatory or descriptively adequate account must be able to model and predict this interaction (for recent proposals on “Devoted Realism” in geopolitics, see Turchin, 2014; Atran, Ginges, & Iliev, 2014).

Nevertheless, acts by devoted actors are not chiefly motivated by instrumental concerns. Instead, they are motivated by “sacred values” (SVs)—as when land or law becomes holy or hallowed—that drive actions independent from, or out-of-proportion to, likely outcomes. Devotion to some core values may represent universal responses to long-term evolutionary strategies that go beyond short-term individual calculations of self-interest but that advance individual interests in the aggregate and long run. This may include devotion to children, to community, or even to a sense of fairness (Atran and Axelrod, 2008). Other such values are clearly specific to particular societies and historical contingencies, such as the sacred status of cows in Hindu culture or the sacred status of the Sabbath or Jerusalem in Judaism, Christianity, and Islam. Sometimes, as with India’s sacred cows (Harris 1966) or sacred forests (Upadhaya, Pandey, Law, and Tripathi, 2003), what is seen as inherently sacred in the present may have a more materialistic origin, representing the accumulated material wisdom of generations who resisted individual urges to gain an immediate advantage of meat or firewood for the long-term benefits of renewable sources of energy and sustenance. Yet, despite the longstanding material advantages associated with these values, unconditional devotion to such sacred values in a rapidly changing world can also be materially disadvantageous: for example, when a hitherto closed commons suddenly becomes an open commons, then continued cultural commitment to values for protection of the commons may be highly maladaptive by facilitating the extinction of native conservationists in areas now open to exploitation by foreign extractors (Atran & Medin, 2008).

Empirical studies in multiple cultures and hotspots across the world indicate that sincere attachment to sacred values entails: 1) commitment to a rule-bound logic of moral appropriateness to do what is morally right no

matter the likely risks or rewards, rather than following a utilitarian calculus of costs and consequences (Atran, 2003; Bennis, Medin, & Bartles, 2010; Ginges & Atran, 2011), 2) immunity to material tradeoffs, coupled with a “backfire effect,” where offers of incentives or disincentives to give up SVs heighten refusal to compromise or negotiate (Ginges et al., 2007, Dehghani, et al., 2010), 3) resistance to social influence and exit strategies (Atran & Henrich, 2012; Sheikh, Ginges, & Atran, 2013), which leads to unyielding social solidarity, and binds genetic strangers to voluntarily sacrifice for one another, 4) insensitivity to spatial and temporal discounting, where considerations of distant places and people, and even far past and future events, associated with SVs significantly outweigh concerns with here and now (Atran, 2010; Sheikh, et al., 2013), 5) brain-imaging patterns consistent with processing obligatory rules rather than weighing costs and benefits, and with processing perceived violations of such rules as emotionally agitating and resistant to social influence (Berns, et al., 2012; Pincus, LaViers, Prietula, & Berns, 2014).

Understanding the way SVs influence decision-making, leading to deontic judgments and choices in disregard for material interests, is necessary but not sufficient to explain how they may influence extreme and costly behaviors. We suggest that SVs may motivate extreme behavior particularly to the extent that they combine with being fused with a group that shares such SVs. When internalized, SVs lessen societal costs of policing morality through self-monitoring (Atran & Henrich, 2010), and blind members to exit strategies (Sheikh, et al., 2013).

In this vein, the theory of “identity fusion” (Swann et al. 2012) holds that when people’s collective identities become fused with their personal self-concept, they subsequently display increased willingness to engage in extreme pro-group behavior when the group is threatened. As such, fusion can help us better understand part of the complexity of group dynamics that leads to action when privileged values are threatened. Fusion theory differs from various social identity theories in emphasizing group cohesion through social networking and emotional bonding of people and values rather than through processes of categorization and association, thus empowering individuals and their groups with sentiments of exceptional destiny and invulnerability. In recent cross-cultural experiments, Swann et al. (2014) begin from observations made by Atran (2010) for militant and terrorist groups and find that when fused people perceive that group members share core physical attributes and values, they are more likely to project familial ties common in smaller groups onto the extended group. This enhances willingness to fight and die for a larger group that is strongly identified with those values, such as a religious “brotherhood.” More recently, Whitehouse et al. (2014) provide evidence that fusion with a family-like group of comrades in arms, which can be felt as even stronger than genetic family ties, may have underpinned the willingness of

recent revolutionary combatants in Lybia to fight on, even in the face of death and defeat.

An Empirical Demonstration: Sacred Values & Identity Fusion Interact in Sacrifice

To illustrate the relationship between sacred values, identity fusion, and willingness to make costly sacrifices, we report results of surveys in two Moroccan neighborhoods ($n = 260$, face-to-face interviews, 50 percent males, Median_{age} = 25 yrs, range 18–50 yrs). Both places were previously associated with militant jihad, and where we had done intensive anthropological fieldwork: Jemaa Mezuak (a rundown barrio of Tetuan, home to 5 of 7 principal plotters in the 2004 Madrid train bombings who blew themselves up when cornered by police, and to a number of suicide bombers who died in Iraq), and Sidi Moumen in Casablanca (a densely populated shantytown, source of terrorist bombing campaigns in 2003, 2005, 2007) (Atran, 2010). Upwards of 2000 Moroccans have joined jihadi groups in Syria, primarily the Islamic State, and our field discussions with Moroccan officials indicate that scores of volunteers are leaving monthly from northern Moroccan towns such as Tetuan and Larache. Sidi Moumen has recently undergone significant urban renewal explicitly aimed at reducing attraction to violent extremism, but radical expressions of discontent persist.

Systematic analysis of dialogues in social media among hundreds of foreign fighters over the last three years indicates a marked shift in motivations over the last year from saving co-religionists in Syria to establishing Sharia and securing the Caliphate regardless of the wishes of local populations (Kathe 2014). As previously with al-Qaeda volunteers from the diaspora (Sageman, 2004), about 3 out of every 4 of foreign fighters in Syria volunteer in clusters of friends (Bond, 2014), some attuned to the cause through social media and arriving in groups, and some being drawn to the cause by friends already in place or who have returned to their point of origin (Atran, 2011). Moroccan volunteers conform to the pattern.

We assessed identity fusion with family-like friends using a visual Identity Fusion Measure (Swann, et al., 2009). Participants were presented with a set of figures depicting gradually overlapping circles, one representing them and the other representing family-like friends: “Now think of your friends [outside your family], who are so close to you that you consider them brothers and sisters [...] Please pick the pair of circles that best represents your relationship with this group” (see Figure below). Participants who picked the completely overlapping circles (Figure 1e) were considered fused with the group.

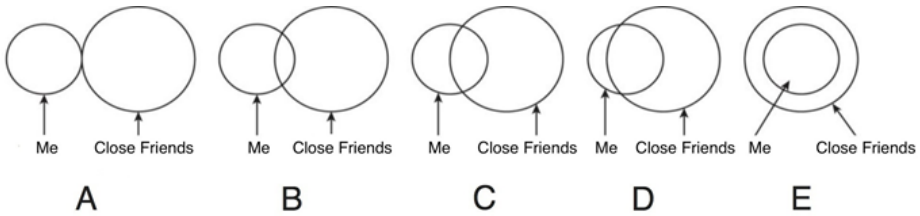


Figure 1. Identity fusion measure

To gauge participants' willingness to make costly sacrifices for Sharia, we asked for their agreement with 5 statements: "If necessary, I would be willing to lose my job or source of income/go to jail/use violence/let my children suffer physical punishment/die to defend the full imposition of Sharia" on a 7-point Likert scale ranging from 1 = "strongly disagree," 7 = "strongly agree." The responses were averaged in a composite score of sacrifice for Sharia. We also probed willingness to make costly sacrifices for democracy using the same set of questions, this time "to defend democratic elections." A measure of support of militant Jihad was also administered to the participants, consisting of 5 statements (e.g., "All countries that are not ruled by Muslims and do not observe Sharia should be considered Dar al-Harb ("House of War") and "Suicide bombers will be rewarded by God"), again, using a 7-point Likert scale to assess agreement.

Overall, 43 percent of participants were fused with the small group of friends they considered family. Sixty percent considered Sharia a SV, and 50 percent considered democracy a SV. Participants in Tetuan were more radicalized, in that they exhibited ceiling effects in our measures of willingness to sacrifice for Sharia and support for militant Jihad (i.e., high positive skew with many people choosing the most extreme response option; see Table 1 for descriptives). Ceiling effects attenuate the variance of the responses and thus reduce the sensitivity of statistical analysis, making it more difficult to detect effects of independent variables. Thus, we report analyses separately for Casablanca and Tetuan. We tested our hypotheses using ANOVAs, with willingness to make costly sacrifices as a dependent variable and fusion with family-like group and SV as independent variables.

In Casablanca, there was an interaction effect between Sharia as a SV and Fusion, $F_{1,126} = 34.90$, $P < 0.01$, on willingness to sacrifice for Sharia: whereas fused participants were more willing to make costly sacrifices, this was especially pronounced for participants who consider Sharia a SV (Figure 2).

Table 1. Descriptive Statistics of Core Measures (SV = “Sacred Value”)

Measure	Location		Reliability
	Casablanca	Tetuan	
	Mean (SD)	Mean (SD)	Cronbach’s α
Sacrifice for Sharia	3.28 (1.56)	5.64 (1.73)	0.94
Sacrifice for Democracy	2.14 (0.93)	3.12 (1.73)	0.91
Support for Militant Jihad	3.55 (0.93)	5.47 (1.76)	0.90
	Proportion (n)	Proportion (n)	
Sharia as SV	53% (69)	68% (88)	
Democracy as SV	36% (47)	63% (82)	
Fusion with family-like friends	30% (39)	57% (74)	

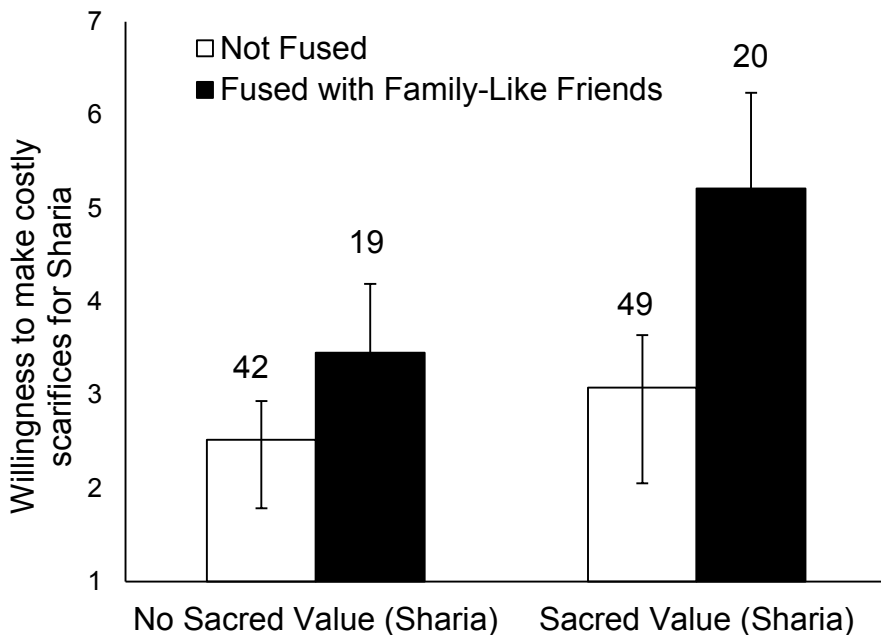


Figure 2. Willingness to make costly sacrifices for Sharia (with sample sizes and 95 percent confidence intervals)

As Figure 2 shows, those who considered Sharia as a SV and were fused with a family-like group were, on average, above the midpoint of the response scale, that is, were more willing than not to make costly sacrifices. With

particular regard to willingness to use violence and to die, we found that among the participants who were fused, those who considered Sharia a SV were, on average, more likely to use violence ($M_{diff} = 1.79$, $SE = 0.61$, $P < 0.01$) and more willing to die ($M_{diff} = 1.49$, $SE = 0.66$, $P = 0.03$) than those who did not (where M_{diff} is the difference in averages of the two groups). We found a similar effect for support of militant Jihad ($F_{1,126} = 4.02$, $P < 0.05$): participants who considered Sharia a SV and were fused with a family-like group were the only ones who, on average, were above the midpoint of the scale, that is, supported militant Jihad.

There was also an interaction effect between SV Democracy and Fusion ($F_{1,126} = 3.06$, $P < 0.01$). As Figure 3 shows, participants who were fused and also held democracy as a SV were, on average, more willing to make costly sacrifices for democracy. Although we found preliminary evidence that an interaction between fusion and sacred values also predicts costly sacrifices when democracy is considered a SV in our Casablanca population, effects proved much weaker than for Sharia as a SV.

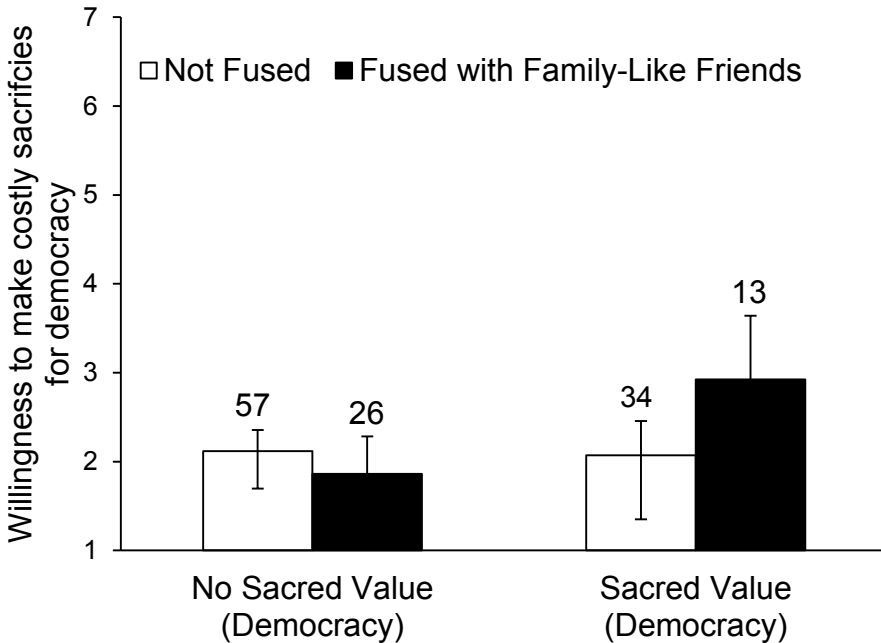


Figure 3. Willingness to make costly sacrifices for democracy (with sample sizes and 95 percent confidence intervals)

For Tetuan, we observed an overall higher level of radicalization, leading to a ceiling effect on costly sacrifices for Sharia and militant Jihad measures, rendering statistical analyses problematic. On average, participants who considered Sharia a SV agreed with making costly sacrifices and supporting militant Jihad; nonetheless, those who were also fused had, on average, the highest values on both measures ($M = 6.43$, $SD = 0.73$, and $M = 6.24$, $SD = 0.82$), reaching the top of the scale. Costly sacrifice was not affected by fusion and electoral democracy as a sacred value.

Conclusion: The Fight for the Future

In this report, we have presented initial evidence for the hypothesis that “devoted actors” who are unconditionally committed to a sacred cause, as well as to their comrades, express willingness to make costly sacrifices, including fighting and dying. Of course, a move from our analysis of reports of willingness to act to actual actions under appropriate conditions is by no means guaranteed. Nevertheless, compatibility of our findings with field studies of violent extremists (Atran, 2010) at least renders plausible the notion that proximate issues of psychology can suggest ultimate explanations that enable an advantage in group competition.

More specifically, we found that in two Moroccan neighborhoods with a history of susceptibility to militant jihad, there is a strong correspondence between: 1) support for the sacred value of Sharia, whose implementation allows no compromise, 2) fusion of personal identity into a unique collective identity involving a close, family-like group of comrades and 3) expressed willingness to make costly sacrifices. In one neighborhood, Casablanca’s Sidi Moumen, we found a highly significant interaction between the sacred value of Sharia and fusion with close comrades in predicting willingness to make costly sacrifices. People who considered Sharia a sacred cause and who were fused with close comrades were also most likely to express support for militant jihad. We also found preliminary evidence that an interaction between fusion and sacred values predicts costly sacrifices when electoral democracy is considered a sacred value. Although effects proved much weaker with electoral democracy than with Sharia, the similar overall pattern of results suggests that they are reliable and support our main hypothesis. In the other neighborhood, Tetuan’s Jamaa Mezuak, a higher overall level of radicalization (and thus, reduced variance) led to limited usefulness of findings in this community for testing our hypothesis. Costly sacrifice was not affected at all by electoral democracy as a sacred value; and people tended to agree with even the most extreme sacrifices for Sharia and the most extreme statements condoning militant Jihad that we probed (e.g., letting your children suffer for defending Sharia, or waging war

on non-Muslim countries). Although these ceiling effects preclude additional direct support for our hypothesis, the response patterns are still wholly consistent with it.

Evidence from previous studies of American soldiers in combat (Stouffer, et al., 1949, Moskos, 1975) as well as more recent research with revolutionary combatants in Lybia (Whitehouse, et al., 2014), suggests that identity fusion with a close family-like group is strongly associated with willingness to fight and die. Nevertheless, some fighters also claim they do so for a greater cause (Dollard, 1944; Spector, 1994), which carries with it a sense of personal significance and collective meaning beyond mere comradeship (Fiske, 2004; Kruglanski & Gelfand, 2013). Humans define the groups to which they belong in abstract terms. Often they strive for lasting intellectual and emotional bonding with anonymous others, and make their greatest exertions in killing and dying not to preserve their own lives or to defend their families and friends, but for the sake of an idea—the transcendent moral conception they form of themselves, of “who we are.” In *The Descent of Man*, Darwin (1871:163-165) casts it as the virtue of “morality ... the spirit of patriotism, fidelity, obedience, courage, and sympathy” with which winning groups are better-endowed in history’s spiraling competition for survival and dominance. For such “devoted actors,” rightness of the in-group’s cause often leads to intractable conflicts with out-groups that become immune to the give-and-take common to “business-like” negotiations (Atran & Axelrod, 2008; Atran & Ginges, 2012).

Devotion to a sacred cause, in conjunction with unconditional commitment to comrades, may be what allows low-power groups to endure and often prevail against materially stronger foes. For example, in 1776, the American colonists had the highest standard of living in the world. Frustrated not over economics, but “sacred rights” (Thomas Jefferson’s original words for the Declaration of Independence), they were willing to sacrifice “our lives, our fortunes and our sacred honor” against the world’s mightiest empire (Atran, 2014). Indeed, ever since World War II, revolutionary and insurgent groups (e.g., the Islamic State) have beaten armies with up to an order of magnitude more firepower and manpower because of devotion to comrade and cause rather than typical reward structures like pay and promotion (e.g., the Iraqi army) (Arreguin-Toft, 2001).

Further support for our hypothesis will require additional studies with populations in the field, and tighter linking between inferred psychology and action. In this regard, we have completed the first round of study with an opportunity sample of 20 Kurdish combatants and 11 non-combatants in frontline areas of the battle against the Islamic State, between Mosul and Erbil in Iraq. Although fighting groups are highly factionalized and there is no overall unity of command, volunteer combatants are often willing to join any

group that will accept them into the fight,, and non-combatants express wholesale support for the defense of Kurdistan (whether Iraqi Kurdistan or Greater Kurdistan or, most often, both). Here, we find that 28 respondents are fused with “Kurds”, 26 with “family,” and only 15 with “close, family-like group” of comrades. Moreover, in rankings of relative importance of identity fusion, 16 respondents report that fusion with “Kurds” trump all other forms of identity fusion, and no respondent reports that fusion with “family” or “close-family like group” trumps fusion with “Kurds.” There are also more than twice as many expressions of devotion to “Greater Kurdistan” and “Kurdish Language” as sacred values than to “Electoral Democracy” as a sacred value for which respondents are willing to fight and die. These very preliminary findings suggests that, at least in some cases, larger groups that are sacralized (in terms of language, territory, cultural history, etc.) can be the primary locus of identity fusion, and of the interaction between identity fusion and sacred values in producing costly sacrifices, including fighting and dying. If so, the primary relationship between identity fusion and willingness to fight needn’t be always at the level of a close family-like group. In other words, the strongest and most powerful forms of sacrifice for group and cause needn’t always require a process of “upscaling” from a localized family-like cohort of comrades to an extended ideological community, but may inhere in a larger, sacralized community to begin with.

In our preferred world of liberal democracy, tolerance of diversity, fairness and distributive justice, violence—especially extreme forms of mass bloodshed—are generally considered pathological or evil expressions of human nature gone awry, or collateral damage as the unintended consequence of righteous intentions. But across most human history and cultures, violence against other groups is universally claimed by the perpetrators to be a sublime matter of moral virtue (Burke 1757/2008; Ehrenreich, 1997). After all, without a claim to virtue, it is very difficult to endeavor to kill large numbers of people innocent of direct harm to others. For the future of liberal democracies, even beyond the threat from violent jihadis, the core existential issue maybe how comes it that values of liberal and open democracy increasingly appear to be losing ground to those of narrow nationalisms and radical Islam (Atran, Wilson, Davis, & Sheikh, 2014).

Acknowledgment

This research was sponsored by the MINERVA Initiative of the U.S. Department of Defense under the auspices of the Office of Naval Research (Grant N000141310054).

References

- Arreguín-Toft, I (2001) How the weak win wars. *International Security* 26:93-128.
- ARTIS Research. (2010) <http://artisresearch.com/>
- Asch, S. (1987) *Social psychology*. New York: Oxford University Press.
- Atran, S. (2003) Genesis of suicide terrorism. *Science* 299:1534-1539.
- Atran, S. (2010) *Talking to the enemy*. New York: HarperCollins.
- Atran, S. (2011) US Government Efforts to Counter Violent Extremism, US Senate Armed Services Committee, 2010-2011 (Testimony, Response to Questions); http://www.jjay.cuny.edu/US_Senate_Hearing_on_Violent_Extremism.pdf
- Atran, S. (2014) Incentives for war, beyond material gain. *New York Times*, August 20.
- Atran, S., & Axelrod, R. (2008) Reframing Sacred Values. *Negotiation Journal* 24:221-246.
- Atran, S., Axelrod, R., & Davis, R. (2007) Sacred barriers to conflict resolution. *Science* 317:1039-1040.
- Atran, S., & Ginges, J. (2012) Religious and sacred imperatives in human conflict. *Science*, 336:855-857.
- Atran, S., & Ginges, J. (in press) Devoted actors and the moral foundations of intractable inter-group conflict. In *The moral brain*, J. Decety and T. Wheatley, eds. Cambridge, MA: MIT Press.
- Atran, S., Ginges, J. & Iliev, R. (2014) Devoted actors, devoted realism, and the territorial imperative: A commentary on Johnson and Toft. *Cliodynamics: The Journal of Theoretical and Mathematical History* 5(1).
- Atran, S. & Henrich, J. (2010) The evolution of religion. *Biological Theory* 5:18-30.
- Atran, S., & Medin, D. (2008) *The native mind and the cultural construction of nature*. Cambridge, MA: MIT Press.
- Atran, S., Sheikh, H., & Gómez Á (2014) Devoted actors fight for close comrades and sacred cause. *Proceedings of the National Academy of Sciences, USA* 111, doi: 10.1073/pnas.1420474111.
- Atran, S., Wilson, L., Davis, R., & Sheikh, H. (2014) Devoted actors, sacred values, and willingness to fight: Preliminary studies with ISIL volunteers and Kurdish frontline fighters. Presented in conjunction with the U.S. Dept. of Defense Minerva Initiative to the Strategic Multilayer Assessment of ISIL in support of SOCCNET, November, Washington DC; http://artisresearch.com/wp-content/uploads/2014/11/Atran_Socnet_MINERVA_ISIS.pdf
- Baron, J. & Spranca, M. (1997) Protected values. *Organizational Behavior and Decision Processes* 70:1-16.

- Bennis, W., Medin, D., & Bartels, D. (2010) The costs and benefits of calculations and moral rules. *Perspectives on Psychological Science* 5:187-202.
- Berns, G., Bell, E., Capra, C., Prietula, M. J., Moore, S., Anderson, B., Ginges, J., & Atran, S. (2012) The price of your soul: Neural evidence for the non-utilitarian representation of sacred values. *Philosophical Transactions of the Royal Society B* 367:754-762.
- Bond, M (2014) Why westerners are driven to join the jihadist fight. *New Scientist*, September 10, <http://www.newscientist.com/article/mg22329861.700-why-westerners-are-driven-to-join-the-jihadist-fight.html>
- Burke, E. (1757/2008) *A philosophical inquiry into the origins of our ideas of the sublime and the beautiful*. New York: Oxford University Press.
- Dehghani, M., Atran, S. Iliev, R., Sachdeva, R., Ginges J. & Medin, D. (2010) Sacred values and conflict over Iran's nuclear program. *Judgment and Decision Making* 5:540-546.
- Dollard, J. (1944) *Fear in battle*. Washington, DC: The Infantry Journal.
- Ehrenreich, B. (1997) *Blood rites: Origins and history of the passions of war*. New York: Holt.
- Fearon, J. (1995) Rationalist explanations for war. *International Organization* 49:379-414.
- Fiske, S. (2004) *Social beings: Core motives in social psychology*. New York: Wiley.
- Ginges, J. & Atran, S. (2011) War as a moral imperative (not practical politics by other means). *Proceedings of the Royal Society B* 27:2930-2938.
- Ginges, J., Atran, S., Medin, D. & Shikaki, K. (2007) Sacred bounds on the rational resolution of violent political conflict. *Proceedings of the National Academy of Sciences, USA* 104:7357-7360.
- Harris, M. (1966) Cultural ecology of India's sacred cattle. *Current Anthropology* 7:261-276.
- Ignatius, D. (2014) James Clapper: We underestimated the Islamic State's 'will to fight'. *Washington Post*, September 18, http://www.washingtonpost.com/opinions/david-ignatius-we-underestimated-the-islamic-state-james-clapper-says/2014/09/18/fof17072-3f6f-11e4-9587-5dafd96295fo_story.html
- Jones, R. (1978) *The wizard war: British scientific intelligence, 1939-1945*. London: Cowan, McCann & Geoghegan.
- Kahneman, D. (2011) *Thinking fast and slow*. New York: Farrar, Straus and Giroux.
- Kathe, C. (2014) A summary of ICSR event in Parliament with Professor Peter Neumann. Quilliam Foundation, London, October 21;

- <http://www.quilliamfoundation.org/blog/charlotte-kathe-a-summary-of-icsr-event-in-parliament-with-professor-peter-neumann/>
- Kruglanski, A. & Gelfand, M. (2013) Motivation, ideology, and the social process of radicalization: A social science Minerva project. *APS Observer* 26(4), <http://www.psychologicalscience.org/index.php/publications/observer/2013/april-13/motivation-ideology-and-the-social-process-in-radicalization.html>
- McManus, J. (2003) *The deadly brotherhood: The American combat soldier in World War II*. New York: Presidio Press.
- McPherson, J. (1997) *For cause and comrades: Why men fought in the Civil War*. New York: Oxford University Press.
- Manchester, W. (1988) *Goodbye darkness: A memoir of the Pacific War*. New York: Random House
- Moskos, C. (1970) *The American enlisted man*. New York: Russell Sage Foundation.
- Moskos, C. (1975) The American combat soldier in Vietnam. *Journal of Social Issues* 3:25-37
- Payne, S. (2014) Obama: U.S. misjudged the rise of the Islamic State, ability of Iraqi army. *Washington Post*, September 28, http://www.washingtonpost.com/world/national-security/obama-us-underestimated-the-rise-of-the-islamic-state-ability-of-iraqi-army/2014/09/28/9417ab26-4737-11e4-891d-713f052086a0_story.html,
- Pincus, M., La Viers, L., Prietula, M., & Berns, G. (2014) Conforming brain and deontological resolve. *PlosOne* 9(8) doi:10.1371/journal.pone.0106061.
- Sageman, M. (2004) *Understanding terror networks*. Philadelphia: University of Pennsylvania Press.
- Schelling, T. (1960) *The strategy of conflict*. Cambridge, MA: Harvard University Press
- Sheikh, H, Ginges, J. & Atran, S. (2013) Sacred values in intergroup conflict: Resistance to social influence, temporal discounting, and exit strategies. *Annals of the New York Academy of Sciences* 1299:11-24.
- Simon, H. (1997) *Models of bounded rationality*. Cambridge, MA: MIT Press.
- Smith, R. (1983a) Why soldiers fight: Part I. Leadership, cohesion, and “fighter spirit.” *Quality and Quantity* 18:1-32.
- Smith, R. (1983b) Why soldiers fight: Part II. Alternative theories. *Quality and Quantity* 18:33-58.
- Spector, R. (1994) *After Tet: The bloodiest year in Vietnam*. New York: Vintage.
- Stouffer, S. et al. (1949) *Studies in Social Psychology in World War II. Volume II: The American Soldier. Combat and its Aftermath*. Princeton: Princeton University Press.

- Swann, W., Buhrmester, M., Gómez, Á., Jetten, J., Bastian, B., Vázquez, A., Zhang, A. (2014) What makes a group worth dying for? Identity fusion fosters perception of familial ties, promoting self-sacrifice. *Journal of Personality and Social Psychology* 106:912-926.
- Swann, W., Gómez, Á., Seyle, C., Morales, J. & Huici, C. (2009) Identity fusion: The interplay of personal and social identities in extreme group behavior. *Journal of Personality and Social Psychology* 96:995-1011.
- Swann, W., Jetten, J., Gómez, Á., Whitehouse, H., & Bastian, B. (2012) When group membership gets personal: A theory of identity fusion. *Psychological Review* 119:441-456.
- Tetlock, P. (2003) Thinking the unthinkable: Sacred values and taboo cognitions. *Trends Cognitive Science* 7:320-324.
- Turchin, P. (2014) 'Devoted Realism': A commentary on Johnson and Toft. *Cliodynamics* 5:148-151.
- Upadhaya, K., Pandey, H., Law, P., & Tripathi, R. (2003) Tree diversity in sacred groves of the Jainata hills in Meghalaya, northeast India. *Biodiversity and Conservation* 12:583-597.
- Whitehouse, H., McQuinn, B., Buhrmester, M., Swann, W. (2014) Brothers in arms: Libyan revolutionaries bond like families. *Proceedings of the National Academy of Sciences, USA* 111, doi: 10.1073/pnas.1416284111.