CHAPTER 6

Sacred Values and Cultural Conflict

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Abstract

This chapter reviews a body of research on sacred values and cultural conflict. Research conducted in the West Bank, Iran, Indonesia, and India reveals that when people transform a resource, idea, or activity into a sacred value, normative approaches to dispute resolution may fail. In a series of experiments, the authors find that offering material incentives to encourage people to compromise over a sacred value will often "backfire" leading to heightened opposition to such compromise. In contrast, culturally sensitive attempts to offer powerful symbolic gestures—such as a painful apology or sacrifice over one's own sacred values—often increase flexibility towards compromise. The chapter also discusses a direction of future research focusing on the way people manage sacred values over time.

Keywords: morality, sacred values, backfire effect, cultural conflict, intractable conflict

1. INTRODUCTION

Most approaches to management of resource and political conflicts assume that parties to disputes are rational actors that weigh the costs and benefits of their choices, treat values as though they are fungible, and then act in a way that maximizes their benefits (Atran, Medin, & Ross, 2005; Ginges, 1997; Varshney, 2003). This approach has the benefit of elegance; it is attractive to scientists and policy makers alike because it suggests consistent modes of decision making, and thus of dispute resolution, across cultures and contexts. Here we review empirical research that suggests this approach is inaccurate.
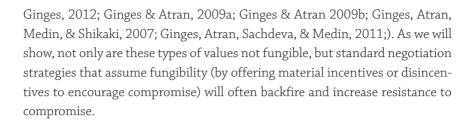
People do not treat all values as fungible. Many of our most important decisions and most significant conflicts are driven by culturally bound "sacred values" (Baron & Spranca, 1997; Tetlock, 2003). The act of classifying the world into the "sacred" and the "profane" appears to be a near human universal; it exists in the most economically and scientifically sophisticated societies, and in isolated societies of hunter gatherers (Rappaport, 1984). It occurs when people believe that a thing (such as a piece of land), or an idea (such as a national right) is not an ordinary preference that can be valued along a metric common with economic goods. Rather, sacred values are treated as moral imperatives that have their own intrinsic value that makes them noncomparable to, and nonfungible with, ordinary or profane values, as when land becomes "Holy Land" (Rozin & Wolf, 2008). Sacred values are things that communities set apart from the economic or profane aspects of everyday life. While there is a clear overlap between sacred values and moral convictions (Graham & Haidt, 2010; Haidt, 2012; Skitka, 2002; Skitka, Bauman, & Sargis, 2005), we can distinguish between these constructs in two ways. First, moral convictions deal with things with a clear moral content. A moral conviction regarding abortion rights for example, involves moral concerns over the rights of a fetus and of a woman over her body. While some sacred values may be awe inspiring constructs like a god, sacred values can be relatively everyday items, with no clear moral properties such as an amulet, a rock, or a lake (Durkheim, 1912). Second, it is not clear whether all moral convictions are sacred values. In our research, not all things considered virtues are classified by participants as sacred; moreover, there is no correlation between the importance of moral virtues and their likelihood of being sacred.

The act of classification or separation from the profane or economic world gives sacred values their meaning. Their defining characteristic is a taboo against considering sacred values as fungible with economic things or valuing sacred values along a material or monetary scale (Ginges et al., 2007). This taboo leads to noninstrumentally rational commitments to a set of beliefs, practices, or places that might serve to both unify people within groups, and create conflicts between groups. While sacred values appear ubiquitous across cultures, specific sacred values are cultural products—the distinction between what is mundane and what is sacred varies widely across cultural contexts—and thus a great deal of cultural knowledge and sensitivity is required when seeking to achieve cooperative outcomes in cross-cultural interactions. The research we will review here demonstrates that people seem to apply different rules when making decisions about mundane versus sacred values (Atran &

Ginges, 2012; Ginges & Atran, 2009a; Ginges & Atran 2009b; Ginges, Atran, Medin, & Shikaki, 2007; Ginges, Atran, Sachdeva, & Medin, 2011;). As we will show, not only are these types of values not fungible, but standard negotiation strategies that assume fungibility (by offering material incentives or disincentives to encourage compromise) will often backfire and increase resistance to compromise.

II. SACRED VALUES AND THE MATERIAL WORLD

"The sacred and profane are always and everywhere conceived by the human intellect as separate genera, as two worlds with nothing in common...They are different in kind...The mind experiences a deep repugnance about mingling"

—Emile Durkheim, The elementary forms of religious life

We began our research program motivated in part by the following dilemma. Our previous research and experience working in Israel, Palestine, Indonesia, and Guatemala suggested that theories of bounded rationality were insufficient to account for many significant behaviors. To illustrate, while carrying out research with Jewish Israelis living in the West Bank, we noticed a disconnect between material fears for safety and actual behaviors. Frequently our participants, driving between their homes in the West Bank and Israel, would take the dangerous route of driving through Palestinian villages instead of taking roads that had been controversially built on expropriated Palestinian land, to allow Jewish Israelis to bypass these villages safely. In interviews it became clear that this type of behavior was not driven by hubris (drivers were aware of and concerned about dangers), or because people were trading off the increased dangers for some other type of benefit. Rather, all their behaviors were driven by a sense of duty to values. For example, in one interview we asked a settler why they did not do more to protect their settlement and houses. He replied that they should not have to do these things because "we belong here." These anecdotal observations were supported by empirical research showing, for example, that willingness to engage in acts of violence could be predicted not by the perceived efficacy of such acts, but by a belief that violence was morally mandated (Ginges & Atran, 2009a, 2011). Self-immolation, suicide attacks, and hunger strikes are the extreme ends of human behaviors often carried out not as a result of some type of calculation regarding costs and benefits, but as a consequence of the constraint of choice that is associated with perceived moral obligations. Thus, regardless of utilitarian calculations

of terror-sponsoring organizations, suicide terrorists as well as their leaders appear to act as "devoted actors" rather than "rational actors," in the sense of a willingness to make extreme sacrifices based on a deontological evaluation of "appropriateness" rather than an instrumental calculus (Bennis, Medin, & Bartels, 2010).

A. Initial Empirical Investigations into Sacred Values

Despite the prevalence and importance of such behavior, relatively little work had been done investigating the behavior driven by deontological rather than instrumental logic. One exception was two related lines of research into "protected" or "sacred" values. In a series of experiments with college students in Philadelphia, Baron and Spranca (1997) showed that people will frequently refuse to compromise a position no matter how great the benefits were. For example, one experiment asked participants about genetic engineering to (in one condition) increase a child's intelligence from 100 to 110. Participants were asked how much they would be willing to pay extra in medical costs to allow this procedure to be available to all who wanted it, and what was the least that they would have to save per year in health costs to allow this genetic engineering to be available. A large proportion of participants (more than 20%) were against this type of genetic engineering regardless of the costs. To Baron and Spranca (1997), this was evidence of what they termed a protected value, defined as a value to which one had absolute commitment and could not be traded off. They cogently argued that these types of values were widespread and poorly understood. From their perspective, such values posed a problem as they blocked reasonable utilitarian attempts to value all things along a common scale—attempts they regarded as important for a society seeking to maximize the value satisfaction of all.
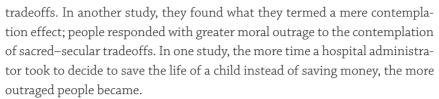
A few years later, Tetlock et al. (2000) published a study into what they termed "sacred values" which, similarly to protected values, were defined as values that people treated as having infinite or transcendent value that precluded any tradeoffs. For example, in one study with college undergraduates they found that people expressed more moral outrage when thinking about sacred–secular tradeoffs (such as prostitution, the buying and selling of human body parts, or the buying of electoral votes) than when thinking of secular–secular tradeoffs (such as paying someone to clean their house, a doctor for medical services, or a lawyer for legal services). Moreover, in a result interpreted as "moral cleansing," most participants were more willing to volunteer time to fight a fictional ballot that sought to legalize the buying and selling of child adoption rights only if that item occurred after exposure to the sacred–secular

tradeoffs. In another study, they found what they termed a mere contemplation effect; people responded with greater moral outrage to the contemplation of sacred–secular tradeoffs. In one study, the more time a hospital administrator took to decide to save the life of a child instead of saving money, the more outraged people became.

Both these lines of research offered promising means of understanding the types of behaviors we were interested in exploring. However, the following problem arose: although we were interested in investigating the way sacred values could propel people into making choices that were seemingly non rational (like killing oneself in protest), those carrying out research into protected and sacred values doubted their verity. Baron and Spranca (1997) noted that absolute values must be impossible to satisfy and, in a series of experiments with college students, Baron and Leshner (2000) found that when asked to think of cases where in the real world compromise might be made, participants reported fewer protected values.

Similarly, Tetlock (2003) argued that sacred values are "pseudo sacred." He began with the following premise: while people are generally sincere when they claim a value to be sacred, such sacredness is impossible. In a real world of scarce resources, he argued, we have to put a material price on everything. Tetlock (2003) portrays people as taking a delicate tightrope walk, attempting to adhere to sacred values associated with their social identities in a way that still satisfies their need to interact with the finite material world around them. He argues that to manage this clash, people are easily swayed by attempts of elites to reframe sacred values as secular, or taboo tradeoffs (between a sacred value and a material one) as tragic tradeoffs, (between sacred values). As evidence, he cites Baron and Leshner (1999) as well as one of his own studies where he found that apparently absolute opposition to selling body organs on the marketplace was substantially reduced when, for example, it was emphasized that this trade would save many lives.

It is interesting that Tetlock, Baron, and colleagues seemed to begin from a very different perspective than we did. Tetlock (2003) starts with the observation that people often (and must) renege on apparently sacred commitments in the real world. He called this the "reality constraint" principle. He then empirically demonstrated how that might happen (e.g. McGraw & Tetlock, 2005). We began with the opposing perspective, with the realization that many behaviors in human history are carried out in spite of material concerns. Humans fight and kill in the name of abstract and often indefinable values—like god or country or history (Atran, 2003; Atran & Ginges, 2012; Ginges & Atran, 2011). If sacred values were so easily reframed, and if people

were so willing to turn their backs to ostensibly sacred commitments, then it is hard to imagine why anyone other than the most deranged would give their most precious resource to a cause.

B. The Backfire Effect

An initial goal of our research was to develop an experimental paradigm that could investigate the effect of material incentives to compromise over values considered sacred. Our experiments differed from previous psychological research into sacred or protected values which tended to use unrealistic hypothetical scenarios, often involving multiple values, in experiments run primarily with undergraduate students (Baron & Spranca, 1997; McGraw & Tetlock; 2005; Tetlock et al., 2000). While Tetlock (2003) described research that attempted to show reality constraints on sacred values, we were more interested in determining whether we could demonstrate the way sacred values often seemed to confound material interests. To do this we ran experiments using realistic hypothetical scenarios involving values that were central to the lives of our participants and their communities who were sampled from key populations involved in political disputes.
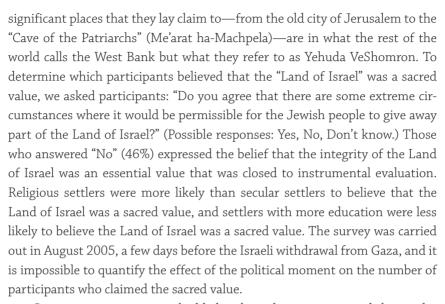
1. An Initial Study: Jewish Israeli "Settlers"

In September 2005 we conducted our first field experiments (Ginges, Atran, Medin, & Shikaki, 2007) in the West Bank and Gaza to test the effect of different forms of incentives on the willingness of a representative sample of 601 Jewish settlers to compromise over two key issues in the Israeli–Palestinian conflict: exchanging land for peace, and recognizing the legitimacy of the right of return for Palestinian refugees. "Settlers" is a term used to refer to Jewish Israelis who choose to live in territories that Israel occupied, but did not annex, after the 1967 war. We should note that in Israel the term "settler" in Hebrew is a contested one, which we use here for the sake of convenience. The settler community is not homogeneous; some settlements are religious, others secular or mixed. Some settlers live in occupied territories for economic reasons, while others do so out of moral or religious convictions. The latter tend to be motivated by the idea that the Jewish people should "reclaim" the entire Land of Israel (Eretz Israel). One experiment dealt specifically with the sacredness of "Eretz Israel," which is a term that does not refer specifically to the modern State of Israel, but is a more abstract biblical concept with variable boundaries. Notwithstanding its abstractness, to religious settlers many of the more

significant places that they lay claim to—from the old city of Jerusalem to the "Cave of the Patriarchs" (Me'arat ha-Machpela)—are in what the rest of the world calls the West Bank but what they refer to as Yehuda VeShomron. To determine which participants believed that the "Land of Israel" was a sacred value, we asked participants: "Do you agree that there are some extreme circumstances where it would be permissible for the Jewish people to give away part of the Land of Israel?" (Possible responses: Yes, No, Don't know.) Those who answered "No" (46%) expressed the belief that the integrity of the Land of Israel was an essential value that was closed to instrumental evaluation. Religious settlers were more likely than secular settlers to believe that the Land of Israel was a sacred value, and settlers with more education were less likely to believe the Land of Israel was a sacred value. The survey was carried out in August 2005, a few days before the Israeli withdrawal from Gaza, and it is impossible to quantify the effect of the political moment on the number of participants who claimed the sacred value.

Our experiments were embedded within a larger survey, and their order within the survey was assigned randomly to each participant by using computer-assisted telephone interviewing, so that there were no order effects in responses. Participants were randomly assigned to one of two experiments, and then were randomly assigned to respond to one of three different conditions within each experiment. In our analyses we pooled results across both experiments. In the "Land of Israel" experiment, participants were asked to imagine that the United States had organized a peace deal between Israel and the Palestinians, and that the terms of the deal were the following:

A. Israel would give up its sacred right to certain parts of Eretz Israel by giving up 99% of Judea, Samaria, and Gaza.
B. Israel would not be required to absorb ANY Palestinian refugees.
C. There would be two states—a Jewish State of Israel and a Palestinian state.

In one condition, the "taboo" condition, participants responded to this deal only. In two other conditions we varied the nature of the incentives offered. In the "taboo+" condition we added a material incentive to sweeten the above deal: participants were told that the United States would give Israel $1 billion a year for 100 years. In the "symbolic" condition participants were told that Palestinians would renounce their sacred value of the "right of return." Note that this symbolic deal was practically redundant because the deal being offered precluded any Palestinian refugees being absorbed by Israel in any

case. In this and other experiments we investigated whether the symbolic gesture might have some secondary material value by increasing participant's trust that the other side would adhere to the deal, by asking participants to rate the extent to which they thought the deal would be peacefully and successfully implemented. In no experiments did the symbolic deal enhance a belief in implementability.

The second experiment dealt with the "right of return" for Palestinian refugees, which is another key issue in the Israeli–Palestinian conflict. As we shall see most Palestinians regard as sacred the right of Palestinian refugees, and their descendants, to return to their former lands and homes in what is now the State of Israel. In 2007 when Jordan's King Abdullah II suggested Palestinian refugees might be compensated, Mousa Abu Marzouk (then deputy head of Hamas's political bureau) responded that the right of return was "sacred" (mukades) and could not be given away by any authority. Most Israelis regard recognition of this right as an existential threat to their independence and, perhaps for this reason, participants in a pilot study reacted with such hostility to a sacred value question ("Do you agree that there are some extreme circumstances where it would be permissible for Israel to recognize the Palestinian right of return") that we were required to drop the item from our survey. We did however include an experiment regarding the right of return, where participants were asked to imagine that the United States had organized a peace deal between Israel and the Palestinians, and that the terms of the deal for those in the taboo condition were the following:

- Israel would be required to symbolically recognize the historic legitimacy of the right of Palestinian refugees to return. However, Israel would not be required to absorb ANY Palestinian refugees.
- This treaty would result in two states—a Jewish State of Israel and a Palestinian state that would take up 99% of Judea, Samaria, and Gaza.

In the taboo+ condition, we offered the following material incentive: "In return, the people of the Jewish state of Israel would be able to live in peace and prosperity, free of the threat of war or terrorism." In the symbolic condition, participants were told instead that: "On their part, Palestinians would be required to recognize the historic and legitimate right of the Jewish people to Eretz Israel." Note that the symbolic incentive in this experiment (as with the first experiment) is instrumentally equivalent to the "taboo" deal. Palestinians "giving up" the right of return (in the "symbolic" deal, Experiment 1), has no

material value because, in all types of deals presented, no Palestinians were allowed to return. Palestinians recognizing the legitimacy of the State of Israel (in the "symbolic" deal, Experiment 2) is again without material meaning because each deal explicitly includes a Jewish State of Israel alongside the Palestinian state. In contrast, the taboo+ deal is instrumentally superior to the taboo and symbolic deals. In Experiment 1, the taboo+ deal involves a monetary incentive, and in Experiment 2, the taboo+ deal promises freedom from violence and a life of peace.

Because we were not able to ask the sacred values question relevant to Experiment 2, we used the sacred values question regarding Eretz Israel to compare "moral absolutist" (those for whom land was a sacred value) with "nonabsolutists." We found no interaction, for any measure, between participant type (moral absolutists vs non absolutists), experiment (Land or Return) and experimental condition. Thus our analyses pooled results from both experiments.

After they heard about a hypothetical peace deal, we asked participants to describe their affective response, their support for violent opposition to the deal, and how implementable they believed the deal was. To measure emotional responses, participants were asked "which of the following words best describes how you would feel about an Israeli leader who would sign such a deal: pity, disgust, approval, anger, or neutral?" Because pretesting suggested that direct measures were unlikely to be answered by participants because of political and legal sensitivities, we used an indirect measure by asking participants to estimate the percentage of "typical settlers who would use violence to oppose this agreement." This measure took advantage of the highly robust finding of a positive correlation between people's own opinions and preferences with their estimates of the relative frequency of these opinions and preferences in the population (Marks & Miller, 1987). Thus, an expectation of levels of violence was used as an indirect measure of each participant's own preferences for violent responses.

We first tested the expectation that (i) across conditions, moral-absolutists would display more emotional outrage and support for violence than nonabsolutists; (ii) moral-absolutists for whom deals involved compromises over sacred values would irrationally report more emotional outrage and greater support for violence when responding to taboo+ deals compared with taboo deals; and (iii) nonabsolutists for whom peace deals involved compromises over strong preferences would rationally report less emotional outrage and support for violence in response to taboo+ deals compared with taboo deals

because the former deals included added instrumental incentives. To test these hypotheses we used the following focused contrasts (weights in parentheses) to test the expectation of the following order between conditions: Sacred Value/Taboo+ (+3) > Sacred Value/Taboo (+1) > Preference/Taboo (–1) > Preference/Taboo+ (–3). This linear contrast proved statistically significant for measures of support for violence and emotional outrage.

While moral absolutist participants responded negatively to material incentives, we predicted that antagonism to taboo tradeoffs would decrease if tradeoffs involved equitable losses over sacred values by both sides. This hypothesis was motivated by the observation that people appear to have a desire for equitable outcomes with a disregard to instrumental consequences (e.g. Nowak, Page, & Sigmund, 2000). We reasoned that in the case of sacred values, the desire that the other side suffer equally meant that their loss must also be in the sacred domain. Thus, we predicted that those who hold sacred values would be less antagonistic to compromise over those values if the adversary suffers a similar loss over their own sacred values, even if the adversaries' loss does not instrumentally alter the compromise deal at hand. Indeed, moral-absolutists responding to the symbolic deals, compared with those responding to taboo and taboo+ deals, showed less emotional outrage and support for violence.

These results provided the first evidence for what we were later to term the "backfire effect." Our finding that offering participants materially improved deals increased hostility to compromise for moral absolutists, while decreasing hostility for non–moral absolutists suggested that people with a relevant sacred value will ignore reality constraints. Just as interesting, the results suggested that whereas sacred values might be protected from material tradeoffs, symbolic tradeoffs could lead to some flexibility.

2. Palestinian refugees and students

A few months later, we found further support for these results with a sample of 535 Palestinian refugees (collected in November 2005). Among Palestinian refugees more than 80% regarded the right of return as a sacred value. In one experiment, refugees were asked to give up the right of return in exchange for their own state in the West Bank and Gaza, plus a national financial incentive (in the taboo+ condition) or a symbolic renunciation of Israel's claim to the West Bank (in the symbolic condition). In a second experiment, refugees were asked to recognize the legitimacy of the Jewish State in return for their own state in the West Bank and Gaza, plus the material incentive of a life

free of violence (in the taboo+ condition) or symbolic Israeli recognition of the right of return (in the symbolic condition). This experiment was run by a Palestinian survey organization expert in conducting representative polling of Palestinians in a difficult political climate. Surveys were conducted face-to-face, and the organization was required to negotiate extensive difficulties in travel restrictions due to Israeli roadblocks. However, inexperience with experimental methods led to an error: rather than random assignment to individuals, conditions were randomly assigned to neighborhood. Our analyses took into account neighborhood variation finding similar results to the settler study, but we lacked the sample size to compare absolutists with nonabsolutists. Despite this limitation we replicated the settler finding: adding material incentives increased opposition to peace deals, whereas adding symbolic Israeli gestures decreased opposition to peace deals.

Both the Israeli settler study and the Palestinian refugee study revealed the potential and the drawbacks of running experiments embedded in large surveys of ordinary people in conflict zones. In the Israeli study, hostility to the inclusion of some items, and in the Palestinian experiment the unfamiliarity of our colleagues with the experimental method, meant analyses that were not as clean as those typically found in laboratory studies. At the same time, we were able to conduct studies with large samples of populations of ordinary Palestinians and Israelis that were central to the conflict and use realistic scenarios. A year later we built on the training of the Palestinians survey organization, and our own lessons, to design a tighter set of experiments to investigate the moral logic used to reason about sacred values.

We surveyed 719 Palestinian students from 14 Palestinian university campuses throughout the West Bank and Gaza in May–June 2006, a month before the Israeli reentry into Gaza. The sample consisted of approximately equal numbers of students who self-identified as Islamists (50.1%) and Nationalists (49.9%) and of males (49.9%) and females (50.1%). The median age of respondents was 20 (range: 18–38). Thirty-six percent said their family lived below the official poverty line (1700 NIS monthly), 23% said their family was on the poverty line, and about 30% were above the poverty line. The experiments were embedded within a larger survey carried out by the Palestinian Center for Policy and Survey Research. All respondents participated in two experiments, one of which occurred at the start of the survey and the second at the end. Participants were randomly allocated into the taboo+, taboo, or symbolic conditions and were in the same condition for both experiments. Both experiments measured reactions to a peace deal. All deals (and all measures in each experiment) were subjected to rigorous pretesting to ensure transpar-

ency of meaning and comprehension. One experiment dealt with the issue of Palestinian sovereignty over East Jerusalem, and the other with recognition of the legitimacy of the Jewish State. We measured, in an unrelated segment of the survey, whether participants regarded either of these issues as a sacred value, finding that 57.9% of the sample were moral-absolutists who rejected any compromise over either the Palestinian right of return and Palestinian sovereignty over Jerusalem no matter how great the benefit to the Palestinian people. Self-identifying Islamists were more likely to be moral-absolutists than Nationalists and frequency of Mosque attendance (but not prayer) positively predicted the likelihood of being a moral-absolutist.

In Experiment 1, the taboo deal involved a peace treaty that required Palestinians to "recognize the sacred and historic right of the Jewish people to Israel" in return for a Palestinian State created in 99% of the West Bank and Gaza. Those in the taboo+ condition were given the additional material incentive: "On their part, Israel will pay Palestine 1 billion U.S. dollars a year for 10 years." Those in the symbolic condition were not given the added material incentive but instead heard about a symbolic gesture: "On their part, Israel will recognize the historic and legitimate right of the Palestinians to their own state and would apologize for all of the wrongs done to the Palestinian people." In Experiment 2, Palestinians were asked to give up sovereignty over East Jerusalem in return for a Palestinian state. Those in the taboo+ condition were given the additional material incentive: "On their part, Israel will pay each Palestinian family 1000 U.S. dollars a year for 10 years in economic assistance." Those in the symbolic condition were not given the material incentive but only a symbolic gesture: "On their part, Israel would formally declare that it gives up what it believes is its sacred right to the West Bank."

Again, note that the symbolic deal is instrumentally equivalent to the taboo deal. Israel "giving up" its rights to the West Bank (in the symbolic deal, Experiment 2) or recognizing the Palestinian state (in the symbolic deal, Experiment 1) are purely symbolic gestures because in all types of deals presented, a Palestinian State would be created on the West Bank. In contrast, the taboo+ deal is instrumentally superior to the taboo and symbolic deals, involving different types of monetary incentives. After they heard about a hypothetical peace deal, we asked participants to describe their affective response, their support for violent opposition to the deal and how implementable they believed the deal was. To measure emotional responses, participants were asked: "which of the following words best describes how you feel about this deal: pity, disgust, approval, anger, or neutral?" We then asked them to indicate which of

these emotions also described their emotional responses. We created an index of emotional outrage by giving participants a score of "4" if they used anger or disgust to describe both their first and second emotional response, a score of "3" if they used only anger or disgust to describe their first emotional response, a score of "2" if they only used anger or disgust to describe their second emotional response, and a score of "1" if participants never nominated anger or disgust as an accurate description of their emotional reactions. We again used an indirect measure of support for violence by asking participants to estimate the percentage of typical Palestinians who would "support a campaign of suicide attacks to oppose this agreement" (in Experiment 1) and would "martyr themselves in a suicide attack to oppose this agreement" (in Experiment 2).

We first tested the expectation that (i) across conditions, moral-absolutists would display more emotional outrage and support for violence than nonabsolutists; (ii) moral-absolutists for whom deals involved compromises over sacred values would irrationally report more emotional outrage and greater support for violence when responding to taboo+ deals compared with taboo deals; and (iii) nonabsolutists for whom peace deals involved compromises over strong preferences would rationally report less emotional outrage and support for violence in response to taboo+ deals compared with taboo deals because the former deals included added instrumental incentives. To test these hypotheses, we used the following focused contrasts (weights in parentheses) to test the expectation of the following order between conditions: Sacred Value/Taboo+ (+3) > Sacred Value/Taboo (+1) > Preference/Taboo (–1) > Preference/Taboo+ (–3). This linear contrast proved statistically significant for measures of support for violence and emotional outrage in both Experiment 1 and Experiment 2.

For moral-absolutists, the greater opposition to taboo+ compared with taboo deals was statistically reliable for emotional outrage in Experiment 1, and support for violence in both experiments. We then tested the expectation that moral-absolutists responding to the symbolic deals would, compared with those responding to taboo and taboo+ deals, show less emotional outrage in both experiments. In neither experiment was this hypothesis supported for measures of support for violence. In a subsequent analysis we found that positive responses to these symbolic tradeoffs were partly mediated by a reduction in experienced humiliation of those asked to contemplate trading off their sacred values for peace (Ginges & Atran, 2008)

In 2007, we interviewed 14 Palestinian and Israeli political leaders and we systematically included some of our tradeoff scenarios (Atran, Axelrod,

& Davis, 2007; Atran & Ginges, 2009). Responses were consistent with our previous findings, with one important difference. Previously, we had found that people with sacred values responded "No" to the proposed tradeoff; "No" accompanied by emotional outrage and increased support for violence to the tradeoff coupled with a substantial and credible material incentive; and "Yes, perhaps" to tradeoffs that also involve symbolic concessions (of no material benefit) from the other side. Leaders responded in the same way, except that the symbolic concession was not enough in itself, but only a necessary condition to opening serious negotiations involving material issues as well. For example, Musa Abu Marzouk said "No" to a tradeoff for peace without granting a right of return; a more emphatic "No, we do not sell ourselves for any amount," when given a tradeoff with a substantial material incentive (credible offering of substantial U.S. aid for the rebuilding of Palestinian infrastructure); but "Yes, an apology is important, as a beginning. But it's not enough, because our houses and land were taken away from us and something has to be done about that." Similarly, Binyamin Netanyahu (former Israeli opposition leader in parliament and current Prime Minister) responded to our question, "Would you seriously consider accepting a two-state solution following the 1967 borders if all major Palestinian factions, including Hamas, were to recognize the right of the Jewish people to an independent state in the region?" with the answer: "Yes, but the Palestinians would have to show that they sincerely mean it, change their textbooks and anti-Semitic characterizations and allow some border adjustments to prevent shoulder-fired missiles from reaching [sensitive installations and population centers]."

In standard negotiation theories, the resolution of divergent or conflicting positions best advances through a "business-like" approach under the assumption that: "Negotiation . . . is the process of determining the price and currency in a barter" (Zartman, 2008:2). Because of the emotional unwillingness of those in conflict situations to barter sacred values, conventional wisdom suggests that negotiators should either leave sacred values for last in political negotiations or should try to bypass them with sufficient material incentives. Our findings indicate that conventional wisdom is wrong. In fact, offering to provide material benefits in exchange for giving up a sacred value actually makes settlement more difficult because people see the offering as an insult rather than a compromise. But we also found that making symbolic concessions of no apparent material benefit might open the way to resolving seemingly irresolvable conflicts by first showing recognition, if not respect, for the other side's core values so as to then make negotiations over specific material issues and disputes even possible.

3. Summary

These experiments built on earlier research into sacred or protected values, by demonstrating that claims to sacred values were more than posturing. Although a large body of work into judgment and decision-making has demonstrated the ways in which normative rules of rationality are systematically violated when people make decisions aimed at achieving instrumental outcomes such as maximizing profit (Axelrod, 1984; Kahneman & Miller, 1986; Ostrom, 1998), our results showed that people with sacred values did not reason instrumentally. We were able to show that people with sacred values responded with greater hostility to compromises over those sacred values when such compromises included material sweeteners to the deal. In contrast, they responded with decreased hostility when the other side made symbolic gestures. We believed that these results have significant implications for understanding the trajectory of many cultural, resource, and political conflicts, implying that attempts to solve disputes in a bargaining setting by focusing on increasing the costs or benefits of different actions can backfire, if people conceived of the issue as sacred.

4. The backfire effect *in Other Contexts: Indonesia, Iran, and India*

In our original report (Ginges et al., 2007), we argued that the implications of these findings were broad because literally any thing or idea could take on sacred properties. In many cases, sacred values have a long history and are embedded in religious narratives. For example, we first replicated the backfire effect outside of the Palestinian–Israeli context in a survey of 102 Indonesian students attending one of three different religious boarding schools. In this experiment we used a within subjects design showing that participants were more hostile to compromise over aspects of Sharia law if offered national material incentives (Ginges & Atran, 2009b). In other cases mundane values can take on sacredness rather quickly, and include values without obvious religious content, including activities (such as hunting a particular animal or farming a certain crop), or ideas (such as obtaining a nuclear weapon). A series of experiments led by Morteza Dehghani (Dehghani et al., 2009, 2010), tested the last notion by investigating the sacredness of the Iranian nuclear program. This research is notable for a number of reasons. First, it suggested that the nuclear program might be an emerging sacred value in Iran. This idea was grounded in the observation that while rhetoric concerning the Iranian nuclear program in the United States focused on consequences, in Iran government discussions of the nuclear program were embedded in narratives concerning national

rights and past historical injustices. This study then attempted to replicate the backfire effect in the case of a relatively novel sacred value. A second noteworthy feature of these studies was the use of careful experimentation to isolate the specific aspect of the nuclear program that was sacred to many Iranians.

The first experiment involved 75 Iranians that were recruited online. Eleven percent of participants (N = 8) regarded Iran's "nuclear program" to be a sacred value, reporting that Iran should not give up its nuclear program "no matter how great the benefits." Participants were randomly assigned to one of two conditions. In the taboo condition participants were asked to imagine a hypothetical situation where Iran would give up its nuclear program and at the same time the United States would drastically reduce its military aid to Israel. In the taboo+ condition, participants heard about the taboo deal with the following material incentive: "In addition the EU will pay $40 billion to Iran." Participants were then asked to predict the extent to which Iranians would approve of the deal, and the extent to which Iranians would be angry about the deal. In spite of the low number of participants who claimed a sacred value, responses to the different deals were significantly moderated by whether or not the deal violated a sacred value. While those for whom the deal did not invoke a sacred value were indifferent between the two conditions, those for whom the nuclear program was sacred responded with greater predicted anger and less predicted support if they heard about the materially improved deal (taboo+). Clearly this study was limited by the small number of participants, yet it offered suggestive proof that the nuclear issue had the potential for acquiring sacredness for some Iranians, and that people may reason about this type of emerging sacred value similarly to Palestinians and Israelis reasoning about their sacred values.

Two follow-up experiments described in Dehghani et al. (2010) built on this finding in two ways. Recruiting larger samples, these experiments attempted to replicate the initial experiment while also disambiguating the sacredness of Iran's nuclear program. Many outside Iran view the nuclear program with trepidation, imagining attachment to the program is equivalent to an attachment to developing weapons of mass destruction. An alternative possibility is that the nuclear program was acquiring sacredness less because of its destructive capability and more because it symbolized issues of independence, scientific advancement and status. Second, these experiments investigated the effect of material disincentives in addition to material incentives. Material disincentives are particularly relevant to this context, where economic sanctions are used to attempt to influence Iranian policy making their inclusion particularly interesting.

In one experiment (N = 1418) conducted online in Farsi, 14% of participants regarded Iran's "nuclear energy program" to be sacred, reporting a belief that it should not be stopped "no matter how great the benefits are." Participants were randomly assigned to three conditions: taboo, taboo+, and taboo−. Those in the taboo condition read about the following hypothetical situation:

> Iran will give up its program for developing nuclear energy and surrender the current nuclear facilities to the UN; in return Israel will give up their program for developing nuclear energy and surrender the existing nuclear facilities to the UN.

Those in the taboo+ condition read about this deal, along with the material incentive of $40 billion given to Iran by the United Nations, while those in the taboo− condition were instead given a material disincentive: "...if Iran does not accept this deal, the United Nations will impose additional sanctions on Iran." Participants then rated their willingness to accept the deal, and predicted how angry Iranians would be. As in the previous study, no difference was found in reaction to the different deals for participants without a sacred value. However for those with a sacred value a familiar story emerged; these participants responded to financial incentives and disincentives with less approval and more anger. Again, normative methods of applying influence to other parties in a dispute backfired.

A second experiment (N = 579), replicated the experiment just described with one difference; it replaced "nuclear energy program" with "nuclear weapons program." Intriguingly, whereas a similar percentage regarded the nuclear weapons program to be a sacred value, in this case the backfire effect was not replicated. While different interpretations are available, the evidence suggests that those who hold the nuclear program as sacred do so not because of its ability to provide weapons of mass destruction, but for other reasons—what the program implies about the independence and advancement of Iranian society. Other evidence supported this suggestion. Participants in the nuclear energy experiment, compared to those in the nuclear weapons experiment, showed stronger agreement with the idea that the nuclear program was needed for Iranians to be treated with respect, that the program was a religious duty and that it was an Iranian value. One interesting implication (apart from what this finding reveals about how Iranians think about developing their own nuclear capabilities) is that studying the backfire effect may provide important information regarding the nature of sacred issues in a given context. The typical measure of sacred values, where participants are asked whether they would

compromise on something in return for great benefits is vulnerable to posturing. Studying the backfire effect negates this possibility and so can be used to reveal what aspects of an issue a population regards as sacred.

A study by Sonya Sachdeva and Douglas Medin (2009) revealed something similar. They investigated sacred values around two contentious disputes among Hindus and Muslims in northeastern India. One dispute about Hindu–Muslim ownership of the Babri Mosque. Hindus claim the site as the birthplace of the deity Ram, whereas Muslims lay their own claim. The dispute over the site has led, in early 1990s, to the worst sectarian violence since the partition of India. The second dispute was over Kashmir, a predominantly Muslim region that borders Pakistan, two thirds of which lies within Indian territory. The residents of Kashmir have struggled for autonomy from India, and the dispute has led to fighting between India and Pakistan. Sachdeva and Medin (2009) began with the presumption, gleaned from pilot interviews, that although these issues were important to both Hindus and Muslims, the Kashmir issue was more salient for Muslims and more closely tied to their collective identity. In contrast, ownership of the Babri Mosque seemed a more important issue for Hindus than Muslims. They recruited 53 participants from two neighboring towns—one predominantly Muslim and the other predominantly Hindu—in Uttar Pradesh. Participants responded to deals regarding both Kashmir and the Babri Mosque. Participants either responded to taboo deals (the baseline scenario), taboo+ deals (taboo deals plus a material incentive), or tragic deals (taboo deals plus a symbolic concession by the other side). To illustrate, the baseline deal for the Babri Mosque participants involved splitting the site in half, "with one half for a temple to Ram and another as a monument to the Masjiid (Mosque)." In the taboo+ condition, participants learned that the other side would pay them 10 million Rupees each year for 10 years. In the tragic condition the other side recognized the historical narrative of the participant's identity group. For example, Muslim participants learned that Hindus would "recognize the historic and legitimate right of the Muslims to the Babri Masjiid and will apologize for all the wrongs done to Muslims." Following the presentation of the deal participants were asked whether they approved or disapproved, their likelihood of voting for the deal, and if they felt anger about the deal. We should be careful about interpretations of results because of the relatively small number of participants, but they were as follows: the backfire effect was replicated (more opposition to the taboo+ than the taboo deal for participants with a relevant sacred value) in the Muslim sample for the Kashmir issue but not the Babri Mosque, and replicated in the Hindu sample for the Babri Mosque issue but not Kashmir.

An important issue that both the Iranian and Indian studies raise is that in some cases claims to sacred values may be posturing, perhaps designed to secure a strong bargaining position. One possibility is that in some conflicts—such as that between Muslims and Hindus—one side may adopt a sacred stance reflecting that of the other group; however, such a stance may not be deeply felt or incorporated into the relevant collective identity. This remains an interesting hypothesis in need of testing. Yet clearly, from a practical perspective, the Iranian and Indian results suggest that studying the backfire effect can reveal subtle cultural differences in the sacredness of different issues.

One characteristic of our research program is that unlike work which begins in Europe or North America and then investigates a phenomenon in another culture, we began our research in the Middle East and only subsequently investigated sacred values in North America. In collaboration with Emory University (Berns et al., 2012) we recently investigated neural processing of sacred values. We utilized an experimental paradigm that used integrity as a proxy for sacredness and which paid money to induce individuals to sell their personal values. Using functional magnetic resonance imaging (fMRI), we presented participants with a set of values, asked them to choose between them, and then offered them a chance to sell off their choice. In the first "passive phase" of the experiment, participants were presented, under the scanner, with 124 statements involving 62 issues that ranged from items dealing with religious issues (e.g. belief in God) and moral issues (e.g. harming an innocent person) to the mundane (e.g. a preference for Macs over PCs). In subsequent phases participants were asked to choose between two pairs of statements (e.g, "You believe in God/You do not believe in God"), and were then asked if they would be willing to sell off their belief. For example, participants who did not believe in God (or who were "Mac people") were asked to nominate a dollar amount to sign a report disavowing their preference. Participants were given the option of opting out—refusing to nominate a monetary amount, which was taken as one indication of a sacred value. Out of the scanner, people were given the option of auctioning off their belief for any amount of money between $1 and $100. The higher the amount of money, the less chance they had of winning the money. Again, a decision not to participate was taken as an indication of a claim to a sacred value.

We were interested in distinguishing between two interpretations of sacred values. One interpretation of refusals to sell off sacred values is simply that people have not been offered enough money to do so. If a refusal to sell off a value was indicative of greater utility of that value, then passive processing of that value should be associated with greater activation in brain

regions associated with processing utility, such as the ventromedial prefrontal cortex (VMPFC), striatum/nucleus accumbens, and parietal cortex. We found instead that sacred values were associated with increased activity in the left temporoparietal junction (TPJ) and ventrolateral prefrontal cortex (VLPFC), regions previously associated with semantic rule retrieval. This suggests that sacred values affect behavior through the retrieval and processing of deontic rules and not through a utilitarian evaluation of costs and benefits.

One emerging finding about sacred values is that they are relatively resistant to social influence. For example, in a recent study with a representative sample of Palestinians we primed participants with one of three conditions: we asked participants about their opinion on either the Israeli-Palestinian conflict in general (control group), Palestinians' support of control over borders and airspace (Sovereignty: Palestinian support), or Israeli opposition to this demand (Sovereignty: Israeli rejection). We then asked all participants to rank order a list of eight virtues, including sovereignty over borders from the perspective of things that were important for Palestinian children to be taught. Other virtues included alms giving, belief in God, and protecting the family. In a different part of the survey we asked participants whether it was permissible for Palestinians to consider compromising over the issue of border and airspace sovereignty if compromising would bring a great benefit to Palestinians (response options were "Yes," "No," "Don't know"). Those who answered "No" (84%) were considered to be claiming a sacred value. The relative rank of sovereignty was influenced by the experimental manipulation, for those who did not claim it as a sacred value. If sovereignty was not a sacred value, Israeli opposition and Palestinian support for the issue increased its importance relative to the conflict condition (approximately by one rank for the Palestinian support condition and one and a half ranks for the Israeli opposition condition). However, if sovereignty was a sacred value, it was resistant to social influence. As an aside, we note that in this and in other studies, there is no clear relationship between whether a virtue is sacred and its relative rank. This suggests that while some moral virtues are sacred some are not, and that sacred values are more than just relatively important moral virtues.

A follow up neuroimaging study carried out by Greg Berns and colleagues may have identified the neural correlates of such resistance. In a replication of the study previously described (Berns et al., 2012), they introduced a social influence manipulation at the stage of the study when people are asked to choose which statement they identified with (e.g. "I believe in God"). In this study people could see the percentage of fellow participants who agreed with

them. It was found that social influenceability, willingness to change positions on an issue to reflect majority opinion, on a given issue was negatively correlated with activation of the VLPFC—the same region activated for sacred values in Berns et al (2012).

C. Future Research: Managing Sacred Values

Research into the backfire effect demonstrates that claims to sacred values are often real, and people reason differently when making decisions that concern sacred values than when making decisions about mundane material values. We need to know more about how people manage their commitments to sacred values. We know little, for example, concerning how people tradeoff sacred values. While order of sacredness is sometimes formalized, as in the case of religion, in many cases people have to make novel decisions about which competing sacred values are more important. In the economic world, people make choices between things by weighing their value along a common scale such as money. The backfire effect shows this is unlikely to occur for sacred values, but it does not answer the question: How do people deal with tragic tradeoffs? We also know little about how we balance commitments to sacred ideals with our everyday responsibilities. Max Weber first posed this issue as the fundamental moral and practical challenge for anyone having "a vocation for politics" (Weber 1919/1994, p. 368), and formal investigations into sacred values have, from the beginning, asked how such values may be reconciled with the demands of everyday life (Baron & Leshner, 1999; Tetlock, 2003).

Still, there has been little serious study of the dynamic relationship between deontological and instrumental reasoning in general and, in particular, of how political and advocacy groups manage values and responsibilities over time. We suggest two broad mechanisms at play when people balance their sacred ideals with responsibilities. One is reframing. Sacred values are often associated with propositions that are inherently ambiguous in their meaning, without fixed reference or application (e.g. Sharia is the law of God, Whoever believes in the Resurrection is Reborn, the Land of Israel) (Atran & Norenzayan, 2004). Nevertheless, such beliefs, and the values they are associated with, can be tied to clear norms and behaviors through context- specific interpretations made by political or religious leadership (e.g. as in weekly sermons). Because the propositions they express cannot be empirically or logically falsified in any straightforward sense, and because they can be interpreted in different ways for changing circumstances, such beliefs and values can adapt

to different situations and survive over long periods of time (Atran & Ginges, 2012; Atran & Henrich, 2010).

For political and advocacy groups, reinterpretation allows sacred values and associated beliefs to be "reframed" to fit both present circumstances and future prospects. For example, Sheikh Safwat Hegazi, General Secretary of Egypt's Revolutionary Council and of the World Organization of Sunna Scholars, recently told us in Cairo:

> "Sharia is God's law, but how it is implemented depends on circumstances in the country, and the people's readiness to accept its provisions. This is where the Muslim Brotherhood differs from the Salafis ("purist" fundamentalist) groups. The Salafis want Sharia implemented in the same way, everywhere, here and now. The Brotherhood says 'wait and see what is needed and what the people are ready for.' There may be no need to accept ever cutting off hands in Egypt or forcing women to cover their faces. In other countries or circumstances Sharia may be applied in different ways." (Interview with Atran, Axelrod, & Davis, 25 September 2012)

One observation to be made about this statement is that as we learn more about how people manage their sacred values, we need to pay attention to cultural (in this case ideological) distinctions. Some groups and individuals may manage the relationship between ideals and responsibilities differently to others. Understanding how such differences come to be seems an important avenue for future research.

Another, often related, psychological tactic that allows political and advocacy groups to adapt values to circumstances may be "reprioritization." For example, circumstances at the beginning of the Civil War compelled Abraham Lincoln to prioritize saving the Union over freeing the slaves, though both were avowedly sacred values to him and to many of those he represented (Atran & Axelrod, 2008). Toward the end of the Civil War, however, when the Union appeared near to being saved, he decided that freeing the slaves needed to take precedence over ending the war in order to have a morally viable Union. The way these types of tradeoffs—between ideals and responsibilities—are made can reveal much about social and political movements. For example, in our discussion of values and responsibilities with General Ami Ayalon, former chief of Israel's Shin Beit (internal security, responsible for overseeing Hamas and other Palestinian factions), he observed that:

> "All political groups settle somewhere between responsibility and absolute value. The Muslim Brotherhood seems more a group where responsibility comes before

value, at least for day-to-day operations, whereas Al Qaeda is a group strictly based on absolute value. The Brotherhood will do everything to prevent the people it cares for from suffering, but for Al Qaeda it doesn't matter if hundreds or hundreds of thousands of people it purports to defend, much less others, die along the way." (Interview with Atran, Axelrod, & Davis, 2 October 2012)

A key factor in regulating tension between responsibilities and values may be time management. One way to shift context is to change a value's scope from the here-and-now to an indefinite future. In the 1920s, for example, Stalin moved the goal of a world revolution and victory for communism to an indefinite future when he declared that social and economic implementation of communism in one country must have priority. This contradicted Lenin's views that the imperial and democratic powers were about to destroy themselves but needed a final, violent push by international communism (Atran & Axelrod, 2008). Time management of values to meet responsibilities is often closely associated with reframing and reprioritization. For example, from our discussion with General Ayalon:

"Consider the concept of hudna [from the Arabic word for 'calm; roughly 'truce' or 'armistice', based on the hudna in the Treaty of Hudaybiyyah between Moham-med and the Quraysh tribe]. Beginning in the late 1980s Hamas began an ongo-ing power struggle with Fateh, which they would have to win before they could hope to confront Israel full force in a final battle. So, (Hamas founder Sheikh) Yassin began the idea of a hudna with Israel to last for 10 years then extended to perhaps for 20 years. Now, with Hamas triumphant in Gaza, they need calm with Israel to build their strength. So, the Hamas leaders in Gaza are talking about 30 or 40 years or something even more indefinite. Hudna is just one example of sabr [the Arabic word for 'patience'], which is a very important idea in Brotherhood ideology—and remember, Hamas is part of the Brotherhood. It gives them flex-ibility and the promise of realizing their values in some future time. Hamas lead-ers can use the concept of hudna to say: 'there is no need to fight Israel everyday.' And they can use whatever verse of the Koran they need to justify what can be suspended for the time being, and why." (Interview with Atran, Axelrod, & Davis, 2 October 2012)

Although important, we know little about how people manage sacred values over time. Temporal management and psychological distance may be related in complex ways when sacred values are involved. Construal Level Theory's (CLT) (Trope & Liberman, 2003, 2010) central tenet is that people can only directly experience the here and now but must mentally construe the past and
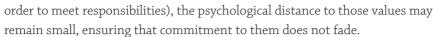
the future. Thus, the greater the temporal or social distance from a stimulus, the more psychologically distant it appears to be. CLT maintains that as psychological distance increases, construals tend to become more abstract and tend to focus on the whys of actions rather than the hows. Similarly as the level of abstraction increases, so does psychological distance. What is unclear is how decision making over sacred values might be influenced temporality. On the one hand, sacred values are often abstract concepts that are central to choices. This perspective suggests a positive relationship between psychological distance and the importance of sacred values. Nevertheless, there is preliminary evidence from a variety of cultural settings that sacred values are often perceived as concrete and psychologically close, and that psychological distances involving sacred values may involve a complex calculation that cannot be simply predicted independent of context (Gong, Illiev, & Sachdeva, 2012).

We also have some preliminary evidence that for events associated with sacred values, the relationship between temporal and psychological distance can shrink and even perhaps disappear (especially in ritualized settings when memories of such events are invoked, as during Easter or Passover). Thus, in 2011, a series of interviews that Lydia Wilson carried out for us among militant Kurds from Turkey who have taken refuge in Iraq, we find that even for Marxist-Leninist Kurds of the PKK, for a majority of interviewees the 12th-century Kurdish leader Saladin's recapture of Jerusalem from the Crusaders feels closer in time than more recent events (including World War I), and that actual estimates of time elapsed (e.g. from 100 years to 1000 years) can have much greater variation for such events than for more mundane events. Also in 2011, we asked a sample of 555 Palestinian adolescents to rate, on a 10-point scale, how close they felt to the end of World War II and the "Naqba" (or the "catastrophe" that befell Palestinians who were exiled as a result of the creation of the State of Israel in 1948), and to estimate the future date when Palestinian refugees would be able to fulfill the "right of return." Analysis conducted by Hammad Sheikh compared responses of Palestinians who did, or did not, regard this right of return to be a sacred value. Palestinians who considered the right of return to their former lands as sacred (compared to those who did not) perceived the Naqba to be temporally closer than the end of World Ware II. They also estimated the time when a return will be possible to be closer. These findings suggest the possibility that even as implementation of sacred values is delayed (perhaps by political leaders and devoted actors (e.g. militants) in

order to meet responsibilities), the psychological distance to those values may remain small, ensuring that commitment to them does not fade.

Another significant emerging area of research concerns sacralization, how things may take on sacred properties. Evidence suggests that perceptions of threat (to the group or to values associated with group identity) may lead to sacralization of values when those values are paired with existing sacred values through a meaningful set of collective rituals (Atran & Ginges, 2012; Sheikh, Ginges, Coman, & Atran, 2012). Leaders and devoted actors may take advantage of this by raising people's perceptions of threat to the group, and perhaps even inciting conflict, over issues that can be tied to sacred values through religious rhetoric and collective ritual (Ginges, Hansen, & Norenzayan, 2009), as with the Iranian leadership's rendering of its nuclear program as a sacred symbol of Islam's global resurgence against Western opposition (Takeyh, 2006; Dehghani et al., 2010). For example, in a representative survey of Palestinian adolescents we showed that the odds of a participant holding a sacred value could be predicted by the participants religiosity: more religious participants were more likely to sacralize a value such as the right of Palestinians to return. Moreover, this finding was accentuated by the degree to which participants perceived that Palestinians were under threat: as perceived threat increased, so did the effect of religiosity on the likelihood of sacralization (Sheikh, Coman, Ginges, & Atran, 2012). In this and other studies variances in individual experiences (e.g. exposure to political violence or related cognitive coping capabilities, as in the Palestinian case), or other variables (e.g. need for closure or disgust sensitivity that predict ideology and morality, as in U.S. studies) do not predict individual variance in holding of sacred values (Sheikh et al., 2012).

III. CONCLUSION

Despite some serious misgivings about the explanatory adequacy of theories of rational choice and utility in social and political life (Kahneman, 2003), until recently much more attention has focused on instrumental decision making than on morally motivated decision making. To be sure, over the last decade or so, there has been a surge in studies of moral decision making that focuses on universally mundane intuitions, beliefs, and behaviors about fairness and reciprocity (Baumard, André & Sperber, 2013; Greene et al., 2008; Nichols & Mallon, 2006). Yet, there has been surprising little research into that sense of "morality" that Darwin (1871, p. 166) associated with "the spirit of patriotism,

fidelity, obedience, courage, and sympathy," which enables human groups, from tribes to nations, to better cooperate in the competition with other groups for survival and dominance.

Especially in potentially violent situations of intergroup conflict, sacred values appear to drive collective actions independently, or all out of proportion, to evident or likely risks or results "because it is the right thing to do, whatever the costs or consequences." Our research indicates that sacred values have privileged links to emotions and resist material tradeoffs. The field-based studies reveal that using the standard approaches of business like negotiations in seemingly intractable conflicts, such as the Israel–Palestine dispute or the West's standoff with Iran over its nuclear program, may only backfire, with material offers and sweeteners increasing resistance to negotiation and support for violence because they are interpreted as morally taboo and insulting (on par with accepting money to sell your child or sell out your country). But we also found that making symbolic concessions of no apparent material significance might help resolve such conflicts by first showing recognition, if not respect, for the other side's core values. Doing so appears to increase support for compromise even among leaders and militants, reduce support for violence, and thereby open the possibility for negotiations over specific material issues and disputes.

Most current models of human cognition and behavior assume that the further down the line a goal is, the less its real value is here and now and the less committed a person is to implement the means to realize it. A new but still tentative line of research suggests that decisions about sacred values may show little or no discounting and even represent reverse discounting, with perceived psychological distance to temporally distant past or future events that are associated with sacred values shrinking or disappearing altogether. This may have important implications for how political leaders and militants manage to delay imposition and implementation of their values in order to meet the instrumental needs of people, without weakening—and perhaps even strengthening—popular belief in those values.

ACKNOWLEDGEMENTS

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