Religious and Sacred Imperatives in Human Conflict

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ic and political dynamics, immigration history, and the pace of intercultural mixing should interact to predict activation of brain regions linked to the operation of System 2, which should correspondingly be reflected in macrosocial trends toward tolerance and harmonious intergroup relations.

Has the multicultural "experiment" failed? The answer is that we just don't know, not because science has failed to make a contribution, but because we have not been asking quite the right questions. The research discussed above suggests that social diversity results in coalitional (i.e., cooperative, tolerant) behavior only when it requires one to think beyond the ancestral building blocks of modern society. Predicting how people will react to multiculturalism therefore requires more focused scientific research on which coalitional systems are activated when different policies are communicated (or communicated in different ways).

More generally, we would argue that to provide clear science-based directives concerning multicultural policy, researchers must better understand the operation of cognitive systems that manage our capacity to navigate socially diverse environments. We must harness those systems and capitalize on their potential to inform, focus, and frame future policy in this area. Perhaps only by considering the origins and evolution of such systems can we fully understand the impact of broad-based initiatives for social change.

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PERSPECTIVE

RELIGIOUS AND SACRED IMPERATIVES IN HUMAN CONFLICT

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Religion, in promoting outlandish beliefs and costly rituals, increases ingroup trust but also may increase mistrust and conflict with outgroups. Moralizing gods emerged over the last few millennia, enabling large-scale cooperation, and sociopolitical conquest even without war. Whether for cooperation or conflict, sacred values, like devotion to God or a collective cause, signal group identity and operate as moral imperatives that inspire nonrational exertions independent of likely outcomes. In conflict situations, otherwise mundane sociopolitical preferences may become sacred values, acquiring immunity to material incentives. Sacred values sustain intractable conflicts that defy "business-like" negotiation, but also provide surprising opportunities for resolution.

Humans will kill and die not only to protect their own lives or defend kin and kith, but for an idea—the moral conception they form of themselves, of "who we are". Across history, religion has often served to bind members of a primary group, creating moral communities under the rule of immaterial but physically sentient and powerful deities—that is, entities whose semantic description is contradictory and conceptually surprising. Their miraculous features are attention-arresting and memorable, favoring cultural transmission and survival of religious beliefs (*1*). Although logically and empirically inscrutable, such beliefs can be tied to clear norms and behaviors through context-specific interpretations (as with understanding metaphors, and as in weekly sermons). Even when context fixes meaning, seemingly contrary evidence seldom undermines religious belief, especially among groups welded by costly commitment in the face of outside threats (*2*). Belief in gods and miracles also intensifies when people are primed with awareness of death, or when facing danger, as in wartime (*3*). Cross-national analyses show that a country's devotion to a world religion correlates positively with existential insecurity (*4*).

Humans acquire novel beliefs from cultural models (experts, leaders), similarly to how children acquire unfamiliar tastes from adults, by inferring commitment through actions (*5*). Unlike mundane commonsense or scientific beliefs, faith in religious beliefs rests not on logical coherence and empirical evidence but is sustained by costly rituals whose elements may have no active or useful relationships in everyday life (*6–8*). Supernatural agents that incentivize costly sacrifices for symbolic beliefs (which reliably identify cooperators and cannot be undermined by reason) favor the cultural linkage, survival, and spread of religious beliefs and rituals.

Studies suggest that costly and seemingly arbitrary ritual commitment to apparently absurd beliefs deepens trust, galvanizing group solidarity for common defense and blinding members to exit strategies (*9*). By contrast, fully reasoned social contracts that regulate individual interests to share costs and benefits of cooperation can be more liable to collapse: Awareness that more advantageous distributions of risks and rewards may be available in the future makes defection more likely. Thus, even ostensibly secular nations and transnational movements usually contain important quasi-religious rituals and beliefs: from sacred songs and ceremonies, to postulations that providence or nature bestow equal rights (*10*). These sacred values act as moral imperatives that inspire nonrational sacrifices in cooperative endeavors and war, generating outsize commitment in low-power groups to resist and often prevail against materially stronger foes (*10, 11*).

Evolution of Religion

Controversy over religion in human conflict has recently centered on debates about religion's origin and evolution. One view is that religion, including self-sacrifice for sacred group values, is biologically adapted for ingroup cooperation in a competitive environment (*12*). Even arbitrary assignments of sacredness, whose transgressions are taboo and often severely punished, unequivocally distinguish otherwise closely associated groups: Sabbath and Kosher laws isolated Hebrew hill tribes from Canaanite neighbors and,

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in later centuries, diaspora Jews from surrounding societies; ritual association with chosen animals and plants socially separated contiguous Australian aboriginal groups for millennia. The more antagonistic a group's neighborhood, the more proprietary the group's sacred values, increasing ingroup reliance, but also disbelief and potential conflict toward other groups (7).

Religious rituals build ingroup solidarity. Experiments in Israeli kibbutzim (cooperatives) show that people who participate most in collective religious ritual more likely cooperate with anyone in their cooperative (7). Among 83 utopian communes in the 19th century, religious groups with more costly rituals survived longer than groups with fewer (7). Ties between religious ritual and ingroup solidarity may translate into greater willingness to kill and die for a cause in intergroup conflict (13). Studies of 60 small-scale societies reveal that groups in highly competitive socioecologies (with frequent warfare) endure the costliest rites (genital mutilation, scarification, etc.) to display solidarity (7). Cross-cultural research indicates that participation in collective religious ritual increases parochial altruism and, in relevant contexts, support for suicide attacks (13).

An alternative view is that religion (unlike, say, language) involves no particular biological adaptation with clear units of selection. Religion is a fuzzy category with no transparent distinction between beliefs or actions as religious or not (1, 8). Nevertheless, readily identifiable clusters of empirically and logically inscrutable beliefs reoccur cross-culturally as a by-product of nonreligious cognitive functions evolved for mundane purposes. For example, notions of invisible supernaturals may be the by-product of a biologically specialized "mental module" that underlies universal folk psychology, and which is hair-triggered to detect intentional agents as friend or foe under uncertain conditions: People easily imagine voices in the wind or faces in shadows because, from an evolutionary vantage, "better safe than sorry" (14).

"New Atheist" thinkers who embrace by-product views consider religion an intellectually worthless but dangerous evolutionary accident readily exploited by predatory societies and kleptocrats (15). But most by-product theorists now focus on merging by-product views with adaptationist accounts emphasizing cultural (rather than biological) selection (e.g., by emulating historical success) (6, 9). The thesis is that once belief in supernatural agency emerged as a by-product of mundane cognitive processes, cultural evolution favored

the spread of high gods who impose inviolable rules and costly, repetitive rituals upon abstract moral communities, prescribing what people should and shouldn't do (8).

As human groups expand into resource-rich environments, they tend toward greater competition, and thrive by becoming larger. But more opportunities arise for larger groups to fissure. Transcendent supernatural agents help solve this problem by providing absolute and context-free moral authority to elicit cooperation among even anonymous individuals (9). Priming people with belief in powerful, all-seeing deities (e.g., oaths on a Bible) induces fairness to strangers and self-monitoring (which reduces collective burden in punishing misbehavior) (6).

Archaeology reveals clear, coevolutionary connections between religion, ritual, and complex societies. Finds from Mesopotamia and Mesoamerica indicate that rituals became more elaborate and costly as societies developed from foraging bands into chiefdoms and states (16). Contrary to notions of religion or god as a direct product of a biologically adapted mental module (as opposed to a culturally evolved by-product), small-scale hunter-gatherer societies, which best approximate ancestral conditions, lack omniscient and omnipotent supernaturals. Studies from the

Ethnographic Atlas (1267 societies coded into 186 cultural types) show larger societies likelier to engage in external conflict and possess potent moralizing gods who punish norm violators (17). Modern multiculturalism and global exposure to multifarious values are increasingly challenged by fundamentalist movements to revive primary group loyalties through greater ritual commitments to ideological purity (4–6).

Religion and War

Religious beliefs involving sacred values facilitate both large-scale cooperation and enduring group conflict. For example, the mainly nonviolent Civil Rights Movement and extremely violent Al-Qaeda movement were strongly motivated by religious commitment—to "right the national sin" of slavery in one case (18), to "restore God's law" against indignity and injustice in the other (19)—however important other economic, social, and political factors. Yet, ever since the 9/11 attacks in New York, New Atheist thinkers claim that religion is chiefly responsible for war and much human misery, which its demise would greatly reduce (15).

In fact, explicit religious issues have motivated only a small minority of recorded wars (20). There is little religious cause for the internecine Russian and Chinese conflicts and world wars

Fig. 1. The backfire effect. Offering material incentives to compromise sacred values increases anger and violence toward a deal. (**A**) In a 2010 study, Iranians who regarded Iran's right to a nuclear program as a sacred value more violently opposed sacrificing Iran's nuclear program for conflict-resolution deals involving substantial economic aid, or relaxation of sanctions, than the same deals without aid or sanctions. [Photo: V. Salemi/Associated Press] (**B**) In a 2005 study in the West Bank and Gaza, Palestinian refugees who held their "right of return" to former homes in Israel as a sacred value more violently opposed abandoning this right for a Palestinian state plus substantial economic aid than the same peace deal without aid. [Photo: D. Douglas]

responsible for history's most lethal century of international conflict. Indeed, inclusive concepts of "humanity" arguably emerged with the rise of universal religions. Buddhism spread beyond India by eliminating social castes, and early Christianity became the Roman Empire's majority religion through growing social networks built on trust grounded in self-sacrificial displays (e.g., caring for non-Christians during epidemics) (21). Fourteenth-century historian Ibn Khaldūn found that for North African Muslim dynasties with comparable military might, long-term differences in success "have their origin in religion… group feeling [wherein] individual desires come together in agreement [and] mutual cooperation and support flourish" (9), the more religious societies enduring longer.

Studies with a diverse range of contemporary foragers, farmers, and herders show that professing a world religion predicts greater fairness toward ephemeral interactants (22). Islam's ongoing spread in sub-Saharan Africa depends on religious rituals (fasting, sobriety, charity) drawing people into tighter networks of trust and trade similar to Protestant evangelicalism's growth in the Americas and Asia (4, 9).

Nonetheless, ample historical and cross-cultural evidence shows that when conflict is framed by competing religious and sacred values, intergroup violence may persist for decades, even centuries. Disputes over otherwise mundane phenomena (people, places, objects, events) then become existential struggles, as when land becomes "holy land." Secular issues become sacralized and nonnegotiable (23), regardless of material rewards or punishments. These values become transcendent, emotionally charged yet stable over time, and neurally processed as duties bound by rules rather than utilitarian calculations (24).

Sacred Values in Intractable Conflicts

Sacred values determine which social and material transactions are morally sanctioned, and can drive actions in intergroup conflict independently of material interests or consequences: as with some decisions to initiate or sustain war, when religiously motivated suicide bombers willingly die to broadcast commitment regardless of whether others are killed (11), or when certain Native American groups reject majority-culture offers for exploiting natural resources as violating spiritual injunctions (25). Studies with Palestinians, Israelis, Indonesians, Indians, Afghans, and Iranians show that offering people material incentives (large amounts of money, guarantees for a life free of political violence) to compromise sacred values can backfire, increasing violence toward compromise (11). Backfire effects occur both for sacred values with clear religious investment (Jerusalem, Sharia law) and those with initially none (Iran's right to nuclear capability, Palestinian refugees' right of return) (Fig. 1, A and B). While sacralization of initially

secular issues blocks standard "business-like" negotiation tactics, strong symbolic gestures (sincere apologies, demonstrating respect for the other's values) generate surprising flexibility, even among militants and political leaders, and may enable subsequent material negotiations. Moreover, as with religious beliefs generally, sacred values may be reframed through novel, context-sensitive interpretation without compromising their absolute "truth" (e.g., Jerusalem is less a place than a portal to heaven, and earthly access to the portal suffices) (10).

We need to know more about cognitive and social mechanisms underlying sacralization of values that cement personal devotion to group norms. One hypothesis is that humans sacralize threatened group interests by incorporating them within religious ritual and rhetoric, as with Iran's nuclear program (26). In one experiment, Americans who were cognitively primed with reminders of religious ritual were likelier to sacralize nonreligious preferences (e.g., favor or oppose deporting illegal immigrants), measured by refusal to forsake preferences for money (27). In a longitudinal study, Palestinian adolescents who perceived strong threats to their people and were highly involved in religious ritual were most likely to see political issues like the right of refugees to return as absolute moral imperatives, forbidding Palestinian leaders to compromise whatever the costs (27).

Religion addresses problems of cooperation in large complex societies through supernatural agents that punish noncooperators, use of ritual to forge strong group bonds, and sacralization of mundane issues threatened in intergroup disputes. Future research should investigate interactions between these mechanisms. While there is no necessary link between religious belief, sacred values, and war, during intergroup conflict protagonists may transform material interests into sacred values and further consolidate them into religious beliefs. Sacred values are not exclusive to religion; mundane values may be sacralized through rituals linking them to nonreligious sacred values, like the nation. Studies could test whether religious belief reinforces sacred values by conferring divine authorship and watchfulness. The implication is that when sacred values acquire supernatural association, they become conceptually immune to reasoned challenge and subject to self-monitoring, reducing possibilities for social defection; they also become attention-arresting and memorable, rendering them culturally contagious.

Religion and sacred values inspire achievement of great virtue and vice, in spiriting folk to glory or bending will to power. They arouse strong attitudes among believers and nonbelievers, which can hinder deeper, nuanced appreciation of human conflict. In an age where religious and sacred causes are resurgent, there is urgent need for joint scientific effort to understand them. In-depth

ethnography, combined with cognitive and behavioral experiments among diverse societies (including those lacking a world religion), can help identify and isolate the moral imperatives for decisions on war or peace. Neuroimaging may elucidate how religion and sacred values differ from secular beliefs and values, to better comprehend how they interact and which aspects are liable to manipulation toward violence or nonviolence. We need more developmental study on how children acquire religion and sacred values, and how people come to change or abandon them. Formal modeling of cultural evolutionary processes should join archaeological and historical efforts to mine this multidisciplinary research for insight into broad patterns of history and future prospects for human conflict and its resolution.

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