**Religion, prosociality, assortative sociality, and the evolution of large-scale cooperation: A few remarks on Martin & Wiebe**

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In their paper, Luther H. Martin and Donald Wiebe put forward three types of claims. The first type concerns current research agendas in the Cognitive Science of Religion. In this regard, they claim both that these agendas neglect religion’s connection with violence by emphasizing its presumed relation with prosociality and that this neglect involves a hidden bias. The second type concerns the social function of religion. Here, they claim that religion is fundamentally tied to assortative sociality rather than prosociality. The third type concerns a possible causal link between religious prosociality and the evolution of large-scale cooperation. Here, they claim that religious prosociality did not play any pertinent causal role in such evolution. We do not address the first issue in our reply, though we would like to say that Martin & Wiebe have a partial reading of the CSR literature in this respect, which undermines the strength of their related claims.[[1]](#footnote--1) We address the other two issues in turn, but, before discussing their related claims, we characterize some basic distinctions that will frame our subsequent remarks.

*Basic distinctions*

We understand prosocial behavior as behavior that follows social norms. Some social norms prescribe behaviors that indicate group affiliation without constituting any helping behavior at all (e.g., the prescription that one should use the garments specific to a social group). We shall call the related prosociality “group-marker prosociality”. Some social norms prescribe behavior that constitutes helping behavior that benefits not only the recipient, but also, immediately or in the long run, the benefactor (e.g., the prescription that one should help a friend who is in need). We shall call the related prosociality “mutualistic prosociality”. Some social norms prescribe helping behavior that benefits the recipient but not the benefactor, namely, the benefactor incurs a cost without receiving, immediately or in the long run, any proportional benefit (e.g., the prescription that, in a situation of war, one should sacrifice oneself for the sake of the group). We shall call the related prosociality “altruistic prosociality”.[[2]](#footnote-0) Mutualistic and altruistic prosociality constitute two distinct types of cooperation (see Baumard, André & Sperber, 2013). Group-marker prosociality only indirectly promotes cooperation by (sometimes costly) signaling the presence of trustworthy potential cooperators.

We characterize religion in terms of beliefs in supernatural agents and religious prosociality as behavior that follows social norms by being at least partially motivated by the belief that a supernatural agent sanctions the norm (and often by a corresponding fear of supernatural punishment in case of norm violation). Thus, religious group-marker prosociality is motivated by the belief that a supernatural agent sanctions norms prescribing behavior that simply indicates affiliation to a social group, religious or otherwise; and religious mutualistic or altruistic prosociality is motivated by the belief that a supernatural agent sanctions norms prescribing mutualistic or altruistic behavior.

Norms prescribing helping behavior have different types of scope in that they may concern different types of recipients—individuals that one is familiar with and/or strangers; individuals that are part of one’s social group and/or individuals that are part of an outgroup. Accordingly, we shall say that religious prosociality, mutualistic or altruistic, may be more or less inclusive in that it may concern only ingroup-familiars, or in addition, ingroup-strangers, or, in addition, ingroup-strangers and outgroup-familiars, or, in addition, ingroup-strangers, outgroup-familiars and outgroup-strangers (in the latter case, the prosociality has a universalist scope).

*Religion, prosociality and assortative sociality*

Martin & Wiebe’s claim that religion in general is fundamentally tied to assortative sociality rather than prosociality is unclear, and we couldn’t find an interpretation that would make it relevant or plausible.

 At times Martin & Wiebe seem to deny that religion is fundamentally tied to prosociality by focusing primarily on a notion of prosociality that is altruistic and universalistic, which is indicated by their reference to Norenzayan and Shariff’s characterization of prosociality (“religions facilitate costly behaviors that benefit other people at a personal cost”) and by their supposition that religious prosociality would predict “a kind of global *kumbayah*”. This focus turns their critical argument into a straw man argument. Although certain religious traditions may foster more universalist attitudes, the anthropological literature clearly shows that this is not a feature of religion in general, even less so in terms of a prescription of altruistic prosociality. In other words, who in the CSR would argue that religion in general promotes such universalistic and altruistic prosociality?[[3]](#footnote-1)

Occasionally, Martin & Wiebe seem to deny that religion is fundamentally tied to prosociality by focusing primarily on the role of group-marker prosociality, and by arguing that the relation between religion and group-marker prosociality is psychologically contingent:

(…) ingroup prosociality can be accounted for by general psychological mechanism and strategies (…) as well as by any number of ingroup markers in addition to the religious, such as “race, nationality, computer use, or … [an] operating unit at work” (...) (M & W, p. 3)

We question, however, whether *religious* prosociality is any more (or less) robust than any other basis for group belonging, including arbitrarily assigned affiliations, as documented by the classic robbers cave experiment. (M & W, p. 8)

Here again, we don’t see the relevance of Martin & Wiebe’s claim qua a broad critical claim. Most researchers in the CSR would agree with the stance that there is no necessary psychological connection between group-marker prosociality, or prosociality more generally, and religion (i.e., that the psychological mechanisms promoting prosociality are independent of religion), including, ironically, the principal authors they are discussing and criticizing in their paper (i.e., Norenzayan and Shariff).

Martin & Wiebe’s claim that religion is fundamentally tied to assortative sociality (more specifically, that religion is a biological adaption whose function is to discriminate outgroup members so that to avoid pathogen contamination) faces a dilemma. Either they understand religion as independent of the occurrence of beliefs in supernatural agents, or, as in our characterization, they understand it as constituted by such occurrence (Martin & Wiebe do not provide any characterization of what they mean by “religion”). In the former case, their claim becomes totally unclear. What exactly is specific to religion that promotes an assortative disposition? In the latter case, their claim becomes quite implausible. Given the wide variety of representations of supernatural agents involved in religious beliefs, many of them completely unrelated to the sanctioning of outgroup discrimination, it is much more parsimonious to claim that the adaptations related to assortative sociality are independent of religion. In other words, in the same way that prosocial dispositions are only contingently related to religion, assortative dispositions are only contingently related to it (for a relevant discussion, see Tybur, Lieberman, Kurzban & DeScioli, 2013). In sum, in either interpretation of their understanding of religion, their claim is not tenable.

*Religious prosociality and the evolution of large-scale cooperation*

Martin & Wiebe’s claim that religious prosociality did not play any pertinent causal role in the evolution of large-scale cooperation is plausible, though their arguments in support of this thesis are not convincing (for more poignant arguments, see Baumard & Boyer, 2013; Boyer & Baumard, *forthcoming*).

Sometimes Martin & Wiebe seem to defend their standpoint by supposing that the large-scale cooperation at stake is cooperation with outgroup members and by arguing that religion cannot sustain such cooperation, for, given its assortative nature, religion has discriminatory effects, instead of cooperative effects, in relation to outgroup members. However, under this interpretation, their argument constitutes a straw man argument because the evolutionary hypothesis advocated by Norenzayan and Shariff is primarily about the growth of social groups and cooperation within groups—i.e., about cooperation between ingroup-strangers rather than cooperation with outgroup members. Moreover, their hypothesis is a cultural-group selection one in which the growth of cohesive social groups based on Big-Gods religious prosociality outcompetes other groups by violently eliminating or absorbing them. In other words, Norenzayan and Shariff’s hypothesis in fact implies that religious prosociality (or at least Big-Gods religious prosociality) has a complementary dark side concerning outgroup members (see Norenzayan & Shariff, 2008; Norenzayan, 2013).[[4]](#footnote-2)

Occasionally, inspired by Dunbar, among others, Martin & Wiebe seem to defend their claim by arguing that human prosocial dispositions are effective *only* in the context of small-scale ingroup dynamics (i.e., in the context of interaction between ingroup-familiars) and that, in the context of large-scale ingroup dynamics (i.e., in the context of interaction between ingroup-strangers), some kind of centralized and permanent political leadership is necessary to neutralize divisive assortative tendencies, including the assortative tendencies inherent to religion, and stabilize cooperation. In other words, according to them, while religion can enhance cooperative effects in the context of small-scale ingroup dynamics (i.e., religious prosociality might exist in such context), it can only exaggerate social divisions in the context of large-scale ingroup dynamics (i.e., religious prosociality cannot exist in such context). Thus, religion is rather a divisive force that should be controlled for the evolution of cooperation between ingroup-strangers to become stable.

We are skeptical about Martin & Wiebe’s argument against the existence of religious prosociality in large-scale ingroup dynamics, namely, their argument denying that religion could enhance cooperation between ingroup-strangers.[[5]](#footnote-3) First, there is a good amount of experimental evidence indicating that religion can support cooperation between ingroup-strangers (e.g., Malhotra, 2010; Randolph-Seng & Nielsen, 2007; Shariff & Norenzayan, 2007). With regard to this point, Martin & Wiebe argue:

Since, the evidence for religious prosociality cited by Norenzayan and Shariff and others only supports small-scale ingroup dynamics, their proposed hypothesis of extending these dynamics to the facilitation of large-scale group formation seems to be by inferential fiat with dubious empirical support. (M & W, p. 3)

However, given that much of this evidence concerns cooperation with anonymous others, who, in the context of the studies, are probably understood as ingroup-strangers, we wouldn’t say that an arbitrary inference from small-scale ingroup dynamics (i.e., cooperation between ingroup-familiars) to large-scale ingroup-cooperation (i.e., cooperation between ingroup-strangers) is involved here.

 Second, historical evidence related to phenomena such as the Crusades, for example, suggests that religion can enhance cooperation between ingroup-strangers. Martin & Wiebe claim that in such situations religion is utilized only as a symbolic device supervenient on political forces. However, what could be the reason for utilizing such symbolism in the first place, if not its possible effects in enhancing cooperation between ingroup-strangers?[[6]](#footnote-4)

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1. For additional discussions of religious violence, see, for example, Blogowska, Lambert & Saroglou, 2013; Blogowska & Saraglou, 2013;Ginges, Hansen & Norenzayan, 2009; Haidt, 2012; Johnson, Rowatt & LaBouff, 2010; Preston, Ritter & Hernandez, 2010; Teehan, 2010. We do not mention the various publications of Atran and collaborators because Martin & Wiebe acknowledge Atran’s contribution to the topic. Nonetheless, given the scope and importance of Atran and collaborators’ contribution, we think that it has not been duly considered by Martin & Wiebe. [↑](#footnote-ref--1)
2. We should add that (i) we understand costs and benefits in terms of individual fitness (not in terms of inclusive fitness); (ii) our characterization of helping behavior is independent of the psychological motivation involved (e.g., altruistic behavior may be motivated by psychological egoism—for discussions of psychological altruism/egoism, see Stich, Doris & Roedder, 2010); (iii) even if it is often difficult to determine whether an instance of helping behavior is mutualistic or altruistic, we deem the distinction between mutualism and altruism an important one. [↑](#footnote-ref-0)
3. Even if one interprets Norenzayan and Shariff’s characterization in terms of mutualism (their characterization is vague in this respect) and take Martin & Wiebe’s claim to regard mutualistic and universalistic prosociality, this wouldn’t affect substantially our criticism here. [↑](#footnote-ref-1)
4. We are puzzled by a passage in Martin & Wiebe’s paper that apparently contrasts Atran & Henrich’s cultural-group selection view (see Atran & Henrich, 2010) with Norenzayan & Shariff’s view, as if Martin & Wiebe were attributing to the latter a biological-group selection perspective (see M & W, p. 4). In fact, Norenzayan & Shariff adopt a cultural-group selection position quite similar to Atran & Henrich’s position on the matter. [↑](#footnote-ref-2)
5. Our counter-argument here should not be seen as a defense of the hypothesis that religious prosociality played a fundamental causal role in the evolution of large-scale cooperation. As we indicated above, we are sympathetic to Martin & Wiebe’s claim, but for other reasons. [↑](#footnote-ref-3)
6. Martin & Wiebe invoke two other arguments against the hypothesis that Big-Gods religions played a fundamental role in the evolution of large-scale cooperation. First, in a footnote, they claim that Big-Gods religions are neither necessary nor sufficient for large-scale cooperation. However, Norenzayan and Shariff’s hypothesis is a probabilistic one about causal contribution, therefore this argument does not hold. Second, in the same footnote and other parts of the paper, they claim that their Hebrew-epic example counts against this hypothesis. However, besides the fact that the hypothesis at stake is a probabilistic one, their analysis of this example is too simplistic to be taken too seriously. [↑](#footnote-ref-4)