Religion and the Origins of Anti-Atheist Prejudice

Will M. Gervais and Ara Norenzayan

University of British Columbia

Those are not at all to be tolerated who deny the being of a God. Promises, covenants, and oaths, which are the bonds of human society, can have no hold upon an atheist. The taking away of God, though but even in thought, dissolves all.

      John Locke, *Letter Concerning Toleration* ([1983] 1689)

Over the past few decades, much ink has been spilled in attempts to understand the relationships between religion, intolerance and conflict. And, although, some progress has been made, religion's precise role in intolerance and intergroup conflict remains a poorly researched scientific topic. This oversight is remarkable given that the vast majority of the world is religious (Norris & Inglehart, 2004), and hardly a day goes by without religious conflict shaping events and making international headlines (The Washington Post, May 11, 2011).

To a large degree, researchers interested in religion, intolerance, and conflict have focused on conflicts between different religious groups. That is, much thinking and research is devoted to conflicts between different stripes of theists with differing cultural histories, religious traditions, and devotional practices. Though of course very important, this focus has sometimes obscured an even more fundamental divide: that between those who are believers and those who do not endorse any brand of theism. In this chapter we concentrate on this latter issue and report new research on the psychological bases of anti-atheist prejudice. This research is long overdue. Antagonism towards atheism is widespread, found worldwide and throughout history. Although we live in a world where most people are religious, the number of atheists worldwide is not trivial. Actual estimates of the prevalence of atheists worldwide are difficult to obtain, but if we use a straightforward definition of atheists as individuals who do not believe in a god or gods, the numbers likely exceed half a billion (Zuckerman, 2007); this number suggests that if atheists were considered a "religious" group, they would be the fourth largest one in the world, trailing

only Christians, Muslims, and Hindus. Despite the considerable number of atheists in the world, antagonism towards atheists is perhaps the least understood and talked about prejudice. Moreover, greater understanding of anti-atheist prejudice has the potential to illuminate the evolutionary and cultural origins of religious belief itself, as well as provide fresh insights into the psychological bases of prejudice and intergroup conflict.

If there is one important insight in our understanding of religion's role in human social behavior, it is that it makes little sense to ask questions such as "Does religion breed intolerance?" A more sensible question is to ask *which* aspects of religion tend to be associated with which outcomes, whether prosocial or anti-social (Batson, this volume). What specific aspects of religion induce ingroup cooperation (Sosis & Alcorta, 2003; Norenzayan & Shariff, 2008) conflict with outgroups (Whitehouse, this volume; Ginges, Hansen, & Norenzayan, 2010), and under what specific socio-cultural contexts? This insight – that sharper focus on the constituent parts of what is broadly termed "religion" is of central importance to our analysis of the root causes of anti-atheist prejudice as well.

This chapter proceeds in six sections. (1) We highlight some examples of what we mean by "anti-atheist prejudice" and discuss why it poses somewhat of a psychological puzzle. This puzzle is resolved, we argue, by combining (2) an evolutionary perspective on the psychological origins of prejudice and conflict, and (3) an emerging synthetic approach that describes the evolutionary and cultural forces that lead to both the cross cultural recurrence and variability in religious beliefs, and (4) We bring these two lines of thought together to derive a number of specific hypotheses about anti-atheist prejudice. (5) We describe a number of empirical findings that support this framework, and (6) discuss some key implications. Finally, we integrate insights from across these sections, and offer suggestions for future research.

Anti-Atheist Prejudice

Today, Article 6, Section 8 of North Carolina's state constitution reads "The following persons shall be disqualified for office: First, any person who shall deny the being of Almighty God." Only after disqualifying atheists from office does the constitution dismiss other riffraff, such as those convicted of treason, felony, corruption, malpractice in office, or those who have previously been impeached from office. Although this antiquated piece of law is clearly in conflict with the US Constitution's prohibition against religious tests for political candidates, it is still on the books. And, as recently as 2009, some North Carolina citizens attempted to wield the law against a recently elected city councilor who happened to admit that he does not believe in God (Schrader, 2009). This example, far being an isolated example of negative attitudes towards atheists, may be representative of attitudes that are much more widespread.

The Gallup organization routinely uses hypothetical voting polls to gauge the degree to which different groups of people are tolerated and accepted in Americans society. And, in general, Americans are tolerant of diverse political candidates (or at least they report that they would be tolerant). For instance, the 2008 Presidential election presented perhaps the most diverse group of legitimate candidates in history, and a February 2007 Gallup poll indicated that most people reported a willingness to vote for candidates who are Catholic (95%), African American (94%), Jewish (92%), female (88%), Hispanic (87%), Mormon (72%), twice divorced but currently married (67%), elderly (57%), or homosexual (55%). Of the provided list of hypothetical candidates, only an atheist candidate (45%) could not garner a majority vote. Interestingly, although tolerance for most outgroups (as measured in similar polls) has increased steadily throughout the last five decades, this has been much less true of tolerance for atheists (e.g., Edgell, Gerteis, & Hartmann, 2006). To illustrate, although Gallup respondents were more

than twice as likely to say they would vote for a gay candidate in 1999 than in 1978, this same timespan saw only about an 8% increase in political tolerance for atheists.

Exclusion of atheists is not solely limited to the political domain. Edgell and colleagues (2006) surveyed Americans' views on two other issues: whose vision of America you disagree with, and who you would disapprove of your children marrying. Approximately 40% of respondents indicated that atheists do not agree with their vision of America, markedly more than Muslims (26%), homosexuals (23%), Jews (7%) or African Americans (5%). Atheists fared no better as potential marriage partners, with about 48% of respondents indicating that they would disapprove of an atheist joining the family. Once again, Muslims (34%) and African Americans (27.2%) were more tolerated than were atheists. An atheist's potential problems don't even end with courtship, however, as there is a notable lack of faith in atheists' abilities to raise upstanding citizens. A 2002 Pew poll revealed that more than 60% of Americans feel children who receive a religious upbringing are more likely to be moral adults, and nearly half those surveyed also responded that, as an adult, belief in God is a *necessary* prerequisite for moral behaviour. Edgell and colleagues (2006, p. 211) concluded that "atheists are less likely to be accepted, publicly and privately, than any others from a long list of ethnic, religious, and other minority groups."

It is important to highlight three important facts about anti-atheist prejudice. First, it is widespread in America, but is not unique to it. International surveys show that wherever there are religious majorities, that is, most of the world, there is high levels of anti-atheist prejudice (although there are mitigating factors, which we discuss later). Second, despite the worldwide prevalence of this prejudice, international surveys also show that there is considerable variability in the prevalence of this prejudice across nations. For example, there is virtually no rejection of

atheists in Scandinavian societies such as Denmark and Sweden (Zuckerman, 2008). In providing an account of the causes of this prejudice, we must also explain this cultural variability. Third, anti-atheist prejudice is not just a contemporary phenomenon -- it has deep historical roots, even in democracies that have inherited ideals of the Enlightenment. Even a figure such as John Locke, not exactly a religious zealot, advised against tolerance of atheists in his *Letter Concerning Toleration*!

Why should atheists be the targets of such deep levels of distrust? After all, atheists are individually inconspicuous and collectively inconsequential. They are not a visible, coherent, or powerful group of people. There is no such thing as identifiable atheist attire, cuisine, or music. From the perspective of much psychological research on prejudice, atheists should be ignored, rather than despised. Indeed, one standard way to define prejudice is treating an individual differently based on perceived group attributes (e.g., "Jon's African American, I'll bet he'd like to play on our basketball team"). However, in the case of atheists, it is unclear if there are any aggregate group-level traits that observers apply to individual nonbelievers. As British comedian Ricky Gervais (2010) puts it, "Saying atheism is a belief system is like saying not going skiing is a hobby."

Throughout the rest of this chapter, we will argue that traditional psychological approaches to prejudice, despite making significant advances (e.g., Brewer & Brown, 1998), fall short of explaining persistent negative perceptions of atheists in particular. To understand this particular brand of prejudice, one must appreciate two insights that have emerged in recent years. First, anti-atheist prejudice makes little sense if one views prejudice as a simple unidimensional construct (e.g., "liking" some people and "disliking" others), rather than a suite of nuanced reactions to specific perceived threats coming from different outgroups. Second, anti-atheist

prejudice makes little sense without first considering the social, cultural, and evolutionary functions of religious beliefs.

The Diversity of Prejudices

To understand the psychological bases of anti-atheist prejudice, we must first take a brief historical digression through the prejudice literature. Classically, researchers have viewed prejudice as a simple unidimensional construct. In this view, we tend to "like" people who are similar to us in some way, and we tend to "dislike" dissimilar others. This approach has yielded a number of impressive insights (see, e.g., Brewer & Brown, 1998 for a review), and still influences modern prejudice research. For example, many of the tools that researchers use to measure prejudice simply gauge the degree to which people feel generally positively towards outgroups, or associate outgroup members with positively valenced words (e.g., Greenwald, McGhee, & Schwarz, 1998). And some of these important insights have led to effective policy interventions that seem broadly applicable, such as the idea that equal-status contact between groups can have powerful effects on promoting positive feelings, trust and cooperation (e.g., Pettigrew & Tropp, 2006).

Over the past decade, however, the multidimensional nature of prejudice has become more apparent. One prominent approach partitions prejudice into two separate dimensions: perceived warmth (e.g., friendliness, pleasantness) and perceived competence (e.g., intelligence, capability) (e.g., Cuddy, Fiske, & Glick, 2007; Fiske, Cuddy, Glick, & Xu, 2002). This perspective helps highlight the textured reactions that characterize some prejudices. For example, people tend to pity individuals seen as high in warmth but low in competence—such as individuals with mental disabilities—but envy people seen as high in competence but low in warmth—such as rich folks

(Cuddy, et al., 2007). At the same time, however, this perspective has significant trouble distinguishing many seemingly distinct different types of prejudice. For example, prejudice against Muslims, blacks, Hispanics, and gays seem quite distinct, yet these groups are rated as comparably warm and competent (Fiske, et al., 2002, Study 2). Apparently, more than two dimensions are necessary to explain diverse prejudices.

Recognizing this, a number of evolutionarily-inspired researchers (e.g., Cottrell & Neuberg, 2005; Kurzban & Leary, 2001; Schaller & Neuberg, 2008) have argued that specific forms of prejudice manifest from different central adaptive challenges that humans face. According to this evolutionary perspective, different types of people may be perceived as threats to different functional goals such as finding reliable exchange partners, avoiding pathogens, and avoiding threats to physical safety. The threats themselves are functionally distinct, with different optimal solutions, leading attitudes towards different potentially threatening people to be characterized by separate and distinct reactions.

In concrete terms, this means that, rather than trying to explain "prejudice" broadly, a more nuanced approach would focus on the specific threats that a given group is perceived to pose, as well as the specific reactions people have to such a threat. For example, Cottrell & Neuberg (2005) found that although a unidimensional measure of prejudice could not really distinguish between anti-black prejudice and anti-gay prejudice, both prejudices manifest themselves in markedly different ways. American undergraduates of European descent intuitively judged African American men as threats to personal safety and property, and therefore experienced *fear*. But the same undergraduates intuitively judged gay men as potential pathogen vectors who threaten health, leading to *disgust* reactions.

Above and beyond any given empirical contribution, the evolutionary approach suggests a novel and powerful approach for understanding any specific form of prejudice. First, is to identify any potential functional threats that a given outgroup might be perceived to pose. Second, is to identify potential adaptive reactions to a perceived threat. This framework thus has tremendous potential for solving the puzzle of anti-atheist prejudice, providing that a specific perceived threat can be identified. Atheists lack belief in gods. By exploring the possible functions of supernatural agent beliefs, researchers might be able to determine what a lack of belief in gods might be perceived to threaten.

Religious Prosociality: In Belief in God We Trust

What is the threat that interactions with disbelievers are perceived to pose? To understand this perceived threat, we must appreciate the partly religious origins of large-scale cooperation in human societies. And this requires that we take a detour and consider why large-scale cooperation is an evolutionary puzzle.

Individual members of most species limit their cooperation to a few close members of kith or kin. In contrast, humans readily form large groups, cooperate with a large number of people, and do so even in largely anonymous contexts. From an evolutionary framework, this large-scale cooperation is initially somewhat puzzling because cooperative groups rely on costly investments by individual members. However, a freerider could join the group and accrue the benefits of group living without actually investing any of his or her own effort. In a cooperative group, therefore, defection (non-cooperation) is always advantageous to individual freeriders, but harmful to the functioning of the group as a whole (e.g., Sober & Wilson, 1998). Hence, large scale cooperation has long been recognized as a central adaptive challenge in human evolution,

and researchers have produced a number of potential solutions to this dilemma (e.g., Fehr & Fischbacher, 2003; Henrich & Henrich, 2007). For example, kin selection (Hamilton, 1964) and reciprocal altruism (Trivers, 1971) provide solutions to cooperation among genetically related individuals and individuals who repeatedly interact, respectively.

However, kin selection fails to explain cooperation among nonrelatives, and reciprocal altruism fails to explain cooperation among strangers who have little access to information about each others' cooperative reputations and little chance of repeated interaction. That is, neither kin selection nor reciprocal altruism can explain large scale human cooperation (Henrich, 2004; Henrich, et al., 2005). Both fail under conditions in which cooperation is actually and routinely observed among humans.

An alternative mechanism for eliminating freeriders stems from punishment. If there exists a plausible risk that freeriders will be caught and punished for their actions, potential freeriders may curtail their selfishness (Henrich, 2006; Henrich, et al., 2006). This solves one problem, but creates another. After all, who does the punishing? As with first-order cooperation, punishing freeriders is costly. All members of a group benefit from the presence of individuals willing to punish freeriders, but individual punishers will be outcompeted by those who freeride on their punishment duties. This argument can be repeated *ad infinitum*.

Some types of supernatural agent beliefs might be able to cut through this infinite regress. Across cultures, gods are seen as intentional social agents with whom people can interact (e.g., Waytz et al, 2010; Norenzayan & Gervais, in press). However, there is considerable variability in the described abilities of different gods. Among the world's most culturally successful religions, the gods are described as possessing the ability to monitor human behaviour, and have moral

interest in rewarding normative behaviors and punishing transgressions (e.g., Norenzayan & Shariff, 2008). Thus, if people actually treat their gods as strategic agents who might punish freeriding, then beliefs in moralizing gods could promote large scale cooperation without requiring individually costly punishment (e.g., Johnson & Bering, 2006; Johnson & Kruger, 2004; Norenzayan & Shariff, 2008; Shariff & Norenzayan, 2011). There are important debates regarding the precise mechanisms and evolutionary origins of these beliefs, which we do not discuss here (for a recent review and critical discussion, see Schloss & Murray, 2011; see also Norenzayan & Shariff, 2008; Norenzayan, Shariff, & Gervais, 2009). However there is agreement that these beliefs have played an important role in the emergence of human cooperation.

To see how beliefs in these potent "supernatural watchers" could have played a central role in promoting nice behavior in anonymous contexts, it is important to appreciate how powerful social monitoring incentives are. Economic game studies have shown that people are more prosocial when the situation is not anonymous, and when repeated future interactions are expected, that is, when people expect to be monitored (Fehr & Gaechter 2002). Moreover, even subtle cues of being watched, such as incidental exposure to schematic drawings of human eyes, increase prosocial behavior in anonymous economic games (Haley & Fessler 2005) and decrease cheating in naturalistic settings (Bateson, Nettle, & Roberts 2006). If human watchers encourage nice behavior, it is no surprise that omniscient, morally concerned supernatural watchers do as well, as long as they are genuinely believed and readily come to mind. Critically, these gods have the powerful advantage that cooperative interactions are believed to be under monitoring even when no one is watching, that is, when the situation is objectively anonymous. Moreover, actual punishment is not necessary to elicit good behavior; the mere implied presence of

supernatural monitors, and the threat of punishment (rather than actual punishment) is enough to deter individuals from following their selfish urges and help address the problem of anonymity that plagues large groups.

There is both cross-cultural evidence and laboratory research to support these ideas. First, across 186 separate cultures, belief in morally-concerned gods who can police behaviour is more likely in larger cooperative groups (Roes & Raymond, 2002), lending support to the idea that belief in these gods culturally spread to solve the problem of large-scale cooperation. Second, a variety of experimental and cross-cultural evidence indicates that belief in monitoring gods encourages greater cooperation with strangers. For example, Henrich and colleages (2010) found that believers in the omniscient, moralizing gods of world religions (e.g., Islam, Christianity) are more generous in anonymous economic games. In the lab, subtle experimental reminders of supernatural agents and religious concepts increase volunteerism (Pichon, Boccato, & Saroglou, 2007), honesty (Bering, et al., 2005; Randolph-Seng & Nielsen, 2007), and anonymous generosity (Shariff & Norenzayan, 2007). Although there are potential alternative explanations for these findings (for a critical review, see Norenzayan & Shariff, 2008), there is growing evidence consistent with the idea that belief in gods who are omniscient, powerful, and morally involved encourage prosocial behavior in anonymous contexts. Furthermore, recent evidence confirms that beliefs in watchful, punishing supernatural agents affect people in largely similar ways as does being observed by other humans. For example, if people are performing in front of a human audience or a video camera, they may feel self-conscious (social psychologists refer to this as *public self-awareness*). In addition, people tend to cast themselves in a positive light when they feel that they are targets of social scrutiny. Gervais and Norenzayan (2012) found that subtle reminders of God cause these exact same effects in believers.

To summarize, beliefs about monitoring, policing gods cause the same suite of cooperative effects caused by being watched by other humans. Because cooperativeness stabilizes only when cooperators seek likeminded cooperators (e.g., Henrich & Henrich, 2007), people are quite discriminating about their social partners. In other words, cooperators are quite selective about who they trust. Taking this a step further, sincere expression of belief in these gods, to the extent that it encourages cooperative behavior, could be taken as a signal of another's cooperative intentions. The connection between belief in gods and group-level cooperation may therefore suggest a potential perceived threat posed by religious nonbelievers.

Atheists Seen as Freeriders

To succeed in the social world, individuals must figure out who can be trusted and who should be treated with suspicion. Indeed, trustworthiness is the single most valued trait in others (Cottrell, Neuberg, & Li, 2007). However, trustworthiness cannot generally be observed directly; instead it must be indirectly inferred from other cues (Simpson, 2007). According to the logic of religious prosociality that we just presented, belief in watchful gods might serve as one such cue for believers. That is, believers may view others' belief in God as a potent signal that others may be trusted to comply with prosocial norms.

Recent behavioral economic evidence supports this possibility. In the Trust Game, one participant (the Giver) is given a sum of money and offered the option to transfer any of this money to another participant (the Receiver). Any money that the Giver transfers is multiplied by the researcher, and the Receiver then decides how much money to keep for herself, and how much to give back to the Giver (*sans* multiplication). So, for example, a Giver might receive $10 and transfer all $10 to the Receiver. The initial $10 would be tripled, leaving the Receiver to

choose how to allocate $30 between herself and the Giver. If the Giver trusts the Receiver to split

the money fairly, then he should transfer the full amount, allowing both members to benefit.

However, this leaves the Giver susceptible to getting ripped off by a selfish Receiver who keeps

the full $30. Thus, the amount transferred by the Giver is a direct financial estimate of the

amount of trust he has in the Receiver. Tan and Vogel (2008) used a version of this trust game to

evaluate the relationship between religiosity and perceived trustworthiness. They found that

strongly religious Givers transferred significantly more money to strongly religious Receivers,

indicating that, consistent with the present theoretical framework, religious people tend to use the

religious beliefs of others as a heuristic cue of trustworthiness.

Indeed, the logic of religious prosociality might make it possible to use the beliefs of even

members of other religions as cues of trustworthiness. A Jewish person, for example, might not

share a Hindu's faith in the existence of Vishnu or Shiva, but can nonetheless infer that the

Hindu's beliefs about supernatural monitoring might constrain his or her selfish behaviour.

Consistent with this line of thought, there is at least anecdotal evidence that Mormons are viewed

as particularly trustworthy nannies by non-Mormon New Yorkers (Frank, 1988), and Sikhs are

viewed by non-Sikhs as trustworthy economic partners (Paxson, 2004). In at least some

situations, observers apparently use commitment to even rival gods as signals of trustworthiness.

Where does this analysis leave atheists? To the extent that believers use belief in a god or

gods as a signal of how much others should be trusted, then atheists would be viewed as a threat

to cooperative living, and subsequently distrusted. Atheists might see their religious skepticism

as a private metaphysical viewpoint; believers, on the other hand, see atheism as a threat to

cooperative living. One key reason why believers distrust atheists may be that they view them as

potential freeriders. For the remainder of this chapter, we describe some empirical results bearing on this hypothesis, as well as some interesting implications of this theoretical framework.

Distrust as the Basis of Anti-Atheist Prejudice

In the last several years, we have been applying this theoretical framework to explain the psychological bases of anti-atheist prejudice. If different prejudices are characterized by different reactions to distinct perceived threats, then anti-atheist prejudice should have a psychological profile distinct from other prejudices.

For several theoretical reasons, we were particularly curious about how anti-atheist prejudice compares to prejudice based on sexual orientation. Anti-gay prejudice is a conceptually compelling comparison to anti-atheist prejudice because both atheists and gays typically score poorly on cultural acceptance polls (e.g., Edgell, et al., 2006). Moreover, antipathy is often directed at both atheists and gays by fervent religious believers and religious organizations (from certain religious backgrounds, at least). For example, the Boy Scouts of America do not allow either gays or atheists to join their organization. In addition, both atheists and gays exemplify what is known as *concealable stigma* (e.g., Goffman, 1963)—that is, one cannot tell someone's sexual orientation or religious beliefs simply by looking at them. Despite these similarities, our theoretical framework predicts that anti-gay prejudice and anti-atheist prejudice should derive from distinct psychological processes (distrust and disgust, respectively).

In one study (Gervais, Shariff, & Norenzayan, in press, Study 1) investigated this very prediction by drawing a large and broadly representative sample of American adults. In addition to assessing demographic information and individual religious beliefs, we asked participants to rate the degree to which they viewed both atheists and gays with either distrust or with disgust.

As hypothesized, anti-atheist prejudice was derived from a distrust reaction, whereas anti-gay prejudice was derived from a disgust reaction. Moreover, distrust of atheists was predictably much stronger among individuals who more strongly believed in God.

Though intriguing, this study was susceptible to a few counter-explanations. First, the distrust measure we used was quite overt. It is possible that, for whatever reason, people felt similarly towards both atheists and gays, but felt more comfortable openly voicing distrust of atheists than of gays. In addition, our sample consisted of American adults, an overall quite religious group. To address the latter concern, we performed a number of additional followup studies in the largely secular confines of Vancouver, Canada (Gervais, et al., in press, Studies 2-6). To address the concern that the effects of our initial study were merely an artifact of using an overt measure of explicit atheist distrust, we designed three studies that utilized an indirect measure of distrust. For this measure, we capitalized on some classic findings from the human judgment and decision making literature.

For many judgments, people rely on quick intuitive reactions, rather than on more deliberative reasoning. These intuitive responses often tend to be suboptimal, leading people to logically incorrect choices. For instance, when given a description of a single, politically active, liberal woman and asked whether it is more likely that the woman is 1) a bank teller, or 2) a bank teller and a feminist, most participants choose option 2, against the logic of conditional probabilities (Tversky & Kahnemann, 1983). This problem only works because, at an intuitive level, the description of Linda just *sounds like* a description of an active feminist. This is termed the representativeness heuristic—judging the probability of events based on perceived representativeness to a description, rather than based on logical consideration of probabilities.

To indirectly measure distrust, we capitalized on this classic finding and modified the task so it included a description of an archetypical freerider, somebody who you would likely not trust:

> *"Richard is 31 years old. On his way to work one day, he accidentally backed his car into a parked van. Because pedestrians were watching, he got out of his car. He pretended to write down his insurance information. He then tucked the blank note into the van's window before getting back into his car and driving away.*
> *Later the same day, Richard found a wallet on the sidewalk. Nobody was looking, so he took all of the money out of the wallet. He then threw the wallet in a trash can."*

Next, participants chose whether it is more probable that Richard is 1) a teacher, or 2) a teacher who is also XXXXXX, with XXXXXX being a group membership that we varied across conditions and studies. In this task, the proportion of participants who succumbed to the intuitive pull of the second option provides an indirect measure of the degree to which participants found the description of a criminally untrustworthy individual representative of the particular group presented as XXXXXX.

Across three separate studies, we found that by and large participants did not intuitively judge the description representative of Christians, homosexuals, Muslims, Jewish people, or feminists. But they did intuitively judge that a description of a criminally untrustworthy individual was representative of atheists. The magnitude of atheist distrust in these studies was especially remarkable, as atheists were not viewed as more trustworthy than rapists--the only group we found that was distrusted to the same degree as atheists.

At the same time, not all subjects reacted in the same way to this task. Intuitive distrust of atheists was significantly more prevalent among those who more strongly believed in God. More specifically, distrust of atheists was powerfully predicted by endorsement of the idea that people behave better when they feel like God is watching them. In fact, believers who see belief in a

watchful God as a basis for prosocial behavior are especially likely to distrust atheists. This is precisely what would be expected from the hypothesis that atheist distrust originates from reliance on supernatural monitoring.

Additional follow-up studies further demonstrated that negative reactions towards atheists are confined to the realm of distrust. For example, one study modified the representativeness heuristic paradigm to include a trustworthy, though otherwise unpleasant character. Unpleasantness per se was not found to underlie prejudice against atheists. However, participants only tended to erroneously select the "teacher and…" option when an atheist target was paired with an untrustworthy description. Combined, these studies help to isolate distrust—rather than general unpleasantness or disgust—as the psychological basis for anti-atheist prejudice. These studies also identify the precise religious origins of this prejudice: belief in the moral significance of being under supernatural surveillance.

Implications: Situational Specificity and Prejudice Reduction

When and Where to Expect Anti Atheist Prejudice

If anti-atheist prejudice is so prevalent, why is there little evidence of violence against atheists the way we see, for example, towards gays? According to poll data, atheists are less accepted than gays, yet examples of real-world expressions of anti-atheist prejudice are less apparent than examples of homophobia. The distrust-based origins of anti-atheist prejudice may explain why anti-atheist prejudice does not generally manifest with violence. The threats that many groups are perceived to pose trigger specific emotional responses. For example, anti-gay prejudice is triggered by disgust, and anti-black prejudice is triggered both by fear and anger. Emotions such as fear, anger and disgust are more likely to provoke violent conflict between

groups. Concerns about trustworthiness, on the other hand, may manifest themselves through social exclusion, particularly in domains where trust is seen to be of utmost importance.

In one study (Gervais, et al., in press, Study 6), we tested whether exclusion of atheists varied along with the degree to which a given situation incentivized trustworthiness. To do so, we asked participants to play the role of somebody working on a hiring committee for various jobs. We presented them with résumés and pictures from two potential applicants. The applicants were matched for a variety of different attributes, including age, gender, attractiveness, and educational background. However, we manipulated each applicant's religious identity. One applicant was always described as religious and the other applicant was always described as an atheist.

After reviewing the dossiers of our fictional job applicants, participants indicated which of the two applicants they would hire for a number of different jobs. For our crucial comparison, we had two jobs that were previously matched on the degree to which an ideal candidate would be pleasant, but differed on the degree to which an ideal applicant would need to be trustworthy. According to a previous batch of participants, both babysitters and waitresses need to be pleasant people, but babysitters need to be more trustworthy. As hypothesized, this difference strongly affected our participants' hiring preferences. Most participants were willing to hire our fictional atheist candidate as a waitress, but few would hire her as a babysitter. As in previous studies, this exclusion of atheists from high-trust positions was predicted by participants' belief in God. Although this study only tested hypothetical hiring preferences for two jobs, we suspect that exclusion of atheists would be apparent across a variety of jobs requiring trustworthy individuals, including teachers, bankers, and priests (though in this latter case, the exclusion is

not complete. See Dennett & LaScola, 2010, for a look at the case of closet atheists in the clergy).

Situationally-specific distrust of atheists might have intriguing implications for peoples' situationally strategic self-presentations. In general, people like to make favorable impressions on others, and this can, at times, lead them to present themselves in a favorable light. In some situations, a given individual might want to emphasize his fun-loving nature; in other situations, the same individual might emphasize their bookish intelligence. This suggests the hypothesis that situations that especially require trustworthiness might lead people to over-exaggerate their degree of religious commitment in order to avoid appearing like an untrustworthy atheist. Although this hypothesis has not been directly tested, there is some indirect evidence consistent with it.

Li, Cohen, Weeden, & Kenrick (2010) investigated how changing perceptions of one's romantic rivals might affect religious beliefs. In the experimental conditions, participants viewed a lot of pictures of attractive individuals of their own gender, leading the participants to think that the current mating pool was highly competitive. Interestingly, participants who were thus primed to think of a highly competitive mating market subsequently described themselves as more strongly religious than did participants viewing a less competitive pool of competitors.

One interpretation of these results is that somehow perceiving a competitive mating market actually makes people more religious. However, a second (and perhaps more parsimonious) interpretation is that, when faced with a pool of romantic rivals who excel in terms of *physical* attractiveness, individuals may (consciously or not) inflate the degree to which they describe themselves as possessing other important attributes. Because trust is of vital importance in

romantic relationships, participants may have exaggerated their religious faith to assure others of their trustworthiness.

In sum, it is likely that anti-atheist prejudice presents in highly context-sensitive ways in the real world. Rather than leading to violent conflict, we suggest instead that atheists might simply be excluded from high trust domains. Although there is relatively little research directly exploring this hypothesis, available evidence is consistent with the possibility that distrust of atheists results in exclusion, rather than violent conflict.

Reducing Anti-Atheist Prejudice: Governments and Numbers

The unique characteristics of anti-atheist prejudice suggest that some specific factors may reduce anti-atheist prejudice, independent of their effects on other forms of prejudice. The theoretical model articulated in this chapter reveals that distrust of atheists results from a prevalent view that people can primarily be trusted to the extent that their behavior is being socially monitored. That is, we trust people who feel they are being watched. To a religious believer, who endorses the existence of a morally concerned God overseeing human behavior, atheists are unpredictable individuals – moral wildcards who cannot be trusted because they do not believe in supernatural monitoring.

However, in many modern societies, secular institutions have emerged and supplanted religion as a primary institution that monitors and polices human behavior. If atheists are seen as untrustworthy because they do not believe in *supernatural* monitoring, then perhaps reminders of *secular* monitoring might make atheists appear more trustworthy.

Across three studies, we (Gervais & Norenzayan, in press) tested whether awareness of secular authority reduces distrust of atheists. In addition, we tested three plausible alternative explanations. First, it is possible that a reduction in atheist distrust might just be one instantiation

of an effect whereby awareness of secular authority reduces prejudice in general. Second, evolutionary approaches to prejudice (e.g., Cottrell & Neuberg, 2005) demonstrate that different prejudices are characterized by different perceived threats and functionally-relevant reactions to those threats; secular authority may dampen these specific reactions across different forms of prejudice. Finally, it is possible that awareness of secular authority might simply make all outgroups seem more trustworthy.

In one study, we found that overtly priming effective secular authority (by having participants watch a video about local police) reduced distrust of atheists, but did not affect general attitudes towards a variety of other outgroups (gay men, Muslims, and Jewish people). In a second study, we utilized a more subtle priming technique (Srull & Wyer, 1979) in which participants are not consciously aware that researchers are priming a given concept. This implicit secular authority prime again reduced distrust of atheists, but did not reduce disgust-based prejudice against gays. Finally, we found that implicit secular authority primes once again reduced distrust of atheists, but not distrust of all outgroups. In sum, awareness of watchful secular authorities (e.g., police, judges, and courts) reduced distrust of atheists, but (as predicted by out theoretical model) *did not* affect other forms of prejudice. This finding generalizes from the lab to the real world, as actual government effectiveness is strongly negatively associated with religious believers' distrust of atheists across more than 50 countries worldwide, holding constant individuals' demographic backgrounds, and other relevant factors implicated in prejudice against atheists (Norenzayan & Gervais, 2012), such as country-level human development, individualism and religiosity. The important point to appreciate about this finding is that two equally fervent believers express different levels of distrust towards atheists

depending on whether they live in a society with strong or weak rule of law. Believers exposed to strong rule of law distrust atheists much less.

Another interesting avenue for reducing atheist distrust can be found in their numbers. More than half of a century ago, Allport (1954) noted that prejudice increases with relative outgroup size. For example, racist attitudes in the United States are reliably positively related to the percentage of local populations that happen to be African American (e.g., Quillian, 1996). Indeed, this relationship is perhaps the primary driver of apparent regional differences in racist attitudes between Northern and Southern states (Taylor, 1998). However, racial prejudice— which again results from fearful and angry reactions (Cottrell & Neuberg, 2005)—appears ideally suited for positive prejudice–outgroup size relationships. It is unsurprising that prejudice is positively associated with the relative size of a feared group. However, an evolutionary approach to prejudice recognizes that different prejudices have different functional bases, and may be differentially affected by perceived outgroup prevalence.

Gervais (2011) found converging evidence of a *negative* prejudice-outgroup size relationship when investigating distrust of atheists. One study, for example, revealed a global pattern (across 54 countries) whereby religious believers were more trusting of atheists in countries where atheists were actually more numerous, even after controlling for numerous important individual and international differences (Study 1). A second study found that this effect was consistent even among Canadian university students: people who thought atheists were more common also perceived them as more trustworthy (Study 2). Finally, reminders that atheists are quite prevalent reduced both explicit and implicit measures of atheist distrust (Studies 3-4). In addition, these effects were conceptually distinct from people's perceptions of actual contact with atheists. Knowing that atheists are common did not make people think that

they know more atheists, but it did make atheists appear more trustworthy. In contrast to observed patterns in racial prejudice, perceived atheist prevalence reduced anti-atheist prejudice. These findings highlight another interesting commonality between anti-gay prejudice and anti-atheist prejudice. Dawkins (2006) argues that one way to combat the social stigma associated with atheism is for atheists to "come out," and raise public awareness, like the Gay Pride movement did for the acceptance of gays. These results indicate that—to the extent that "coming out" increases perceptions of atheist numbers—people being increasingly open about their atheism might reduce distrust of atheists. However, it is also important to note that the manner in which people "come out" might also have some bearing on perceptions of atheist trustworthiness. If open atheists are seen as people who attack and undermine religious belief, then it is plausible that open atheism might in fact increase atheist distrust.

Final Remarks

Given the connection between religiosity and prosocial behaviour, isn't it reasonable for believers to distrust atheists? We end this chapter by emphasizing why distrust of atheists is, indeed, a form of prejudice. First, distrust effects in our studies far exceeded any evidence of actual atheist untrustworthiness. In fact, studies in the lab, done in societies with strong secular institutions, show no appreciable differences between theists and atheists in prosocial behavior (e.g., Shariff & Norenzayan, 2007). Second, situational effects of religion are stronger predictors of prosocial behavior than are trait-level religious beliefs (Norenzayan & Shariff, 2008). In studies where religious primes increase prosocial tendencies and honesty, typically the effect of self-reported religiosity is null, again at least in modern Western societies where strong rule of law ensures that levels of prosociality and general trust are overall high. Third, the intuition that those who do not believe in supernatural watchers cannot be moral fails to recognize that there

are multiple motivations (or incentives) to act prosocially. Although religious belief appears to be one such source of prosociality, it is far from the only source available. Consider the powerful role of strong secular institutions that maintain prosocial norms, as well individual motivations such as guilt, shame, empathy and compassion that are shared by nonbelievers and believers alike. Some of the least religious societies on earth, such as Denmark and Sweden, are also the ones that are the most prosocial and trusting (see Zuckerman, 2008). It is very likely that most atheists act morally, albeit for nonreligious reasons (e.g., Beit-Hallahmi, 2010).

We began this chapter with a sentiment expressed by John Locke in *Letter Concerning Toleration*, captured by the fallacious but intuitively compelling idea among believers that atheists are de facto freeriders. In this chapter, we have documented that prejudice against atheists is indeed a direct consequence of a key component of prosocial religions: belief in supernatural surveillance. It is that belief, which atheists lack, that elicits deep distrust towards them. This insight also helped us identify previously hidden factors, in particular exposure to strong institutions and awareness of the prevalence of atheists that erode one of the most widespread prejudices found in the world today.

References

Allport, G. (1954). *The nature of prejudice.* Cambridge, MA: Addison-Wesley.

Batson, this volume

Bateson, M. Nettle, D. Roberts, G. (2006). Cues of being watched enhance cooperation in a real-world setting. *Biology Letters, 2,* 412-414

Beit-Hallahmi, B. (2010). Morality and immorality among the irreligious. In P. Zuckerman (Ed.) *Atheism and Secularity.* (pp. 113-148). Westport, CT: Greenwood Publishing Group.

Bering, J. M., McLeod, K. A. & Shackelford, T. K. (2005). Reasoning about dead agents reveals possible adaptive trends. *Human Nature, 16,* 60–81.

Brewer, M. B., & Brown, R. (1998). Intergroup relations. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (4th ed., pp. 554–594). New York: McGraw-Hill.

Cottrell, C. A. & Neuberg, S. L. (2005). Different emotional reactions to different groups: A sociofunctional threat-based approach to "prejudice." *Journal of Personality and Social Psychology, 88,* 770-789.

Cottrell, C. A., Neuberg, S. L., & Li, N. P. (2007). What do people desire in others? A sociofunctional perspective on the importance of different valued characteristics. *Journal of Personality and Social Psychology, 92,* 208-231.

Cuddy, A. J. C., Fiske, S.T., & Glick, P. (2007). The BIAS map: Behaviors from intergroup affect and stereotypes. *Journal of Personality and Social Psychology, 92,* 631-648.

Dawkins, R. (2006). *The God delusion.* Boston: Houghton Mifflin.

Dennett, D. C. & LaScola, L. (2010). Preachers who are not believers. *Evolutionary Psychology, 8,* 122-150.

Edgell, P., Gerteis, J., & Hartmann, D. (2006). Atheists as "other": Moral boundaries and cultural membership in American society. *American Sociological Review, 71*, 211–234.

Fehr, E., & Fischbacher, U. (2003). The nature of human altruism. *Nature, 425*, 785-791.

Fiske, S. T., Cuddy, A. J. C., Glick, P., and Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from status and competition. *Journal of Personality and Social Psychology, 6,* 878-902.

Frank, R. H. (1988). *Passions within reason: The strategic role of the emotions*. New York: W.W. Norton.

Gervais, R. (December 22, 2010). Does God exist? Ricky Gervais takes your questions. http://blogs.wsj.com/speakeasy/2010/12/22/does-god-exist-ricky-gervais-takes-your-questions/

Gervais, W. M. (2011). Finding the faithless: Perceived atheist prevalence reduce anti-atheist prejudice. *Personality and Social Psychology Bulletin, 37,* 543-556.

Gervais, W. M. & Norenzayan, A. (2012). Like a camera in the sky? Thinking about God increases public self-awareness and socially desirable responding. *Journal of Experimental Social Psychology, 48*, 298-302.

Gervais, W. M. & Norenzayan, A. (in press). Reminders of secular authority reduce believers' distrust of atheists. *Psychological Science*.

Gervais, W. M., Shariff, A. F., & Norenzayan, A. (in press). Do you believe in atheists? Distrust is central to anti-atheist prejudice. *Journal of Personality and Social Psychology*.

Ginges, J., Hansen, I. G., & Norenzayan, A. (2009). Religion and support for suicide attacks. *Psychological Science, 20,* 224-230.

Goffman, E. (1963). *Stigma: Notes on the management of spoiled identity.* Englewood Cliffs, NJ: Prentice-Hall.

Greenwald, A. G., McGhee, D. E. & Schwartz, J. L. (1998). Measuring individual differences in implicit cognition: The implicit association test. *Journal of Personality and Social Psychology, 74,* 1464-1480.

Haley, K. J. & Fessler, D. M. T. (2005). Nobody's watching? Subtle cues affect generosity in an anonymous economic game. *Evolution and Human Behavior, 26,* 245–256.

Hamilton, W. D. (1964). The genetical evolution of social behavior. *Journal of Theoretical Biology, 7,* 1-16.

Henrich, N. S., & Henrich, J. (2007). *Why humans cooperate: A cultural and evolutionary explanation.* Oxford: Oxford University Press.

Henrich, J., Ensimger, J., McElreath, R., Barr, A., Barrett, C., Bolyanatz, A., Cardenas, J. C., Gurven, M., Gwako, E., Henrich, N., Lesorogol, C., Marlowe, F., Tracer, D., & Ziker, J. (2010). Markets, religion, community size, and the evolution of fairness and punishment. *Science, 327,* 1480- 1484.

Henrich, J. (2004). Cultural group selection, coevolutionary processes and large-scale cooperation. *Journal of Economic Behavior & Organization, 53,* 3-35.

Henrich, J. (2006) Cooperation, punishment, and the evolution of human institutions. *Science, 312,* 60-61.

Henrich, J., Boyd, R., Bowles, S., Gintis, H., Fehr, E., Camerer, C., McElreath, R., Gurven, M., Hill, K., Barr, A., Ensminger, J., Tracer, D., Marlow, F., Patton, J., Alvard, M., Gil-White

F., & Henrich, N. (2005). 'Economic Man' in cross-cultural perspective: Ethnography and experiments from 15 small-scale societies. *Behavioral and Brain Sciences, 28,* 795-855.

Henrich, J., McElreath, R., Barr, A., Ensimger, J., Barrett, C., Bolyanatz, A., Cardenas, J. C., Gurven, M., Gwako, E., Henrich, N., Lesorogol, C., Marlowe, F., Tracer, D., Ziker, J. (2006). Costly punishment across human societies. *Science, 312*, 1767- 1770.

Hoffman, McCabe, Shachat, & Smith 1994

Johnson, D. D. P. & Bering, J. M. (2006). Hand of God, mind of man: Punishment and cognition in the evolution of cooperation. *Evolutionary Psychology, 4,* 219-233.

Johnson, D. D. P. & Krueger, O. (2004). Supernatural punishment and the evolution of cooperation. *Political Theology, 5*, 159-176.

Kurzban, R. & Leary, M. R. (2001). Evolutionary origins of stigmatization: The functions of social exclusion. *Psychological Bulletin, 127,* 187-208.

Li, Y. J., Cohen, A. B., Weeden, J., & Kenrick, D. T. (2010). Mating competitors increase religious beliefs. *Journal of Experimental Social Psychology, 46*, 428-431.

Locke, J. (1983/1689). *A Letter Concerning Toleration*. Indianapolis, IN: Hackett.

Norenzayan, A. & Gervais, W. M. (2011). Effective governments reduce distrust of atheists. Unpublished manuscript, University of British Columbia

Norenzayan, A. & Gervais, W. M. (in press). The cultural evolution of religion. Chapter to appear in Slingerland, T. & Collard, M. (eds.) *Creating consilience: Integrating science and the humanities*, Oxford University Press

Norenzayan, A. & Shariff, A. F. (2008). The origin and evolution of religious prosociality. *Science, 322*, 58-62.

Norenzayan, A., Shariff, A. F., & Gervais, W. M. (2010). The Evolution of Religious Misbelief. *Behavioral and Brain Sciences, 32*, 531-532.

Norris, P. & Inglehart, R. (2004). *Sacred and secular: Religion and politics worldwide*. Cambridge: Cambridge University Press.

Paxson, N. (2004). The entrepreneurial ethics of the Sikhs: Religious signaling and the importance of social capital for trust and exchange. Unpublished manuscript.

Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology, 90*, 751-783.

Pichon, I., Boccato, G., & Saroglou, V. (2007). Nonconscious influences of religion on prosociality: A priming study. *European Journal of Social Psychology, 37,* 1032-1045.

Quillian, L., (1996). Group threat and regional change in attitudes toward African-Americans. *American Journal of Sociology, 102*, 816–830.

Randolph-Seng, B. & Nielsen, M. E. (2007) Honesty: One effect of primed religious representations. *The International Journal for the Psychology of Religion* 17, 303–15.

Roes, F. L. & Raymond, M. (2003). Belief in moralizing gods. *Evolution and Human Behavior, 24*, 126–35.

Schaller, M., & Neuberg, S. L. (2008). Intergroup prejudices and intergroup conflicts. In C. Crawford & D. L. Krebs (Eds.), *Foundations of evolutionary psychology* (pp. 399-412). Mahwah NJ: Lawrence Erlbaum Associates.

Schloss, J. P. & Murray, M. J. (2011). Evolutionary accounts of belief in supernatural punishment: a critical review. *Religion, Brain, and Behavior, 1,* 46-99.

Schrader, J. (2009, Dec. 9). Critics of Cecil Bothwell cite N.C. bar to atheists. Asheville Citizen-Times. Retreived August 14, 2011, from http://www.citizen-times.com/article/20091208/NEWS01/912080327

Shariff, A. F. & Norenzayan, A. (2007) God is watching you: Priming God concepts increases prosocial behavior in an anonymous economic game. *Psychological Science*, 18, 803–809.

Shariff, A.F., & Norenzayan, A. (2011). Mean gods make good people: Different views of God predict cheating behavior. *International Journal for the Psychology of Religion, 2,* 85-96.

Simpson, J. A. (2007). Psychological foundations of trust. *Current Directions in Psychological Science, 16,* 264-268.

Sober, E. & Wilson, D.S. (1998). *Unto others: The evolution and psychology of unselfish behavior.* Cambridge, MA: Harvard University Press.

Sosis, R. & Alcorta, C. (2003). Signaling, Solidarity, and the Sacred: The Evolution of Religious Behavior. *Evolutionary Anthropology, 12,* 264-274.

Srull, T. K., & Wyer, R. S. (1979). Category accessibility and social perception: Some implications for the study of person memory and interpersonal judgment. *Journal of Personality & Social Psychology, 38*, 841-856.

Tan, J. H. W. & Vogel, C. (2008). Religion and trust: An experimental study. *The Journal of Economic Psychology, 29,* 832-848.

Taylor, M. C., (1998). How White attitudes vary with the racial composition of local populations: numbers count. *American Sociological Review, 63*, 512–535.

The Washington Post (May 11, 2011). Editorial: The threat posed by religious violence in Egypt.
http://www.washingtonpost.com/opinions/the-threat-posed-by-religious-violence-in-
egypt/2011/05/11/AFPu8fsG_story.html.

Trivers, R. L. (1971). The evolution of reciprocal altruism. *The Quarterly Review of Biology, 46,*
35-57.

Tversky, A. & Kahneman, D. (1983). Extension versus intuititve reasoning: The conjunction
fallacy in probability judgment. *Psychological Review, 90,* 293-315.

Waytz, A., Gray, K., Epley, N., & Wegner, D.M. (2010). The causes and consequences of mind
perception. *Trends in Cognitive Sciences, 14,* 383-388*.*

Whitehouse, this volume;

Zuckerman, P. (2007). Atheism: Contemporary numbers and patterns. In M. Martin (Ed.), *The
Cambridge Companion to Atheism* (pp. 47-65). Cambridge: Cambridge University Press.

Zuckerman, P. (2008). *Society without God*. New York: New York University Press.