## Gods are more flexible than resolutions

Commentary on Atran, S., & Norenzayan, A. (2004). Religion's evolutionary landscape: Counterintuition, commitment, compassion, communion. *Behavioral and brain sciences*, 27(6), 713-730

by George Ainslie

151 Veterans Affairs Medical Center, Coatesville, PA 19320 University of Cape Town, Rondebosch 7701, South Africa george.ainslie@va.gov www.picoeconomics.org

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## Abstract:

The target article proposes that "counterintuitive beliefs in supernatural agents" are shaped by cognitive factors and survive because they foster empathic concern and counteract existential dread. I argue that they are shaped by motivational forces similar to those that shape our beliefs about other people; that empathic concern is rewarded in a more elementary fashion; and that a major function of these supernatural beliefs may be to provide a more flexible alternative to autonomous willpower in controlling dread and many other unwelcome urges.

## **Text**

The useful hypotheses in this article include: 1. that religion is a form of motivated belief, i.e. that religious beliefs and their attendant practices survive insofar as they serve a purpose: 2. that one principal purpose of religion is to deter "social deception and defection in the pursuit of self-preservation"; 3. that another principal purpose of religion is to control "emotionally eruptive existential anxieties; and 4. that human experience, and religious experience in particular, converges "on more or less the same life paths—much as rain that falls anywhere in a mountain-valley landscape drains into a limited set of lakes or rivers." The authors present a case for how humans may be innately prepared to construct the supernatural beings that populate most religions, because of people's "hair-triggered" attribution of agency to ambiguous percepts, the increased memorability of "minimally counterintuitive" ideas, and people's ability to imagine counterfactual omniscient personae. However, this article presents little about what incentive people

have to construct them—only some unsurprising data that subjects value religious ideas more in fear-provoking situations.

I agree that supernatural religion is probably an extension of "emotional mechanisms that evolved for mundane adaptive tasks," and that part of its usefulness is sometimes to control selfishness and emotional eruptions. However, I do not think the authors have specified adequate mechanisms to account for these effects. Part of this problem comes from the inadequacy of how behavioral science has come to imagine self-interest and altruism. Rational self-interest is identified with beating out competitors for resources, and rational altruism with taking the long view of this competition so as to identify situations where cooperation will be more profitable, hedonically or genetically, than competition (Frank et.al., 1993; Dawkins, 1989). Given the human openness to seduction by short-term prospects, altruism is sometimes suggested to require self-control (Rachlin, 2002), but the point is still to maximize your own survival resources. The authors are right to reject this "mind-blind functionalism;" but the role they give to religious belief is still one of controlling an innate tendency toward selfishness, through belief in vigilant gods.

An adequate theory needs to explain why people start out as highly empathic children (Harris, 1987; Zahn-Waxler et.al., 1992), who then learn to overcome this initial impulse to a variable extent. That is, why is there a basic self-interest in cultivating vicarious emotional experience, which is then partially displaced by the more "objective" selfinterest of (say) economic man? This area is largely terra incognita. Motivational theory has not examined emotions as rewards until recently (Lewis & Haviland-Jones, 2000), perhaps because they are awkward targets for controlled research, and it is hard even to theorize about rewards that require no specific stimulus and have many of the characteristics of behaviors. Mounting evidence that all reward-responsive organisms discount delayed rewards proportionally to delay (hyperbolically) rather than at fixed rates (exponentially; Kirby, 1997) suggests one mechanism for vicarious emotional reward, based on the innate impulsiveness that such discounting predicts (Ainslie, 1995) and 2001, pp. 161-186). I can only summarize it here: Emotions are reward-dependent behaviors that have their own appetites and lead to their own innate rewards, rather than being elicited reflexes. Because of a hyperbolic impatience for their rewards, their limiting factor is premature satiation, which causes extinction of deliberately emitted emotions; to stay fresh they must be based on unpredictable occasions, i.e. on gambles. Such a contingency makes external occasions for emotion valuable, and these occasions seem especially well paced by the apparent experience of other people. Thus vicarious reward creates an incentive to help the people you choose as objects, and to resist temptations to exploit them. The recent discovery of "mirror neurons" that initiate copies of other people's behaviors (Iacoboni et.al., 1999) suggests a reason why vicarious experience may stand out from other available occasions for emotion. Whatever the mechanism, empathic engagement with its sometime result of altruism is apparently a primary motivated process.

To speculate more specifically on the processes presented in the article: People construct mental models of gods in the same way that we construct mental models of each other,

models that reflect our take on what others are going through, modified by projection, transference, and other distortions. Ordinarily we "believe in" other people (as opposed to how we experience fictional characters) only when we can test our models against intermittent observations of them. However, when the models are especially valuable to us we may lower our threshold for belief, and experience a dead relative, or Elvis, or a god as present. Such extra occasions for emotion are valuable in their own right—as valuable as the emotions are—but insofar as they can remain robust without confirmatory evidence from actual people they may also improve our self-control.

Selfishness that gets too much in the way of vicarious reward is an impulse that needs to be controlled, as are not only "emotionally eruptive existential anxiety" and other corrosive emotions but also the self-destructive urges that get called sins. Most of these cannot be subsumed under selfishness. Of the seven deadly sins of Christianity, for instance (gluttony, lust, wrath, pride, envy, avarice, and sloth), only wrath and avarice could be argued to be as harmful to others as they are to the sinners themselves. Self-control is a broad task, and central to religion.

Self-control is usually regarded as the function of willpower; but I have argued elsewhere that willpower is nothing more than the fruit of recognizing a limited-warfare relationship among successive selves—another product of hyperbolic discounting—and that it suffers from the same limitations as other solutions to limited warfare (Ainslie, 2001, pp. 90-104, 143-160). Specifically, willpower is the technique of regarding choices as test cases for how you will decide in similar future cases; great reliance on this technique leads to compulsiveness and the risk of permanent damage to willpower in cases where the will fails. That is, autonomous self-control can lead to the kind of lawyerliness that theologians might call "death of the spirit." But the obvious alternative, openness to the influence of actual other people, is fallible—this influence is impulsive itself at times, evadable, and sometimes self-serving.

Here is where a felt relationship with a god or even a sentient ancestor (e.g. "I can just hear Mother") could be a solution. Your sense of being on good terms with this entity forms the stake that you bet against impulses; but the entity is not rigid like a resolution, rather a mental model like your model of other people, and made of human expectations. The information that shapes this model comes indirectly, from the forms of communing and divination to which the authors refer, and is not normally controlled by any one individual. Furthermore, there can be ways that you can overcome your expectation that the entity is angry or disappointed—not sure fire ways, which would undermine your experience that the entity is genuinely another agent, but ways that might be more effective than efforts to repair an autonomous but failed will.

In sum the mundane transactions from which the supernatural is formed need to be more motivationally important than just hair-trigger attributions, mnemonic advantages, and a rich imagination, although all of these may have their role. What I have sketched is just one possibility, but it illustrates the potential for functional modeling when a mechanism for motivational conflict is added to the mixture.

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