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Given the ubiquity and persistence of religion, biobehavioral sciences propose that religion probably contributed in some way to inclusive fitness. The nature of this contribution, however, remains a contested issue. For instance, one rather influential theory suggests that religious sacrifices served as costly and hard-to-fake signals of commitment to cooperative economics. As the human animal could only acquire the requisite resources to survive and successfully reproduce by cooperating with non-kin, religion provided, and perhaps continues to provide a way of ensuring economic cooperation as opposed to exploitative competition. This so-called "free rider problem," however, fails to address why it is that many religious practices appear to be in the service of healing. This paper proposes that one of religion's adaptive functions is to promote health amid infectious disease ecologies. Religion accomplishes this by either reducing or inducing stress.

Stress has a direct affect on immune function. For instance, it is widely recognized that chronic stress depresses the immune system, leaving the stressed individual vulnerable to the contraction of disease. While there are many things that can cause chronic stress, perceiving a lack of meaning, purpose, and sense of coherence clearly promotes stress for the human animal. Recent studies indicate that religion uniquely provides individuals with an adaptive sense of coherence, purpose, and control. According to the cultural anthropologist Ernest Becker, not to mention Terror Management Theory generally, religious culture constructs a "vital lie," an adaptive vice in the service of maintaining psychological equanimity amid nature red in tooth and claw. By reducing chronic stress, religion promotes healthy immune function.

Significantly, though, religion manages stress by occasionally inducing it. Such inductions serve immunological functions. To be sure, according to the ethnographic record, ritual sacrifice appears to be a rather ubiquitous religious practice, a practice that most often occurred, and perhaps occurs in some places to this day, when someone in the local group got sick. While it is clear that chronic stress depresses immune function, acute stress potentiates it. Empirical studies demonstrate that when humans are exposed to gory images, for instance, surgical procedures or scenes from *The Texas Chainsaw Massacre*, their immune systems robustly respond: visual cues of potential infection cause immune systems to prepare prophylactically. What is more, research shows that if one is already infected, the same acute stressor facilitates a more robust immunological response. Finally, some studies indicate that low-dose exposure to an infectious agent while experiencing acute stress acts as a vaccination, such that upon re-exposure to the antigen, the individual's adaptive immune system is prepared to recognize and defeat more effectively the antigen. This paper proposes that religion's blood sacrifices served/serve as acute stressors and thus facilitated an adaptive, immunological response to the threat of infectious disease.

While religion's stress-reducing functions have been widely recognized, religion's stress-inducing functions have not. The stress of economic cooperation notwithstanding, religion's primary adaptive function may be to combat the primary selection pressure on the human animal, that is, infectious disease.