The evolution of murder
Joshua Duntley, Ph.D. – The Richard Stockton College of New Jersey
David M. Buss, Ph.D. – The University of Texas, Austin

Why people murder their fellow humans is a question of profound theoretical and practical importance, but one whose answer has thus far eluded successful scientific explanation. We present an evolutionary theory of murder that explains why murder occurs, the circumstances in which it occurs, and the contribution of some aspects of religion to the activation of psychological mechanisms dedicated to murder.

Roughly 1 in 15,000 people is murdered in the United States each year (DOJ, 2006; Stolinsky & Stolinsky, 2000). At first glance, this may seem like a fairly rare event. But computed over a 75 year lifespan, it equates to a 1 in 369 chance of being murdered during the individual lifetime of a white woman, a 1 in 133 chance for a white man, a 1 in 104 chance for a black woman, and a 1 in 21 chance for a black man (Ghiglieri, 1999).

The homicide rates in industrialized nations pale in comparison to the risk of being murdered in many cultures. Homicides account for roughly 1 in 10 deaths of adult men among the Huli; 1 in 4 deaths among the Mae Enga; and 1 in 3 deaths among the Dugum Dani and Yanomamo (Chagnon, 1988). Even among the so-called “gentle people” or “peaceful” !Kung San of Botswana, there were 22 murders over a 25 year period among a population of 1,500, more than 4 times the rate of homicide in a typical year in the United States (Lee, 1984).

A number of theories of homicide have been proposed. Some have focused on identifying societal correlates of killing. Others have identified developmental, personality, or psychopathology predictors of who is likely to commit murder. Still others have made arguments for the evolution of different lifetime strategies based on experiences early in development that predispose some people to be more likely to adopt criminal strategies, including murder. However, none of these theories provides a complete or compelling explanation for what leads to the vast majority of murders. For our understanding of homicide to be complete, we must explain, for example, (1) why men are vastly over-represented among murderers (87%); (2) why men are also over-represented among murder victims (75%); (3) why women commit some kinds of homicide more than men (e.g., infanticide of own children); (4) why people kill in qualitatively distinct conditions, leading to predictable infanticides, step-child killings, men murdering women, women killing men, intrasexual rivalry homicides, and warfare killings; and (5) why people experience murder fantasies in circumstances that turn out to correspond closely to the contexts in which people actually commit murder (Buss, 2005).

A new theory of homicide has been proposed to fill in many of the explanatory gaps left by previous explanations of murder. Homicide Adaptation Theory (Buss, 2005; Buss & Duntley, 1997; 1998; Duntley, 2005) proposes that murder was historically one among several evolved solutions for solving a variety of adaptive problems. Specifically, we propose that killing a conspecific contributed to: (1) preventing the exploitation, injury, rape, or killing of self, kin, mates, and coalitional allies by conspecifics; (2) reputation management against being perceived as easily exploited, injured, raped, or killed by rivals; (3) protecting resources, territory, shelter, and food from competitors; (4) eliminating resource-absorbing or costly individuals who are not genetically related (e.g.,
stepchildren); and (5) eliminating genetic relatives (e.g., deformed infants; the chronically ill or infirm) who interfere with investment in other vehicles better able to translate resource investment into fitness.

Homicide differs from other strategies for inflicting costs because it leads to the absolute end of direct competition between two individuals. A murder victim can no longer compete with his killer. A dead competitor can no longer directly influence the environment or social context previously shared with his murderer. The distinct outcomes of homicide would have created equally unique selection pressures to shape human psychology specifically for contexts of homicide (Buss, 2005; Duntley, 2005).

Psychological adaptations for murder view the world through the lens of local culture, social environment, and ecology, which can increase the benefits and decrease the costs of a choosing homicide as an adaptive solution. Thus, some specific forms of religious influence can activate evolved homicide adaptations. These include religious leaders who exploit their follower’s evolved psychology, a religious belief in a better afterlife as a consequence of religiously-sanctioned murder, divine instruction and justification for murder, and the establishment and enforcement of in-groups and out-groups.

In sum, Homicide Adaptation Theory proposes a new explanation for murder: Over the long expanse of human history, there were recurrent conflicts between individuals, including conflict over reputation and social status, conflict over resources, and conflict over romantic partners. We hypothesize that killing is one among an arsenal of strategies that evolved to best competitors in these recurrent conflicts. We present empirical evidence to support novel predictions generated by Homicide Adaptation Theory. Discussion examines how some aspects of religion influence the evolved psychological mechanisms that produce lethal and non-lethal violence.

References