

Making Maladaptation Palatable: Fictive Kinship in Adoption and Religion

Anthropological Theory I

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ABSTRACT

Scott Atran is an adjunct professor at the University of Michigan Department of Psychology. He has published on the role of fictive kinship in religion. He argues that militarily and religious institutions recruit and keep members by co-opting neurological and psychological mechanisms that evolved to help kin help each other (Atran 2002, Atran 2003, Atran 2004c). His recent work focuses on jihad and suicide terrorism (Atran 2004a, Atran 2004d, Atran 2005a, Atran 2005b). In the case of jihad, religion and warfare are explicitly linked, making fertile ground for recruitment of suicide bombers.

Although adoptive parents are vastly different from Middle-Eastern suicide terrorists, they share specific maladaptive behavioral similarities. Many adoptive parents forgo a portion of their reproductive success to adopt. In many cases, parents treat their adopted children as well as their genetic children (Gibson 2004). Suicide terrorists likewise sacrifice any chance they have at future reproduction. Fictive kinship motivates self-sacrificing behavior in both groups. Adoptive parents establish fictive parental bonds with their children. Suicide bombers, often forced to cut contact with their biological kin, become members of close-knit fictive families to which they give literally everything. This paper will review recent anthropological and psychological literature by several current and former University of Michigan affiliates and relate fictive kinship to the military, terrorism, and adoption.

INTRODUCTION

I begin describing the work of several University of Michigan affiliates and their work relating to this paper. Then I discuss when and how fictive kinship is used in adoption and religion. I then present a basic evolutionary background and then discuss whether religious sacrifice and non-kin adoption are adaptive. Next, I pay special attention to the costs and benefits members of each group face. I then discuss suicide terror, religion, and adoption results of misplaced evolved psychological dispositions. I close with a discussion of how fictive kinship “keeps it all going.”

Several anthropologists and psychologists who research(ed) questions of fictive kinship in religious, military, and other settings are affiliated with the University of Michigan. Vern Carroll published on adoption in Polynesia. His edited volume “Adoption in Eastern Oceania” (1970) is considered a classic of “adoptionology.” Scott Atran publishes regularly on the role of fictive kinship in terrorist networks and religious institutions (Atran 2002, Atran 2003, Atran 2004a, Atran 2004b, Atran 2004c, Atran 2004d, Atran 2005a, Atran 2005b). Mark Tessler, at the University’s Institute for Social Research and Jeremy Ginges, at the Research Center for Group Dynamics, also investigate terrorism (Ginges 2005, Tessler 2002, Tessler and Corstange 2002). William Irons, a Michigan graduate, has examined religion as a costly, “hard-to-fake,” form of commitment (Irons 1996, Irons 2001). Roy Rappaport has written about the evolution and functional aspects of religion (Rappaport 1971, Rappaport 1979, Rappaport 1999). This paper draws primarily from the work of these investigators. The

paper will focus on two behaviors that appear maladaptive; non-kin adoption and religious self-sacrifice (especially suicide and celibacy) and describe the role of fictive kinship within each.

EVOLUTIONARY BACKGROUND

Behavior we see today among humans is the product of millions of years of evolution. We are the result of our ancestors' successful struggle to reproduce in the face of various constraints. Like our ancestors, we are constrained by our physical, social, and mental abilities, as well as the physical, social, and mental abilities of others. Social constraints force us to make behavioral choices in the same way as ecological constraints. The costs and benefits of these choices can vary depending on who our competitors are and how we benefit by challenging them. From an adaptive perspective, the calculus of social constraints looks very different when interactions involve kin versus non-kin. This is because selection has favored us to act altruistically towards close relatives over unrelated individuals, *ceteris paribus* (Hamilton 1963, Hamilton 1964). Fictive kinship can confuse perceptions of relatedness and cause people to act in unexpected or irrational ways – at least as far as adaptation is concerned.

Adoption agencies, religious institutions, and military recruiters all rely on fictive kinship to establish, strengthen, and maintain emotional bonds between people. Each group, for its own means, successfully co-opts cognitive machinery originally evolved to help consanguineal kin recognize and assist each other. These groups get unrelated conspecifics to behave as though they share “blood.”

In the cases of religion, and the military, kinship manipulation benefits the manipulating party. With adoption, it benefits both parties - well bonded children have fewer problems both in and out of school (Wierzbicki 1993). Religious and military institutions¹, however, use fictive kinship and other devices to get people to do things they normally would not; things we assume natural selection should not favor.

FROM SUICIDE TO CELIBACY

Evolutionary explanations for human behavior assume behavior is adaptive. Individuals who behaved optimally in the past out-reproduced others in the population. Organisms are alive today because their ancestors behaved adaptively. How then, can we make sense of seemingly maladaptive behavior like suicide? Suicide is the most costly behavior an organism can engage in. It costs all current and future reproductive ability. And in species where parents invest in their offspring, suicide may result in the death of current offspring. Suicide can have effects lasting for generations.

More subtle reproductive sacrifices can be thought of as effective forms of suicide. Catholic priests, for example, vow to remain celibate for life. This behavior is best qualified as germ-line suicide because priests and other religious celibates maintain the ability to invest in kin. It could be that cases inclusive fitness benefits compensate for celibacy. This cannot be the case for suicide.

Why, furthermore, should parents adopt unrelated children, especially if

¹ These two institutions might be considered one in the same for organizations such as Hamas and Al Qaeda, where Atran focuses study.

they have genetic children of their own?² The more children a family has, the fewer resources can go to each one (Trivers 1974). Following adaptive logic, parents should never adopt unrelated children. Their genetic interests would be better served by having another genetic child or at least devoting all resources to one child. *Unless* something is “in it” for those who sacrifice.

For sacrifice to be adaptive, it must provide a fitness benefit to the individual. There is no point sacrificing “for the good of the group” if someone else will. In groups, it often makes more sense *for the individual* to ride on the coattails of others (Hardin 1968). Group behavior is riddled with collective action problems like this. Why adopt an unrelated child? Why toss a bill in the collection plate? Why hunt? The answer is that these collective action problems disappear if benefits flow disproportionately to the actor his close relatives (i.e. if he “gets something out of it”) (Hawkes 1992). People will sacrifice if they stand to gain a net benefit from doing so. What is “in it” for religious people and adoptive parents? I turn to this now.

Religious Sacrifice as an Adaptation

God is neither divisible, nor subtractable (Ostrom and Ostrom 1977). That is, I cannot take a part of God and make it my own at your exclusion – God is not zero-sum. Religious leaders teach that people have access to God so long as they follow the proper “path” and pay the proper tribute. All religions also extract tribute. At the most basic level, tribute is time. This creates opportunity costs for

² The term “genetic” is used throughout because the term “biological” is ambiguous. Children born to surrogate mothers are certainly “biological” although they may share no genes with the woman who gives birth to them.

followers. Tribute is also extracted as money and, in extreme circumstances, martyrdom. For religion to be adaptive, the faithful must reap compensation of some sort for their “investments.”

If we are to continue with this “arch-adaptationist” view and hold tightly to individual fitness returns to explain behavior, calling religion “adaptive” seems difficult, but it is possible. One view from the adaptationist perspective proposes that religion is a costly signal (Irons 2001). Individuals who sacrifice are the only ones who can afford to (Zahavi et al. 1997). Sacrificing signals the ability to acquire, protect, and then give away things like knowledge, food, and other resources. Fitness and status benefits are assumed to follow and so, religion is adaptive³ (Irons 2001).

Drawing from Atran, I propose an additional hypothesis. Religion may lead to a longer (Atran 2004c) and possibly more fruitful life (Irons 1996). If we assume 1) post-menopausal women are effective alloparents (Hawkes 2003, Hawkes 2004, Hawkes et al. 1998, Hrdy 2000) and 2) religious people live healthier, longer lives than non-religious ones (Atran 2004c, Levin 1994, Levin 1996, Levin and Vanderpool 1987)⁴, selection might favor religious people over non-religious ones because of they make extra contributions to their children and grandchildren. They are more productive for more time. What makes this scenario unlikely is that religious participation incurs costs of all sorts. People sacrifice food, animals, and especially time to their Gods. The benefits of

³ At least for males.

⁴ This claim is contentious of course. It is used here for the purpose of demonstration.

participation would have to outweigh these costs. Perhaps religion is not adaptive after all.

Religious Sacrifice as a Byproduct

Suicide terror presents a unique problem. Suicide bombers provide a public good but do not live to reap direct fitness benefits. Why? Contrary to establishment views, most supporters of suicide terrorism do not “hate freedom” or even American culture (Tessler 2002, Tessler and Corstange 2002). And the majority of suicide bombers are not poor, uneducated, or psychopathic (Atran 2003, Atran 2004b, Atran 2004d, Atran 2005b). It is safe to rule out pathology as an explanation for this behavior. Bombers may benefit through inclusive fitness payoffs, but this is not likely. In the Middle East, for example, the families of Palestinian suicide bombers are likely to be harassed by the Israeli army (Atran 2003). Their homes are often destroyed and they may be injured or killed.

The most likely explanation for suicide bombing, the one most supported by the data, comes from Atran. He says (2004b: 78-9):

Unlike poorer, less educated-elements of their societies, or equally educated, well-off members of our society, many educated, middle-class Muslims increasingly experience frustration with life as their potential opportunities are less attractive than their prior expectations. Frustrated with their future, the appeal of routine national life declines, and suicide terrorism gives some perceived purpose to act altruistically, in the potential terrorist’s mind, for the welfare of a future generation. Revolutionary terror imprints itself into history when corrupt and corroded societies choke rising aspirations into explosive frustration.

A lack of perceived-opportunity, together with psychological manipulation, makes a suicide terrorist (Atran 2003, Atran 2004b). Terrorist handlers actively enforce

the idea that suicide bombing will benefit (fictive) kin. As an example of this, Atran (2004b) cites the “Oath to Jihad” used by an organization with links to bin-Laden, “Each [martyr] has a special place – among them are brothers, just as there are sons and even more dear.” Potential bombers become convinced their sacrifice will benefit kin. As this happens, the calculus of costs to benefits shifts to the point where sacrifice makes sense in the mind of the terrorist.

Atran calls adaptationist arguments “mind-blind” (Atran 2004c). He forces us to reconsider whether all of what we see is adaptive and asserts that characteristics that evolved for one reason may be co-opted for another, leading to maladaptive results such as suicide bombing. I now turn to non-kin adoption, another apparently maladaptive behavior.

Adoption as an Adaptation

It is not hard to see how kin adoption is adaptive; it has obvious inclusive fitness benefits. Taking in a genetic relative has fitness benefits for the adopter because he or she shares genes with the adopted (Hamilton 1963, Hamilton 1964, Silk 1980, Silk 1987a, Silk 1987b). Counter-intuitively, *non*-kin adoption can also be adaptive. Making a living off a plot of land of fixed size, for example, requires families to optimize its size (Silk 1980, Silk 1987b). Large families may run out of food, small families may not have enough labor to work the farm. It is easier to adjust family size than farm size. When they need labor, they adopt in. When the farm cannot support the family, they adopt out (Silk 1980, Silk 1987b).

In post-industrial societies, as in all others, adoption is a way to increase inclusive fitness. Kin-adoption is quite common in the first world (Stolley 1993). Non-kin adoption, however, presents a puzzle. Adoption is no longer needed to secure labor, so this adaptive explanation falls by the wayside. Adoption *is* used by childless people to produce “social progeny” and heirs (Goody 1977), but this behavior is not adaptive. It would make more evolutionary “sense” for a family without children to endow their kin over an unrelated child (unless, of course, they have no living relatives).

I believe an adaptive argument may explain non-kin adoption (in America at least). Childlessness is associated with negative stereotypes (Callan 1985). Callan’s study found that Americans who have no children by choice are called “materialistic” and “selfish” by their peers significantly more than those who have children (Callan 1985). People with children are called “natural,” “devoted,” “emotionally mature,” “likeable,” “conforming,” and “hard-working” (Callan 1985). People who remain childless because of medical conditions fell in between these two poles. Americans may adopt to evade negative perceptions. Such avoidance has tangible benefits – it is difficult to imagine a childless person elected President of the United States. Childlessness could have ramifications in the workplace as well. It is not difficult to imagine a boss laying off a single person before someone with “a wife and kids at home.” Adoption may be mutualism. Parents benefit along with their children.

Unless the adoptive couple eventually has genetic children, adopting for status is not likely to be adaptive. The possible exception is adoption pays off in

inclusive fitness. Whether or not it does remains to be seen. It seems more likely that adoption is a byproduct of technologically advanced society. I discuss why in the next section.

Adoption as a Byproduct

All living organisms are driven to reproduce. This assumption goes without saying in Darwinian models. People who find they are unable to conceive children still possess the psychological “drive” to parent. In traditional societies, such individuals might become “helpers at the nest” (Hrdy 2000) or adopt close kin if the need be. There is nothing we would consider institutionalized adoption in these societies – no institutionalized framework for enforcement exists.

Ethnographic accounts of infanticide show that people have little time for unrelated children (Hrdy 2000). Even if it were possible to adopt unrelated children, there would be difficulties with feeding because breasts, not bottles, are ubiquitous. Non-kin adoption is uncommon in small-scale societies.

I propose people in post-industrial societies adopt to fulfill a parental “drive” (i.e. “will,” “instinct,” or “urge”). What makes Westerners more motivated to adopt unrelated children than people in subsistence economies? First, Westerners have the wherewithal and institutional mechanisms to adopt non-kin. Second, perhaps more importantly, Western citizens may feel a stronger drive to adopt because of the disconnect between kin inherent in Western society. A tight focus on the independent nuclear family (and eventually splitting from it to start a new one) combined with neolocality mean we are no longer surrounded

by kin as our ancestors were for hundreds of generations. It is now normative to marry, establish a household, and have children independent of the household where you were raised. If marriage fails to produce children, we no longer have relatives nearby towards whom we can direct our energy. Adoption may help us fill this void.

Just how far people go to adopt supports this hypothesis. The adoption process is very selective and people who adopt non-kin, especially through agencies, are highly motivated to succeed. Prospective parents screen themselves by deciding to engage in a legal, emotional, and financial process that may take years to complete or fail altogether (Gibson 2004). After this, social workers, government agencies, and birth-parents⁵ screen them again. The effort put into adoption makes it clear that it is no mistake. But neither is suicide bombing. Why do people want so badly to behave maladaptively?

THE ROLE OF FICTIVE KINSHIP IN RECRUITMENT AND RETENTION

Fictive kinship groups use close kinship terminology to reinforce the idea that members are kin. Members refer to each other as “brother” and “sister.” They call their leaders “father” and “mother.” It would be odd to hear a Catholic parishioner address his priest as “Cousin Smith.” It is logical that people take direction from close relatives like “fathers” over more distant ones. Our fathers have more stake in our wellbeing because the “power” of kin altruism falls dramatically with relational distance (Hamilton 1963). This can be likened to the inverse-square law in physics where the amount of measurable energy (say

⁵ In open adoptions.

magnetism) between objects drops by half for every doubling of distance between them. Fictive kinship groups more cohesive if members use close kin terms when referring to each other (Sosis and Bressler 2003). This strengthens bonds between them and increases the likelihood they will act altruistically toward each other. This is important and beneficial for adoptive parents and children, but what of religious sacrifice?

The experiments of Stanley Milgram show how susceptible our cognitive machinery is to local circumstances (Milgram 1963). Milgram recruited a number of “regular” participants to administer electric shocks to people in an adjacent room. Shocks ranged from 15 to 450 volts⁶. Subjects were told to administer increasingly strong shocks when confederates provided incorrect answers to a series of questions. If subjects wished to stop punishing, they were prodded to go on up to four times, they were never threatened. The strongest prod was “You have no other choice, you need to go on” (Milgram 1963: 374). The shocks were not real, of course, but the horrified participants were unaware of this. In the end, 26 of 40 administered 450 volt⁷ shocks to utter strangers.

The presence of an authority figure strongly influenced the subjects in Milgram’s classic experiment (Milgram 1963). This figure (the researcher) ensured them it was right, necessary, and normal to proceed with increasingly powerful shocks. Milgram says the “larger than life” setting of the experiment, Yale University, also contributed to obedience. People felt their actions were

⁶ For comparison, a car battery is 12 volts, while the “third rail” of most commuter trains is 600 to 700.

⁷ This switch was labeled “450 volts” and “XXX.”

sanctioned and therefore justified. Milgram concluded calling obedience a “deeply ingrained behavior tendency” (Milgram 1963).

The tendency to obey has roots in the nuclear family. As children, we obey our parents and other close relatives. These people have authority over us and are responsible for our wellbeing. After childhood, we pledge obedience to secular institutions like the state. All the while, we pledge obedience to our Gods. Religious leaders use kinship terminology to familiarize us to and strengthen our bonds with supernatural deities (Atran 2002, Atran 2004c). As we bond with God, we bond with other “kin” who share our beliefs. Sostis and Bressler (2003) found that religious communes are much more durable than ones based on secular ideologies. Drawing on Rappaport (1971, 1979, 1999), they explain that religious beliefs are unfalsifiable and therefore “cannot be verified logically, believers verify them ‘emotionally.’” The emotional nature of religious ritual binds believers together in a way secular ideologies cannot.

Atran (2002), echoing others before him (see Alexander 1987, Baron-Cohen 1995), speculates that the neural networks and cognitive machinery that not only cause, but *allow*, humans to believe in the supernatural first developed to help us model the world unknown to us. He says:

[‘M]eta-modeling’ or ‘meta-representational’ ability has wide-ranging consequences for human survival. It allows people to conceive of alternative worlds and to entertain, recognize, and evaluate the differences between true and false beliefs. Given the ever-present menace of enemies within and without, concealment, deception and the ability to both generate and recognize false beliefs in others would favor survival (Atran 2002).

The ability to think metaphorically, or “meta-representationally”, affords us the ability to judge whether a predator lurks in the distance, if hunting prospects are good on any given day, and if next season’s harvest will support the people in the village. But if we can evaluate these facts using experience and metaphor, why can we not evaluate the existence of God using the same tools? The answer is familiar to scientists - God is not falsifiable (Atran 2004c). Some people do not believe in God, but this does not stop most from continuing to. Our brains appear “hardwired” for making meta-representational judgments (Atran 2004c). Having a meta-representational mind that predisposes us to believe in God is advantageous to not having a meta-representational mind at all. This type of mind also can get “tied up” in fictive kinship when it might not be adaptively useful, as in religion and adoption.

CONCLUSION

They are dissimilar on the surface, but suicide terrorism and adoption function on similar principles. Pending further study, both appear maladaptive. Both involve the co-option of evolved psychological mechanisms originally used to help genetically related kin recognize and assist one another.

Novel circumstances make it possible for people in the West to parent unrelated children. Close kin terms strengthen these relationships – so much so that fictive bonds between parents and adopted children can even rival those of parents and genetic children (Gibson 2004).

Novel circumstances also spur suicide bombing. When relatively young members of a population fail to realize their perceived ability, often due to political and military influences out of their control, they seek new ways to take action. Militant religious leaders are quick to recruit and manipulate them to a point at they sacrifice themselves for their “kin.”

We may be able to use adoptive parents to learn about the psychology of suicide terrorists. Members of each group are highly self-selected, relatively wealthy and well educated (Atran 2003, Atran 2004a, Atran 2004b, Atran 2004d, Bachrach 1986). Most importantly, both sacrifice a significant portion of their own fitness for unrelated individuals. There is sure to be variation between individuals regarding who is most easily manipulated, or motivated, to help kin, fictive or otherwise. Future research might examine what factors cause one person to be easily “fooled” into sacrificing for non-kin, and another to stand his ground. Adoptive parents provide a good place to start.

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