Against Moral Nativism

September 2004

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[Forthcoming in D. Murphy and M. Bishop (eds.), Stephen Stich and His Critics, Blackwell Press.]

In the 1960s and 1970s philosophical interest in innateness was rekindled by the rise of modern linguistics. That resurgence was facilitated by Stephen Stich's (1975) anthology *Innate Ideas*, which takes readers on a tour from Plato, Locke, and Leibniz, to Chomsky, Katz, and Quine. That volume also marked a new philosophical interest in interdisciplinary research. One year after publication, the Sloan Foundation reified interdisciplinary approaches to the mind, by offering institutional support and selecting the label "cognitive science." Twenty years later, cognitive science is going strong, and debates about nativism have broadened to include many different mental capacities. Stich has been at the cutting edge of these trends; he has been an important contributor, a crusader for interdisciplinary, and a mentor to some of the finest new voices in the field. His most recent contributions to the innateness debate, in collaboration with Chandra Sripada, focus not on language, but on morality. That will by my topic.

Sripada and Stich (forthcoming) argue against strong forms of moral nativism, but they do think moral cognition has an innate basis. I will argue that moral nativism should be abandoned altogether, but much of what I say is in harmony with their views. I will address Sripada and Stich's work in my concluding section. My goal here is not to undermine their arguments, but to offer a parallel discussion. I am a fellow traveler in a terrain that Sripada and Stich have helped to chart out. My debt to Stich will be apparent in every page; he has been instrumental not only in illuminating this specific debate, but in shifting philosophy to an unprecedented form of methodological naturalism. Stich's naturalism raises the bar by demanding that philosophers acquaint themselves with psychology, biology, and anthropology. Philosophers under his influence cannot indulge in a priori reflection without blushing.

1. Born to Be Good?

Moral norms are found in almost every recorded human society. Like language, religion, and art, morality seems to be a human universal. Of these universals, morality is arguably the only one with precursors in nonhuman animals. Many species communicate, but they do not have richly inflected and recursive languages. Apes mourn their dead, but they do not have funeral rites. Bower birds make beautiful structures to attract their mates, but there is no reason to think this is a precursor of human creature expression. But animals do console each other, empathize, and reciprocate. It has even been suggested that some primates have a nascent sense of fairness. It seems, then, that we have good evidence for the claim that morality is an evolved capacity. Animals may not have moral systems in exactly the same sense that we do, but the resemblance is intriguing. It is tempting to conclude that human morality is an evolutionary successor to capacities found in other species.

On the picture, morality is innate. We are born to be good. The concept of innateness is closely related to domain specificity. To say that a capacity is innate is, in part, to say that we have biological machinery *dedicated* to attainment of that capacity. Friends of innateness claims often emphasize universals. If morality is part of the bioprogram, and the evolved aspects of human psychology are generally monomorphic, then there must be moral universals; i.e., there must be aspects of our moral systems that are found among all normally developing members of our species. Defenders of moral universals might adopt the *minimal* view that we have a general capacity for acquiring moral norms, while denying that the content of those norms is preordained. Or they might adopt the *modest* that there are innate moral rules, while admitting that epigenetic factors exert a nontrivial influence on how these rules operate in different societies. Defenders of *immodest* moral nativism would say that innate moral norms have specific contents: the actual norms that govern our lives are innately fixed, and culture exerts little influence.

In this chapter, I will argue against moral nativism. I will proceed in stages. First I will ague against immodest moral nativism, then against the modest view, and finally against the view that we have only a minimal innate moral competence. Morality, I will claim, is a byproduct of capacities that were evolved for other purposes. Morality is a spandrel. There is no mechanism dedicated to the acquisition of moral norms, and the same anti-nativist conclusion may even be true for nonmoral norms. The fact that our lives are thoroughly permeated by norms may be an accident.

2. Are there Moral Universals?

Defenders of immodest moral nativism would need to establish two things. First, they would need to identify some moral norms that can be found in all (or almost all) cultures. I add the parenthetical hedge, because certain highly aberrant cultural conditions might prevent a biologically driven capacity from developing properly. For simplicity, however, I will say that immodest nativists believe in "universal" moral norms. Second, immodest nativists would need to show that innate, domain specific mechanisms are the best explanation of how those norms are acquired. The discovery of pancultural norms would not prove immodest moral nativism on it's own. There can be cultural universals that are not innate. In every culture, people believe that the sun in bright, but that probably isn't an innate belief. It is a belief that every one acquires using general-purpose perceptual capacities. It just so happens that every sighted person observes the sun and is capable of discerning that the sun is bright. In this section, I will postpone the question of domain-specific mechanisms, and focus on universals.

Are some moral norms found universally? To fully address this question, one would have to take an exhaustive list of the moral values in a randomly chosen culture and then investigate whether any of those values can be found in all other cultures. That would be a massive undertaking. To keep things manageable, I will restrict this discussion to three illustrative norms that have been widely observed and widely investigated in both human societies and other species. These norms constitute some of our best current candidates for moral universals.

The first norm that I want to consider can be stated as the injunction: "Don't harm

innocent people." Barring sadists and psychopaths, this looks like a norm few of us would reject. We condemn those who harm others, and we feel terribly guilty when we cause harm, even if inadvertently. We have numerous laws against stealing, torturing, killing, and delimiting the freedoms of others. Violations of these laws carries serious legal consequences and moral outrage from the community. If unsolicited harm were tolerated, societies would break down.

It is hard to imagine that any culture could survive without a norm against harming the innocent. Yet, a moment's reflection can show that this norm is regularly violated. The Aztec's, for example, purportedly captured innocent people on a regular basis, and sacrificed them in public ceremonies that ended in lavish cannibal feasts. Harris (1985) argues that this has been a common practice historically. He cites many examples, including this 16 century missionary's account of how a sacrificed slave was treated by the Tupinamba of Brazil:

[T]hey soon tore [the slave's body] into pieces with great rejoicing, especially the women, who went around singing and dancing, some [of the women] pierced the cut off members [of the body] with sharp sticks, others smeared their hands with [the victim's] fat and went around smearing [the fat on] the faces and mouths of the others, and it was such that they gathered [the victims] blood in the hands and licked it... (p. 209)

Murderous acts are often commonplace without the cannibalistic element. The Yanomamö of the Amazon basin go on raids of neighboring villages and kill the first man they encounter (Chagnon, 1968). The Ilongot of Luzon in the Philippines practiced headhunting into the middle of the twentieth century. Rosaldo (1980) reports that they used to decapitate strangers in order to "lighten their hearts" after a loved one died. The Romans hosted gladiatorial tournaments for half a millennium, and thousands of ordinary citizens would pile into the Coliseum to watch people being torn limb from limb. Slavery has been commonplace throughout human history, and countless societies have engaged in violent conquests to obtain resources or expand. Notice that is all these cases (and examples can be multiplied *ad nauseum*), the harms regarded as morally acceptable by many people or even morally good. In response, one can only concede that there is no general moral stricture against harming innocent people.

There may, however, be a workable revision. Most of the time, when a society tolerates harming innocent people, those people are members of a different social group. So our injunction needs to be revised: "Don't harm innocent members of the ingroup." This is an improvement, but there are still apparent counterexamples. In ritual contexts, harm is often tolerated. Scarification, piercing, fasting, adult circumcision, dangerous dugs, enemas, flagellation, and immolation are just a few examples. A number of Plains Indian groups in North America practices the O-Kee-Pa, in which participants have their bodies suspended by hooks. One might say that these cases are not counterexamples, but principled exceptions. Ritual contexts trump moral rules, and, indeed, the emotional impact of these rituals is heightened by the fact that harm in considered immoral in other contexts. As with gang initiations, one can prove one's strength and loyalty by enduring serious harm. But rituals demonstrate that strictures against harm are culturally variable. In our culture, religions that engage in harmful rituals are abhorred. In any case, we do

not need to look to rituals to find examples of tolerated harm within a social group. Consider the treatment of women. Rape and subjugation of women has been an accepted social practice in many societies. One might respond by arguing that women are not regarded as members of the *ingroup*, by those engaged in abusive practices. Societies that tolerate violence against women regard women as inferior, and, hence, as members of a different group than the men who perpetrate such violence.

This reply underscores the pliability of "ingroup." The ingroup might be defined by geographic or cultural boundaries, on the one hand, or by boundaries such as sex, race, and social class. Strictures against harming members of the ingroup will vary significantly depending on the local requirements for group membership. Indeed, social psychologists have long known that people can form ingroups extremely easily. For example, Sherif et al. (1954) randomly divided a group of boys into two camps, and within a few days the members of each camp started socially ostracizing the members of the other camp, insulting them, fighting with them, and stealing from them.

This raises a danger of trivialization. If we define "ingroup" in terms of geography or culture, the stricture against harming members of the ingroup are substantive. But suppose we define an "ingroup" as any group whose members an individual regards as fully worthy of moral consideration. No the stricture is trivial. It amounts to the injunction: Don't harm those who you regards as people you oughtn't harm. Still, one might insist, this counts as a moral universal. In every society, each person affiliates with other people and considers it wrong to harm those other people. Perhaps the universal stricture against harm amounts to simple norm that we should avoid harming some people some of the time.

Even this norm may have counterexamples. Consider the Ik of Uganda. In a controversial study, Turnbull (1972) argues that the Ik would regularly steal from each other and laugh at each other's suffering. Turnbull reports that a member of the group would pry open the mouth of an old man to get his food. In another case he says, "Men would watch a child with eager anticipation as it crawled toward the fire, then burst into gay and happy laughter as it plunged a skinny hand into the coals," (112). Perhaps the Ik are not a genuine counterexample. Perhaps they lost their natural tendencies to avoid harm under the pressure of economic hardship. Or perhaps Turnbull's account of the Ik is uncharitable. I am willing to grant that. I suspect that there is a universal stricture against harming some people some of the time. The case of the Ik raises the possibility that adverse conditions can promote viscous self-interest, which is hardly surprising. The Ik can be regarded as a limiting case. If the formation of ingroups is a flexible process then, under extreme conditions, the ingroup can reduce to a single member: me.

Out first candidate for a moral universal—the stricture against harm—turns out to be highly flexible because it applies only to select individuals and the selection process is quite unconstrained. On its own, "Don't harm members of the ingroup" is profoundly unhelpful. One needs to know the conditions of ingroup membership (as well as the culturally specific conditions under which ingroup members can be harmed). It would be better to describe this stricture against harm as a norm *schema*. It cannot be used as a guide to action until other information is filled in, and that additional information is openended.

Let me move on to a second example. It is often observed that many mammalian species are hierarchically organized. This generalization includes *homo sapiens*. In

human collectives, there are usually differences in social station or rank. Higher ranking individuals have greater authority than lower ranking individuals and usually greater access to resources. In our own society, we try to downplay rank. We emphasize the middle class, fight poverty, and celebrate upward mobility. But these very values reveal the existence of social stratification. Upward mobility is a euphemism for rank climbing. Moreover, there is evidence that members of our society are highly obedient to authority. In his infamous experiment at Yale, Milgram (1974) demonstrated that randomly chosen volunteers are willing to inflict (what they believed to be) highly dangerous electric shocks to complete strangers. All subjects continued to increase the voltage despite shouts from the victim (who was actually a stooge in the experiment), and 65% administered maximum electricity, well after the victim had entirely stopped responding. The subjects administered these shocks simply because the experimenter, clad in a lab coat, asked them to. When the experiments was conducted by an experimenter who looked less imposing than Milgram or when it was performed at a less prestigious institution, there was a 15% drop in the number of subjects willing to administer maximum voltage.

Social hierarchies are underwritten by moral norms. We respect authorities and we subordinate ourselves to them. We feel contempt for those who are rude to the parents, teachers, and community leaders. We also condemn authority figures who abuse power or don't deserve it. We implicitly regard the social order as natural, and we disapprove of those who do not take their rightful place. In societies that mark status with title or terms of address, failure to use the right words in speaking to a member of higher rank can lead to embarrassment. In traditional societies, violations of hierarchy norms are taken much more seriously. Throughout the world, people literally bow their heads in the presence of authorities—a gesture that exaggerates and symbolically reenacts the natural expression of submission and shame.

In sum, social rank hierarchies seem to be a cultural universal, and they seem to be sustained through moral attitudes. Perhaps there is a moral norm that says, "Respect and obey authorities." The first reaction one might have to this suggestion is that not all authorities are worth of respect. Should we respect and obey evil dictators, incompetent teachers, and abusive parents? The injunction would be better phrased: "Respect and obey legitimate authorities." As with the injunction against harm, there is some risk of trivialization. Which authorities are legitimate? Those that deserve our obedience and respect. So the injunction becomes: "Respect and obey those whom you respect and obey." But, as above, the trivialization does not undermine the norm. It remains a substantive claim that we all respect and obey some people some of the time. If that fact is underwritten by moral norms, then we have a moral universal. But notice that the injunction to "Respect and obey some people some time" is schematic in several ways. Most obviously, there is the question of whom to respect. Is authority determined by age, gender, skin color, strength, wisdom, charisma, looks, or family line? These are common options, but others are imaginable too. Twins are considered closer to God in some African cultures (such as the Nuer and the Kedjom), and the ancient Egyptians used to persecute redheads. The question of who has authority in a given culture depends on who had the power to claim authority in the past, who has attributes that accord with the local cosmology and ideology, and many other factors.

The injunction to respect and obey authorities is also schematic in another way.

There can be considerable variation in what counts as obedience and respect. Bowing, mentioned above, is one popular display of obedience. Others include foot kissing, saluting, terms of address, and class-specific wardrobes. These perceptible signs of deference are but one dimension of variation. A more important dimension concerns the degree of authority granted to those of high rank. Many prestate societies, including bands and some tribes, are said to be egalitarian. This does not mean they have no social hierarchies. Often certain individuals (e.g., "the elders") are given special respect. But those individuals do not wield any concrete power. They do not have resources to redistribute or police to enforce rules. Their power consists in the fact that others consult them for advice and treat them deferentially. More "advanced" societies have headmen or chiefs who have greater access to resources. Statehood begins when there is enough infrastructure for these authority figures to enforce control over others and collect taxes or tributes. Within states, there is considerable differentiation in what people do for a living. With that differentiation, it is easier to form social classes, because some jobs are more desirable, require more training, and produce more wealth. True social stratification begins with the transitions from simple societies to states.

Not all states are equally stratified. I alluded to the upward mobility in own society. That is a morally cherished ideal, even if it is not a reality. In other advanced societies, the ideal is quite different. In India, for example, individuals born into lower castes are often still expected to stay there. As in our society, these lower classes are poor, limited to certain kinds of jobs, and often identifiable by race. The difference is that, until quite recently, public ideology has reinforced this high degree of stratification in India. One factor driving stratification in India is religion. Hinduism reinforces class differences, and believers think social advancement comes through reincarnation, not achievement. The racial differences between achuta (untouchables) and Brahman are easy to see, and they may be historical in origin. There is some evidence that the indigenous people of India were invaded by paler Indo-Europeans during the last millennium, and the vanquished have been subjugated ever since.

Let me note, finally, that there are cultural differences in obedience. Milgram's study, mentioned above, was carried out in a number of different cultures. In all, subjects were alarmingly willing to administer dangerous electric shocks to complete strangers. There were, however, differences. In the U.S. sample, 65% of the participants turned the shock dial to maximum voltage (450 volts, marked XXX). In Germany, the number of maximally obedient subjects rose to 85% (Mantell, 1971), and in Australia, the number dropped to 40% (Kilham and Mann, 1974). It is reasonable to conclude that there is an interaction between obedience and culture. Some cultures promote obedience, and some have a more overt skepticism about authority. Any norm enjoining us to respect and obey authorities must be filtered through this cultural veil. The degree and nature of our obedience can vary.

The authority norm is schematic. People generally obey and respect authorities, but this command is useless without knowing who deserves authority, how respect is shown, and the degree of obedience. There is open-ended variation in all these factors, and considerable variation in the extent and rigidity of hierarchical stratification.

I will briefly consider one more candidate for a moral universal: the prohibition against incest. Incest is avoided in many species, and inbreeding is believed to carry biological risks. Anthropologists tell us that the majority of human societies—perhaps all

of them—have incest taboos. The injunction, "Don't engage in incestuous sexual relations" seems to be a human universal. Or is it? As with the other two norms I have considered, this one admits of striking variation.

The first question to address is, Which sexual relations are incestuous? particular, one might wonder, which relatives are off limits. In contemporary Western societies, sex and marriage between first cousins is often considered taboo. Indeed, in the eighth century, the medieval Church banned marriage between cousins separated by seven degrees (you couldn't marry descendents of your great great great great great granparents descendents—not that you would have any way of figuring out who they are). Jack Goody (1983) speculates that this prohibition was designed to prevent consolidation of wealth within a single family. (He also argues the Church moralized monogamy to serve the same end!) Now the Catholic Church has retreated to the first cousin rule, but this is not universal. In some cultures, first cousin marriage is encouraged. It is standard practice for many parts of Asia and Africa. For example, Pederson found that about 30% of married Palastians were married to first cousins, and Hussien found that over 60% of Nubians were married to first cousins or closer relatives. In the West, first cousin marriage has not been unheard of; Albert Einstein and Charles Darwin both married first cousins. There also appears to be very little health risk in cousin marriage (Bennett et al. 2002).

What about the immediate family? There is at least one society in the historical record that seems to have encouraged both parent-child and brother-sister incest: the Zoroastrians of ancient Iran (Slotkin, 1947; Scheidel, 1996). Here is a representative ninth century text:

... pleased is he who has a child of his child, even when it is from some one of a different race and different country. That, too, has then become much delight which is expedient, that pleasure, sweetness, and joy which are owing to a son that a man begets from a daughter of his own, who is also a brother of that same mother; and he who is born of a son and mother is also a brother of that same father; this is a way of much pleasure, which is a blessing of the joy ... the family is more perfect; its nature is without vexation and gathering affection. (quoted by Slotkin, 1947: 616)

Zoroastrians may be an exception in their overt endorsement of all forms of incest, but other groups seem to condone some forms some of the time. Let's begin with father-daughter incest. Among the Thonga of South Africa, fathers are permitted to have sexual relations with their daughters before a hippopotamus hunt (Junod, 1962), and father-daughter marriages have been documented among royalty in the ancient world. Such cases do not prove that there father-incest isn't accepted in *ordinary* conditions, but they suggest that there may be no biological mechanism making us revile such relations *naturally*. Further evidence comes from incidence of sexual abuse. In America, father-daughter incest is distressingly common; 16,000 incidents are reported annually, and many more cases may go unreported (Finkelhor, 1983).

Mother-son incest is probably less common that father-daughter incest, but it occurs. In common chimpanzees, there is better evidence for mother-son incest avoidance than for any other kind, but the evidence comes from the fact that male chimps *attempt* to

have sex with their mothers, who less then politely refuse (Goodale, 1986: 466f). Freud would have a field day. In bonobos, a few cases of successful mother-son copulations have been reported (de Waal & Lanting, 1997). These copulations are rare, but that is not necessarily due to an incest taboo (Leavitt, 1990). Mothers and sons are also different in age and, typically, different in rank. Statistics about the frequency of mother-son incest are meaningful only when compared to statistics about sex between female-male pairs with comparable differences in age and rank. In our own species, there are occasional reports of mother-son incest. In Japan, news media raised alarm when they spread rumors that some mothers were sexually indulging their sons in order to help them focus on their all-important exams, rather than the vicissitudes of romance (Allison, 2000). There are, in addition, many societies in which mothers soothe their young sons by stroking their genitals (Broude, 1995). This latter practice probably isn't viewed in an entirely sexual way, but it casts doubt on the suggestion that there is a deeply rooted biological aversion to sexual contact between mothers and sons.

Turn, finally, to brother-sister incest. In chimps, siblings rarely copulate, because adolescent males (or females, in the case of bonobos) leave the natal group. This pattern of group migration is often interpreted as evidence for an innate incest avoidance mechanism, but it is possible that it is an innate mechanism to regulate population size by dispersal or a mechanism to promote peace between neighboring groups (Leavitt, 1990). What about human beings? Among Royalty, sibling incest has been well documented in Egypt, Rome, Hawaii, and South America. But sibling incest isn't restricted to royalty. In Graeco-Roman Egypt, census records demonstrate that more than 30% of marriages were between siblings in some urban areas. This has puzzled historians for some time, because there is no prior history of non-Royal sibling incest in Egypt prior to this period or in Greece and Rome. Shaw (1992) offers a plausible explanation. The extant census records are from regions heavily populated by descendents of Greek immigrants, who arrived after Alexander the Great conquered Egypt. Those immigrants may have been discouraged from marrying indigenous people, because the Greek leaders (the Ptolemies) would not have wanted Greek citizens to become overly sympathetic to the vanquished Egyptians. Since the initial immigrant populations were small, discouraging out-group marriage would have lead to a death of marriageable partners. Lifting prohibitions on incest was a natural solution. But why, Scheidel (1996) asks, did these Greeks end up marrying their *siblings* instead of cousins and kin who would have been living close by? (Greeks lived near their extended families.) One possibility is prestige transmission. The Ptolemies, like many other Egyptian pharaohs, married their siblings. When incest prohibitions were lifted, it may have become a fad to emulate the leaders.

Variation in incest norms also shows up in how societies punish guilty parties. In a large-scale review, Thornhill (1991) finds considerable differences in severity of punishment. For example, the Trumai of Brazil merely frown upon incest, and the Incas of Peru gouged out the eyes of a man who committed incest, and quartered him (p. 253). Interestingly, severity of punishment and the range of relations that are regarded as incestrious are both highly correlated with social stratification. Stratified societies have stricter incest prohibitions presumably because incestuous relations provide a way of consolidated wealth and moving up the social ladder thereby.

The upshot of all this is that, while incest avoidance is common, it is not universal in all forms. "Don't engage in incestuous sexual relations" is too schematic a

prescription to follow on its own. Different cultures regard different relatives as offlimits, and there are culturally sanctioned violations of the rule even within the immediate family. In order to avoid incest, we need to which relations are incestuous (cousins?), which acts are incestuous (stroking your child's genitals?), and which contexts allow for exceptions (are you going on a hunt?). The strength of the prohibition is also variable. If you live in an egalitarian society, it may seem less wrong than if you live in a stratified society.

The three norms that I have been considering are among our best candidates for moral universals. My goal here has not been to deny their (near) universality. Instead, I have tried to show that these norms take on different forms in different cultures. Similar conclusions could be defended for other apparent universals. In most cultures, people believe that good deeds should be *reciprocated*, but there is variation in what deeds counts as good, who is required to reciprocate, how much reciprocation is required, and whether that reciprocation has to take the same form as the initial act of kindness. In most cultures people believe that resources should be distributed *fairly*, but there is great variation in the standards of fairness, with some cultures emphasizing equitable division, some emphasizing egalitarian division, and most cultures tolerate some gross departures from fairness. In most cultures, people place moral value on long-term romantic bonds or *marriages*, but the number and gender of marriage partners is notoriously variable, as are attitudes towards extramarital sex.

Are there universal moral proscriptions? That depends. Most societies have moral rules pertaining to harms, social hierarchies, the exchange of resources, and various aspects of sexuality, but the content of those norms varies. Immodest moral nativists suggest that we are hardwired to have moral norms with specific content. That is not the case. At best, we are hardwired with moral norms that have schematic content, which then get filled in through enculturation and learning. The examples that I have been considering suggest that modest moral nativism is more defensible than immodest moral nativism. However, I will now argue that modest moral nativism faces serious objections as well.

3. Is There a Morality Acquisition Device?

Here is a tempting picture of how moral rules are acquired. We are born with a small set of schematic moral principles—principles of the kind I have been discussing. Each of these principles has parameters that are set by exposure to the behavior of caregivers, peers, and other salient individuals in one's culture. We can think of the innate mechanism as a Morality Acquisition Device (MAD). The schematic rules are our Universal Morality (UM), and the behaviors used in setting the parameters in those rules constitute Primary Moral Data (PMD). The analogy, of course, is to language, and, in labeling the innate mechanism a *Morality* Acquisition Device, defenders of this analogy presume that morality is acquired via domain specific resources. This is the picture suggested by modest moral nativists.

There are alternatives to this picture. One alternative is that the schematic rules in question are not innate. Perhaps all societies acquire prohibitions against harm, rank violations, or incest via convergent *cultural* evolution, and these norms are then learned

using general mechanism. Another possibility is that we have innate schematic norms against harm, rank violations, and incest, but these norms are not moral norms. Rather they are norms of a more general kind, and they only get moralized through a learning process. Either of these possibilities would undermine modest moral nativism. Both are consistent with *minimal* moral nativism, however. Both are consistent with the possibility that we have an innate, domain-specific moralization mechanism (MM). This mechanism can convert norms that are not initially moral into moral norms.

To decide between modest moral nativism and one of the other alternatives, we must consider two questions. First, could a cultural evolution story explain the near university of the schematic rules that I have been discussing? Second, is there reason to think that these rules are universally *moral*? A negative answer to either question would cast doubt on the existence of a MAD. If the universals could be culturally evolved, then there is no pressure for them to be innate, and if the universals are not treated morally in all cultures, they may not qualify as an innate morality, even if they have an innate basis. If I can show either of these two things, I will seriously weaken the case for modest moral nativism. This is my objective in the next two subsections. After that, I will turn to the question of an innate moralization mechanism (MM).

3.1 Genes vs. Genealogy

Moderal moral nativists assume that our moral rules are written, albeit schematically, in our genes. An alternative possibility is that they are the products of cultural history. This was essentially Nietzsche's view. He invited us to regard each of our values as an artifact—a human creation devised to serve some psychological or social end. In arguing against immodest moral nativism, I have already implied that Nietzsche was onto something. The variation in moral rules demonstrates that culture is making a constitutive contribution to morality. Perhaps this can be pushed even further. On the modest nativist view, culture is basically switching a few parameters and filling a few slots in our moral schema. On a genealogical view, moral rules come into being through cultural processes. To assess whether the genealogical view is plausible, let's see whether the norms that I have been considering might have a cultural explanation.

Just about all societies have injunctions against harm. In many cases, we have seen, these injunctions are restricted to members of the ingroup, however ingroups happen to be defined. There is some reason to think that these rules have a basis in natural tendencies towards empathy and facilitation, which can be found in social mammals quite generally. Wolves don't randomly turn on members of their own pack. Natural selection has prevented that. But (for reasons I will discuss below), there is little reason to think that this natural tendency is a moral rule in other creatures. If we are disposed to kindness, why do we have moral rules against harm? The answer may have a lot to do with out intelligence. Human beings can reflect on the advantages of harm. We know that we can overpower others and take things from them that we would like to have. A simple tendency to treat others empathetically is too weak to overcome a cool cost/benefit analysis. The weakness of our empathetically driven concern for others is manifest in the monstrous cruelties that human societies regularly inflict against members of other groups. What is to prevent us from overriding empathy within our groups, especially when we can get away with it? What is to prevent us from forming small

coalitions with kin and attacking the family next door? This danger is greatly compounded as human group sizes increase. As Hume pointed out, empathy is inversely related to distance. In order for societies to expand, they need to devise a mechanism to prevent us from harming those we don't know very well. I suspect that moral prohibitions against harm are the culturally evolved solution to these problems. They ensure societal stability when empathy is discounted through distance or short-term cost/benefit analysis. Cultural rules make us feel guilty when we harm others, even if we don't feel empathetic. But why moralize harm at all? Why not enforce harm norms through heavy sanctions? The answer is simple. By morally condemning harm, cultures can shape behavior without having to police it.

Next consider rules pertaining to rank hierarchies. Some mammals have rank hierarchies, and others do not. What about us? Is social rank a biological inevitability or cultural construct? The variations in human hierarchies suggest that culture plays a strong role. Furthermore, there is a plausible story about how such hierarchies might be culturally evolved. Harris (1977) traces the path from egalitarian hunter-gatherer societies into heavily stratified states. The change, he suggests, is driven by human mastery of ecological resources. Imagine an egalitarian society in which certain individuals are especially adapt at obtaining highly valued food. Such individuals can gain favor by redistributing the food that they acquire rather than keeping in to themselves. In so doing, they can gain the loyalty of followers, who band together to collectively help in the accumulation and redistribution process. In this way, good redistributors can increase their social prominence even more and become Bigmen. If ecological conditions allow food to be farmed, stored, and hoarded, the power differential can increase. Bigmen can become a primary source for food during hard times, because individuals working on their own cannot coordinate large-scale storage efforts. Bigmen thereby attain real authority and become chiefs, and their descendents inherit this status. Once a society develops ways of storing food, some individuals can be freed from the drudgery of food production. They can dedicate their time to the creation of other commodities and technologies. These individuals can also become soldiers or police, and, through military conquest, they can allow a chiefdom to expand. Expansion leads to statehood. Police collect tribute from neighboring villages in return for "protection" and access to the commodities. Professional diversification and expansion through conquest Within a State, there will usually be different both lead to increased stratification. classes with different access to material resources and correlated differences in authority and power. In order to ensure stability in the face of inequality, stratified cultures need to moralize deference to those who have higher social rank. In many societies, those with supreme power claim to have divine rights. Some societies denigrate the poor as inferior or even untouchable. According to Nietzsche, the Christian Church maintained social hierarchies by inculcating the idea that poverty is a virtue. Without moralization, there is risk of revolution.

Turn now to incest taboos. There may be an innate tendency to *avoid* incest, but, for reasons given below, that does not mean that we are biologically programmed to find incest *immoral*. The transition from incest avoidance to incest taboos may be driven by culture. Malinowski (1927) argued that incest taboos are needed, because sex within the family would disrupt socialization. In parent-child incest were allowed, it would be difficult for parents to play the role of authorities and educators; the role of love and the

role of teacher can come into conflict. For similar reasons, it is often forbidden for teachers to have sexual relations with their students. Sibling incest may become taboo for another reason. If siblings marry each other, a family will not form close blood ties to another family. In early human populations, forming ties to other families would have been essential to forming successful bands and tribes, which would have been essential, in turn, for survival. Indeed, during periods of high mortality, a family that *always* intermarried would quickly die out. A blanket prescription against sibling-incest is a good strategy for forging social ties to others. Groups that failed to devise such prescriptions may have failed to attain the level of cohesion needed for survival.

3.2 Moral and Nonmoral Norms

I have just been arguing that our universal moral norms could be products of cultural evolution, rather than biological evolution. However, this should not be interpreted as the claim that cultures devise these norms from scratch. Each may be built up on innate tendencies that do not initially qualify as moral. Perhaps we are innately disposed to avoid harming other or to avoid incest, but not innately inclined to regard such behaviors as *morally* wrong. To make sense of this possibility, we need to distinguish moral norms from other kinds of norms. Let's begin with a general definition (for a related definition, which emphasizes independence from institutions, see Sripada and Stich, forthcoming):

Norms are:

- (i) rules governing how people behave that are
- (ii) psychologically internalized (not merely being codified in a book) and
- (iii) enforced by rewards or punishments

Norms govern many aspects of our behavior: how we display our emotions in public, how we dress, how loud we speak, how we line up for the movies, how we raise our hands in class, and so on (for discussion, see Smith, 2004, chap. 4). Many of these norms are nonmoral. Moral norms are a subset of norms, distinguished by their moral character.

There are various theories of what moral character consists in (see Sripada and Stich, forthcoming, for some examples). According to some theories, moral norms are distinguished by their subject matter; according to other theories, they are distinguished by the procedures by which they are discovered or the reasons by which they are justified; according to a third class of theories, moral norms are distinguished by the particular way in which they are psychologically internalized an enforced. I subscribe to a theory of this last kind. I think a moral norm is a norm that is enforced by certain emotions (see Prinz, forthcoming). This view has been known historically as sentimentalism. Roughly, a person regards something as morally wrong (impermissible) if, on careful consideration, she would feel emotions of disapproval towards those who did the thing in question. I think "moral rightness" can be defined with reference moral wrongness. Something is morally right (obligated) if failing to do it is morally wrong. Something is morally permissible, if there is no moral norm against it.

There are a number of different emotions of disapproval. Core examples include guilt, shame, disappointment, resentment, anger, indignation, contempt, and disgust.

There is evidence that different kinds of moral rules recruit different emotions of disapproval (Rozin et al. 1999). We feel anger toward those who harm others, contempt towards those who disrespect members of other social ranks, and disgust towards those who commit incest. If we harm another person, we feel guilty, and if we violate norms or rank or incest, we feel ashamed. I cannot defend these claims here (see Prinz, forthcoming). I will merely point out three relevant facts. First, emotion structures in the brain are active when people make moral judgments (Greene and Haidt, 2002). Second, people who are profoundly deficient in emotions (psychopaths), never develop a true comprehension of morality (Blair, 1995). Third, if we encountered a person who claimed to find killing (or stealing, or incest, etc.) morally wrong but took remorseless delight in killing and in hearing tales of other people killing, we could rightfully accuse him of speaking disingenuously. All this suggests that emotional response is essential to moral cognition. Norms that are not implemented by emotions of disapproval are not moral norms. Some of my arguments will depend on this premise, and will not be convincing to those who reject sentimentalism. But, in discussing cultural evolution, I have already provided an independent case against modest moral nativism.

Now let's return to question of interest. Are the universal norms that I have been considering universally *moral*? The answer seems to be no. Begin with strictures against harm. Most mammals feel emotional distress when they see a conspecific suffer. That emotional response may contribute to widespread avoidance of gratuitous harm, but it does not mean that all mammals regard harm as morally wrong. Empathetic distress is different from anger and guilt. A rat might resist hurting another rat because of empathy, but it will not feel guilty if it harms another rat or angry at other rats who commit harms. Rats don't moralize. Like rats, we may be biologically prone to feel empathy, but not to moralize harm. Moralization takes place under cultural pressure. Initially we feel distress when we cause harm to others, but through socialization, we also come to feel guilty. Our moral educators tell us that we should feel bad when we hurt each other or take things that aren't ours. They teach us by example to get angry at those who violate these norms, even when we are not directly involved. Moralization inculcates emotions of disapproval.

To support this hypothesis, it would be useful to show that some cultures do not moralize harms. This is difficult to do, because there is enormous cultural pressure to prohibit harm against the ingroup. The Ik may be an exception, but their tolerance of ingroup harm emerged under conditions of extreme hardship and deprivation. But, even if most cultures have moral norms against harm, the nature of those moral norms can vary in interesting ways. Consider Read's (1955) analysis of the Guhuku Gama, who live in the New Guinea highlands. Like the Yanomamö of the Amazon, members of this tribe frequently go on raids in which they kill their neighbors. They don't think it is morally wrong to harm members of other groups. They probably do think it is morally wrong to harm members of the ingroup, but they think about that wrongness very differently than we would. First, they do not invoke general moral principles ("It's wrong to kill"). Second, they often explain their moral behavior in prudential terms ("if you don't help

Second, they often explain their moral behavior in prudential terms ("if you don't help others, they won't help you"). Third, they construe their prohibitions against harm as consequences of the dependent on specific relationships. Just as parents have an obligation to protect their children, then Guhuku Gama think they have an obligation to take care of members of their group. Harm is not wrong in itself, but only wrong

relationally: it is morally wrong for you to kill a member of your clan, but not morally wrong for someone from another clan to kill that same person. Ironically, when strangers kill a member of the clan, the Guhuku Gama seek revenge in order to settle the score, but when one member of a clan kills another, there is no punishment; that could trigger a devastating cycle of revenge within the clan. It is fair to say that the Guhuku Gama culture has moralized ingroup harm derivatively, by moralizing personal obligations to kin and clan. This would not work in larger societies. We live along side strangers. As I suggested above, expansion requires moralization. In a large, pluralistic society like our own, we moralize harm itself; we say people have the right not to be harmed regardless of how they are related to us or each other. Such variations suggest that we do not have an innate moral norm against harm. Moralization comes with enculturation and takes on various forms.

Now consider rank. All along I have been claiming that social hierarchies are enforced by *moral* norms. This is certainly the case in many societies. For example, it is morally forbidden to disrespect one's parents in some parts of the world, and we tend to morally condemn leaders who do not deserve their power. But these moral attitudes may not be hardwired. In egalitarian societies, there may not be enough stratification for moralistic rank norms to take hold. In Western free market societies, there is a tendency to idealize upward mobility, and deny major differences in social classes. In North America, we are less prone to view rank in moral terms than members of more traditional stratified societies. This variation is consistent with the hypothesis that rank norms are not innately moral. They become moralized in societies that have a special stake in preventing people from obtaining higher social status.

Finally, consider incest. Once again, we must distinguish innate moral norms from non-moral behavioral tendencies. If it can be shown that there is an innate tendency to avoid incest, as exhibited in some species, it does not follow that there is an innate moral injunction against incest. A moral rule, or taboo, would require emotions of disapproval. Chimps avoid some forms of incest, but there is little evidence that incestuous chimps either feel shame. Likewise, one can question whether we have innate moral prescriptions against incest. Surprisingly, Thornhill (1991) found that only 44% of societies in an extensive cross-cultural study, have explicit prohibitions of incest within the immediate family. This finding is consistent with the hypothesis that people naturally avoid incest but don't moralize it. If we don't like it to begin with, we don't need to devise a strong taboo. According to Fortes (1949: 250), the Tallinasi of Ghana, "do not regard incest with the sister as sinful. When they say it is forbidden...they mean rather that it is disgraceful, scandalous" (quoted by Fox, 1980: 36). This suggests that sibling incest is innately avoided, not moralized.

That said, there is even some debate about whether incest *avoidance* is innate. The strongest arguments for innateness come from two sources: studies of aversive inbreeding effects and studies of "negative imprinting. It is certainly true that inbreeding can be deleterious initially, but repeated inbreeding within a group can actually lead to a healthy and stable gene pool over time; those who inherit harmful recessive genes will die out, and a pool of good genes will be left behind. Therefore, natural selection would not necessarily favor incest avoidance. The term "negative imprinting" refers to a hypothesis that was originally suggested by Westermark (1891). He claimed that brothers and sisters are biologically programmed to lose romantic interest in each other if

they cohabitate during early childhood. This hypothesis has been supported by two empirical findings. First, men and women who were raised collectively on Israeli kibbutzim very rarely marry, even if they are not related (Shepher, 1971). Second, in Taiwan, some families adopt a daughter and raise her to marry their son, so they can avoid paying costly a costly bride price latter on; these "minor marriages" are much more likely to fail than marriages arranged in adulthood (Wolf, 1970). Both of these findings suggest that childhood cohabitation turns off romantic feelings. This conclusion is challenged in a critical review of the evidence by Leavitt (1990). Leavitt notes that children on kibbutzim engage in sexual play with each other when young, and they are subsequently discouraged from sexual activities in adolescence. He blames low marriage rates on sexual mores within the kibbutzim and ample opportunities to find other mates; kibbutzniks are encouraged to delay marriage until after their mandatory military service, by which time they have met many potential mates outside of the kibbutz. Leavitt appeals to other factors in explaining the failure rate of Taiwanese minor marriages. First, such marriages are regarded as low-status, because they are intended to escape the cost of contracting a bride; second, there is a general taboo in Taiwan against sibling marriage, which may infect attitudes towards marriage between adoptive siblings; third, children raised as siblings have rivalries and other experiences during childhood that may make it hard to re-construe each other romantically later on; fourth, marriages arranged later in life can take the couple's interests and personalities into account, whereas marriages arranged from early childhood cannot; firth, in ordinary marriages, the son's parents make a considerable investment in finding a bride, and the in-laws have a strong bond with their daughter, so there is more family pressure to make the marriage work.

If Leavitt is right, incest taboos may have no innate basis. I think this is probably too strong a claim. It's more likely that we are born with natural tendencies towards exogamy. If we are like chimps, we experience sexual *wanderlust*: we like to find lovers outside the natal group. But, this becomes a *moral* norm only under cultural pressure.

I think the case against modest moral nativism is over-determined. Defenders of that view postulate a set of innate schematic moral rules than get elaborated in different ways through culture. The best evidence for modest moral nativism is that some moral rules can be found, with minor variations, universally. Against this picture, I presented two kinds of counter arguments. First, there are cultural explanations of why most cultures would end up with the rules in question. Second, there are variations in the extent to which these rules are moralized, and in the nature of the moral attitudes towards them when they are moralized; such variations suggest that these rules may not be innately moral even if they are underwritten by innate mechanisms.

To these two arguments, I would now briefly add a third. Innate capacities don't take much instruction. They can be acquired by triggering or casual observation. Most importantly, innate rules can be acquired without "negative data." We don't need to be corrected in order to figure out how to extend an innate rule to new cases. Moral rules, in contrast, seem to involve a fair degree of instruction. Children are naturally empathetic, but they steal, lie, hurt, and disrespect authorities. Despite periodic claims to the contrary, children who are raised with opposite siblings are often unsubtly informed about incest taboos; among the Trobriand islanders, for example, brothers and sisters are not allowed to talk to each other or look at each other (Malinowski, 1929). We receive a lot of moral instruction through explicit rules, sanctions, story telling, role models, and overt attitudes

expressed by members of our communities. The primary moral data are not impoverished. Without extensive guidance, children might not learn the correct moral rules. If we were innately moral, then we might not have to spend so much time instructing children and enforcing laws.

I think moderate moral nativism is wrong. There are no innate moral rules—not even schematic moral rules. Cultural universals are not the result of a shared UM. Instead, universals derived from similarities in some of our evolved nonmoral tendencies, and similarities in the needs of social groups. Universal moral rules are the result of convergent cultural evolution.

4. Morality Without Innateness

4.1 Is Morality a Spandrel

If moderate moral nativism is wrong, there is no Morality Acquisition Device or Universal Morality (no MAD or UM). How then is morality acquired? Minimal moral nativism replaces the MAD with a generic Moralization Mechanism (MM). The MM is an innate, domain specific capacity to moralize. It takes nonmoral rules as inputs, and produces moral rules as outputs. For example, the MM could convert incest avoidance into an incest taboo. Should we postulate such a mechanism?

Moralization is clearly a real process. Rozin (1999) presents a number of recent examples. In America, we have moralized drug use, obesity, and cigarette smoking in recent years. Prior to moralization, these things may have been regarded as harmful, but they were not regarded with indignation, judgmental disgust, guilt, or shame. Perhaps moral prohibitions against harm, rank violations, and incest are acquired through the same process that leads us to moralize drugs, fat, and tobacco. I think this is an interesting question for future research. The question I want to ask here is whether the process of moralization depends on an innate MM. The alternative hypothesis is that our capacity to moralize is a byproduct of capacities that evolved for other purposes. Capacities that emerge as inevitable byproducts of other capacities are called spandrels (Gould and Lewontin, 1979). If moralization is a spandrel, then minimal moral nativism is wrong.

To address this issue, let's get clear on what moralization consists in. If moral norms are norms that are enforced by emotions of disapproval, then moralization is a process by which we become disposed to experience those emotions. Those who moralize tobacco feel angry when they see someone smoking in a public space or feel guilty if someone catches them smoking. Do we have innate mechanisms for acquiring this pair of evaluative sentiments? Perhaps not.

First consider anger. When anger is experienced on its own, it is not a moral response. In nonhuman animals, anger is an emotion that promotes aggression: it is a response to a threat from a conspecific. Animals need not have any moral sense to show rage. Suppose, like animals, we are disposed to feel angry when we perceive a threat. Now consider guilt. The term "guilt" always has moral connotations, but guilt may actually derive from a nonmoral emotion. When we feel guilty, we reflect on our faults, we become downtrodden, or even suicidal. This is exactly the same profile as another

emotion: sadness. It is tempting to say that guilt is just sadness brought on by doing something wrong. Why should doing something wrong make us sad? The answer is simple. When we violate rules, members of our community are negatively affected. People we care about are hurt, and people we depend on distance themselves from us. Both of these things make us sad. But sadness is not evolved as a moral emotion. It is an emotion that occurs when we lose something we care about. It just so happens that breaking rules causes us to lose things that we care about. So guilt is an accidental byproduct of sadness.

Let's now put anger and guilt together. Consider a child who grows up in a community where adults have decided that φ -ing is wrong. Violating local standards is a threat to the community, so they react with anger when people φ . As an observer, the child learns to react with anger as well. Now consider what happens if the child is caught φ -ing. Members of the community will react with anger or refuse to associate with the child. This makes the child sad. Thus, when the child considers φ -ing in the future, she resists because she doesn't want to feel sad about her actions (i.e., guilty). A child who leans to feel angry and guilty about φ -ing has moralized φ -ing. This process of moralization does not require a fancy innate mechanism evolved for the purpose of moral leaning. It just requires garden-variety anger and sadness, a capacity to recognize emotions in others, and being raised in a community of people who already have some moral norms. Similar stories might be told about how people come to acquire other emotions associate with moral disapproval. The point is that these are not distinctively *moral* emotions; they are nonmoral emotions that have been adapted to ground moral norms.

If the story that I have been sketching is right, we can acquire moral rules without a special innate mechanism dedicated to that end. Morality emerges out of more general emotional capacities that were evolved for other purposes. If I am right, there is no MM. Minimal moral nativism is false. Morality is a spandrel.

4.2 Is There an Innate Norm Acquisition Mechanism?

The general outlook defended in this discussion closely parallels ideas defended by Sripada and Stich (forthcoming). Like those authors, I have argued that moral judgments are not universal across cultures, despite some similarities, and I have argued that emotions play an important role in acquisition, and implementation of moral norms. Like them, I have also explored these ideas with an interest in explaining how moral norms are acquired. Sripada and Stich are agnostic about how moral norms differ from other norms, and they are they think we are not yet in a position to determine how much innate machinery we need to explain the acquisition of moral norms. I have been less agnostic, arguing explicitly against moral nativism. Even if I am right, Sripada and Stich raise an interesting question in their discussion. Supposing there is no innate mechanism for *moralization*, might there be a more general mechanism form the acquisition of norms? Sripada and Stich suppose there is. They propose a "boxological" model for norm acquisition that contains an "acquisition mechanism" which takes proximal environmental cues as inputs and generates entries in a "norm data base" as outputs.

I have no qualms with boxology. Functional decomposition is the major aim of

cognitive science, and flowcharts are a useful tool in the endeaver. But I do think one has to exercise caution when labeling the boxes. The label "norm acquisition mechanism" implies that there is a mechanism whose function in the acquisition of norms. I think postulation of such a mechanism is premature and methodologically risky. It is akin to postulating a module for every well documental cognitive capacity. Some capacities may be underwritten by domain specific modules, but many of them—perhaps most—may be underwritten by mechanisms that are more domain general. In discussing moral norm acquisition, I suggested that morality is underwritten by domain general emotions. I now want to suggest that norms in general are acquired by means of mechanisms that are not designed specially for the function of norm attainment. There is no norm acquisition mechanism *per se*, but rather several more general mechanisms that happen to result in the attainment of norms.

Let me illustrate with three example. First, consider etiquette norms. We do not chew with our mouths open, because we have been encouraged by members of our community to construe it as disgusting. It is easy trigger core disgust (i.e., disgust that has the function of protecting us from contamination) in the context of biological processes (see Nichols, 2002). If caregivers show disgust when children crew with open mouths, children are more likely to acquire the view that such behavior is disgusting. Sripada and Stich call this a Sperberian bias (after Dan Sperber). Now, consider norms of how close we stand to each other during conversations. Human children can learn physical behaviors by imitation or behavioral mirroring. If we stand too close to someone, that person will pull away, and we unwittingly pick on the distance pattern. Violations of distance norms may induce agitation in our interlocutors, but the norms can be acquired without experiencing that agitation. Finally, consider norms about what side of the street to drive on. These are likely to be learned by explicit instruction and conscious observation. We explicit formulate the rule and train ourselves to act on it, as if it were second nature. Sripada and Stich cite evidence that many norms are learned through explicit instruction.

The first thing to note about these examples is that nonmoral norms are acquired in a variety of different ways. The second thing to notice is that none of these ways requires a norm acquisition mechanism. Emotional conditioning, unconscious imitation, and learning though instruction are all general capacities that serve us outside normative domains. The suggestion that we need a special mechanism for norm acquisition requires further support.

Sripada and Stich might reply by pointing out that there are several constraints on norm acquisition that appear to be specific to norms. First of all there are social heuristics. For example, we don't imitate just anyone; we are biased in favor of imitating people who have prestige. Sripada and Stich believe that such biases count against antinativist theories of norm acquisition. I disagree. Imitating prestigious people is valuable outside the domain of norms. For example, it is advantageous to imitate successful people when we learn basic skills (e.g., in hunting or gathering). Unless these skills are norms, prestige bias cannot be described as a dedicated component of a norm acquisition mechanism.

Sripada and Stich might pursue a second line or response. They might argue that the content of some of our norms is innately prepared. This could be the case with incest avoidance, which, though not innately moralized, may qualify as an innate nonmoral

norm. I am a bit reluctant to call incest avoidance a norm. It is unclear whether it is implemented (without training) by punishment. It is also questionable whether incest avoidance is a *rule* as opposed to a behavioral disposition, but I will not attempt to explicate that distinction here. For even if incest avoidance is an innate norm that does not show that there is a norm acquisition mechanism. We don't need an acquisition mechanism for a norm that is already there. I doubt that there are any innate moral norms, but I will not attempt to argue that there are no innate nonmoral norms.

There is a third line of response that Sripada and Stich might consider. I have argued that some norms are underwritten by emotions that are not specific to the normative domain. There is, however, at least one emotion that appears dedicated to social norm acquisition: embarrassment. Embarrassment is a social emotion, and its primary function seems to be "saving face" when we violate social norms. To this suggestion, I have two replies. First, if embarrassment is dedicated to norm acquisition, it is not the sole means of norm acquisition, and, therefore, it would be an exaggeration to call embarrassment the norm acquisition mechanism. Instead, we would have to say that norms are acquired through domain specific and domain general mechanism. Second, embarrassment could not aid in norm acquisition if its sole function was registering norm violation. Consider how that story would have to go. To teach a child a norm, a caregiver would have to induce embarrassment in the child. But, if embarrassment could be induced only be norm violations, then embarrassment could be induced only if the child already thought that her behavior violated a norm. In other words, the child would already have to have the norm allegedly being acquired (or, at any rate, some related norm applicable in the same situation). Here is an alternative story. Suppose that embarrassment is not primary a response to norm violation, but rather a response to unwanted attention; e.g., embarrassment arises when someone stares at you in a situation when you don't want to be stared at. We are embarrassed to give public speeches or to receive awards and gifts even though no norms have been violated. On this model, embarrassment can be used to acquire norms, because people will not want to engage in conduct that attracts unsolicited attention. Embarrassment is still a social emotion on this picture, but its utility in norm acquisition is a byproduct of its primary function which is to withdraw from unwanted attention. Perhaps this emotion evolved because of its role in facilitated norm acquisition, but it may have evolved for some other purpose. It is rarely a good thing to receive attention when you don't want it.

These remarks are far from conclusive. With Sripada and Stich, I think there is great interest in trying to determine the mechanisms that allow us to acquire norms, and I applaud them for making explicit proposals and for acknowledging how much we still don't know about these phenomena. With them, I also think there are mechanisms involved in norm acquisition (trivially so, since some norms are acquired), and some of these mechanisms may be domain specific. At present, however, it remains an open possibility that norm acquisition relies heavily on more general mechanisms. This possibility is consistent with what Sripada and Stich have to say, but I think the boxological reification of a norm acquisition mechanism prematurely biases inquiry, but adopting the vocabulary of nativist accounts. Cultural variation in norms should lead us to explore the possibility that the mechanisms of norm acquisition, like the contents of our norms, are not innate. More accurately, the innate mechanisms that contribute to norm acquisition may not be dedicated to that purpose.

Appendix: Moral Anti-Nativism And Moral Relativism

I have argued that morality is not innate. It is a byproduct of other capacities. In making this case, I suggested that moral rules vary significantly across the globe. This has implications for moral relativism. It suggests that, as a matter of fact, there is cultural variation in moral norms. It also suggests that such cultural differences may be impossible to rationally resolve. Moral norms are products of nonrational enculturation, not deliberation and deduction from shared first principles. People moralize different things because they are inculcated into different value systems—systems that have emerged though cultural evolution under the pressure of social and ecological conditions that may be specific to a particular group. If we tried to convince a member of the Guhuku Gama that he should kill someone in the next village, he would reply that he has no obligation to anyone in that village. If we tried to convince a Bedouin that she shouldn't marry her first cousin, she would express her disgust at the thought of marrying marry someone who isn't even related. To make progress in a moral debate, there must be a bedrock of shared moral principles. For example, if you and I both agree on when life begins and on the principle that all humans have a right to life (both issues have a moral dimension), we can agree about abortion. Otherwise, not. Across cultures, there is no shared moral bedrock. Therefore, the biological underpinnings of morality cannot be used to adjudicate between competing values.

This amounts to a strong form of descriptive moral relativism. As a matter of descriptive fact, the are cultural differences in morality that cannot be resolved by appeal to shared moral norms. Some philosophers think that moral disputes can be resolved by the power of cool reason (i.e., reason without evaluative premises). I will not address that contention here. For the record, I think cool reason is fundamentally incapable of resolving debates about basic moral values. Cool reason can no more do that than it can resolve debates about whether Bridgette Bardot is better looking than Marilyn Monroe. If I am right about that, then cross-cultural moral disputes cannot be rationally adjudicated.

This conclusion has bearing on *metaethical* moral relativism. Metaethical moral relativism as the view that there is not a single true morality. Different moral codes can have equal claim to being right. If we have no way to resolve moral disputes by appeal to a shared innate code or the dictates of reason, then there are two possibilities. One is that there is a single true morality whose status as such is fundamentally unknowable. Such a morality would be useless to us, because it could not guide action when moral disagreements arise. This possibility is not just silly; it is demonstrably false. If I am right in believing that moral convictions are affect-laden and learned, then there is nothing in virtue of which one unique set moral convictions could be true. The truthmaker for moral claims lies not in Plato's heaven, Kant's deductions, or Darwin's descent, but in us. This brings us to the second possibility: there is not a single true morality. Moral convictions are cultivated by human societies, and moral facts are determined by these convictions. This means that morality is a work in progress. Perhaps we can play a role in revising morality to suit various non-moral needs.

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