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The Emotional Dog Gets Mistaken for a Possum

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H. D. Saltzstein and T. Kasachkoff (2004) critique the social intuitionist model (J. Haidt, 2001), but the model they critique is a stripped-down version that should be called the "possum" model. They make 3 charges about the possum model that are not true about the social intuitionist model: that it includes no role for reasoning, that it reduces social influence to compliance, and that it does not take a developmental perspective. After a defense of the honor of the social intuitionist model, this article raises 2 areas of legitimate dispute: the scope and nature of moral reasoning and the usefulness of appealing to innate ideas, rather than to learning and reasoning, as the origin of moral knowledge. This article presents 3 clusters of innate moral intuitions, related to sympathy, hierarchy, and reciprocity.

I love dogs. They are such lively, intelligent creatures. You can take them anywhere and they will adapt to the new environment. You can teach them all sorts of things. Possums, on the other hand, at least the ones we have here in Virginia, seem like such stupid and inflexible animals. I suppose they are well adapted for their niche, because they have changed little over the course of millions of years. (They are the only marsupials left outside of the Australian region.) But I wouldn't want to have to teach one any new tricks. Nor would I want my name associated professionally with one. So I was quite surprised to read Saltzstein and Kasachkoff's (2004) critique of my social intuitionist model (SIM; Haidt, 2001) in which the model had all of the markings of a possum: inflexible, dumb, and little changed since those ancient days when social influence meant just compliance and conformity. Although I am not originally from the South, I do feel the need to rise up and object to this affront to my honor! (See Nisbett & Cohen, 1996.)

Let me state at the outset that I admire Herb Saltzstein's work in moral development, and I welcome the chance to work through some of the issues that were raised but not solved in my "emotional dog" article. I do that in the last part of this article. But first I must dispel three major misreadings of the SIM that form the basis of Saltzstein and Kasachkoff's (S&K's) critique. The three fundamental errors that I see in their article are as follows: (a) They say I give no role to reasoning; (b) they say I reduce social influence to compliance; and (c) they say I fail to take a developmental perspective.

All three of these misreadings make sense once you realize that S&K are critiquing a stripped-down version of the SIM that I label here the "possum" model (Figure 1). In this model, evolution built a bunch of intuitions into people's heads, and when people are confronted with social situations, these intuitions fire off, causing judgments, which cause post hoc reasoning. End of story, except that some other people feel the need to comply with the person's judgment, so they do so, under pressure and without conviction. In this two-link model, reasoning plays no causal role in the judgment process, we are all prisoners of our gut feelings, and it is hard to see how societies advance or individuals change their minds.

The SIM (Figure 2), in contrast, has six links, three of which are reasoning links. At the heart of the model is indeed the claim that intuitions cause judgments (Link 1), which then cause post hoc reasoning (Link 2). But the main point of the model is to pull moral judgment research away from its focus on an individual's thinking and out into the social world, where moral judgments occur, and get changed, as people gossip, argue, and, yes, reason with each other. If the possum model is like an individual neuron (dendrites trigger action in the cell body, which fires off a charge down the axon), then the SIM is

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Figure 1. The possum model of moral judgment.

designed to capture the entire nervous system, in which moral judgment emerges out of the interactions of many individuals.

A Duel Process

I now respond to S&K's challenge by firing three shots. Each shot is aimed at one of the three fundamental errors I see in S&K's portrayal of the SIM. Readers who are not interested in the duel may skip ahead to the refreshments afterward.

Error 1: "Haidt . . . appears to relegate [moral reasoning] to the status of an epiphenomenon" (Saltzstein & Kasachkoff, 2004, p. 274)

This charge makes sense for the possum model, but it is strange when applied to the SIM. As can be seen in Figure 2, the SIM has six links, three of which are reasoning links (2, 3, and 5). In addition, Link 6 involves a kind of reflection that S&K would consider reasoning, although I do not (as explained later). Yet, S&K do not even acknowledge the existence of Links 5 and 6, except in a footnote. I do indeed minimize the causal efficacy of private moral reasoning, in which a person thinks about an issue and questions assumptions, beliefs, and intuitions without the benefit of a discourse partner. I allow for this possibility as Link 5, but I cite evidence (e.g., Kuhn, 1991; Perkins, Farady, & Bushey, 1991) that, in general, people other than philosophers are bad at such reasoning. Ordinary people do not spontaneously look for evidence on both sides of a judgment question. But moral reasoning *does* play an important causal role once it is seen as a social activity rather than as a solitary activity. People engage in moral reasoning not so much to figure things out for themselves, in private, but to influence others. Link 3 is therefore called the "reasoned persuasion link." (S&K do not acknowledge the existence of this link either.) Other people's reasons in turn can influ-

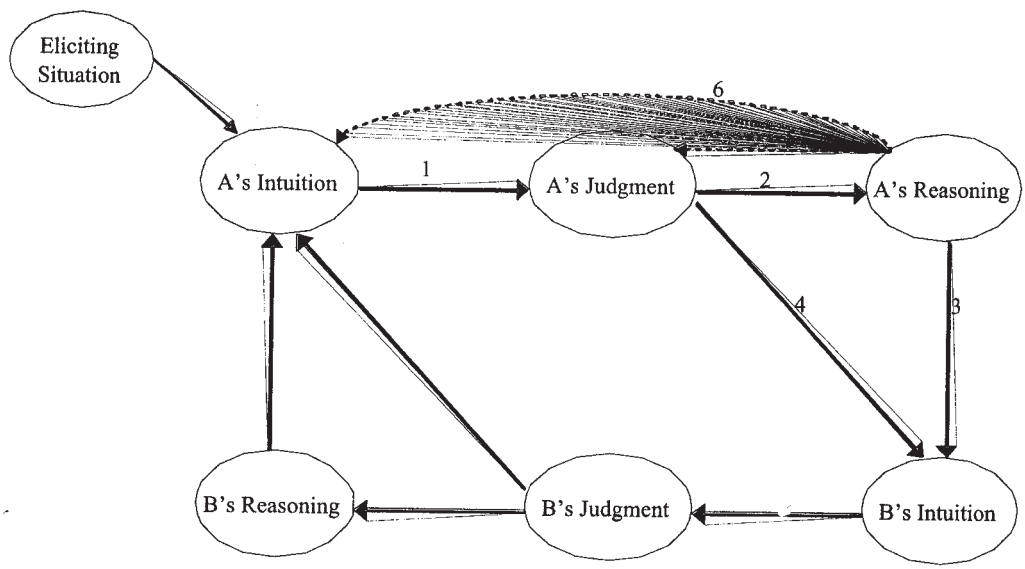

Figure 2. The social intuitionist model of moral judgment. The numbered links, drawn for person A only, are (1) the intuitive judgment link, (2) the post hoc reasoning link, (3) the reasoned persuasion link, and (4) the social persuasion link. Two additional links are hypothesized to occur less frequently: (5) the reasoned judgment link and (6) the private reflection link. *Note*. Reprinted from "The Emotional Dog and Its Rational Tail: A Social Intuitionist Approach to Moral Judgment, by J. Haidt, 2001, *Psychological Review, 108,* p. 815. Copyright 2001 by the American Psychological Association. Reprinted with permission.

ence us, and not just by conformity pressure (see Error 2). So reasons circulate between discourse partners and throughout the social network. For example, I wrote:

> The social intuitionist model posits that moral reasoning is usually done interpersonally rather than privately. If Robert is in fact a friend of yours, then you and your friend might present arguments to each other (link 3, the reasoned persuasion link) in the hope of triggering new intuitions, getting the other to "*see*" Robert's actions in a better or worse light. Moral discussions can then be modeled as a repeated cycle through links 1, 2, and 3 in person A, then in person B, then in person A, etc. (Haidt, 2001, p. 820)

But now look at S&K's closing lines:

> In the end, we think it is likely that the moral decision-making/judgmental process will be an iterative process . . . whereby intuitive processes are intermixed with more rational, deliberative ones. Possibly, convictions that appear as spontaneous and intuitive are then examined by more deliberative and reasoned processes, which then trigger further deliberative thought, and so forth. (Saltzstein & Kasachkoff, 2004, p. 281)

This is very similar to what I wrote. I think we all agree on the nature of moral thinking as a complex, extended, and iterative process. The difference is that I say the iteration of intuitive and reasoned processes happens when people talk about moral issues; it rarely happens in a single head. For example:

> Yet ever since Plato wrote his Dialogues, philosophers have recognized that moral reasoning naturally occurs in a social setting, between people who can challenge each other's arguments and trigger new intuitions (links 3 and 4). The social intuitionist model avoids the traditional focus on conscious private reasoning, and draws attention to the role of moral intuitions, and of other people, in shaping moral judgments. (Haidt, 2001, p. 820)

Until S&K address themselves to the full SIM, which is a social model with six links, I do not believe that the rest of their charges carry much weight.

Error 2: "The one avenue of change that [Haidt] does not *seem to recognize is that brought about by reasoned argument" (Saltzstein & Kasachkoff, 2004, p. 275)*

Once again, I am puzzled by this charge. An entire link in the SIM is called the "reasoned persuasion" link, and I cannot understand why S&K do not mention it. The SIM was designed precisely to capture the many ways that people argue, move, and persuade each other. I have already provided two quotations from the article to illustrate how persuasion and moral change work. Here is another:

> Link 3, the reasoned persuasion link, says that people's (ex post facto) moral reasoning can have a causal effect—on *other people's* intuitions. In the social intuitionist view moral judgment is not just a single act that occurs in a single person's mind. It is an ongoing process, often spread out over time and over multiple people. Reasons and arguments can circulate and affect people, even if individuals rarely engage in private moral reasoning for themselves. (Haidt, 2001, p. 828)

Once again, S&K were critiquing the possum model, which I did not propose and will not defend. The social intuitionist model is called "social" precisely because of the importance that social processes play in moral judgment. (It is interesting to note that S&K do not even refer to my model as the "social" intuitionist model; they call it the "moral" intuitionist model.) I believe that S&K were too focused on Link 4, the "social persuasion link." This link is meant to capture the fact, well established by classic social psychology, that people exert influence on each other in nonrational ways:

> Because people are highly attuned to the emergence of group norms, the model proposes that the mere fact that friends, allies, and acquaintances have made a moral judgment exerts a direct influence on others, even if no reasoned persuasion is used. Such social forces may elicit only outward conformity (Asch, 1956), but in many cases people's privately held judgments are directly shaped by the judgments of others (Berger & Luckman, 1967; Newcomb, 1943; Sherif, 1935). (Haidt, 2001, p. 819)

So the SIM contains two pathways by which people influence each other: one reasoned and one nonrational. This approach fits perfectly well with the most important current models of persuasion, the heuristic-systematic model (Chaiken, 1987) and the elaboration likelihood model (Petty & Cacioppo, 1986). Sometimes people are persuaded by reasons, sometimes by a variety of other facts about the persuader or the social situation. But to say that any persuasion other than fully conscious reasoning is just compliance is to misunderstand human social nature. We are an ultra-social species that has managed to vastly extend its information gathering and processing capacities by looking to others for facts and evaluations. The various automatic judgment processes documented by Bargh and his colleagues (Bargh & Chartrand, 1999) are not design flaws in a rational animal; they are design innovations of a primate mind

that blew out the old limits on primate mentality.

Error 3: "Haidt's theory is limited by his taking a nondevelopmental approach to morality" (Saltzstein & Kasachkoff, 2004, p. 279)

For the third time, I am mystified. I am a social psychologist, and I chose to focus on the social aspects of moral judgment. However, I have always been interested in moral development and in the question of how culture shapes morality (see Haidt, Koller, & Dias, 1993; Haidt, Rozin, McCauley, & Imada, 1997). I therefore wrote two long sections titled "The Origin of Intuitions" and "The Development of Intuitions." These sections do what I thought was the hard work of reconciling my claims about innate intuitions with my claims that morality is culturally variable. In brief, I argued that evolution has prepared us, and other primates, for an intensely social life by equipping us with emotion-backed concerns about social interactions (e.g., reciprocity, hierarchy, and caring for the sick and vulnerable; see De Waal, 1996). These concerns (which we can call moral intuitions in humans) emerge at various times during childhood, at which point they get built up or played down by the local culture. I described in detail three processes that drive this "tuning up" during childhood: the selective loss of intuitions during a sensitive period of middle to late childhood; the immersion of the child in "custom complexes" (Whiting & Child, 1953) that combine practices, beliefs, and motives; and the importance of peer socialization (Harris, 1995; Minoura, 1992) in creating adolescent moralities that are sometimes different from parental moralities. So I cannot be accused of failing to take a developmental approach. I can only be accused of failing to take Saltzstein's particular cognitive–developmental approach.

After the Duel

That's better. The possum model is dead, and I have defended the honor of the social intuitionist model. I can now return to a more genteel and hospitable mood in which I can entertain some of the ideas raised by S&K. I see two principal topics for fruitful discussion: (a) What counts as "reasoning"? and (b) What is the role of evolution in shaping human morality?

What Is Reasoning?

I think that part of the apparent gulf between S&K and me is due to our very different views of what exactly counts as reasoning. I took great pains to define my terms carefully, and I adopted a relatively circumscribed definition of "reasoning" that did not include all conscious cognitive processes. After reviewing the literature on everyday reasoning, I concluded that the critical feature of reasoning is that it occurs in sequential steps, at least a few of which must be performed consciously. I defined moral reasoning as "*conscious mental activity that consists of transforming given information about people in order to reach a moral judgment*" (Haidt, 2001, p. 818). I contrasted moral reasoning with moral intuition, which I defined as *"the sudden appearance in consciousness of a moral judgment, including an affective valence (good-bad, like-dislike), without any conscious awareness of having gone through steps of search, weighing evidence, or inferring a conclusion"* (Haidt, 2001, p. 818). Reasoning and intuition are both forms of cognition. In fact, since writing "The Emotional Dog," I have taken upon myself a personal crusade of correcting people when they contrast "affect" and "cognition," for what they invariably mean is a contrast of two kinds of cognition: hot and cold, or automatic and controlled.

S&K, on the other hand, seem to want an expansive definition of reasoning as any mental process that is responsive to reasons and reason giving. If a person changes her mind in response to a reason given by another person, then S&K want to say that the change occurred by the mental process of reasoning. But let's look more closely at what happens when two people discuss a moral issue. If person A makes a statement and person B offers a counterargument, either of two things might happen in person A's mind. Person A might understand the counterargument, consider it against her original position, decide that the counterargument is right, and change her mind. In such a case, as long as there was "conscious mental activity" with at least two steps, I am perfectly willing to say that person A engaged in moral reasoning. To repeat: I never said that all moral reasoning is post hoc; I said only that non–post hoc moral reasoning is rare outside of social interactions. We need other people to help us see the other side.

But let's look at another possibility. Sometimes person B responds to person A and all at once, even as person B is still talking, person A "gets" it, sees the issue in a new light, and changes her mind. Going by the terms as I just defined them, this is a perfect example of intuition, not reasoning. Person B has triggered a new intuition in person A, without person A engaging in moral reasoning for herself. Yet if we look at the dyad as a single entity, then their discussion does involve "transforming information about people" in steps. A pair of people talking about a moral issue can engage in true moral reasoning, even if each one uses reasoning only in a post hoc fashion to explain her intuitively felt positions. In this way, individuals change their minds, and societies can make progress on moral issues. "Reasons and arguments can circulate and affect people, even if individuals rarely engage in private moral reasoning for themselves" (Haidt, 2001, pp. 828–829).

If you doubt the importance of triggering intuitions when trying to persuade, and you think that reasoning persuades only by triggering reasoning, consider how much power deductive proofs have to change your mind. Is there any logical proof about the existence or nonexistence of God that would change your mind at all? Yet views about religion, life, and one's duties on earth often change radically in the course of minutes or hours when people have emotionally compelling mystical experiences in which, suddenly, everything looks and feels different (Miller & C'de Baca, 2001). William James (1902/1961) summarized the importance of intuition as the underpinning of reasoning as follows:

> Nevertheless, if we look on man's whole mental life . . . we have to confess that the part of it which rationalism can give an account is relatively superficial. It is the part that has the prestige, undoubtedly, for it has the loquacity, it can challenge you for proofs, and chop logic, and put you down with words. *But it will fail to convince or convert you all the same, if your dumb intuitions are opposed to its conclusions.* If you have intuitions at all, they come from a deeper level of your nature than the loquacious level which rationalism inhabits. Your whole subconscious life, your impulses, your faiths, your needs, your divinations, *have prepared the premises*, of which your consciousness now feels the weight of the result; and something in you absolutely knows that that result must be truer than any logic-chopping rationalistic talk, however clever, that may contradict it. (p. 74, italics added)

When S&K claim that moral persuasion works by reasoning, I believe their broad definition of reasoning imports a great deal of intuitive processing.

What Did Evolution Give Us?

A second cause of the difference between S&K and me is that we seem to disagree fundamentally on how evolution works and on what it "gave" us as a species. S&K seem to think that evolution works for the good of the species. They suggest that

> human evolution might be promoted by moral reasoning that produces judgments that are reasonable and morally defensible. Why, for example, might it not be the case that the desire for accuracy and internal coherence of one's beliefs works toward the evolutionary goal of social harmony? (Saltzstein & Kasachkoff, 2004, p. 274)

I don't understand what it means for evolution to be "promoted," or for evolution to have a "goal" of social harmony. Evolution is about the spread of genes that code for individual traits that lead to the spread of those genes. I suggested that there may have been a stronger selection pressure on individuals to agree with their friends and allies than to achieve the most accurate and dispassionate moral judgment. I stand by that claim.

But I think there is a broader theoretical difference at work here. I think that S&K are coming from a cognitive–developmental framework in which one attempts to explain the emergence of cognitive structures such as reciprocity and respect for rules by social developmental processes, such as turn-taking. In such a framework, it seems unparsimonious and unnecessary to posit innate moral content. However, I am a card-carrying antiparsimonist. I believe that the overzealous use of Occam's razor has grossly disfigured the field of psychology, leading us to strive blindly for the greatest degree of parsimony, not the optimal degree. It may be great fun to try to explain the human mind using only a few principles, just as it may be great fun to write a poem using only the first 13 letters of the alphabet. But there is no good scientific reason to exclude evolutionary psychology and innate ideas from scientific theorizing.

I believe that the human species was equipped with a cognitive toolbox that helped individuals succeed at their most important adaptive tasks (Gigerenzer, 2002; Tooby &

Table 1
Three Universal, Cross-Species Clusters of Moral Intuitions

Long-standing fact of life	De Waal's (1996) chapter	Fiske's (1991) model	Innate emotions and intuitions
Caring for kin	2: Sympathy	Communal sharing	Kinship ties, nurturance, sympathy, sensitivity to harm, sharing food
Living in hierarchies	3: Rank and Order	Authority ranking	Rank, order, deference, respect, duty, shame, modesty, bravery
Advantages and risks of cooperation	4: Quid pro Quo	Equality matching	Reciprocity, fairness, justice, revenge, gratitude, trustworthiness

Note. Not all items in the fourth column are found in other primates, but in most cases some precursor is.

Cosmides, 1990). Trying to understand human morality without knowing about this toolbox is like trying to understand astronomy without knowing about gravity.

OK, so what's in the toolbox? I cannot give a complete inventory, but my reading of the literature in primatology, anthropology, and social psychology suggests that the toolbox includes tools for dealing with three major tasks, three long-standing facts about primate life. These facts are (a) that we are mammals who have unusually long child-rearing and care-taking obligations; (b) that we live in groups in which power and access to resources, and to protection, are structured hierarchically[1]; and (c) that there are great gains to be had by individuals who can cooperate with other unrelated individuals, without being taken advantage of by cheaters. I focus on these three facts because of a surprising coincidence I noticed when I first read Frans De Waal's (1996) wonderful book *Good Natured*. After introducing the Darwinian approach to understanding social behavior, De Waal presents three chapters that focus on three of the major areas in which chimpanzees and bonobos show behaviors that appear to be the "building blocks" of human morality. The chapter titles are listed in the second column of Table 1. These chapters describe behaviors and emotional responses that correspond closely to the first three of Alan Fiske's (1991) four models of human social relations. Fiske's theory is a powerful theory, derived from his anthropological work, in which all human beings (except for psychopaths) have four and only four basic, innate relational models that they use to understand, implement, and react to social interactions. (For a more complete presentation of a theory of intuitive ethics based on the work of Fiske and De Waal, see Haidt & Joseph, in press.)

De Waal's chapter on sympathy describes the sort of sensitivity to suffering and distress that grows out of kin altruism, whereas Fiske's "communal sharing" describes a cognitive and affective model in which people feel that they are all one, a feeling of community and kindness based originally on kinship. De Waal's chapter on rank and order, building on his earlier work on "chimpanzee politics" (De Waal, 1982), describes the ways in which chimpanzees negotiate rank and show behaviorally their place in the order. Fiske's "authority ranking" covers similar issues for human beings, with some of the same subtleties. For example, high rank is not just a way of exploiting one's strength; it also carries with it responsibilities to protect those below, and to resolve disputes and keep the peace. De Waal's "quid pro quo" chapter describes the abilities of chimpanzees to keep track of favors and slights, building alliances that do not rest on a foundation of kinship. Fiske's "equality matching" extends this basic concern about reciprocity much further out into the social world, but both Fiske and De Waal make it clear that the emotions surrounding reciprocity, including anger and desires for vengeance, are critical for making relationships work.

Haslam (1997) also noticed the close convergence between the findings of primatology and the first three of Fiske's models. He concluded that there is good evidence for continuity between chimpanzees and humans in the first three models. He also concluded that there is no evidence that chimpanzees have anything like the

[1] Many hunter-gatherer groups are egalitarian, but, as Boehm (1999) has pointed out, these exceptions prove the rule, for they only maintain equality by constant vigilance against bullying and domineering individuals. Human nature, Boehm concluded, is designed for life in hierarchies.

fourth model, "market pricing," which underlies the human propensity for trading nonequivalent objects (such as goods for money, or for services). Not surprisingly, market pricing requires the most complex calculations of the four models, and it is the last of the models to emerge in human development. The first three models are clearly manifested in children by 4 years of age, whereas market pricing does not emerge until several years later.

There are other tools that humans have in their cognitive toolbox that chimpanzees do not. Here is the set that I'm most interested in: cognitions about purity and pollution, linked to feelings of disgust. Much of my research to date has focused on the question of why so many cultures, and even so many people within the United States, moralize harmless consensual acts that involve food, sex, and no victim (Haidt & Hersh, 2001; Haidt et al., 1993). For example, strong condemnations of homosexuality, incest, "deviant" sexuality, or violations of food taboos such as eating dog meat or human flesh make little sense and are hard to explain if we focus on the development of reasoning about justice and harm. When I interview Americans about such acts, I often get strong and clear condemnation, followed by a struggle to provide reasons. I have called this response pattern "moral dumbfounding," and I interpret it as a case in which the intuitive judgment link has created a strong judgment that the act is wrong, but the post hoc reasoning link is having trouble doing its job. I would further add that this dumbfounding comes about because people have a built-in preparedness (Seligman, 1971) to be disgusted by actions that involve the human body, such that the domains of food choice and sexuality are highly likely, across cultures, to be rich with taboos that are based on symbolic factors, not rational concerns about health. Each culture sets the proper boundaries on food and sexuality, but it is guided by rules of learnability. Equipotentiality does not apply to the domain of disgust; some things are more likely to be tabooed than others.

S&K suggest another possibility, one that does not rely on innate content-specific intuitions: that children originally came to condemn these actions for good reasons (based on concerns about harm, rights, and justice?), but their moral responses became automatic over time. "We have reached a point at which habit has taken over the need to engage in reflection each time we need to make a decision" (Saltzstein & Kasachkoff, 2004, p. 279).

How can we pit these two theories against one another? How can we tell if a moral concern that emerges in childhood resulted from the emergence or externalization of an innate intuition or from reason-based learning followed by automatization? I have a suggestion. Let's look at a new domain, a domain that nobody has yet studied seriously: cooties. At a certain point in elementary school, at least in the United States, children begin reacting to other children as though they have a disease or are in some way contaminating. I believe this phenomenon emerges around the age of 7 or 8, which is—not coincidentally—the age at which the emotion of disgust reaches its full cognitive maturity, including contamination sensitivity (Rozin, Haidt, & McCauley, 2000).

So here are the rules of my challenge. Let us look at cooties in the United States and in other countries. If we see that cooties (or something similar) emerges in only a few places, or emerges at varying ages, and that when it does emerge, it emerges in tandem with some rational or reasonable concerns that children might have about contamination (e.g., the first child with cooties is indeed a child who is sick, or very dirty), then S&K win the challenge. This pattern would indicate that children learn the reasons for cooties, and learn by a rational process to fear children with cooties.

However, if cooties (or something similar) emerges in many places at roughly the same age, and if it does not relate to some reasonable cause but is instead an extension of children's existing or emerging social categories and rankings (e.g., gender, popularity, and beauty), then I win. This pattern would indicate the emergence of innate intuitions about pollution and contamination that externalize themselves at a certain point in brain development and are then shaped by the local culture. In the United States, cooties are unsupported by the larger democratic culture (in which it is discriminatory to treat anyone as untouchable). However, in traditional India (or in the American South before the civil rights era) caste divisions are largely marked by the attempt to guard against physical contact and contamination. Such cultures may be building important sociological structures on top of innate intuitions about purity and contamination.

In other words, S&K, I challenge you to another duel!

References

Asch, S. (1956). Studies of independence and conformity: A minority of one against a unanimous majority. *Psychological Monographs, 70*(Whole No. 416).

Bargh, J. A., & Chartrand, T. L. (1999). The unbearable automaticity of being. *American Psychologist, 54,* 462–479.

Berger, P. L., & Luckman, T. (1967). *The social construction of reality*. New York: Doubleday.

Boehm, C. (1999). *Hierarchy in the forest: The evolution of egalitarian behavior*. Cambridge, MA: Harvard University Press.

Chaiken, S. (1987). The heuristic model of persuasion. In M. P. Zanna, J. M. Olson, & C. P. Herman (Eds.), *Social influence: The Ontario Symposium* (Vol. 5, pp. 3–39). Hillsdale, NJ: Erlbaum.

De Waal, F. (1982). *Chimpanzee politics*. New York: Harper & Row.

De Waal, F. (1996). *Good natured: The origins of right and wrong in humans and other animals*. Cambridge, MA: Harvard University Press.

Fiske, A. P. (1991). *Structures of social life*. New York: Free Press.

Gigerenzer, G. (2002). *Adaptive thinking: Rationality in the real world*. Oxford, England: Oxford University Press.

Haidt, J. (2001). The emotional dog and its rational tail: A social intuitionist approach to moral judgment. *Psychological Review, 108,* 814–834.

Haidt, J., & Hersh, M. A. (2001). Sexual morality: The cultures and reasons of liberals and conservatives. *Journal of Applied Social Psychology, 31,* 191–221.

Haidt, J., & Joseph, C. (in press). Intuitive ethics: How innately prepared intuitions generate culturally variable virtues. *Daedalus.*

Haidt, J., Koller, S., & Dias, M. (1993). Affect, culture, and morality, or is it wrong to eat your dog? *Journal of Personality and Social Psychology, 65,* 613–628.

Haidt, J., Rozin, P., McCauley, C. R., & Imada, S. (1997). Body, psyche, and culture: The relationship between disgust and morality. *Psychology and Developing Societies, 9,* 107–131.

Harris, J. R. (1995). Where is the child's environment? A group socialization theory of development. *Psychological Review, 102,* 458–489.

Haslam, N. (1997). Four grammars for primate social relations. In J. A. Simpson & D. T. Kenrick (Eds.), *Evolutionary social psychology* (pp. 297–316). Mahwah, NJ: Erlbaum.

James, W. (1961). *The varieties of religious experience*. New York: Macmillan. (Original work published 1902)

Kuhn, D. (1991). *The skills of argument*. Cambridge, England: Cambridge University Press.

Miller, W. R., & C'de Baca, J. (2001). *Quantum change*. New York: Guilford Press.

Minoura, Y. (1992). A sensitive period for the incorporation of a cultural meaning system: A study of Japanese children growing up in the United States. *Ethos, 20,* 304–339.

Newcomb, T. M. (1943). *Personality and social change: Attitude formation in a student community*. New York: Dryden.

Nisbett, R. E., & Cohen, D. (1996). *Culture of honor: The psychology of violence in the South*. Boulder, CO: Westview Press.

Perkins, D. N., Farady, M., & Bushey, B. (1991). Everyday reasoning and the roots of intelligence. In J. F. Voss, D. N. Perkins, & J. W. Segal (Eds.), *Informal reasoning and education* (pp. 83–105). Hillsdale, NJ: Erlbaum.

Petty, R. E., & Cacioppo, J. T. (1986). The elaboration likelihood model of persuasion. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 19, pp. 123–205). New York: Academic Press.

Rozin, P., Haidt, J., & McCauley, C. R. (2000). Disgust. In M. Lewis & J. M. Haviland-Jones (Eds.), *Handbook of emotions* (2nd ed., pp. 637–653). New York: Guilford Press.

Saltzstein, H. D., & Kasachkoff, T. (2004). Haidt's moral intuitionist theory: A psychological and philosophical critique. *Review of General Psychology, 8,* 273–282.

Seligman, M. E. P. (1971). Phobias and preparedness. *Behavior Therapy, 2,* 307–320.

Sherif, M. (1935). A study of some social factors in perception. *Archives of Psychology, 27*(Whole No. 187).

Tooby, J., & Cosmides, L. (1990). The past explains the present: Emotional adaptations and the structure of ancestral environments. *Ethology and Sociobiology, 11,* 375–424.

Whiting, J., & Child, I. (1953). *Child training and personality*. New Haven, CT: Yale University Press.

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