# Studyguide # 6: Morality, Aggression, Sexual conflict, Status

## Religious Prosociality - Norenzayan and Shariff

- Norenzyan and Shariff point out several ways in which religious beliefs, although they spread culturally, build on aspects of our evolved psychology. Review the argument that beliefs in supernatural agents derives from the tendency to detect agency in nature (as we discussed in the social brain), and the evidence that concern with reputation and honest signalling may also facilitate prosocial tendencies.
- As discussed in lecture, concern with reputation can enhance cooperation (shown by the fact that anonymity reduces it). How might belief in gods build on this, according to Norenzyan and Shariff? When people were primed to think of God, did it affect their behavior in the dictator game? how? When secular primes that related to civil order and policing were used, did it have the same effect? (also shown in lecture).
- One prediction of this reputational aspect of religion is that people who participate in religious practices
  will be more prosocial. Is this based on increased empathy, or concern with reputation? N and S discuss
  the evidence.
- Summarized by N and S: Sosis studied religious communes and found that commune longevity was associated with...what? Why might this be?
- Why do they think a belief in moralizing Gods should be more prevalent in societies with larger populations? Is this expectation supported?

## Morality (Haidt, lecture, text)

- What do trolley problems and similar studies suggest about the difference between moral intuition and moral reasoning?
- According to Haidt, what 2 aspects of morality are most important to liberals, and what is their evolutionary foundation? What 3 other aspects of morality are also important to conservatives, and what is their likely evolutionary foundation?
- Haidt suggests that the moral domain of purity and sanctity has its basis in pathogen avoidance. What evidence relates the two? Is the disgust triggered by moral transgressions similar to that triggered by potentially disease-causing objects, or is it a cognitive response? (lecture)
- How did changing the moral message about pollution affect environmental attitudes (lecture)?
- How does motive (which we infer from our "theory of mind") affect our moral judgments about blame and innocence? How might this differ if a person found theory of mind tasks challenging (as young children do)?
- The moral domains outlined in Haidt's article carry with them characteristic emotions, discussed both in that article and in the text (377-8). Review. What does Buss mean when he says these emotions might serve as commitment devices?

#### Aggression and warfare

NOTE: many of the things discussed in Buss chapter 10 were in lectures on other topics, including sexual conflict, but are included here for ease of review.

- Buss points out that aggression can be used to solve a variety of adaptive problems. We have discussed some of these also in earlier sections, and also in the section on sexual conflict.
- Are men really more violent than women? What is the evidence? (Review evidence from homicide data and bullying, lecture and text).
- Why are men more violently aggressive than women? Note both the sexual selection arguments and the greater fitess costs to women. (text and lecture). The sexual selection arguments were also discussed in the lecture on status-seeking and risk.
- Men, especially young men, are most often the victims, as well as the perpetrators, of physical violence. What does this suggest about the motives underlying it?
- Physical aggression, including homicide, can erupt over seemingly trivial things, but that can have big consequences since it can affect status, honor, and reputation. Review the evidence, both lecture and text.
- Females are more likely than males to use indirect aggression (social manipulation through gossip etc.). When women engage in verbal and indirect aggression, what is the nature of the verbal attack? (text)
- (caveat to above): But what about the Asante market women? Might you expect differences cross-culturally? Why?
- What is the main cause of male aggression against women? (text ch. 10 and the discussion of jealousy in the lecture on sexual conflict).
- Spousal homicide is spiteful it is not directly fitness-enhancing. How, then, does evolutionary psychology explain it?
- Do angry faces signal the ability, or only the intent, to intimidate? (lecture)
- How does individual variation in physical strength affect a man's proneness to anger, sense of entitlement, and belief in the efficacy of violence?
- Vengeance and retribution are common motives for fighting, including in warfare. Vengeance is motivating because it is rewarding. What is the evidence? Is this the case for males and females both? (lecture)
- Review the antiquity and cross-cultural prevalence of warfare discussed in lecture. Is non-state warfare more, less, or about the same in its risks (mortality rate) as warfare in modern states?
- Homicide and risk-prone behavior varies a lot across cultures and subcultures. Review the evidence presented by Daly concerning income inequality (lecture)
- What is the relationship between warriorship and status? warriorship and reproductive success? The fitness costs of warfare in non-state coalitionary violence are large, and while some data support its benefits in fitness terms, it is still problematic. What factors make men willing to bear the costs among the Turkana? (lecture)
- Men fight more than women and there is sexual dimorphism in physical traits that would facilitate this. What cognitive adaptations are also consistent with this?
- Buss discussestwo explanations within the ev psych field about whether homicide is adaptive, although he gives short-shrift to the one he disagrees with (299). What do you think? Personally, I am not persuaded that we have adaptations to homicide per se, or that homicide is usually adaptive in a Darwinian sense. However, risk-prone behavior, aggression, and being known as someone who will fight to get what he wants is often adaptive, and can be lethal. The selective advantage, therefore, doesn't derive directly from the opponent's death.

#### Sexual conflict

- What is sexually antagonistic selection? (and what do duck genitalia tell us about sexually antagonistic co-evolution?)
- Sperm competition in fruitflies involves toxic (to other sperm) semen. It's also not so good for the females. When Bill Rice prevented the females from evolving and let male-male competition evolve, what was the result? What happened when he forced the male fruitflies to be monogamous? Why does this suggest an evolutionary arms race between males and females in this species?
- Although we don't have evidence for sexually antagonistic co-evolution in humans, analogous psychological strategies and counter-strategies are described by Buss in several areas (deceptions about commitment, rape). Review.
- The sexual strategies that are optimal for men and women often interfere with each other. What are the resulting conflicts about?
- Buss argues that the usual interpretation of the "battle of the sexes" is misleading. How? (317)
- How does an extended courtship guard against deception? (the same argument has been made for birds).
- Men and women sometimes interpret the same friendly interaction differently. How, and what is the evidence? Why might such a bias be adaptive for men? Similarly, men underestimate how upsetting sexual harrassment is to women.
- The sexual double standard (greater punishment for extra-pair sex by women than by men) is not limited to WEIRD societies. Why is it so widespread? lecture
- Buss predicted that men would be more jealous about sexual infidelity while women would be more jealous about emotional infidelity. Why? What do the data from Western societies show (text and lecture)? How are the Himba/Tchimba different (lecture)?
- Is rape more common among men who have trouble getting willing mates?
- What psychological characteristics distinguish men who rape? (lecture and text)
- How does men's mate-guarding vary by context? Are they sensitive to the fertility status of their partners?
- At what point in a relationship are women at greatest risk of being killed? How can killing one's spouse be adaptive? Note the problem: how do you make a threat, or any signal, credible?

## Status

- Does high rank translate into reproductive benefits for men? Review the evidence relating social success and reproductive success for both women and men (lecture and text), in traditional small-scale societies (lecture and text) and kingdoms (text). Is the effect stronger in cultures that depend on agriculture than in foragers, who are more egalitarian? Data on modern industrial societies presents a more complicated picture.
- Why are men more risk-prone than women? Is this found in foragers also?
- Males are more risk-prone than females in a variety of domains, including placing larger financial bets. That would result in a larger potential payoff in benefits. But some risk-taking and thrill-seeking seems to not have direct benefits, only big costs What explains that? Discussed both in lecture (e.g., the Darwin awards), and by Buss in the chapter on aggression (p 285).

- Communication depends on honest signals (of competitive ability, mate value, etc) because if a signal is easy to fake, individuals won't pay attention to it. What makes a signal honest? Why?
- Theories about signals need to consider the audience. Recall the discussion earlier in the term about whether masculine secondary sexual characteristics are primarily a signal of dominance to other males, or of attractiveness and good condition to females (Puts slide in men's mating lecture)
- Why would evolutionary theory lead you to expect males to be more interested in status striving than women? Are they? Are they always? (text and lecture).
- Status hierarchies emerge quickly as Buss notes in the intro to the chapter, and they do so from an early age, but they do so more quickly for men than for women, and are probably more stable. A hierarchy depends on deference, which makes sense if losing is likely and the costs of losing are high.
- How do chimps display dominance and submission, and how does the dominant chimp benefit from that status? (text)
- Buss discussed the difference between dominance and prestige, but dominance status in the animal literature does not necessarily imply dominating behavior, so I think this introduces confusion. Dominant primates of several species require social savvy as well as toughness, just like people, although obviously there are more different routes to prestige among humans because we have more social roles.
- How do men and women differ in how they express dominance? Note the Megargee study described in some detail by Buss (mentioned in lecture but not on the slide).
- What is the relationship between status and helping? (Buss speculates on why don't men like to ask for directions). 349.
- Many emotions are related to status and status-seeking. Review (Buss).
- What is the relationship between the physical expression of status and shame, and winning and losing?
- What is the relationship between status and body size? Why might size be related to high status?
- What is the nature of the relationship between testosterone and competition in males? The "challenge" hypothesis is that testosterone rises in males when it is needed for competition (for example, at the beginning of the breeding season in male birds). Does it apply to humans also? When does testosterone rise in human males, and how does it change after winning or losing? Is the same effect found in women?

# Culture

- What is "evoked culture?" What are some examples of evoked culture in evolutionary psychology? (text and lecture).
- What is "transmitted culture?" One reason that transmitted culture may still be fitness-relevant is "biased transmission." What are some evolved biases (e.g., content and context biases) that affect whether or not we attend to and transmit a cultural trait? This was discussed in lecture, Buss, and, at somewhat greater length, Mesoudi.
- One example of transmitted culture discussed by Buss (p 396) is religion. Various biases make us predisposed to religious beliefs and phenomena, which is why Buss refers to these as by-products. We have addressed some them, including (a) the relevance of our evolved tendency to assume agency (intentionality) for our tendency to believe in supernatural agents, (b) how our social brain sensitizes us to respond as though we are being observed by these agents, even when we are alone, and (c) the role of costly displays as signals of religious commitment. Buss discusses these and also others, and it's worth a review (396).

- Culture-gene coevolution (397): It's a plausible idea (culture provides new selection pressures that genetic evolution responds to) although the empirical examples everyone cites are not psychological (e.g., how cooking shaped the human gut, and the effect of dairying on lactase persistence). Assertions have gotten ahead of the evidence, or, more charitably, it is a fruitful area for future research. See the Henrich video links for more.
- People spend a lot of time on the arts, which might seem odd from an evolutionary perspective. What is the display hypothesis, and what evidence supports it? What can it *not* explain?
- What is Pinker's "auditory cheesecake" hypothesis for music? How does the argument apply to literature?
- Culturally-evolved traits can spread because of benefits that happen at the level of social groups. Two examples were discussed in lecture.
- In what sense do cultures "evolve," and how does the process differ from genetic evolution? (Mesoudi). As Mesoudi notes, understanding the process of cultural transmission allows us to model the way cumulative culture changes and spreads.