Studyguide 3

NOTE: the topic of **sexual conflict** (Buss ch. 11, Sapolsky reading, and last lecture) was out of order, but **WILL BE ON THE QUIZ**.

Men's long-term mating strategies

- A text correction: Buss says that one benefit of marriage to men is an increase in the survival of children, pointing to the Ache, where he says paternal investment helps children survive (134). That's only true because children are sometimes killed if their father dies (infanticide), not because Ache men actually do much parental investment. A cross-cultural study of traditional societies found that a father's absence had little or no effect on child survivorship. Dads and their investment may be important in some societies and in other ways, however.
- Why (in evolutionary terms) might it pay a man to marry? (134)
- What is reproductive value? What does it have to do with the sex differences in preferred age of a mate?
- Buss's 37 cultures study found that men prefer wives about 2.5 years younger than themselves (with much cultural variation). How does the preferred age difference vary with the man's age? What does this tell us about the reason for the preference (137-8)? Does behavior support these reported preferences, and is it associated with higher reproductive success (157)?
- What facial features do men find beautiful in a woman? Why? Are these preferences found cross-culturally? What is the evolutionary explanation for these preferences?
- At what age do people begin to distinguish attractive from unattractive faces? (141)
- Which men prefer heavier women?
- What is the adaptive advantage of having (and preferring, if you are a male looking at a potential mate) a low waist-to-hip ratio?
- Among the Kipsigis, an E. African agro-pastoral group, men must give their wife's family a brideprice before they can marry. The ethnographer used the amount of priceprice as a measure of women's attractiveness. Which Kipsigis women cost more to marry? (lecture). There is some analogous behavioral data in Western societies too (158).
- Do men have a preference for ovulating women? Do women behave differently when ovulating?
- Although there is a lot of cross-cultural variation in the trait, men in most societies value chastity in a mate more than women do. There is also more societal tolerance for adultery by men than by women. What is the evolutionary basis for this sexual double standard?
- How does seeing pictures of attractive women affect a man's view of his own relationship? Is it adaptive? Media exposure is a lot like refined sugar a modern novelty that turns an evolved adaptation into something harmful.

- Testosterone facilitates competition among males and rises in anticipation of it. How is testosterone in men related to marital status and fatherhood? How did it differ between the Hadza (foragers) and the Datoga (pastoralists)? What does this indicate about the difference in male strategies in these two populations?
- There are many evolutionary explanations that have been proposed to explain homosexual orientation in men, and no consensus about any of them. The most intriguing, in my opinion, is what Buss refers to as the "female fertility hypothesis". Take a look at it (box 5.1).
- How do male preferences affect what women compete over? 159-60. Note, though, that male attention isn't the only thing women compete over remember those Asante market women? They also compete over resources, especially for their children.

Scelza, "Choosy but not chaste"

- How might multiple mating by females lead to selection on males for reduced parental care? (Scelza suggests two reasons)
- In many societies, mothers get a lot of support from their mothers and other matrilateral kin (we will talk about this more when we discuss parenting). How might this affect the degree of investment by fathers? Review the evidence in support of this.
- Get a sense of the magnitude of variation across societies in sexual behavior, especially in out-of-wedlock births (p 262).
- In developed nations, is a female-biased sex ratio (more women than men) associated with more or less teen pregnancy? strong or weak marital bonds?
- Formal polyandrous marriages are rare cross-culturally, but culturally-accepted polyandrous matings, such as South American "partible paternity" societies, are more common. Review (264 and lecture).
- Cross-culturally, who is more likely to be punished for infidelity: wife or husband? why? (discussed also in lecture).
- How is inheritance of property related to sexual constraints on women? (264).
- Review the possible benefits women might gain from multiple mating (genes, material resources). Does multiple mating enhance reproductive success for Himba women? Pimbwe women? Sami women? US women? Swedish women? (Pimbe women discussed in lecture).
- Do women's mate preferences differ across the menstrual cycle? In what ways, and how might this bear on women's propensity for extra-pair matings? (note: the evidence here is controversial).

Short-term sexual strategies and polygyny

- The cross-cultural data shown in class gave the percentage of non-industrial cultures with polygynous, monogamous, and polyandrous marriage patterns. Which is most common? Which is least common?
- Some monogamous societies are monogamous because of laws prohibiting polygamy, but others, such as many hunter-gatherer societies, are "ecologically monogamous." What ecological conditions favor monogamy?
- Men, like most mammalian males, benefit reproductively from multiple matings, and their minds and bodies show adaptations for it. Review the evidence beginning p 167 (including sperm competition, attitudes, choosiness, closing-time phenomenon, sexual fantasies, behavior). The table 6.1 is a good summary of the evidence.
- There are trade-offs between paternal investment and seeking additional matings. Under what circumstances would it make adaptive sense for males to invest more in offspring? How does the operational sex ratio affect sex and mating patterns? (text and lecture)

3. Some scientists (Gould, Symons), noting that orgasms in women are more variable than in men, have suggested that women's orgasms are an evolutionary byproduct of selection on males. They may be right, but variation in a trait is not a good reason to think selection hasn't shaped it (why not?). Some evolutionary psychologists have proposed hypotheses suggesting a norm of reaction for women's orgasms. What are their ideas? (p. 177). Note, all this stuff is very controversial.

- Why, and under what circumstances might short-term matings be adaptive for females? What is the evidence? (text and lecture).
- One reason why females might solicit extra mates is to get resources and investment. This (like most of this section) is not limited to humans. Why do female dunnocks (birds discussed in class) solicit extra-pair copulations (EPCs) from beta males, and how do we know? (lecture)
- The Bari are a society with beliefs of "partible paternity". What is that? Does having a secondary male benefit a Bari woman? (lecture)
- How do women's mate preferences differ for long vs. short-term mates? What does this suggest about the reasons for engaging in short-term (or extra-pair) mating?
- How does father absence shape mating strategies? We'll talk more about this later.
- How does the sex ratio affect male and female mating strategies? (p. 198 and more extensively in lecture). The relevant sex ratio here is what is termed the "operational sex ratio" (what is that?)
- Polygynous men typically have greater reproductive success (higher fitness) than monogamous men, but the same is typically not true for women (remember the figure of Utah polygynous vs monogamous marriages). Why is this the usual pattern?

- The Pimbwe (lecture) were an exception to the rule above. What do the data show for the Pimbwe?
- What is the "polygyny threshold" argument discussed in lecture, and how does it explain when it might be advantageous for a female to mate/marry polygynously?
- The Kipsigis women studied by Borgerhoff Mulder (discussed in class) chose men who had the most resources available after division among co-wives, rather than the most resources overall. Why does this suggest polygyny by female choice (polygyny threshold argument) rather than male coercion?

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? (Sapolsky)
- What is genomic imprinting? What kinds of traits are associated with imprinted genes? Why? What happens to the offspring when the paternally imprinted gene is knocked out? Ditto the maternally imprinted gene? Why does this suggest an evolutionary arms race in our species? (Sapolsky)
- The sexual strategies that are optimal for men and women often interfere with each other. What are the resulting conflicts about?
- Daly and Wilson give an evolutionary interpretation of spousal homicide. Do they think, therefore, that spousal homicide is adaptive? If not, what are they arguing?
- 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.
- Is rape more common among men who have trouble getting willing mates?
- 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)? How are the Tchimba different (lecture)?

- 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? Why, according to the text, are poor men more likely to commit domestic violence? How can killing one's spouse be adaptive? Note the problem: how do you make a threat, or any signal, credible?