

Studyguide # 7

Toward a unified evolutionary psychology

NOTE: some of the material in the last Buss chapter was discussed earlier in the course, where I thought it was topically relevant, but review it here, in addition to the new material.

NOTE: Daly's book is not included here, but will be on the quiz, following the main points discussed in class. If I have time, I will add some questions, and put it on the homepage announcements.

Cognitive psychology

- Are attention and memory sensitive to fitness-relevant situations? How do we know? (382-3)
- Review the material on heuristics and biases, 383-8 (assigned previously, and discussed in the lecture survival #4)
- Pinker says that language is a human "instinct" (an adaptation, not a by-product). What is the evidence? That doesn't mean we know what the adaptation is for, however.
- Why are humans so smart? Compare arguments and evidence that focus on social competition as the primary selection pressure with arguments and evidence that focus on environmental hazards and other mortality risks. Probably most of the attention in EP is on social intelligence, but, as the text notes, Gottfredson points out that social intelligence is not highly correlated with general intelligence.

Social psychology

- Buss says (394) "Most of the major theoretical advances in evolutionary biology have been about social phenomena, yet these important theories have been almost entirely ignored by mainstream social psychologists." Buss lists some of those theories. What are they, and what does each contribute to a theory of social phenomena (briefly)?
- What is the functional logic that might underlie anger, embarrassment, and guilt? Other moral emotions? 395ff
- Review the discussion of group selection (discussed briefly earlier in the course). What does Buss think?

Evolutionary Developmental Psychology

Review Bruce Ellis's lecture. The basic point of his work, and of most evolutionary developmental psychology, is #4 on Buss's list (398), so review his slideshow with that in mind.

- Review the material on theory of mind (assigned and discussed earlier in the course, lecture on “mindreading and the social brain”).
- What is life history theory? Understand the basic trade-offs, as discussed in text and Ellis’s lecture.
- What does life history theory predict about early childhood environments (father absence and unpredictability) on sexual strategies and the age of reproductive maturity? (400-401 and Ellis’s lecture). Does evidence support it? Would you call this a norm of reaction, or a difference based on gene frequencies, or is it hard to tell?
- Insecure attachment in young children is viewed as pathological. While it is certainly associated with bad outcomes, some have suggested that it might also be adaptive. What is the argument?

Evolutionary Personality Psychology

- Why do people differ? Buss introduces this under “personality psychology” but some of this was discussed early in the course also
- What is frequency-dependent selection? How might it explain psychopathy? (also discussed earlier in the course)

Evolutionary Clinical Psychology

See lectures on Survival 1 and 2.

- How do we decide what aspects of human variation are “abnormal”? Buss thinks evolutionary psychology has a theoretically-grounded way of making that distinction. What is it?
- A lot of psychological traits make us uncomfortable. The same arguments given by Nesse and Williams for physical ills can also help us understand the evolutionary reasons why we suffer from psychiatric disorders. Review (408-410)

Evolutionary Cultural Psychology

- What is the difference between evoked and transmitted culture? One reason that transmitted culture may still be fitness-relevant is “biased transmission.” What evolved biases affect whether or not we learn a cultural trait?
- 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 the arts?

- Reading is a cultural invention. How does the brain do it? Does it use general purpose (domain general) brain mechanisms? Or domain-specific circuits that evolved for something else? (review lecture notes on culture).
- Southern men have a “culture of honor” (what is that, and how do we know? – see lecture notes and Daly). Is it an adaptation, in Daly’s view? If so, to what?

Other readings

- Henrich article: Three tests were used to identify whether people were individualistic/analytical or collectivist/global. What is the triad test and the sociogram test, and what did they show?
- Most comparisons of individualistic and collectivist cultures compare Western (especially American) cultures with Asian ones. What makes the comparison in this study an improvement? What causal variable do they claim accounts for the difference?
- What did Mittal et al learn about how unpredictable childhoods affect cognition? What manipulation in the experiment was necessary in order to show this? This approach suggests that the consequences of harsh and unpredictable environments can be better understood as adaptations than simply as deficits.