Studyguide # 5

Alloparents

- The human life history (short interbirth intervals, long period of juvenility) mean that mothers need help. And in traditional societies, they get it (from a child's siblings, father, grandmother, other kin) Review (lecture)

- Cross-cultural data suggests that the effect of having a living maternal grandmother differs from the effect of having a living paternal grandmother. What is the difference, and why? (lecture)

- Which grandparents invest more in offspring, and why? (lecture on alloparents, and text in kinship chapter).

- Teen pregnancy is not just a matter of ignorance and accidents. What is the evidence? Under what circumstances does it make adaptive sense for girls to want to become mothers when they are still teenagers? (lecture)

Kinship

- Understand kin selection and Hamilton's inequality (a mutation will spread if Hamilton's inequality holds - why?) How does this explain altruism among kin?

- One manifestation of sibling competition is that first-borns, later-borns, and middle-born children must adapt to different familial niches. What are the implications of this? (text discusses Sulloway's arguments, p. 220).

- How can kin selection explain alarm calls? See discussion of Belding's Ground squirrels in the text. Why do we think that female Belding's Ground squirrels call because of inclusive fitness benefits rather than just parental investment? (223-4)

- Are patterns of helping among human kin and others consistent with the expectations of Hamilton's rule? Some evidence in support of inclusive fitness theory comes from the following: (a) comparisons of helping behavior to full and half sibs, (b) responses to hypothetical scenarios and (c) bequests. Review the evidence in text and lecture.

- Who do people leave their estates to, how do women and men differ, and why? (250-1).

- Many homicides occur at home, and since we live chiefly with relatives this has caused some to question the importance of kin selection. What needs to be controlled in order to evaluate this? Review Daly and Wilson's study on homicide risk at home (lecture); what did they find?

- How is the grief parents think they would experience at the death of a child affected by the child's age, and why is this consistent with evolutionary thinking? (lecture)

- Why is parent-offspring conflict inevitable? What forms does it take? (text and lecture). Is weaning conflict found in hunter-gatherer societies (kinship lecture)? How does the presence of a sibling affect it? (text 213)

Reciprocity and collective action (Sigmund et al, lecture, text)

- What is reciprocal altruism? What is the "free-rider" problem it poses?

- Be able to explain the following "games" and how people usually behave in them: prisoner's dilemma (one shot and repeated), ultimatum, and public goods.

- Why does the "rational" solution to the one-shot prisoner's dilemma (PD) lead to a suboptimal outcome? How does having an iterated (repeated) game change things? What is "tit for tat" and why is it often successful (it is not always best strategy)? Turning a one-shot PD into an interated PD can be a helpful way of solving problems.

- Chimpanzee politics involves coalitions; what do the chimp males get out of the alliance? (text)

- Why do evolutionary psychologists think that reciprocity was important in the EEA, when everyone lived as foragers in a world of foragers? (lecture)

- What increases selfishness in the ultimatum game? Why? (lecture)

- There are cross-cultural differences in how much people donate in these games. How typical are Americans? What factors affect generosity cross-culturally? (lecture, Sigmund et al)

- It has been suggested that social emotions such as guilt, shame, and righteous indignation are motivators for successful reciprocity. Explain.

- What are the key features of a public goods game? As with the prisoner's dilemma, there are short-term advantages to defection, but if everyone cooperates they all do better. How do people behave in these games? What increases cooperation? (lecture)

- Speed of response affects generosity in public goods games. How? What does this suggest about our "social brain"? (lecture)

- Does punishment promote cooperation? Punishment of free-riders is sometimes viewed as altruistic because the punisher bears the full cost of the punishment but everyone shares in the benefit. (referred to as the "second order collective action problem"). But most punishment in everyday social interaction (verbal aggression, shunning, lack of respect) is low or no cost to the punisher. See also Buss's discussion (reciprocity lecture and text pp 268-270).

Ridley and Low: Can selfishness save the environment?

- Do they agree that the route to solving collective action problems lies with better education? How about attempts to change values so to better support sustainability? What do they think instead?

- What is the "tragedy of the commons" and how is it similar to the games we discussed in the reciprocity lecture? Why has privatization been proposed as a solution? Would a private owner necessarily conserve the resource? (see their discussion of Colin Clark).

- There are cases where commonly-held resources are managed sustainably. How does it work in Valencia?

- Do you think "tit for tat" can be scaled up to deal with global problems like limiting atmospheric carbon?

The social brain (lecture for 3-31) & Neuberg & Schaller

- Are we able to recognize prospective altruists (and likely cheaters before we are cheated)? How much interaction is needed (what do studies show)? (lecture and text)

- Why do many evolutionary psychologists think we have a mind that is especially designed to solve social contract problems, and to detect cheaters and altruists? Review especially the Wason selection task in its different forms: abstract, social contract, perspective-change (discussed in lecture), seeking credit (text).

- We will discuss costly signalling later, but review the text discussion of it, regarding advertising that you are an altruist (259)

- One way we are able to cooperate without being taken advantage of is through our ability to "read minds". What do psychologists mean by "theory of mind"? Review the developmental components discussed in lecture:

  1. intentionality detection: Even infants children distinguish animate objects (that move of their own volition) from inanimate ones. We seem predisposed to the former, and to attribute causation to such agents.
  2. gaze monitoring ("seeing leads to knowing") - what is this?
  3. shared attention (directing attention of others by pointing, etc.).
  4. theory of mind as measured by false belief tests. (be able to give an example of a "false belief" test, such as the crayon box example in the film The Social Brain). At what age are people able to pass such tests?

- What are the features of autism that suggest "mindblindness" (in the sense discussed above)?

- Chimps are socially intelligent and can collaborate. Briefly (from the lecture slide): How is cooperation different between humans and chimps?

- The film The Social Brain showed a lot of people with neurological problems: prosopagnosia, autism, Williams syndrome, frontal-lobe damage (the man shown the disturbing photos and the card game). What are each of these, and what is their relevance to the theme that our brains are specialized for social reasoning?

- Cooperation is a hallmark of our species' success, but it also poses threats. Neuberg and Schaller argue that prejudices evolved as ways of mitigating these threats, and that these generate "false alarms" (what do they mean by this?)

- Neuberg and Schaller also argue that the nature of the prejudice is specific to the type of threat, for example, to the threat of physical harm, of disease, and of individuals who don't conform to group norms. How do the responses differ?