

9.20 M.I.T. 2005

Class 30

Practical issues

**in thinking about and collecting data on
adaptations**

John Alcock, *The Triumph of Sociobiology*, ch 9:

Misuse of scientific findings

1. Give three examples of the misuse of scientific findings or claims in service of political goals. At least one of these examples should concern sociobiology or Darwinian theory.

P 189-192

- Nazi claim that racism, and even genocide, was based on genetics
- 19th century “social Darwinism”: used to justify dominance and superiority of the rich
- Infidelity is natural, therefore understandable, therefore, justifiable. Subjugation of women, similarly.

John Alcock, *The Triumph of Sociobiology*, ch 9:

Separating what people actually do from what they ought to do or should do

2. Formulate two statements summarizing a sociobiological finding, in the following manner: For one of them, make it sound like people ought to behave in a certain way. Then re-state the finding in a more objective way.

P 193

“It is natural to being male to want to have power and dominance over others, including women.”

Re-statement: Men, more than women, have a tendency, on average, to strive for positions of power and dominance.

John Alcock, *The Triumph of Sociobiology*, ch 9:

Medical issues

3. Give an example of a medical issue that can be illuminated by sociobiological ideas and data.

P 195-196

Morning sickness (discussed by Alcock)

Fever

Pain

John Alcock, *The Triumph of Sociobiology*, ch 9:

The birds and the bird watchers

4. Why are studies of the behavior of white-fronted bee-eaters (birds) relevant to human behavior?

P 196-201

Both species have families that persist over long time periods – so they have had similar selective pressures. “Helpers at the nest” is by offspring helping, usually, full siblings (sharing about 50% of genes)

John Alcock, *The Triumph of Sociobiology*, ch 9:

Remarriage and step families

5. What does adaptationist thinking (by sociobiologists) predict about human marriage and step families?

(These predictions have been tested and verified.)

P 200-203

- More conflict within step families (less stability), at least when children are involved.
- Greater child abuse by step parents, especially step fathers. See figure p 202.
- More divorce with greater number of step children.

John Alcock, *The Triumph of Sociobiology*, ch 9:

Male-female differences

6. What important kind of data on male-female differences is not mentioned by Alcock (on p 204f)?

Brain-behavior differences (on average) found by neuropsychologists:

- Verbal abilities
- Spatial abilities
- Linear logic; quantitative analysis
- Social and emotional intelligence and sensitivities

John Alcock, *The Triumph of Sociobiology*, ch 9:

The naturalistic fallacy

7. What is the “naturalistic fallacy” often made by people, including some scientists, who are opposed to sociobiology’s studies of human nature?

”An evolved tendency is natural, and therefore acceptable and justified.” See Q2 above.

John Alcock, *The Triumph of Sociobiology*, ch 9:

Rape as a show of power over females

8. Is it true that “all rape is an exercise in power” and is not about sexual desires?

No. See your homework.

Also note that it is widespread among animals, although certainly not in all species.

John Alcock, *The Triumph of Sociobiology*, ch 9:

Maternal instincts greater than paternal instincts, on average

9. Answer Q1 in the Appendix for ch 9.

“Imagine that someone [a sociobiologist] establishes that the maternal drive of women is on average greater than the paternal drive of men across most societies. Imagine that an adaptationist proposes ...[an explanation in terms of genetic fitness]”

Is the sociobiologist being irresponsible...[since people may misuse his conclusions]?

Read Alcock’s quotations of the opinions of Richard Dawkins and George C. Williams, p 215.