

9.20 M.I.T. 2005

Class 31

**“The Triumph of Sociobiology”**

John Alcock, *The Triumph of Sociobiology*, ch 10:

## Alcock's summary of a major argument: Is it an overstatement?

1. The first paragraphs of this final chapter are a beautifully concise summary of a major argument of the book. Comment on the following sentence: "In fact, they could not study 'genetically determined' behavior even if they wanted to because it does not exist...." Is this too extreme? Use examples in your answer.

P 217

I think it is too extreme, because some behaviors have very little variation attributable to learning or other environmental influences: e.g., sneezing, yawning, withdrawal reflexes; grooming in mice; social signals in geese; various insect behaviors, etc.

John Alcock, *The Triumph of Sociobiology*, ch 10:

## Snubbing the field of sociobiology

3. Why have many social scientists and people in the humanities ignored sociobiology?

P 220-221

“...*evolutionary biology is ‘alien and disquieting’ to many social scientists, including some psychologists and cultural anthropologists, as well as many philosophers and academicians in the humanities. The real cost of the continuing assaults...*” is the resistance to incorporating evolutionary theory in other disciplines. People prefer to retain a worldview that is familiar and comfortable. Note the description of a verbal assault, at a meeting, on the primatologist Craig Stanford.

John Alcock, *The Triumph of Sociobiology*, ch 10:

## Extreme environmentalism (reviewed for emphasis)

4. What are the causes you can discern, or have learned about, for the extreme environmentalism in America? (It has been more extreme in America than in Europe.)

P 221

Opposition to attitudes in European aristocratic society with its elitism based on inheritance. In America, ideals of democracy included the belief that “all are equal”, which should mean “under the law”, but is often taken to mean equal at birth, with everything possible to everyone who has the will and can find the opportunity. This was applied to the education system, with good outcomes despite the inaccuracy of the beliefs.

John Alcock, *The Triumph of Sociobiology*, ch 10:

## Claiming a major weakness of sociobiology

5. Appendix ch 10, Q3: *Ian Tattersall describes how women in a surviving hunter-gatherer tribe breast-feed their infants for four or more years, a practice that blocks ovulation during this time and prevents them from becoming pregnant. He writes, “Their genes hardly seem to be screaming out for replication; and economic considerations, as virtually always, lie to the fore. For hunters and gatherers, then, it’s fertility, not its lack, that is the enemy. Individual San women show no sign, conscious or unconscious, of wishing to maximize their output of progeny.” Tattersall believes that he has identified a major weakness of sociobiology. Is he right?*

What are the fitness-enhancing advantages of spacing of offspring?

What are other benefits of breast feeding?

John Alcock, *The Triumph of Sociobiology*, ch 10:

## Respond to a critique of evolutionary psychology

6. ~~Appendix ch 10, Q2: Homework due Friday.~~

~~*Provide a sociobiological response to Albert Bandura's op-ed piece on evolutionary psychology that appears on the Internet [Swimming against the mainstream: Accenting the positive in human nature.]*~~

*replaced by Q 8.*

John Alcock, *The Triumph of Sociobiology*, ch 10:  
Only immoral or amoral actions can evolve?

7. Appendix ch 9, Q2: Homework due Friday.

*Defend sociobiology against the following charge:  
“Sociobiology predicts that only immoral or  
amoral actions can evolve. When sociobiologists  
are confronted with the existence of true altruism  
and moral behavior, they then change their tune  
and say that these cases illustrate that human  
beings are able to resist our evolved impulses. But  
why would we resist if our actions really have  
evolved via natural selection?”*

John Alcock, *The Triumph of Sociobiology*, ch 10:

## Trying to explain fitness-reducing behaviors

2. What explanations for fitness-reducing behaviors have been offered by sociobiologists?

P 218-219

Most altruism has been shown to be adaptive, either directly (involving genetic relatives) or indirectly (reciprocal altruism). Maladaptive altruism also occurs, and has potential explanations, e.g.,

- By-product hypothesis
- Novel environment hypothesis

John Alcock, *The Triumph of Sociobiology*, ch 10:  
Only immoral or amoral actions can evolve?

8. *Homework* due Friday: Read the article on the following web site on the field of evolutionary psychology:

[http://en.wikipedia.org/wiki/Evolutionary\\_psychology](http://en.wikipedia.org/wiki/Evolutionary_psychology)

Write a brief review, including the definition and the origins of the term, distinguishing between sociobiology and evolutionary psychology, and a few of the controversies that this field has generated. For help in this, read the “talk page” accessible *via* a link.