Justin Garson

The Biological Mind

Ch.3: Evolution and Psychology

Ch.4: Nature and Nurture

QUESTIONS

What is cultural evolution?

What is an example?

Question: why have nearly all soldiers in human history been men?

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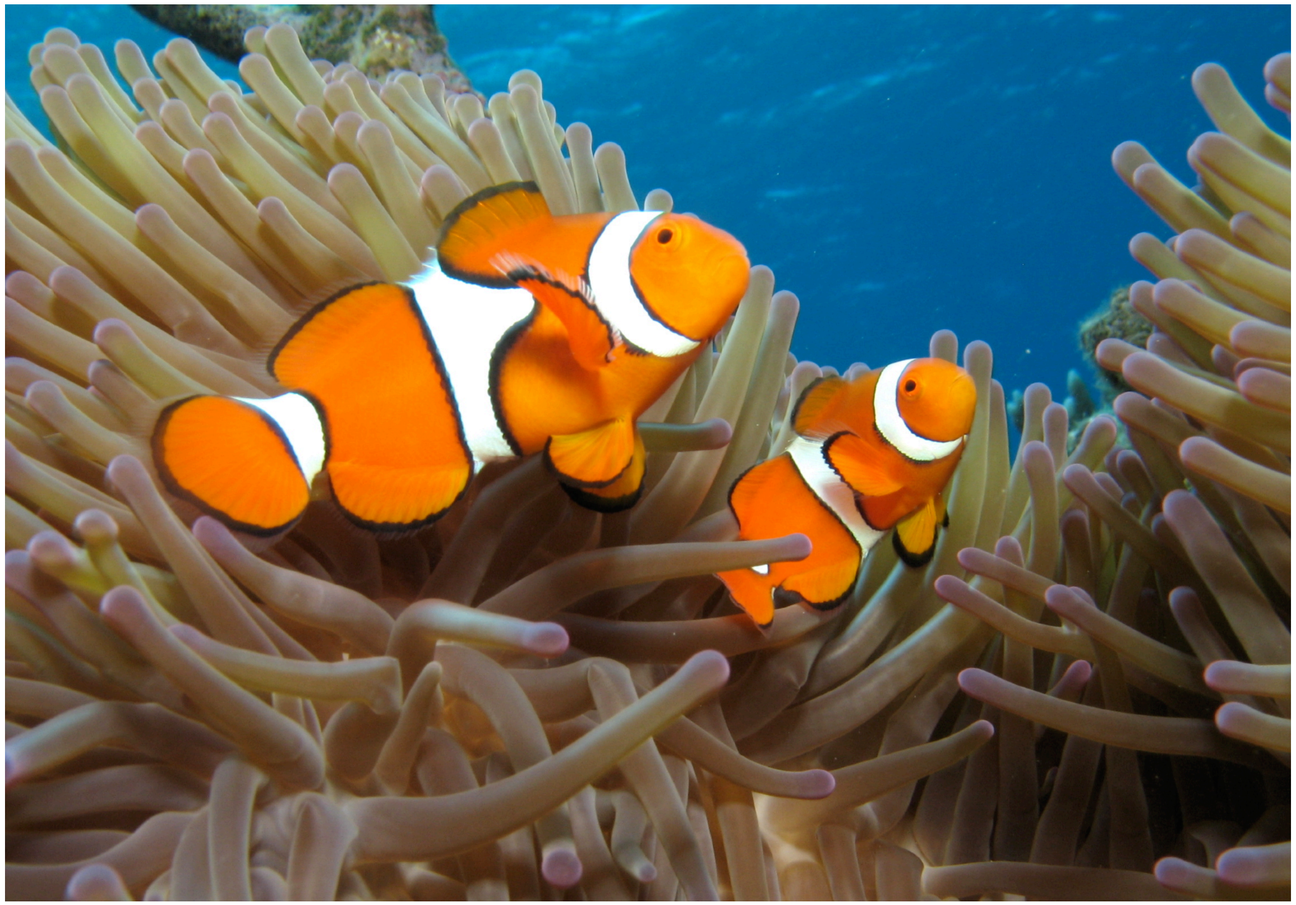
First Answer:

Men and women differ genetically/ biologically in ways that make men better suited to serving as soldiers:

Men are bigger, more aggressive, have more testosterone, etc.

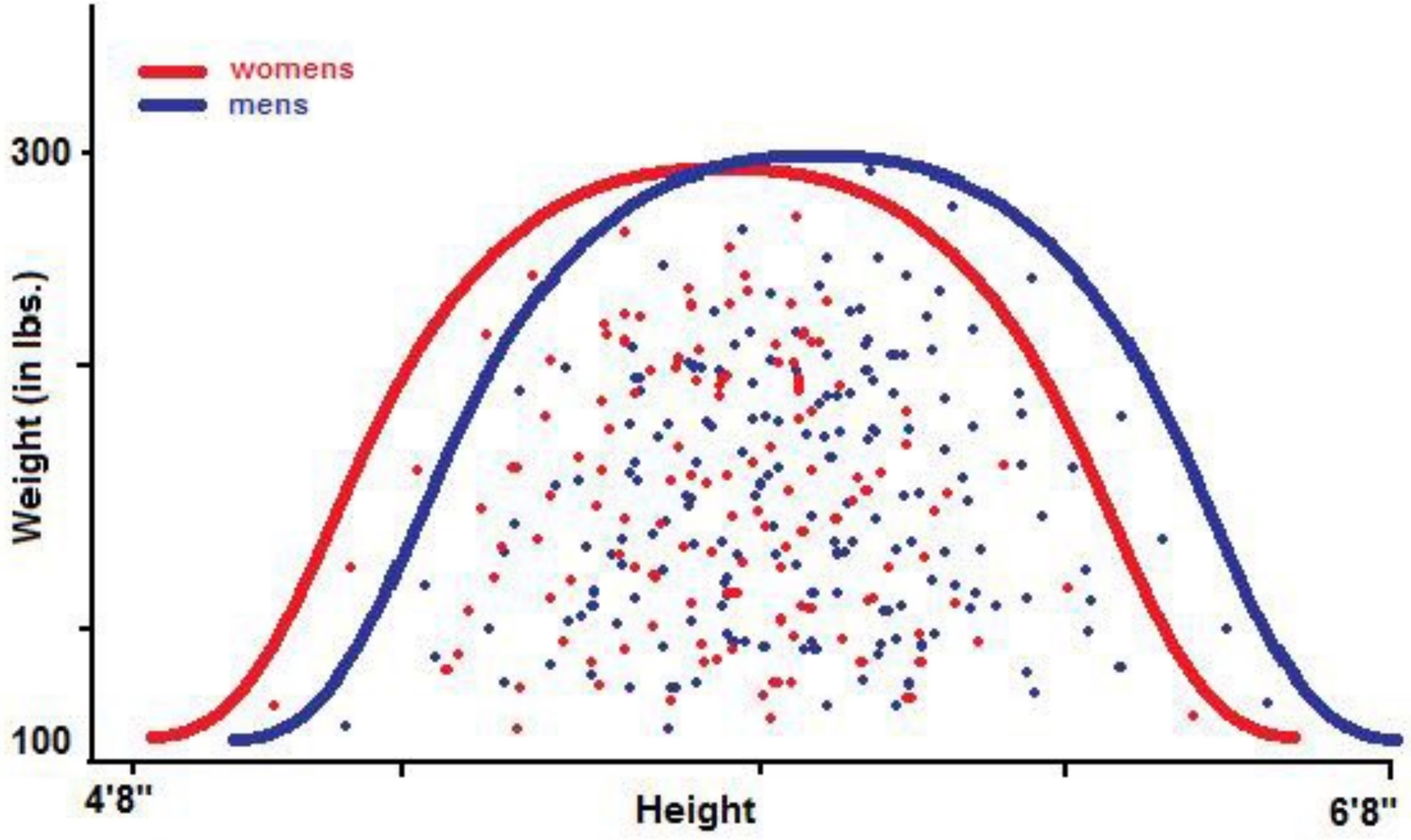
A problem with first answer:

Some biological differences are caused by differences in social position.



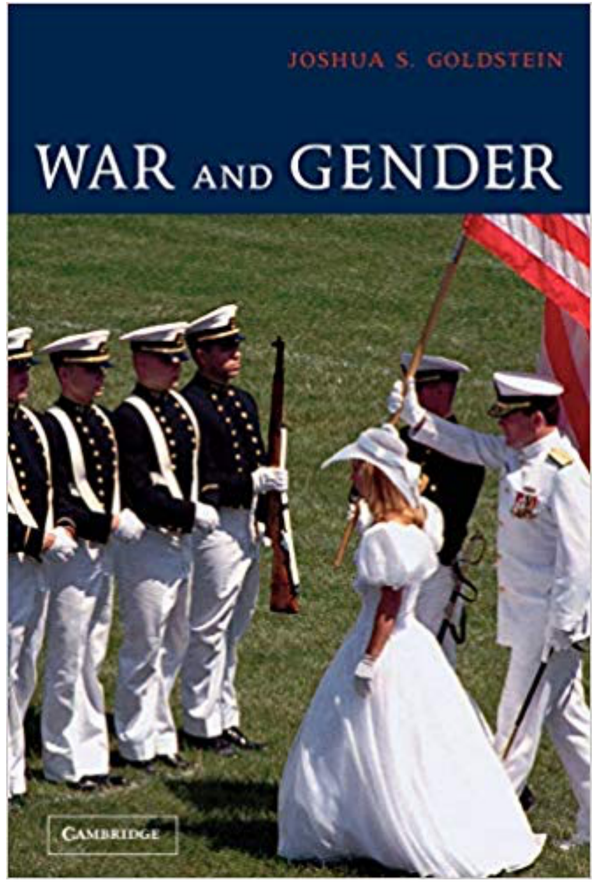
Another problem with first answer:

"Average differences" mask large overlaps.



This graph and caption were adapted from a lecture from the course "Constructing Gender in American Society," given by Paul Sargeant, SDSU Sociology professor. This particular image is © http://mordantbelle.com.

Question: why have nearly all soldiers in human history been men?

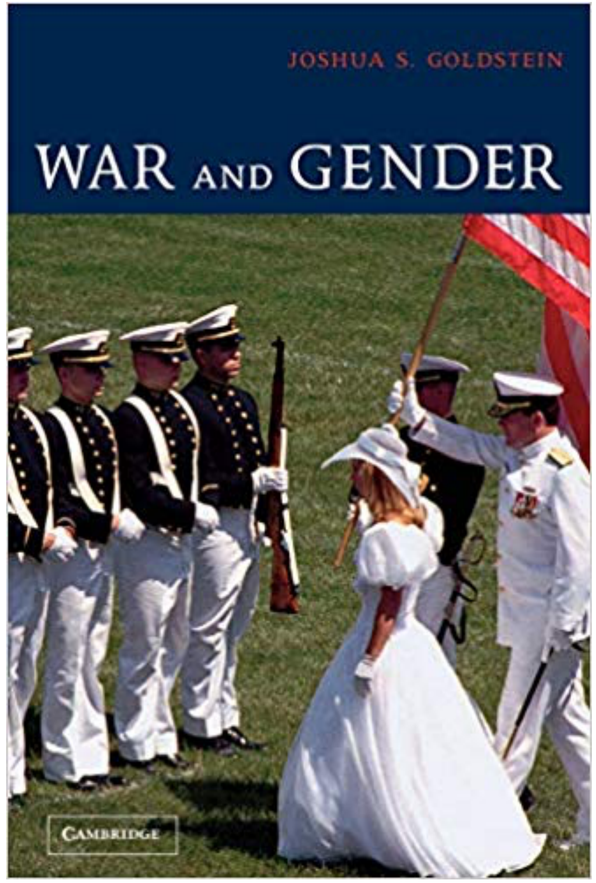


Josh Goldstein's Answer:

It is highly unnatural for anyone to volunteer to fight in a war, but societies in which nobody fights have tended to die out.

This has created a kind of "survival of the fittest" among societies: The cultures that win are those that convince large portions of their populations to be willing to fight.

Question: why have nearly all soldiers in human history been men?



Josh Goldstein's Answer:

The most effective way to make large numbers of people willing to fight is to use gender norms: pick a gender and reinforce aggressive, warlike gender norms in them, and peaceful, nurturing norms in the other.

Because males have a *slight* natural statistical edge as fighters, it works best when they are the ones who are culturally trained to be aggressive.

QUESTIONS

What is an example of how cultural and biological evolution can interact?

What is the Baldwin effect? (pp.51–52)

What is an example of gene-culture co-evolution? (p.55)

QUESTIONS

What is a meme?

What are some problems with the idea of memes, and of cultural evolution more generally? (p.56)

QUESTION

In discussing Human Behavioral Ecology, Garson says that “we′re designed to be flexible in the face of new problems. This ability is called “behavioral plasticity,” which is a kind of phenotypic plasticity”

What does he mean?

QUESTIONS

What is it for a trait to be an adaptation?

What is adaptationism?

What is a psychological trait most humans possess that is probably not an adaptation?

QUESTIONS

Garson describes evolutionary psychology as a package of the following ideas:

- the "massive modularity" of mind
- the innateness of our mental modules
- adaptationism about mental modules
- universality of mental modules

What are these four ideas? Do they have to go together?

(pp.59–61)

QUESTION

What reasons are there to doubt adaptationism as a thesis about our psychological characteristics? (pp. 62–69)

QUESTION

Given what we learned about generative grammar, should we be adaptationists about language?

QUESTION

John Locke defended the following claim:

> ...on any apparently reasonable definition of what the word "innate" means..., almost everything turns out to be "innate," or almost nothing does.

Why is it so hard to come up with a definition of "innate" that avoids this problem? (p.78–9)

QUESTION

Does it make sense to say that we have some capacities at the moment of conception and acquire some capacities only later? (p.78)

QUESTION

Richard Lewinton famously made this claim:

> Asking how much of a behavior is due to heredity and how much to environment is as meaningless as asking, "how much of the area of a field is due to its length, how much to its width." (p.79)

(See also his brick-laying metaphor, and his claim that the contributions of genes and environment are "incommensurable", p. 83)

What did he mean?

QUESTION

What is wrong with saying that a trait is innate if and only if it is “not learned”? (p.81)

QUESTION

Population geneticists try to measure the extent to which traits in a population are heritable—that is, the extent which their variation correlates with genetic variation.

Why is it important to recognize that this is a merely statistical measure, and not a measure of how much genes *cause* variation?

QUESTION

What does Garson mean by his distinction between “robustness” and “plasticity”?

(pp.88–90)