

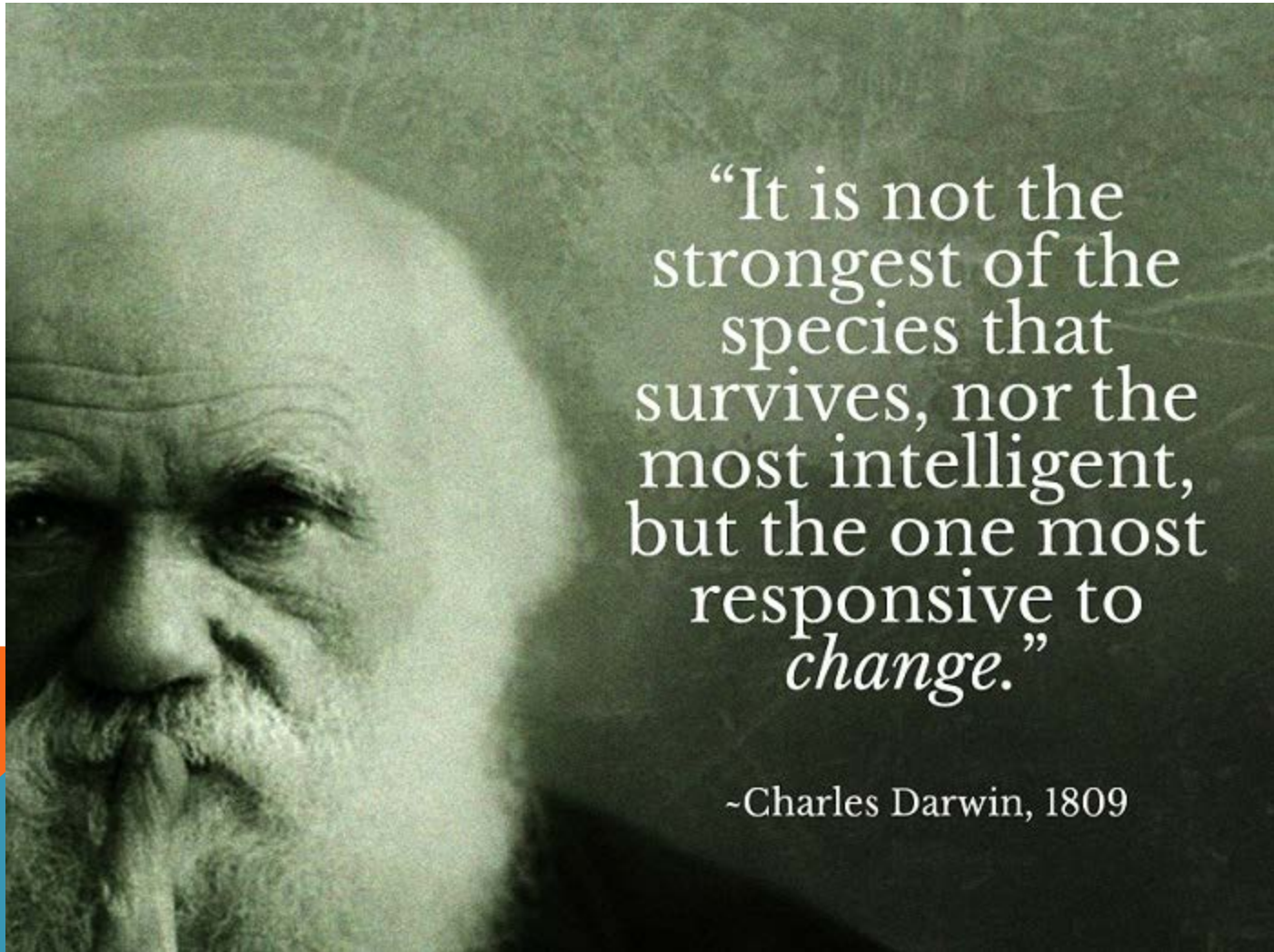
# **THE IMPACT OF DARWIN'S THEORIES**

## **Darwin's Theories and Human Nature**



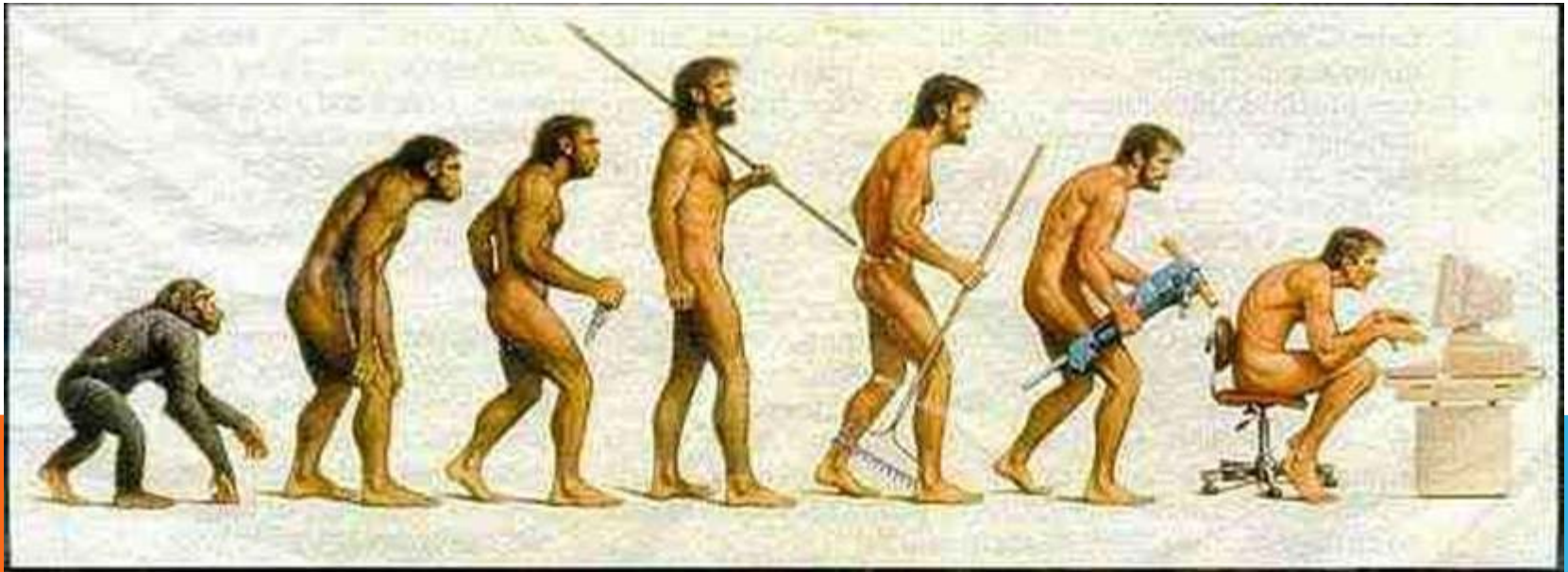
# THE IMPACT OF DARWIN'S THEORIES

## I. Preliminary Questions:



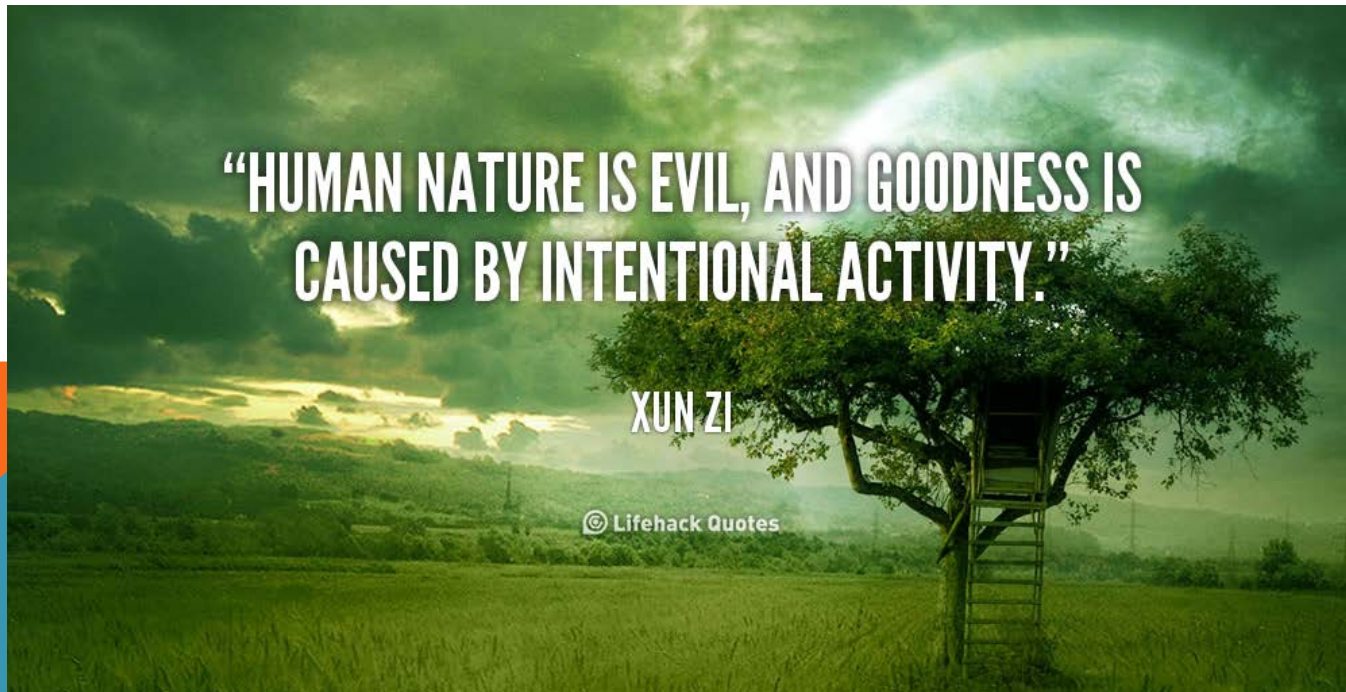
# THE IMPACT OF DARWIN'S THEORIES

1. Is science a better methodology to discover “truth” about human nature?



# THE IMPACT OF DARWIN'S THEORIES

2. Should secular, scientific, claims to a prescription of what is wrong with us be considered as controversial (a thus subject to rejection) as religious and philosophical descriptions?



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## II. Theories of Evolution

Evolution – dictionary definitions include any extended process with an identifiable end-product.

1. Progressive – better by-product than before?
2. Problems related to the *fact* of evolution vs. its *mechanism*.



Human nature is not a machine to be built after a model, and set to do exactly the work prescribed for it, but a tree, which requires to grow and develop itself on all sides, according to the tendency of the inward forces which make it a living thing.

(John Stuart Mill)


# THE IMPACT OF DARWIN'S THEORIES

**Darwin** and “Natural Selection” – **Darwin's** great contribution to this debate was to propose natural selection as the mechanism (*Origin of the Species*, 1859).



# **THE IMPACT OF DARWIN'S THEORIES**

## **Natural Selection's 4 Empirical Generalizations:**

- 1. Variation in the traits of individuals of a given species.**
  - 2. Traits of parents passed on to offspring.**
  - 3. Species can increase geometrically.**
  - 4. Environmental resources can't support this increase.**
- 

# THE IMPACT OF DARWIN'S THEORIES

Therefore!  
You have  
“survival  
of the fittest”



**DARWIN AWARD**

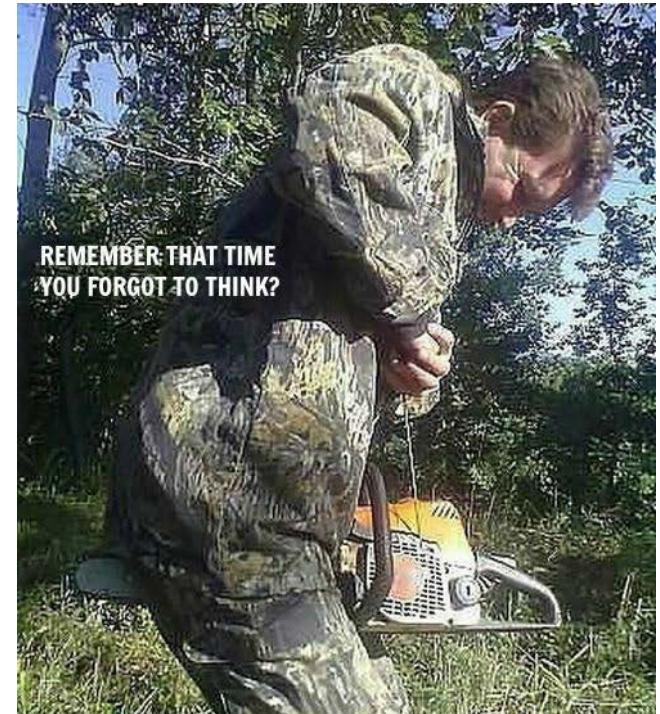
She's about to receive one

# THE IMPACT OF DARWIN'S THEORIES

## Debates Within Darwinian Theories

Progressive or Nonprogressive  
(tree- or bush-shape?)

1. Progressive – humans occupying the “top of the tree.”
2. Nonprogressive – humans occupying some part of the bush (with no “topmost” part).

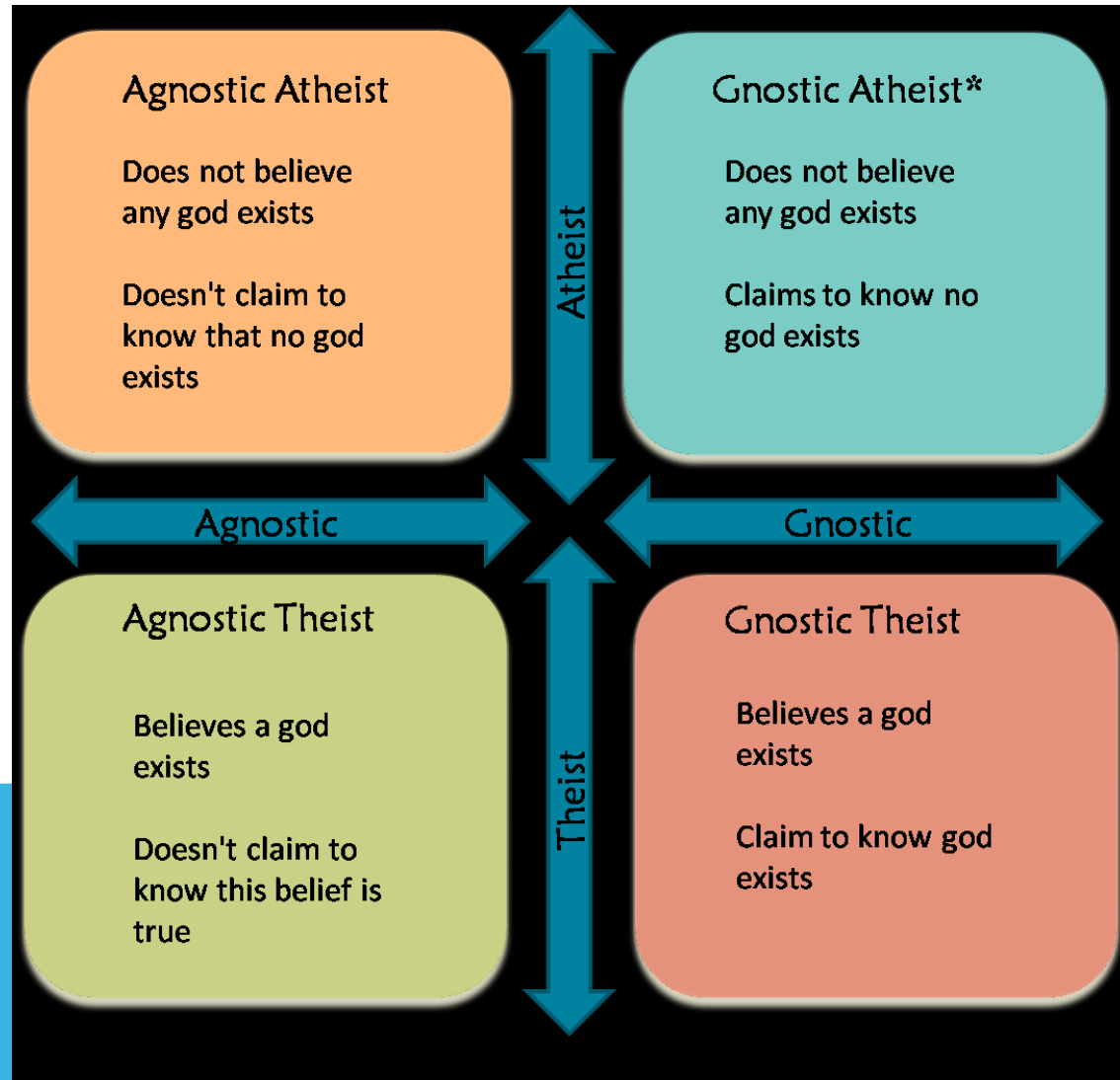


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## Theist or Atheist?

1. Theist – Genesis story taken literally or symbolically?

2. Atheist – Genesis story taken literally, therefore false.



# THE IMPACT OF DARWIN'S THEORIES

## III. Evolutionary Theory Applied to Human Nature

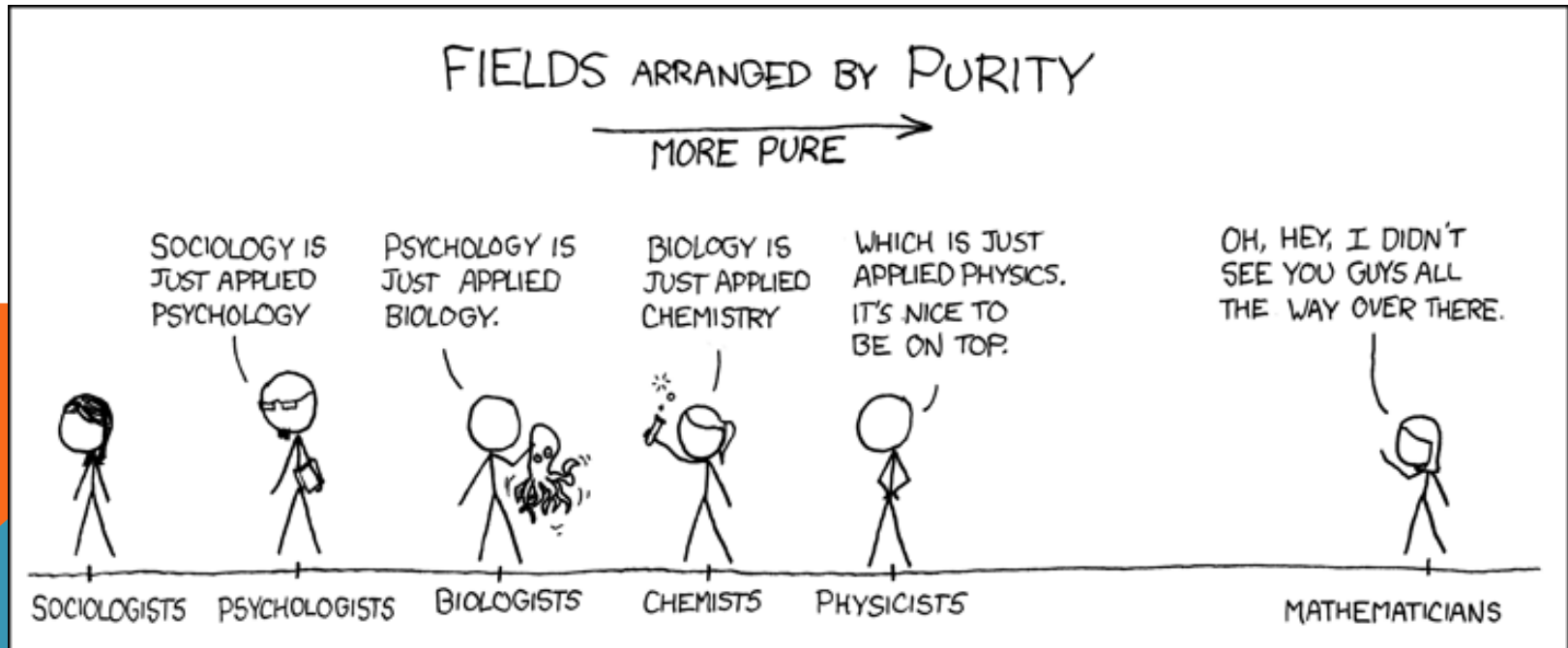
### **Durkheim's** Standard Social Science Model

1. Irreducibility of psychological facts to biological facts.
2. Irreducibility of social facts to psychological facts. (facts about wholes / totalities cannot be derived from the nature of their parts).

# THE IMPACT OF DARWIN'S THEORIES

This produces a threefold division:

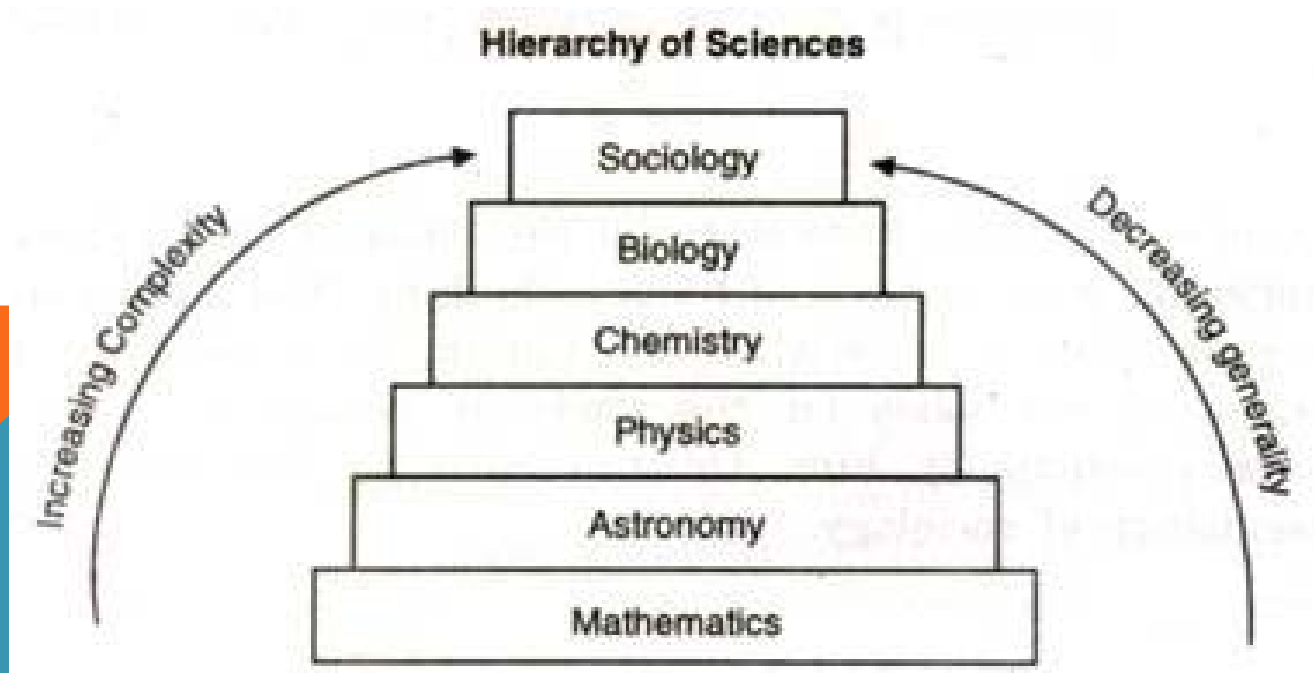
1. Biological sciences – anatomy, physiology, evolutionary theory...
2. Psychology
3. Social “Sciences” – sociology, anthropology, economics, and political “science”?



# THE IMPACT OF DARWIN'S THEORIES

Causal or Functional Explanation?

Human Nature? No reduction of social facts to purely psychological facts derived from biological facts.



# **THE IMPACT OF DARWIN'S THEORIES**

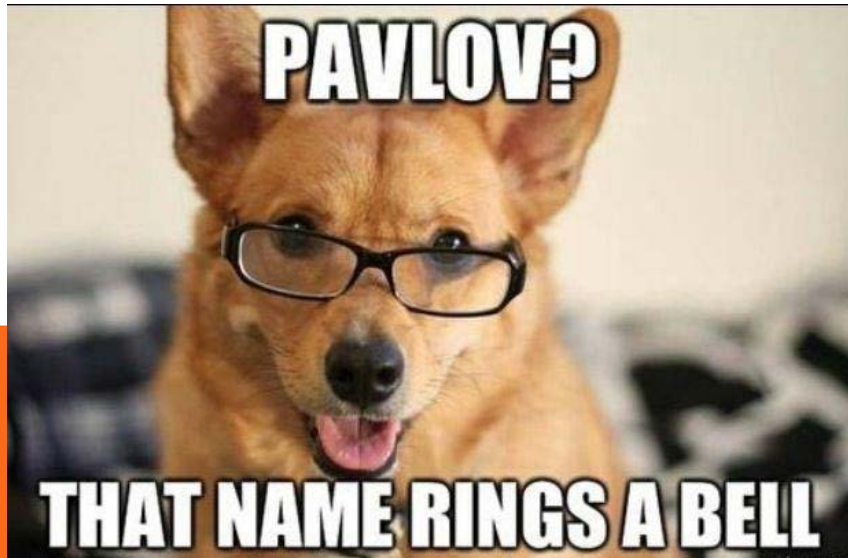
## **Sociobiology / Evolutionary Psychology and Lorenz**

**Lorenz – Nature**

**Skinner - Nurture**

# THE IMPACT OF DARWIN'S THEORIES

Animal behavior is innate or fixed; it cannot be eliminated or significantly modified however much the environment is manipulated. Behavior patterns are “instinctual.”



# **THE IMPACT OF DARWIN'S THEORIES**

Based on **Darwin's** theories of evolution:

- 1. In a given species, traits of individuals vary.**
- 2. Parent's traits tend in general to be passed on to children.**
- 3. Species population can increase geometrically.**
- 4. Support resources can only increase arithmetically.**

# THE IMPACT OF DARWIN'S THEORIES

Thus, only the “fittest” survive....



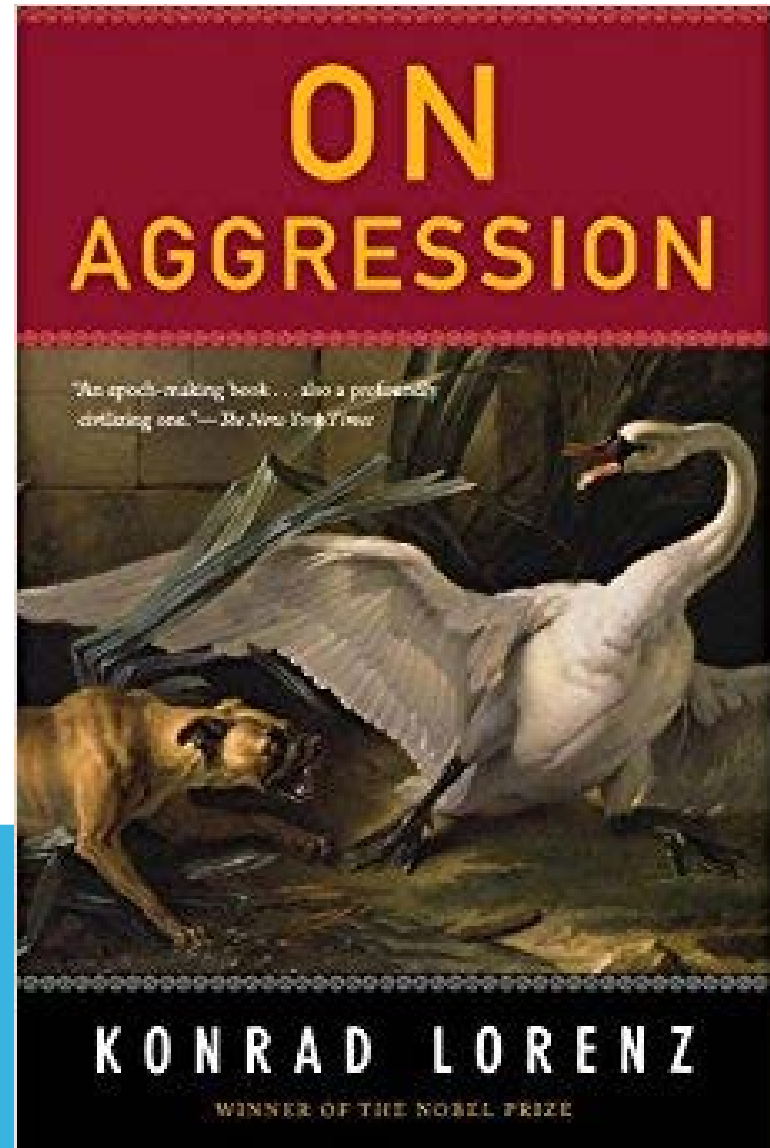
# **THE IMPACT OF DARWIN'S THEORIES**

## **I. Theory of Animal Nature**



# THE IMPACT OF DARWIN'S THEORIES

1. **Lorenz's *On Aggression* (1963)** – describes patterns of aggressive behavior in many species, including humans.



# THE IMPACT OF DARWIN'S THEORIES

## 2. Two Important Concepts:

a. Fixed action patterns – innate (not learned) patterns of movement typical to each species and a drive such as feeding, reproduction, fight or flight, that

causes the behavior to appear spontaneously.



# THE IMPACT OF DARWIN'S THEORIES



- b. Innate releasing mechanism (inhibition mechanism).  
Ex. “beaten wolf”**

# THE IMPACT OF DARWIN'S THEORIES

3. **Lorenz** concentrates on *intraspecific* aggression, not *interspecific* aggression (predatory) which he does not count as aggression.



# THE IMPACT OF DARWIN'S THEORIES

4. What is the species-preserving function of intraspecific aggression?

- a. Territory
- b. Food
- c. Reproduction
- d. Hierarchy



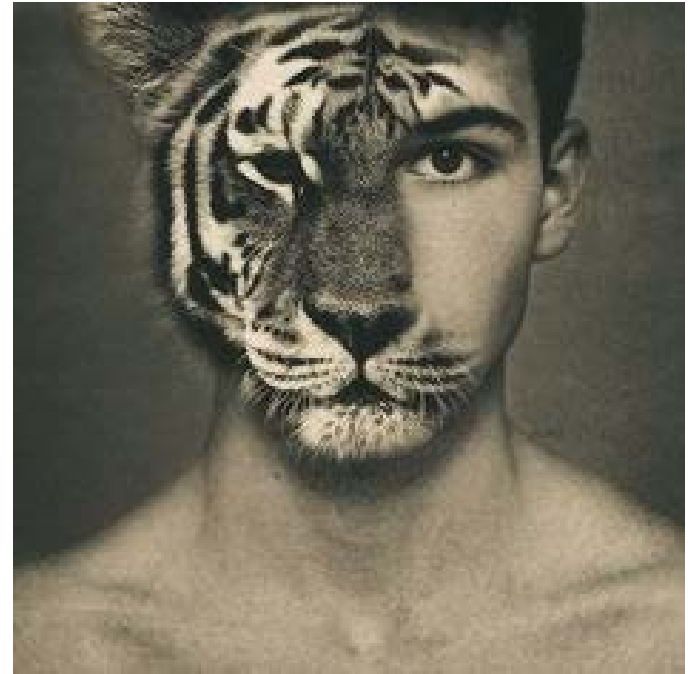
# **THE IMPACT OF DARWIN'S THEORIES**

## **II. Theory of Human Nature**



# THE IMPACT OF DARWIN'S THEORIES

1. Humans are just another animal species.



# THE IMPACT OF DARWIN'S THEORIES

2. Why war? Our innate drive to intraspecific aggression.



# THE IMPACT OF DARWIN'S THEORIES

3. Our aggressiveness is *communal* (most destructive fighting is not individuals, but groups).



# THE IMPACT OF DARWIN'S THEORIES

**4. Environment became less dangerous; only danger left is other humans!**



# THE IMPACT OF DARWIN'S THEORIES

5. We developed “warrior virtues” and “militant enthusiasm” (loss of rational control and moral inhibitions against alien groups).



# THE IMPACT OF DARWIN'S THEORIES

## III. Diagnosis



# THE IMPACT OF DARWIN'S THEORIES

1. Our physical weakness precluded an evolutionary inhibition mechanism.

A kill inhibition mechanism?



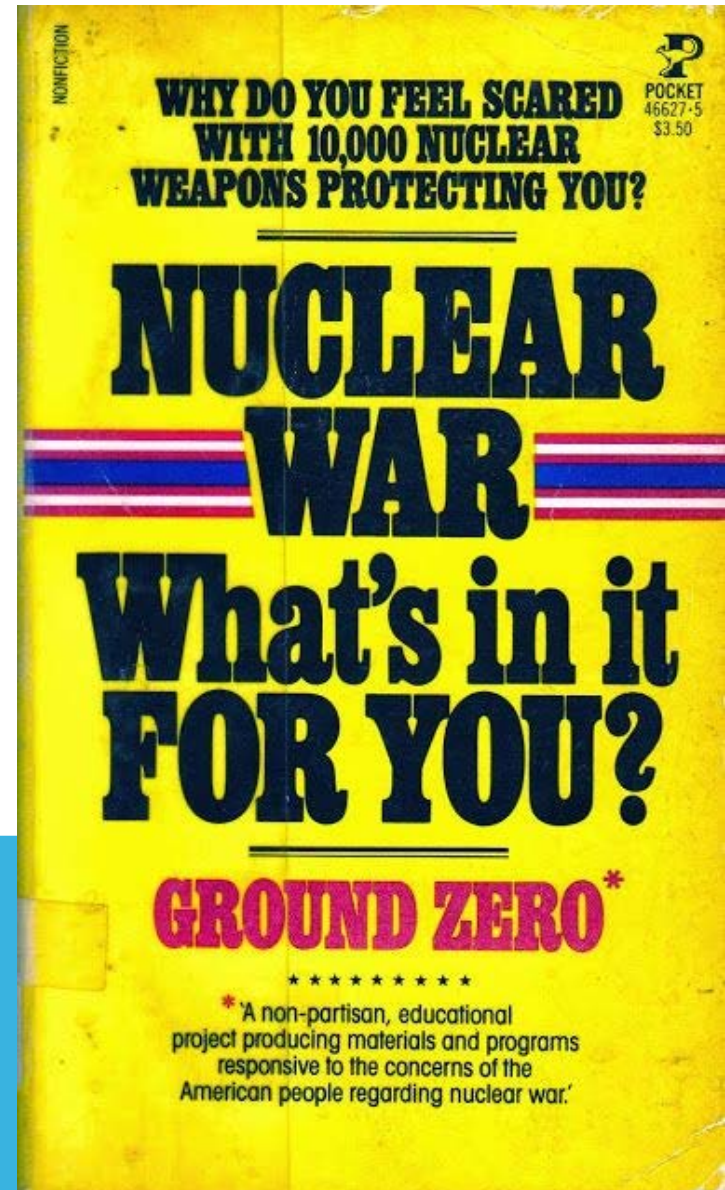
# THE IMPACT OF DARWIN'S THEORIES



**2. However, our big brains allowed us through technology to create artificial weapons.**

# THE IMPACT OF DARWIN'S THEORIES

3. Thus, the “biological equilibrium” between killing potential and inhibition is upset – leading to mass slaughter of our own species.



# THE IMPACT OF DARWIN'S THEORIES



4. Reason, appeals to rationality or moral responsibility, cannot work to control innate aggression; it must find an outlet.



# THE IMPACT OF DARWIN'S THEORIES

5. We now find ourselves in a dangerous situation having both the *power* and the *willingness* (in certain situations) to destroy ourselves.



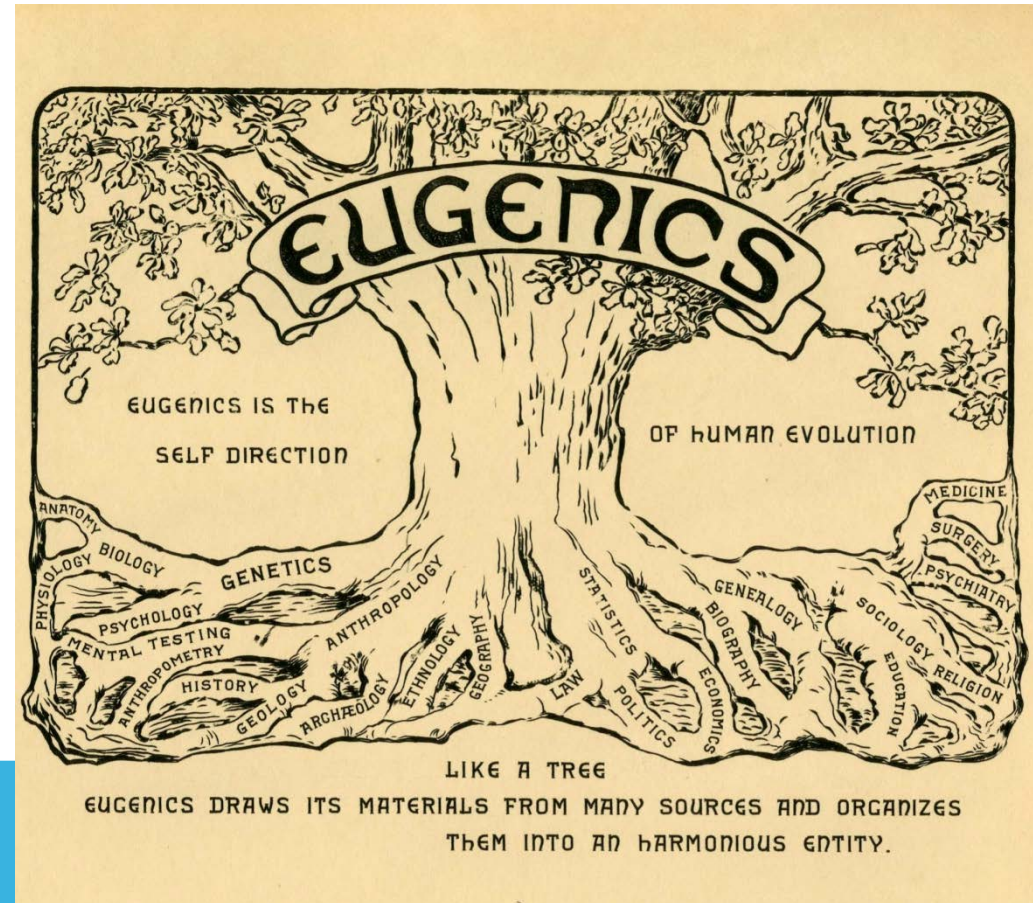
# THE IMPACT OF DARWIN'S THEORIES

## IV. Prescription

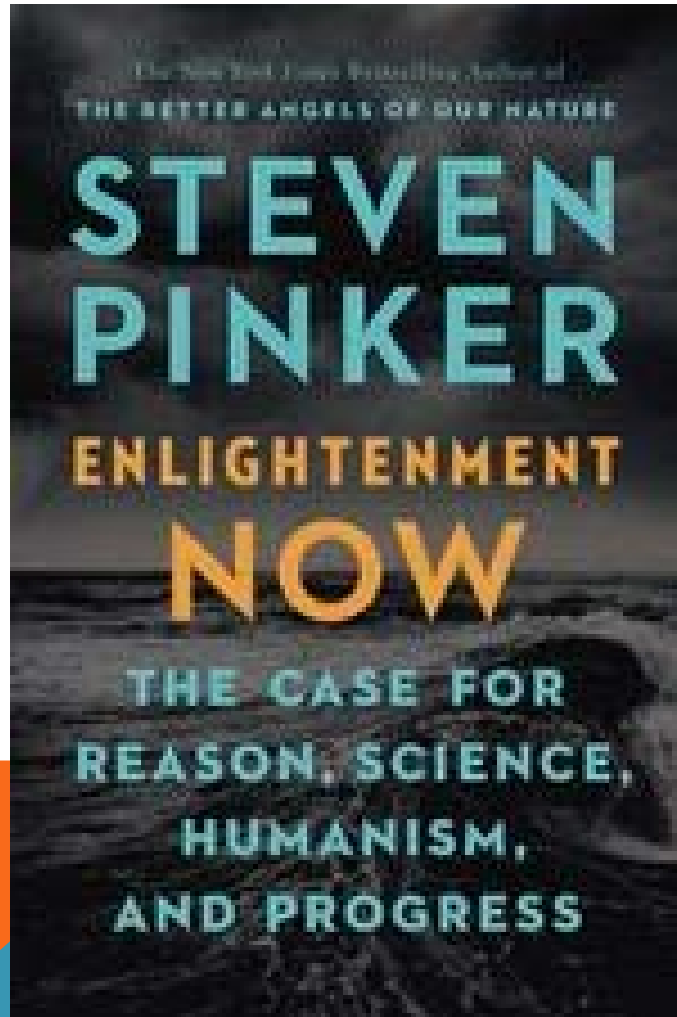


# THE IMPACT OF DARWIN'S THEORIES

1. Eugenically  
“breeding out”  
aggression  
would be  
inadvisable  
since  
aggression  
might be key to  
our survival.



# THE IMPACT OF DARWIN'S THEORIES



2. ***Reason* can and will exert a selection-pressure in the right direction.”**

# THE IMPACT OF DARWIN'S THEORIES

## 3. Self-knowledge is the first step



# THE IMPACT OF DARWIN'S THEORIES

4. Sublimation –  
team sports,  
movies,  
breaking  
things?



Sense of humor?

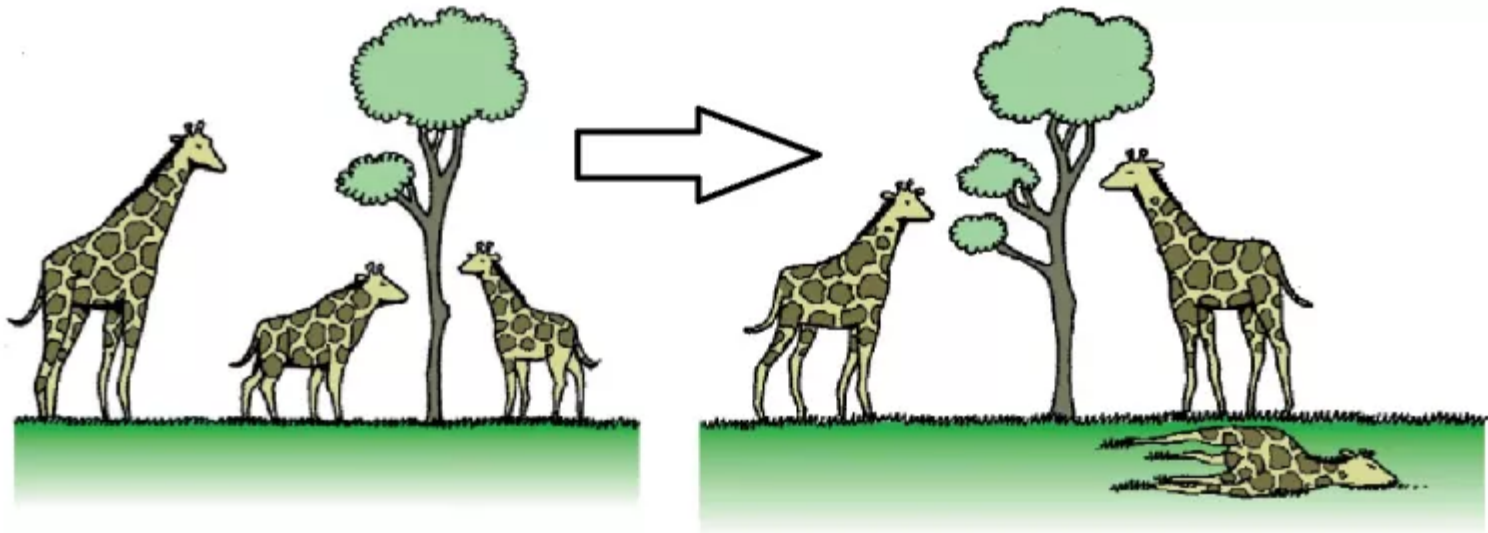
# **THE IMPACT OF DARWIN'S THEORIES**

## **V. Critical Discussion**



# THE IMPACT OF DARWIN'S THEORIES

1. Doubts about **Lorenz's** understanding of natural selection (he focuses on groups rather than individuals).



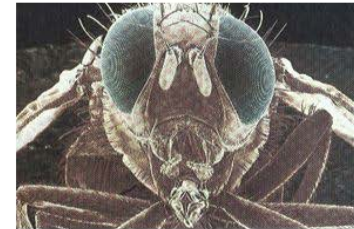
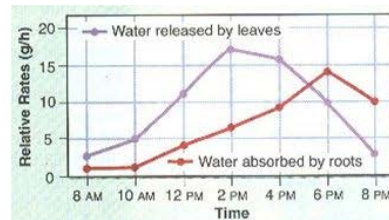
Natural Selection in action

# THE IMPACT OF DARWIN'S THEORIES

2. Are the concepts of drive and instinct testable by scientific observation and experiment?

## Scientific Method

- **Observations**  
(qualitative and quantitative)
  - **Quantitative**— involve numbers, counting, measuring objects.
  - **Qualitative**— involve characteristics that cannot be easily measured or counted such as color or texture



# THE IMPACT OF DARWIN'S THEORIES



3. Do animals have a true *need* to fight rather than just a disposition to fight under certain circumstances?



# THE IMPACT OF DARWIN'S THEORIES

4. Methodological questions – too much focus on fish and birds, not as much focus on our closest ancestor, apes.



# THE IMPACT OF DARWIN'S THEORIES

5. Theories about competition between hostile tribes are highly speculative, and solid evidence is hard to find (see video *Warriors of the Amazon*).



# **THE IMPACT OF DARWIN'S THEORIES**

**7. Ideological motives? Justification of violence as “natural” or “inevitable” thus encouraging aggressiveness, male dominance, wars and preparation for war, or competitive economic systems.**