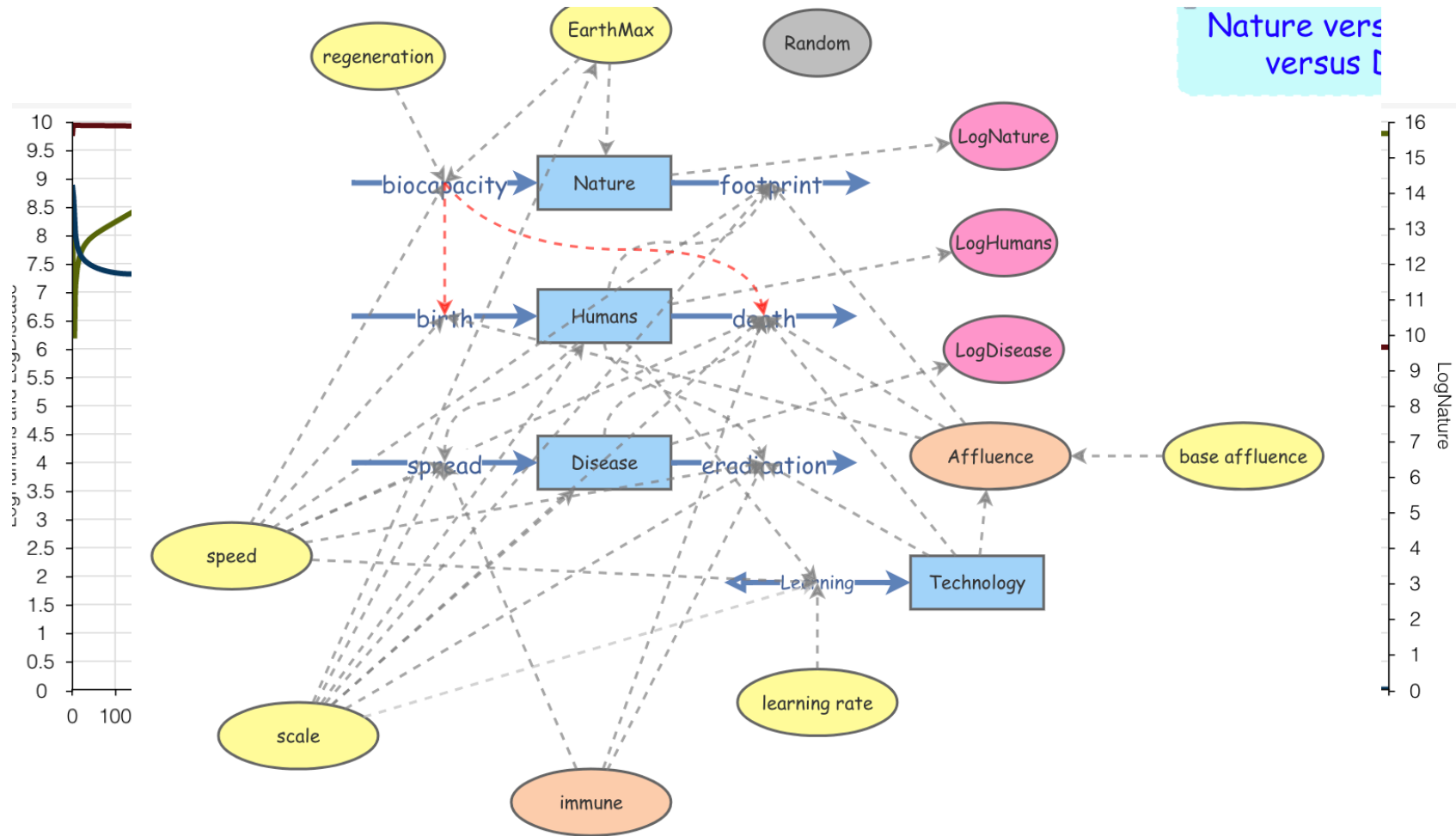


Human Population 2018

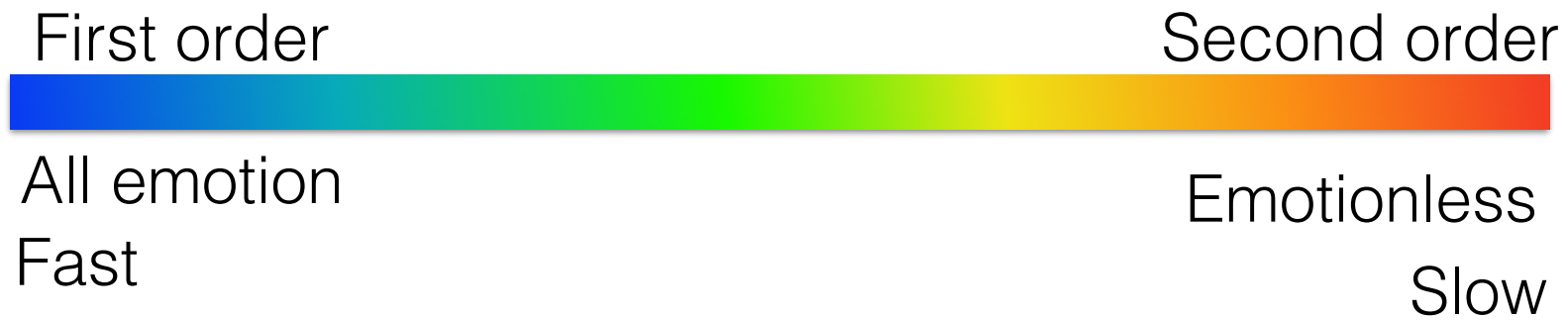
Lecture 17
ethics, resilience

New improved tandem modified Lotka-Volterra



When humans consume [biocapacity] instead of [Nature], population oscillates at a higher level.

Where are we in the spectrum of first order versus second order judgement?





What is moral?

Something human....

Something having to do with behavior....

When we understand
morals in the context of
Science, only then can we
proceed to the scientific
discussion of what is
ethical.

Science versus Ethics

- Science asks the question: How **do** people behave?
...because science is about observation, and understanding
- Ethics asks the question: How **should** people behave?
...because ethics is about "goodness" or "rightness."
- Science asks Ethics: How do people define "**good**"?
The science of ethics is about understanding ethics.

Kant's "deontological ethics"

To act in the morally right way, people must act from duty (*deon*).

Kant, Immanuel. 1780. Preface. In *The Metaphysical Elements of Ethics*.

Where does **duty** come from?

- conscience? (if so, where does conscience come from?)
- law? (if so, where does law come from?)
- doctrine? (if so, where does doctrine come from?)

define "Morals"

(based on various online dictionary sources.)

1. a person's standards of behavior or beliefs concerning what is and is not right and good.
2. a code of conduct.

Good /gōōd/, adjective

- 1. that which is morally right; righteousness.

But...doesn't that "beg the question"?

What is "**right**"?

Right /rīt/, adjective

- 1. morally **good**, justified, or acceptable.

The definitions are **circular!**

try another definition

Good /gōōd/, adjective

- 2. to be desired or approved of.

But...what is "**desire**"?

Desire /də'zī(ə)r/, verb

- 1. strongly wish for or **want**.

So... "**good**" is something we "**want**"?

After fruitless wanderings in the space of english semantics...

- Conclusions
- "**good**" is *vaguely defined* , inadequate for the precise standards of science.
- **Morals** are understood to apply to a group broadly, even to a group that encompasses all people.
- **Morals** are almost* never ascribed to animals.

To get the truth, we consult **Socrates**.



Socrates asks yes/no questions.

What is good?



1. Do all animals have behaviors?
2. Are those behaviors generally instinctual, meaning encoded in genes?
3. In cases where those behaviors are not instinctual, are behaviors learned by observation of the actions of mature individuals of the same species?
4. When a behavior leads to the demise of the one engaging in it, are those genes or learned actions available to be passed on genetically or by example?
5. If not [4], then are those behaviors eliminated from the gene pool or from the pool of accepted behaviors?
6. If [5], then do most current instinctual and accepted behaviors lead to survival?
7. Is the desire to do good a sensation that drives behavior?
8. Conclusion: *good is a sensation that drives well-established survival behavior.*

Testing the definition

- Examples of good behaviors.
- Examples of bad behaviors.

animals have morals.

De Waal, Frans, 1996, **Good Natured: The Origins of Right and Wrong in Humans and Other Animals**, Cambridge, MA: Harvard University Press.

book review

“Modern **Darwinian evolutionary theory** is based on individual reproduction, on ‘selfish’ genes that have been selected at the expense of others that might act for the greater good. How then could survival of the fittest lead to empathy?... This profound paradox has led some scholars in the past to assume that the emergence of morals must be a transcendent process beyond the bounds of scientific explanation. Frans de Waal, one of the world’s best-known primatologists, has set out to prove that assumption wrong. On the final page of his startling new book, he asserts that **‘we seem to be reaching a point at which science can wrest morality from the hands of philosophers.’** How the author...came to this conclusion makes for compelling reading.”

—William C. McGrew, *Scientific American*

...ok, what about plants?....

Definition of morality from the philosophy literature

The term “morality” can be used either

1. *descriptively* to refer to certain codes of conduct put forward by a society or a group (such as a religion), or accepted by an individual for her own behavior, or
2. *normatively* to refer to a code of conduct that, given specified conditions, would be put forward by **all rational persons**.

<http://plato.stanford.edu/entries/morality-definition/>

discuss

ven specified conditio
all rational persons.

Plato.Stanford is saying morality (used in the normative sense) **converges**.

Convergence happens when we are rational and have "inquired...enough".

Therefore, "**morality**" is the behavior we (rational persons) would all espouse, once we have inquired enough.

From lecture 1

The convergence of
opinion



of C.S. Peirce
"the father of pragmatism"

If a proposition is true, then anyone who inquires 'into the nature of reality' (well enough and long enough) is fated to believe it.

And of a proposition is *false*, then anyone who inquires.. is fated to *disbelieve* it.

Given that knowledge is "*justified, true belief*" [Plato], then science leads to *common* knowledge.
Common knowledge is a form of agreement.
Agreement leads to peace.

Misak, Cheryl, ed. The Cambridge Companion to Peirce. Cambridge University Press, 2004. Ch.5 p 133. by Christopher Hookway

A useful definition for our purposes

Good /gōōd/, adjective

- 1. code of conduct that promotes of the survival of the species.*

* Not found in any dictionary! Only for use in class.

I like survival. We all like survival. But what if the survival of the whole comes into conflict with the survival of the one?

Tragedy of the Commons

In 1833 the English economist William Forster Lloyd published a pamphlet which included an example of herders sharing a common parcel of land on which they are each entitled to let their cows graze. In English villages, shepherds had sometimes grazed their sheep in common areas, and sheep ate grass more severely than cows. He suggested overgrazing could result because for each additional sheep, a herder could receive benefits, while the group shared damage to the commons. If all herders made this individually rational economic decision, the common could be depleted or even destroyed, to the detriment of all.



individuals benefits
from increased use

Shared
resources

all suffer from
increased use

Hardin, G. (1968-12-13). "The Tragedy of the Commons". Science (AAAS) 162 (3859): 1243–1248.

Examples of commons

- Ocean
 - fisheries
 - pollution sink
- Forest, in some countries
 - trees
 - wildlife
- Aquifers, rivers, lakes
- Atmosphere
 - pollution sink
- Internet?

Conscience Is Self-Eliminating

It is a mistake to think that we can control the breeding of mankind in the long run by an appeal to conscience. **Charles Galton Darwin** made this point when he spoke on the centennial of the publication of his grandfather's great book. The argument is straightforward and Darwinian. People vary. Confronted with appeals to limit breeding, some people will undoubtedly respond to the plea more than others. Those who have more children will produce a larger fraction of the next generation than those with more susceptible consciences. The difference will be accentuated, generation by generation. In C. G. Darwin's words: "*It may well be that it would take hundreds of generations for the progenerative instinct to develop in this way, but if it should do so, nature would have taken her revenge, and the variety Homo contra cipiens would become extinct and would be replaced by the variety Homo progenitivus*" (16).



Darwin's grandson

G. Hardin "The Tragedy of the Commons" p. 1246

Is passing on our genes
"good"?

The UN on Reproductive Rights

1967 UN declaration reproductive rights

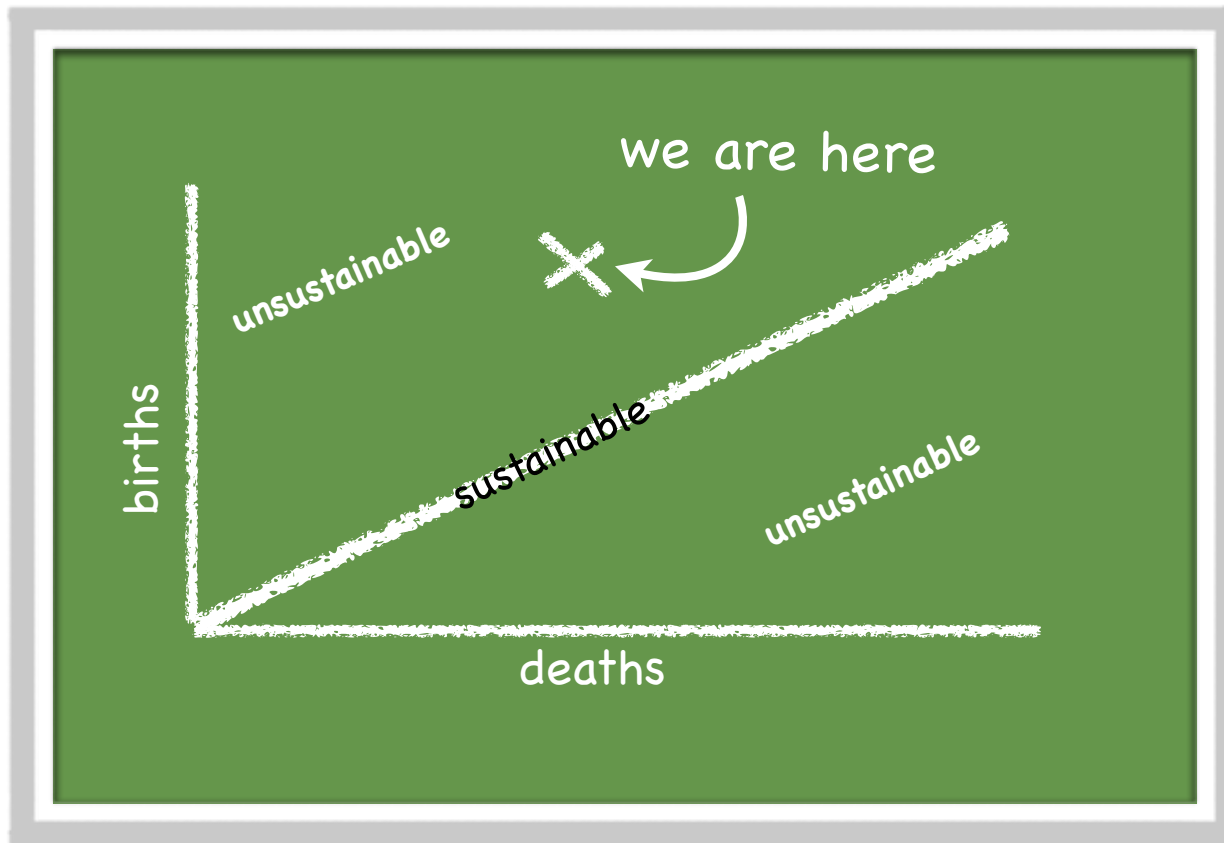
<http://www.un.org/en/development/desa/population/theme/rights/>

Read and discuss

"Freedom" and overbreeding

In a welfare state, how shall we deal with the family, the religion, the race, or the class (or indeed any distinguishable and cohesive group) that adopts overbreeding as a policy to secure its own aggrandizement (13)? **To couple the concept of freedom to breed with the belief that everyone born has an equal right to the commons is to lock the world into a tragic course of action.**

when bad is good, and good is bad



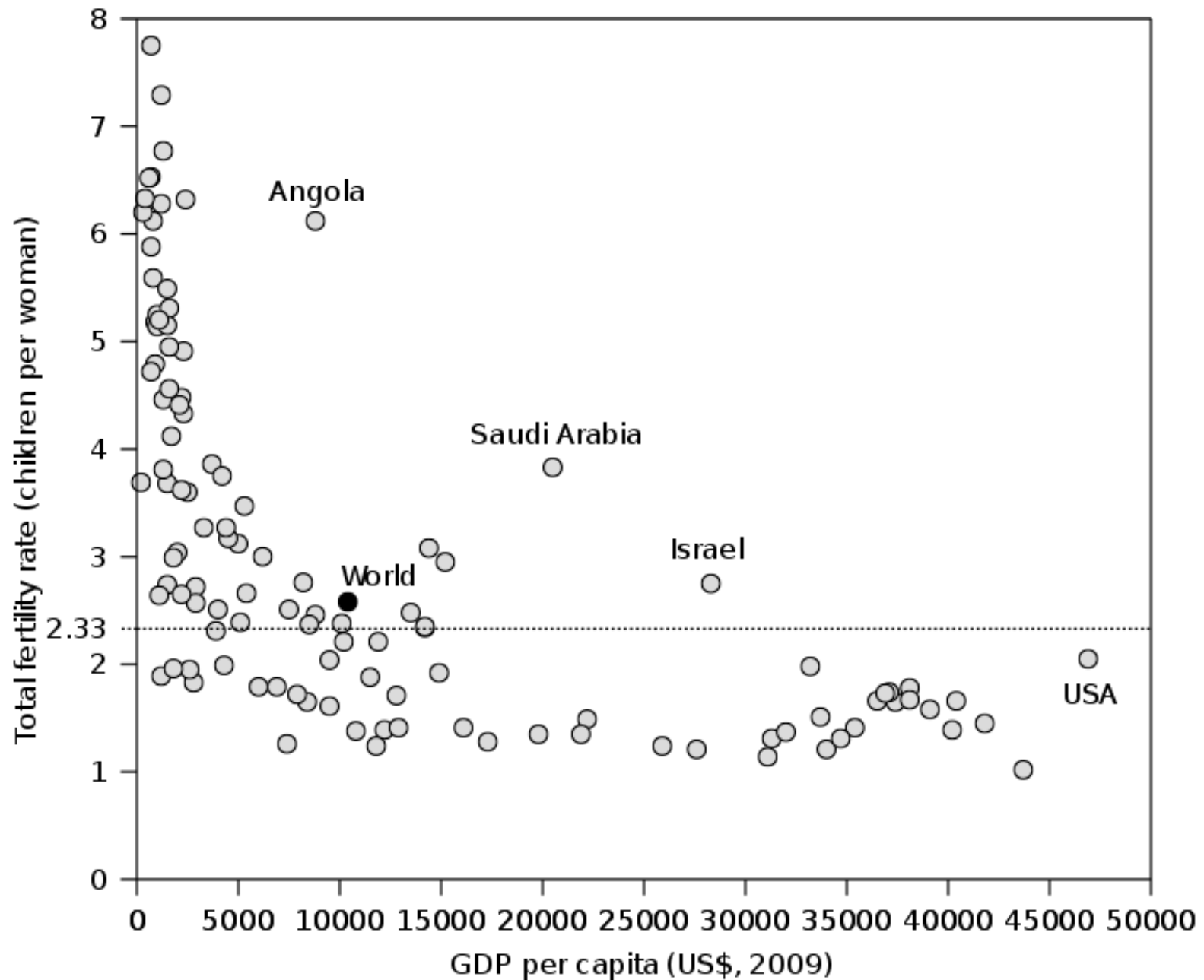
Current morality -- births are good, deaths are bad.

Good for survival at far below carrying capacity.

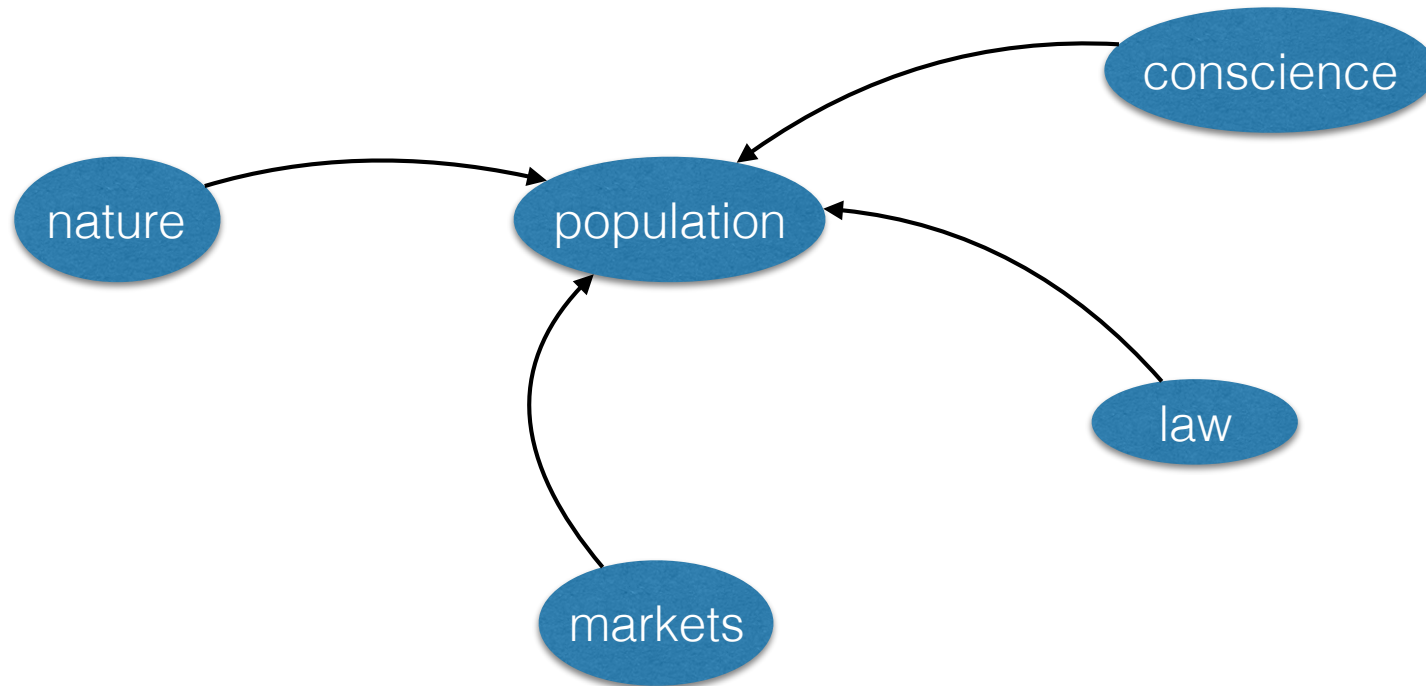
Bad for survival in overshoot.

Future morality? -- births=deaths = good.

How far are we above the replacement level globally?



What is exercising control on human population?



What will exercise control in future? 30

Does "appeal to conscience"
work?

"To make such an appeal is to set up a selective system that works toward the elimination of **conscience** from the race."

G. Hardin. "Conscience Is Self-Eliminating", in "The Tragedy of the Commons" p. 1246

Controversy with respect to the nature of conscience

- Does "conscience" mean "morality"?
- If so, then we have the following controversy
 - C.G. Darwin (and G. Hardin) argues that conscience will eliminate itself by natural selection, or evolution. (from "Tragedy of the Commons")
 - Frans de Waal (and our "Socrates") argues that conscience is the result of evolution! (from "Good Natured")

Lifeboat Ethics -- The effect of leadership.

Imagine a lifeboat that can hold 50 people safely. It already has 50 but one person is left in the water. Adding one person might sink the lifeboat, but leaving them in the water is certain death for the one. What do you do?



Carrying capacity = number of people the boat (The Earth) can hold safely.

Lifeboat Ethics -- The effect of leadership on ethics



Decision making as a group with a strong leader, versus individual decision making

Strong leader ←leadership spectrum..... → Weak leader

Makes decisions, good or bad, on behalf of the **whole**.

Saves the lifeboat, at the expense of the lone swimmer.

Allows decisions based on personal **self interest**. Anyone may choose to save the swimmer.

One of them saves swimmer, at the expense of lifeboat.

Debate 4, discussion