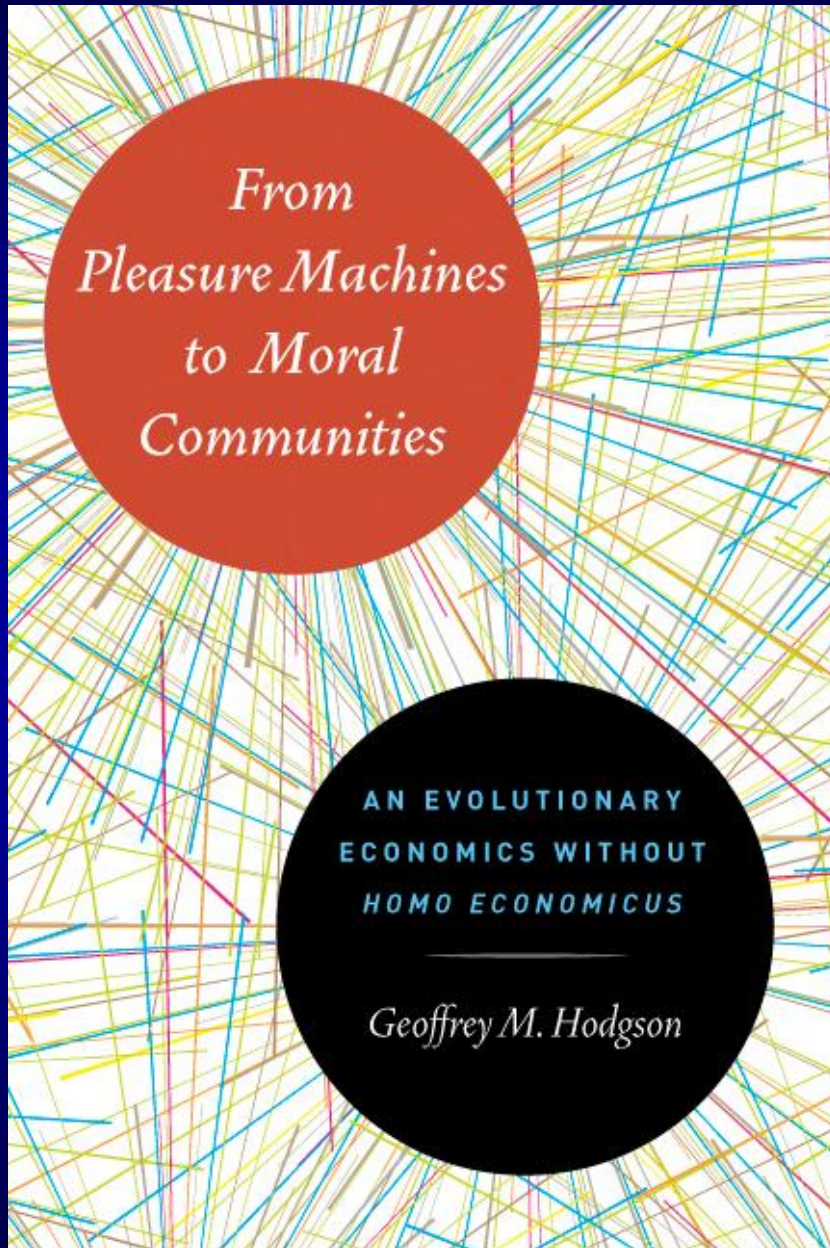


Human Motivation and Climate Change

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- 1. Introduction: utilitarianism and economic man**
- 2. Interpreting evidence on human motivation**
- 3. The evolution of morality**
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1. Introduction: utilitarianism and economic man

Dealing with climate change:

First major problem is denial of the evidence and of the scientific consensus

Another major problem is the reliance by economists on policies based on the assumption that everyone is motivated solely by his/her self-interest – utility maximizing “economic man”

This utility maximizer is found in both Coasean and Pigovian approaches to these problems.

1. Introduction: utilitarianism and economic man

Dealing with climate change:

Partha Dasgupta (1991) on environmental policies:

“I cannot think that it will do to look solemn and utter pious sentiments concerning our moral duty.”

Moral values and norms are either disregarded in the neoclassical approach, or rendered commensurate with everything else via the utilitarian calculus of satisfaction-seeking individuals

1. Introduction: utilitarianism and economic man

Dealing with climate change:

Richard Tol (2008) on environmental policies:

“A climate policy that works if people are selfish would also work if people are altruistic”

But what happens if a climate policy based on selfishness does not work?

Or if policies that rely on some degree of altruism work better?

1. Introduction: utilitarianism and economic man

Dealing with climate change:

Utility-maximisers can cooperate and be altruistic, but only insofar as an individual gains utility from such acts

But an “other-regarding” individual is still self-serving, rather than being genuinely altruistic.

Notions of morality or duty that are not incorporated in the utility-maximizing calculus are disregarded.

1. Introduction: utilitarianism and economic man

But pecuniary and moral incentives can be vital complements, and are not necessarily rivals.

Elinor Ostrom (1990) and Michael Taylor (1996) pointed out that many cases of cooperation in depend on combinations of normative exhortations, peer pressure, incentives and sanctions.

A danger in exclusive focus on extrinsic motivation and pecuniary or material rewards, is that intrinsic motivations and moral concerns will be “crowded out” and undermined – experimental evidence (**Bruno Frey**).

1. Interpreting evidence on human motivation

	Cooperate	Defect
Cooperate	4, 4	0, 5
Defect	5, 0	1, 1

In any *finite* number of Prisoner's Dilemma games the “rational” thing to do is to DEFECT.

“Rational” = maximizing individual payoff

1. Interpreting evidence on human motivation

Pooling 37 different studies involving 130 Prisoner's Dilemma experiments from 1958 to 1992 ...

David Sally (1995) found a rate of cooperation of 47.4 per cent in the pooled sample.

1. Interpreting evidence on human motivation

In a **Public Goods** game, individuals in a group (of say 10) are each given (say) \$10 and offered the choice of keeping the money for themselves or investing it for the public good.

All the money invested is multiplied by (say) two and distributed equally to all the members of the group, whether they contributed or not.

If everyone contributes then each person will receive \$20. If only one contributes then she will receive \$2. If no-one contributes they each get \$10.

1. Interpreting evidence on human motivation

Nash Prediction: A payoff maximizer will invest nothing because of the risk that less than five people will contribute. In the **Nash** equilibrium there is no investor and everyone takes their \$10.

Dawes and Thaler (1988) – in a series of experiments that about half the participants contributed.

No subsequent experimental study confirms the Nash prediction of an overall zero contribution.

People play non-Nash in other games.

1. Interpreting evidence on human motivation

Widespread evidence goes against the idea that people are “rational”, selfish, payoff maximizers.

Samuel Bowles and Herbert Gintis (2011) *A Cooperative Species: Human Reciprocity and its Evolution* (Princeton University Press).

Bowles and Gintis (2011) argue for a modified utility function with “other-regarding preferences”.

But is this adequate?

1. Interpreting evidence on human motivation

The Role of Morality

- No society or economy can function without moral bonds and rules.
- But this is largely ignored in the mainstream economics.
- We are motivated by greed and by moral sentiments.
- We need to start with the nature of morality.

3. The evolution of morality

What is morality?

Darwin (1871):

“A moral being is one who is capable of comparing his past and future actions or motives, and of approving or disapproving of them. We have no reason to suppose that any of the lower animals have this capacity ... man ... alone can with certainty be ranked as a moral being ...”



3. The evolution of morality

Modern philosophers

Richard Joyce (2006):

1. Moral judgments express attitudes (such as approval or contempt) and also express beliefs.
2. The emotion of guilt is an important mechanism for regulating moral conduct.
3. Moral judgments transcend the interests or ends of those concerned.
4. Moral judgments imply notions of desert and justice.
5. Moral judgments are inescapable.
6. Moral judgments transcend human conventions.
7. Moral judgments govern interpersonal relations and counter self-regarding individualism.

3. The evolution of morality

Preceding points establish the *nature of moral judgment* – not what is a *valid* moral judgement

⇒ Critique of utilitarianism and mainstream economics.

⇒ Difference between morality and convention.

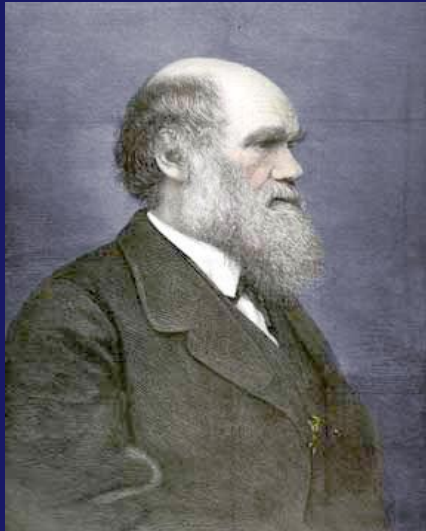
3. The evolution of morality



Darwin (1871):

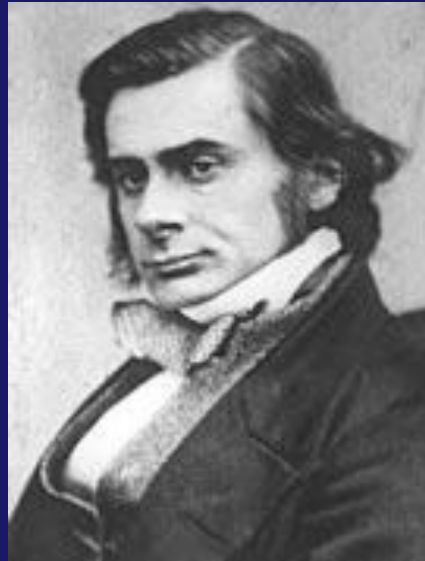
“Selfish and contentious people will not cohere, and without coherence nothing can be effected. A tribe possessing the above qualities in a high degree would spread and be victorious over other tribes ...”

3. The evolution of morality

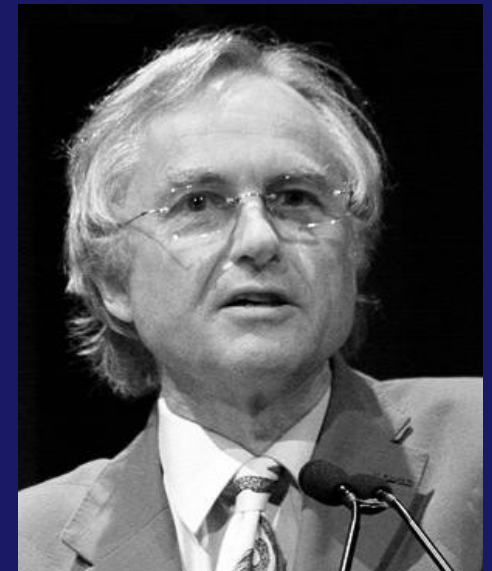


versus

Charles Darwin
(1871): human morality has evolved by “natural selection” of “social qualities” dating from the “progenitors of man”



+



Thomas Henry Huxley (1893): “the ethical progress of society” depends on “combating” natural selection

Richard Dawkins (1976): “we are born selfish” and “anything that has evolved by natural selection should be selfish”. BUT:

“Let us try to teach generosity and altruism. ... We, alone on earth, can rebel against the tyranny of the selfish replicators”

3. The evolution of morality



Frans de Waal in
*Primates and
Philosophers* (2006)

counters the Huxley-Dawkins “vener theory” of morality and presents evidence that primates are capable of sympathetic and cooperative emotions.

3. The evolution of morality

Jonathan Haidt and Craig Joseph (2004, 2008) propose five sets of innate value-intuitions:

1. **Care** for others, protecting them from harm.
2. **Fairness**, justice, treating others equally, **reciprocity**.
3. **Loyalty** to group, family, nation, or **ingroup**.
4. **Respect** for tradition and legitimate **authority**.
5. **Purity**, avoiding disgusting things, foods, or actions.

4. Conclusion: motivations in groups and societies

The Good News:

The capacity for morality is grounded in our nature.

Contrary to some leading mainstream economists, a government committed to the protection of the natural environment can usefully appeal to moral imperatives such as duty and compassion,

... and not rely simply on self-interest and a calculus of pecuniary costs and benefits.

4. Conclusion: motivations in groups and societies

The Bad News:

Our capacity for morality evolved in, and depends on circumstances where there are relatively small groups, and it relied on familiarity and face-to-face interactions.

These mechanisms cannot work so well in larger societies, where we can become familiar with a much lower fraction of our society.

Incentives and the $1/n$ problem.

4. Conclusion: motivations in groups and societies

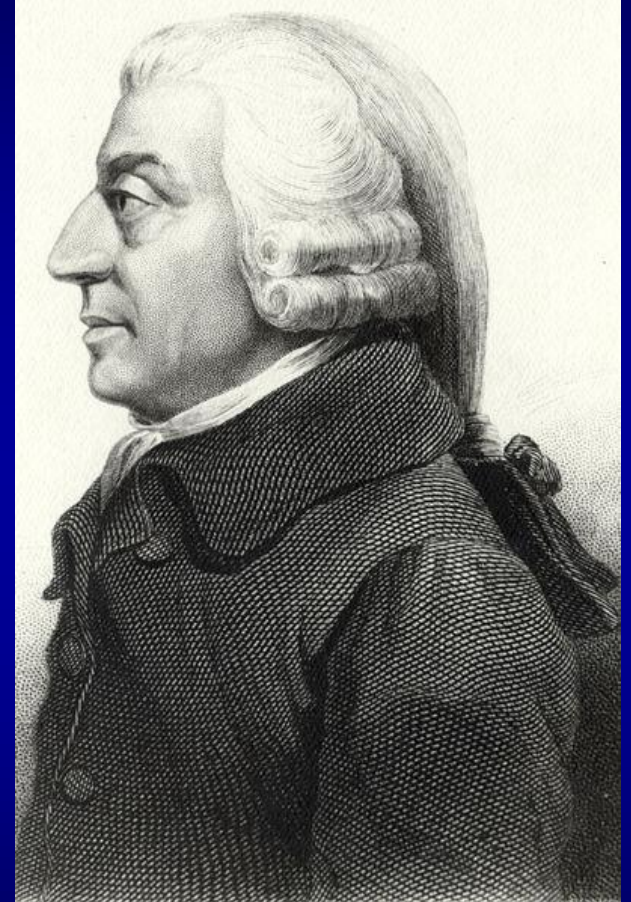
Elinor Ostrom on polycentric governance



4. Conclusion: motivations in groups and societies

Back to **Adam Smith** and the *Moral Sentiments* (1759)

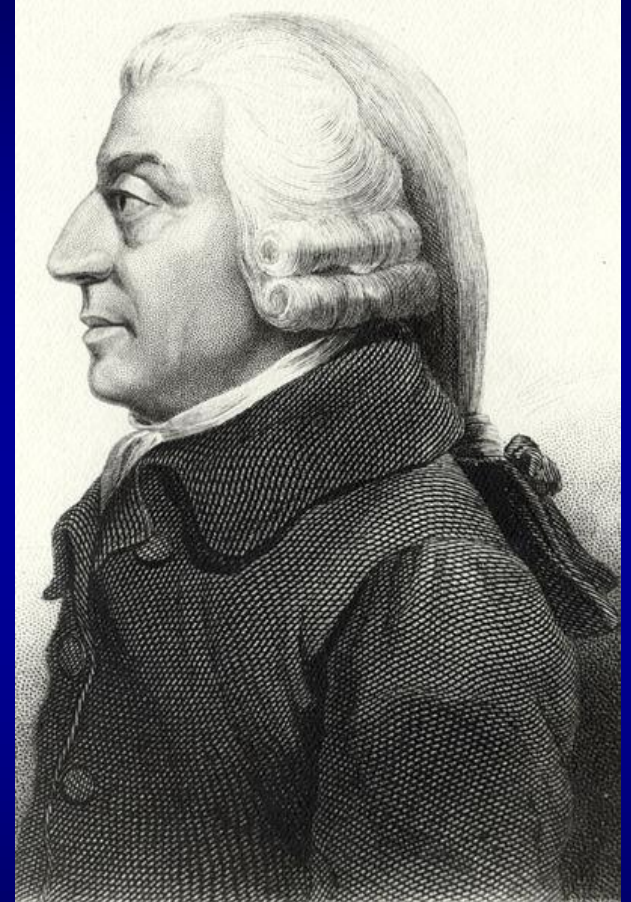
“How selfish soever man be supposed, there are evidently some principles in his nature, which interest him in the fortune of others, and render their happiness necessary to him, though he derives nothing from it except the pleasure of seeing it”



4. Conclusion: motivations in groups and societies

Adam Smith and the *Moral Sentiments* (1759)

“Nature ... has not ... abandoned us entirely to the delusions of self-love. Our continual observations upon the conduct of others, insensibly lead us to form to ourselves certain general rules concerning what is fit and proper to be done or to be avoided ... It is thus that the general rules of morality are formed.”



4. Conclusion: motivations in groups and societies

An exclusive stress on pecuniary motivation is self-defeating.

The design of policies to deal with climate change should take into account moral as well as pecuniary motivations.

Evolutionary theory is a useful tool to understand how human dispositions and institutions have evolved to deal with problems concerning our past survival.

4. Conclusion: motivations in groups and societies

