

The evolution of morality:
Is true self-sacrifice ever favored
by selection?



Morality:

the prioritizing of group interest (or the interests of other group members) when the fitness cost to the individual likely outweighs the benefit

Four traditional approaches to morality

- Morality is adaptive: the global calculation
- Morality is maladaptive: an over extension of cooperative instincts to novel circumstances outside the EEA
- Morality is us struggling to overcome our selfish instincts.
- Morality is proof of group selection



Cooperation naturally evolves

- Kin Selection ($c/b < r$, Hamilton)
- Reciprocal altruism (iterated prisoner's dilemma, Trivers)
- Indirect reciprocity (Reputation, Trivers, Alexander)

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Assumptions

- Competition is a dominant selective force for all species at almost all times
- In humans, intraspecies competition is generally the primary selective factor
- Humans compete for resources and status within a group
- Human groups compete with each other for resources
- A lone baboon is a dead baboon
- For a belief in morality to be adaptive, morality must be somewhat common

Recasting the question so it becomes answerable

- First we must recognize the paradox of moral absolutism
- Humans are not moral, nor are they amoral.
- Humans are facultatively moral.
- Therefore, explaining why humans are moral is not likely to be fruitful.
- The capacity to act morally, and the tendency toward moral deliberation is the thing that needs explaining.

Human Fitness has two components

- How are you doing relative to other members of your group
- How is your group doing relative to other groups
- These components are antagonistic

An illustrative model

1000	500	250	125	62.5	31.25
	250	125	62.5	31.25	15.625
	125	62.5	31.25	15.625	7.8125
	62.5	31.25	15.625	7.8125	3.90625
	31.25	15.625	7.8125	3.90625	1.953125
	15.625	7.8125	3.90625	1.953125	0.9765625



Predictions:

- Members of disadvantaged groups will tend to be more genuinely self-sacrificing
- Self sacrifice will become less common as groups become wealthy
- Wealthy members of wealthy groups will (over)emphasize threats posed by other groups
- Wealthy members of wealthy groups will advertise their own patriotic and moral tendencies

Predictions:

- Wealthy members of wealthy groups will spend some wealth to disrupt coalition formation amongst less wealthy individuals

Hazards to morality

- Tragedies of various commons
- Prisoner's dilemmas
- Races to the bottom