PHIL 480: Seminar in the History of Philosophy
Building Moral Character: Neo-Confucianism and Moral Psychology

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[Handout #20]
Robert L. Trivers, "The Evolution of Reciprocal Altruism"

[Altruistic behavior]:
__ Behavior that benefits another organism, not closely related, while being apparently detrimental to the organism performing the behavior. [benefit/detriment defined in terms of contribution to inclusive fitness.]

* A classic problem in social science and philosophy has been whether to define altruism in terms of motive or in terms of behavior, regardless of motive.

§ Evolution of altruism – Models that attempt to explain altruistic behavior in terms of natural selection are models designed to take the altruism out of altruism.

[The Model]

1. The model is designed to show how certain classes of behavior conveniently denoted as "altruistic" can be selected for even when the recipient is so distantly related to the organism performing the altruistic act that there is no factor of kin selection.
2. Main thesis: Under certain conditions, natural selection favors altruistic behavior because in the long run they benefit the organism performing them.

*** Altruistic Situations:**
___ Altruistic behavior benefits the individual in the long run more than it costs the individual at the time of act:

(i) when there are many such altruistic situations in the lifetime of the altruists
(ii) when a given altruist repeatedly interact with the same small set of individuals
(iii) when pairs of altruists are exposed "symmetrically" to altruistic situations in such a way that the two are able to render roughly equivalent benefits to each other at roughly equivalent costs.

Q: Is our current society one of those altruistic situation?

§ Reciprocal Altruism
__ Under altruistic situations, an act of helping someone else, although incurring some cost for the individual, could be beneficial if there is a chance of the individual's being in a reverse situation where the person helped before may perform an altruistic act towards this individual. Therefore, reciprocal altruism could have evolved since it might be beneficial to the organism.

__ The net average benefit to the homozygous altruist exceeding the average benefit to the homozygous non-altruists is more likely to be true if altruists restrict their altruism to fellow altruists. ➔ It is the *exchange* that favors such altruism.
__ Reciprocal altruism can also be viewed as a symbiosis, each partner helping the other while he helps himself (e.g. cleaning symbiosis in fish).

> Two are better than one; because they have a good reward for their labor. For if they fall, the one will lift up his fellow: but woe to him that is alone when he falls; for he has not another to help him up. Again, if two lie together, then they have heat: but how can one be warm alone? And if one prevail against him, two shall withstand him; and a threefold cord is not quickly broken. [**Ecclesiastes 4:9-12]**

§ Human Reciprocal Altruism
___ Reciprocal altruism in the human species takes place in a number of contexts and in all known cultures.

Types of altruistic behavior:
1. helping in times of danger
2. sharing food
3. helping the sick, the would, the very young or old
4. sharing implements
5. sharing knowledge.

§ Reciprocity and Evolution

Anthropologists: The function of reciprocity is to enhance *group* benefits. Reciprocity cements group relations and encourages group survival.

Psychologists: The function of reciprocal altruism is selective advantages of *individuals*. No concept of group advantage is necessary to explain the function of human altruistic behavior.

Trivers' Claims:
1. Reciprocal altruism has been an important factor in recent human evolution.
2. The underlying emotional dispositions affecting altruistic behavior have important genetic component.

§ The psychological system underlying human reciprocal altruism:

***Each individual human is seen as possessing altruistic and cheating tendencies.**

Our emotions have evolved accordingly, and they can be explained as important adaptations to regulate the altruistic system:

(i) ***friendship***, ***like*** and ***dislike*** – There is more altruistic behavior toward friends (or ones we like) than toward neutral individuals.

(ii) ***moralistic aggression*** – Moralistic aggression and indignation in humans was selected to offset non-reciprocating people. This serves as a protective mechanism for the altruists. [Q: Don't we often feel indignation that someone did not do his or share?]

(iii) ***gratitude, sympathy*** – The emotion of gratitude has been selected to regulate human response to altruistic acts and the emotion is sensitive to the cost/benefit ratio of such acts (both in deciding whether to perform an altruistic act and in deciding whether, or how much, to reciprocate).

(iv) ***guilt*** and ***shame*** – the negative emotions associated with the cheater. It seems plausible that the emotion of guilt has been selected in humans partly in order to motivate the cheater to compensate his misdeed and to behave reciprocally in the future, and thus to prevent the rupture of reciprocal relationships.

(v) ***subtle cheating***, ***mimicking***, ***dishonesty*** and ***hypocrisy*** – Selection will favor mimicking those altruistic traits (friendship, guilt) in order to influence the behavior of others to one's own advantage.

(vi) ***trust, suspicion, trustworthiness*** – Selection would favor the ability to detect and discriminate against subtle cheaters. It may also favor distrusting those who perform altruistic acts without the emotional basis of *generosity* or *guilt* because the altruistic tendencies of such individuals may be less reliable in the future.

Q: If these emotions are adaptations from evolution, then do they lose their moral connotations?

§ Summary of Trivers' Overall Argument

1. Reciprocal altruistic behavior is commonly observed in the animal kingdom.
2. If a type of behavior is common among different species, then it must have passed the Natural Selection test.
3. Therefore, reciprocal altruism has been selected as a surviving trait.
4. Traits that pass Natural Selection are traits beneficial to the organism in general.
5. Therefore, human reciprocal altruism must be beneficial to humans.
6. If reciprocal altruism is beneficial to humans, then humans' emotional dispositions affecting altruistic behavior must have important genetic component.
7. Therefore, our emotional dispositions such as friendship, shame, gratitude, etc. are developed in order to support reciprocal altruism.
8. However, humans also have a "cheater" disposition (or an egoistic inclination), which would potentially thwart reciprocal altruism.
9. Therefore, there are also some emotional dispositions in humans that are selected to discourage cheater behavior.