# The moral problem of group selection

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There is much to agree with in Steven Pinker's essay. In these remarks, I focus on the argument that group selection is at odds with what we know of human moral psychology and argue that indeed individual selection provides a better account moral behavior.

Putting psychology back in the debate is all the more important that the debate has often focused on group-selection evolutionary mechanisms (are they are theoretically sound? Were they at work during human evolution?) but less often on the psychological predictions that go with these mechanisms. Let's grant that group selection is theoretically possible and let's assume, at least for the sake of discussion, that it had an impact on human evolution; what would this really predict about human psychology?

For many group selectionists, the answer is obvious: group selection predicts that humans are moral creatures and since they are indeed moral, it strongly suggests that group selection is a better theory than individual selection. This would all be well and good if individual selection predicted that individuals are, like psychopaths, hiding their selfish motives in order to cooperate with others. But it doesn't. Quite the contrary, individual selection emphasizes that being *genuinely* moral is the best evolutionary strategy (see for instance Delton, Krasnow, Cosmides, & Tooby, 2011; Frank, 1988; Sperber & Baumard, in press; Trivers, 1971). Today, evolutionary biologists indeed argue that moral behavior evolved to attract partners in a market where individuals could freely choose amongst potential cooperators. In this competitive context, being moral isn't just the right thing to do, it is simply your best option. Start cheating, hiding, or manipulating others, and you will soon find yourself stuck with second-class partners (André & Baumard, 2012).

So the debate is not between a theory that predicts that humans are moral (group selection) and a theory that predicts they are not (individual selection), but between two theories of morality: one based on sacrifice for the group and the other one based on individual interests. This debate is not novel and echoes a fundamental question in moral philosophy: Is morality about maximizing the welfare of the community (biologists would rather talk about the fitness of the group) or about respecting individual rights (biologists would talk about individual fitness)? In other words, is morality utilitarianist or contractualist?

At first sight, utilitarianism is the winner: morality is all about helping others and being generous, right? But philosophers have highlighted that, again and again, human morality actually isn't about maximizing welfare. Here is a famous case in point put forward by moral philosopher Judith Thomson:

> "A brilliant transplant surgeon has five patients, each in need of a different organ, each of whom will die without that organ. Unfortunately, there are no organs available to perform any of these five transplant operations. A healthy young traveler, just passing through the city the doctor works in, comes in for a routine checkup. In the course of doing the checkup, the doctor discovers that his organs are compatible with all five of his dying patients. Suppose

*further that if the young man were to disappear, no one would suspect the doctor."*
(Thomson, 1985)

What would you do? No doubt ants and bees would agree to kill the young individual in the interest of the group. But we, humans, disagree. As John Rawls noted in the opening page of his famous Theory of justice:

> *"Each person possesses an inviolability founded on justice that even the welfare of the society as a whole cannot override. For this reason justice denies that (…) the sacrifices imposed on a few are outweighed by the larger sum of advantages enjoyed by many"*. (Rawls, 1971)

Of course, one can dismiss these intuitive remarks and relegate them to philosophical quibbles. In the last two decades though, empirical investigations of moral judgments have exploded and, properly interpreted, they have all lead to the same conclusion: humans are not utilitarian and morality did not evolve for the group.

Now, let's be a bit more technical, and consider two examples where utilitarianism and contractualism disagree: punishing wrongdoers and distributing resources.

## 1. Punishing wrongdoers

According to group selection, punishment evolved as a way to curb selfishness or, as utilitarian philosophers would put it, to deter futures crimes. By contrast, individual selection predicts that punishment is just a way to compensate the victim or, as contractualist philosophers would put it, to restore fairness. There are many ways to disentangle these two views of punishment. For instance, if punishment is really a second-order utilitarian trait, as cultural group selection scholars argue, sanctions should always be harsh enough to make it more advantageous to cooperate than to defect: if a crime is difficult to detect, the punishment for that crime ought to be more severe in order to counterbalance the temptation created by the low risk of getting caught.

Experimental studies relying on a variety of methodologies, however, have revealed that when people punish harmdoers, they generally ignore factors related to deterrence (likelihood of detection, publicity of the punishment, likelihood of repeat offending) and instead take into account parameters that are relevant to restore fairness between the criminal and the victim (magnitude of harm, intentionality) (Baron & Ritov, 1993; Carlsmith, Darley, & Robinson, 2002; Sunstein, Schkade, & Kahneman, 2000). Similarly, field observations have extensively demonstrated that the level of compensation in prestate societies is proportional to the harm done to the victim: it aims to force the wrongdoer to compensate the victim rather than to deter future crimes (Baumard, 2011).

Here, death penalty is a case in point. Although many people claim that their opinion about death penalty is based on efficiency (partisans argue it deters crimes, opponents that it has no effect), several studies have shown that, many people would actually continue to support death penalty even if it had no deterrent value (Ellsworth and Ross 1983). People support death penalty first and foremost because it seems to them that it is the only proportionate penalty for certain crimes (murder, rape, etc.), not because they see it as a useful tool to deter future crime.

## 2. Distributing resources

When it comes to distributing resources, it seems natural to turn to economic games - experimental situations in which people are asked to allocate real money among different individuals. What are the predictions of the two theories here? In group selection, morality should aim at maximizing the welfare of the group through transfers of resources from individuals who have resources to those who need them. As Steven Pinker notes, this is precisely what we observe among eusocial insects and at first sight, this is what participants do in economic games: they voluntary transfer the money they have to the other participant, even though they could keep it for themselves. But is that so clear? Let's consider two scenarios. In the first scenario, you are in the street and an experimenter comes to you and says "Hi, this is John. He is not a beggar. He is just an average guy like you. Would you like to share the $10 I know you probably have in your wallet?" In the second scenario, the experimenter comes to you and says "Hi, here are $10. Take them. Oh, I forgot to make the presentations: this is John. John is a guy that also happens to be here. Would you like to share the $10 you just got?" In the first scenario, you own the money and you see no reason why you would share it; in the second scenario, you have just received a lump of money for no apparent reason and you do not feel entitled to keep it all to yourself.

The first scenario is close to real life, the second is close to most procedures used in standard 'dictator games'. In standard dictator games, people appear to be generous, but they might simply be distributing according to what appears to be fair given where the money comes from. Experimental manipulations of context in dictator games have indeed confirmed this view: When participants are told that the money belongs to them, they do not give anything; when they are told that it belongs to the other participant, they let her take it ; when they work with the other participants to produce the resource, they distribute it according to merit, taking into account personal investment and talent (Baumard, André, & Sperber, in press). In other words, how much money is transferred in dictator games does not reflect how much the dictator cares about the recipient but how much the dictator owes her.

Group selection is hailed as best explaining human morality. It does not.

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