

Not all mutualism is fair, and not all fairness is mutualistic

Alex Shaw and Joshua Knobe
Yale University

Abstract: The target article convincingly argues that mutualistic cooperation is supported by partner choice. However, we will suggest that mutualistic cooperation is not the basis of fairness; instead, fairness is based on impartiality. In support of this view, we show that adults are willing to destroy others' resources to avoid inequality, a result predicted by impartiality but not by mutualistic cooperation.

Jack Abramoff, one of the most notorious lobbyists in the last decade, made millions of dollars by delivering huge profits to his clients at the expense of others and the public good (Stone, 2006). Abramoff's relationship with the legislators was a classic example of mutualistic cooperation. He provided money to the legislators and, in return, the legislators provided their votes on key issues. This is precisely the sort of phenomenon for which Baumard, André, and Sperber's theory offers an elegant explanation.

Yet, though the actions of the legislators certainly made them effective partners in a mutualistic exchange, these actions would not generally be regarded as paradigm examples of *fairness*. On the contrary, in this case there is a direct conflict between the aim of being a good partner and the aim of acting fairly. The most fair thing to do in this situation would be to not show any preference for one's own partner and simply to vote in a way that advanced the public good.

Thus, we suggest that fairness is not reducible to mutualism. Baumard and colleagues may be correct in their claim that the best model of mutualistic cooperation involves partner choice, but it would be a mistake to suppose that mutualistic cooperation

is itself sufficient to explain intuitions about fairness. Instead, fairness often acts in opposition to the discriminative generosity that partner choice demands by asking individuals to treat others *impartially*.

Although mutualistic cooperation and impartiality can be congruent, they often make different behavioral prescriptions. In repeated dyadic interactions, mutualistic cooperation and fairness prescribe the same behavior. Reciprocity makes Bill both a good mutualist and also impartial. However, things change once at least three actors are involved. If Jack is overly generous to Bill in one interaction and Bill has resources to share with him and another individual at a later date, then mutualistic cooperation and fairness make different prescriptions. Mutualistic cooperation says Bill should reciprocate the past generosity, giving more to Jack than he does to other people. By contrast, impartiality says that Bill should split the resources completely equally. To the extent that people show such a preference for equality, their behavior cannot be understood in terms of mutualism alone and must also involve a concern for impartiality.

An especially striking example of people's preference for equality arises in cases where people actually destroy resources to avoid unequal distributions (Blake & McAuliffe, 2011; Dawes et al., 2007). In an extreme display of this tendency toward destructive fairness, Shaw and Olson (in press) presented 6- to 8-year-old children with a choice between (a) giving a person an additional resource and thereby introducing inequality or (b) simply throwing that resource in the trash. The majority of participants chose to throw the resource in the trash. This behavior shows a strong concern with equality, but it is hard to see any way of explaining it with models based on mutualism and partner choice. If one were trying to develop a mutually beneficial partnership with

either of these individuals, then giving an additional resource could improve this budding partnership.

To determine whether adults would exhibit similar tendencies, we conducted a follow-up experiment. Forty participants ($M = 37.5$ years, $SD = 10.2$, 26 females) were assigned either to the Equality Condition or the Inequality Condition. Participants in the Equality Condition were told that two employees had each received a two dollar an hour raise and were then asked what the company should do with an additional dollar an hour raise: (a) give it to one of the two employees or (b) give it to neither of them. Participants in the Inequality Condition were told that one employee had received a three dollar an hour raise, while the other had received a two dollar an hour raise and were asked the same question. All participants were told that the employees did not know each other and would not know about the other's raise. In the Equality Condition, the majority of participants (90%) chose not to give the dollar to either employee, whereas in the Inequality Condition only a minority of participants (10%) preferred this option, $\chi^2(1, N = 40) = 22.5, p < .001$. These results suggest that adults too are willing to destroy resources in the name of fairness; this would not be expected under models of mutualistic cooperation. Mutualistic cooperation would predict that individuals should give an extra benefit to one of the employees, since doing so could foster future cooperative interactions (Binmore, 1998), and increase the employee's work output (Fehr & Schmidt, 1999). In contrast, such destructive fairness is expected if fairness is rooted in impartiality.

One open question is: why would natural selection have favored impartiality? The answer to this question may be rooted in the dynamics of human alliances. The human

tendency to form alliances nicely exemplifies the tension between favoritism and impartiality. People rank their allies, but they do not want others to know that they rank their allies (DeScioli & Kurzban, 2009). One possibility is that people do not want to be explicit about ranking others because they want to avoid negative reactions from those who receive a low rank. This leads to a possible explanation for why fairness may have evolved: as a way for people to signal to others that they are impartial, and thereby avoid being condemned by third parties for alliances based on preferential sharing.

Abramoff and the legislators he influenced made a great deal of money (based on mutualistic cooperation), but when their work was revealed to the public, many of them paid a heavy price (based on fairness). Although not normally reaching such extremes, human social life often involves this delicate balance between showing favoritism towards one's partners and appearing impartial to others. We suggest that neither of the two can simply be reduced to the other.

References

- Binmore, K. (1998). *Game Theory And The Social Contract Volume 2: Just Playing*. Cambridge, MA: MIT Press.
- Blake, P. R. & McAuliffe, K. (2011) "I had so much it didn't seem fair": Eight-year-olds reject two forms of inequity. *Cognition* 120: 215-224.
- Dawes, C. T., Fowler, J. H., Johnson, T., McElreath, R., & Smirnov, O. (2007) Egalitarian motives in humans. *Nature* 446: 794-796.
- DeScioli, P. & Kurzban, R. (2009) The alliance hypothesis for human friendship. *PLoS ONE* 4: e5802.
- Fehr, E. & Schmidt, K. M. (1999) A theory of fairness, competition, and cooperation. *The Quarterly Journal of Economics* 114: 817-868.
- Shaw, A. & Olson, K.R. (in press) Children discard a resource to avoid inequity. *Journal of Experimental Psychology: General*.
- Stone, P. (2006) *Heist: Super lobbyist Jack Abramoff, his republican allies, and the buying of Washington*. New York: Farrar, Straus, & Giroux.