

Fairness in Modern Society

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Experiments in psychology and economics have demonstrated that in industrialized societies all over the world, a substantial fraction of individuals will be fair in anonymous interactions and will punish unfairness (1, 2). However, it has not been clear whether this benevolent, prosocial behavior depends on innate human psychology or norms peculiar to industrialized societies. Henrich *et al.* explored the motivation for fairness in anonymous interactions across dramatically diverse societies and on page 1480 of this issue (3), they report that this behavior increases with the level of the society's market integration, measured as households' average percentage of calories that are purchased.

A game used to study how people behave toward others who are not linked to them by kinship or friendship is the Dictator Game, in which an individual (the "dictator") is matched with an anonymous person. The pair is allocated a stake of 10 monetary units (equal to 1 day's wage in the study by Henrich *et al.*). The dictator decides how much of the stake to keep and how much to send

to the other player, who is passive. Pure self-interest would lead the dictator to send zero to the other player. Henrich *et al.* now show a strong and robust positive relationship between the mean amounts sent in 15 societies, including foraging and nomadic hunter-gatherer bands, and the level of the society's market integration. **This is convincing evidence that societal standards of behavior in anonymous interactions have coevolved with market institutions.**



Economic game. A "Third-Party Punishment Game" was used by Henrich *et al.* to assess preferences across different societies. An experimenter is shown demonstrating such a game in a remote region of Papua New Guinea.

What features of a society motivate individuals to behave fairly?

By varying the rules of the Dictator Game, studies have shown that one motivation for sharing is the desire not to violate standards of expected behavior. For example, in one variant of the Dictator Game, the dictator, after making an allocation decision, is given the option to exit the game and keep the full stake less a small amount. The exit option leaves the other player with zero but also ensures that he never knows that a Dictator Game was to be played. One-third of the dictators take the exit option (4).

Thus, some participants are willing to pay a price to avoid a situation in which they are expected to share because they dislike not doing so in that situation. In another variant of the Dictator Game, the dictator's choice set is enlarged to include taking money from the other player. If the dictator's choice set ranges from -\$5 to +\$5 instead of from zero to \$5, the proportion of positive offers falls from 71 to 10% (5). This suggests that another motivation for sharing is a desire to avoid the most selfish feasible action. This motive would lead dictators to share when the choice set ranges from zero

to \$5 but not to share when the choice set includes negative values.

It has been argued that Britain's leadership in the Industrial Revolution—the onset of modern economic growth—depended on the unusual strength among European countries of its informal norms against opportunism in business. Although markets were highly competitive, businessmen displayed a high degree of class solidarity, defined as “sufficient trust in one another so that pairwise cooperative behavior was expected and maintained” (6, 7). In this secure environment, unprecedented levels of cooperation occurred between individuals with commercial acumen and those with technical skills. The exceptional cheaters risked punishment in the form of the exclusion from social groups.

In many settings, maintaining cooperation when interactions are impersonal is greatly enhanced by “altruistic punishment” of norm violations. Games in which disinterested parties have the opportunity, at a cost, to punish norm violators provide a measure of such altruism (see the figure). An open question, however, is how specific features of a society shape the willingness of individuals to engage in altruistic norm enforcement. Experimental evidence indicates that selective social status is accorded to those who altruistically contribute to group welfare and that such status enhances individuals' willingness to contribute to the group in the future (8). Henrich *et al.* report evidence that group solidarity rituals have coevolved with

social complexity. These findings predict that denying members of a group the possibility to enjoy social status and participate in community rituals and religion will interfere with the emergence of altruistic norm enforcement. An experiment in India (9) examined the effect of caste status on the willingness to punish violations of the norm to reciprocate cooperation. The norm was held by both caste groups that participated in the experiment—the low castes, who had been subject to the practice of exclusion (so-called “Untouchability”), and the high castes. Although there were controls for individual wealth, education, and political participation, low-caste individuals exhibited a much lower willingness to punish norm violations that hurt members of their own caste, suggesting a cultural difference across caste status in the concern for members of one's own community. Low-caste individuals adopted an attitude toward norm enforcement that was closer to pure self-interest than did individuals at the top of the caste hierarchy. There was, however, no caste difference in norm enforcement when the victim was not a member of one's own community—both low- and high-caste members punished little in that case. Because low castes were traditionally denied the possibility of any social status and entry to temples, these results support the idea that altruistic norm enforcement is learned, not innate. The findings also suggest that groups denied free cultural expression are at a disadvantage with respect to norm enforcement and collective action.

A society is not just a random group of people with a shared territory. It is a group that shares cognitive frames and social norms (10, 11). We cannot know for certain how fairly our ancestors in foraging bands behaved in situations lacking relationship information, but Henrich *et al.* bring us a closer understanding by studying people in simple societies that may be very like those of our early ancestors. **These findings call into question the standard assumption in economics that preferences are innate and stable, and suggest instead that cultural conditioning of the expression of human selfishness is a part of the process of economic development.**

References

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