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Vengeance Is Mine, Sayeth the Lord –
But Scientists Differ

By SHARON BEGLEY

To a cynic, the good people of Florida who helped out their worse-off neighbors after last month's hurricanes were actually acting selfishly.

According to a leading theory of human behavior, they were merely polishing their reputations and collecting IOUs in case they themselves needed help one day. Altruism had nothing to do with it. But this jaded view of human behavior hits a brick wall every time a Good Samaritan helps a stranger, waving off questions about his identity.

Such pure altruism has long defied scientific logic and puzzled evolutionary biologists, who seek explanations for how behaviors arose and persist. From a purely rational, cold-hearted, survival-of-the-fittest perspective, it makes no sense to do a good deed if it costs you time, money or your own safety, unless it enhances your reputation or helps a close relative survive and prosper. (In evolutionary theory, helping relatives is just as good as helping yourself, and the only reason that other animals do good deeds.)

"Human altruism is unique in the animal world," says Ernst Fehr, a behavioral economist at the University of Zurich in Switzerland."None of our current theories can explain altruism when there is anonymity and therefore no chance of reciprocity or enhancing your reputation." But scientists think they have discovered a plausible explanation. There are just enough people in society who are willing to punish anyone who does not contribute to the common good, even when it costs them to do so. Scientists call it"altruistic punishment." But you can think of it as righteous vengeance.

To probe the prevalence of and motivation for keeping others in line even at a cost to themselves, behavioral economists have volunteers play a little game. Each player starts with $20, and each decides, without knowing the others' moves, how much to contribute to a common kitty. The kitty will be doubled and distributed among all four regardless of what — or even whether — each contributes. If everyone kicks in $20, for instance, the resulting $80 will be doubled to $160 and split four ways, $40 each. These cooperators will have doubled their stake. But if only three players kick in $20 each, then the $120 distributed among all four players will give everyone $30. Those who contributed their entire $20 will be a little better off, but the person who kicked in nothing will make out best of all, keeping her $20 and getting $30 from the kitty.

The temptation to freeload while others contribute to the common good is therefore strong. But if everyone followed this selfish strategy, no one would contribute anything and no one would improve on their $20 stake. In experiments, people seem to grasp this, and contribute about half their stake. But after a while, people decrease their contribution, learning that selfishness pays. Prof. Fehr and his colleagues then introduced a twist: They let players exact punishment. At the end of each round, if Player A thinks Player B has been freeloading, A can fine B, but only at a cost. If A wishes to fine B $1, say, A must also pay 30 cents to the person running the game. From a purely selfish and even logical point of view, A would be an idiot to do this. A loses money and gains nothing tangible in return. Yet most players are eager to exact punishment anyway. In fact, they exact revenge even when they have no chance of reaping any rewards personally: Players are quite willing to engage in such altruistic punishment even if the game is arranged so that A never again plays in the same group as B and therefore has no chance of benefiting from more public-spirited behavior by a chastened B.

"The punishment pattern does not change," says Prof. Fehr."It's astonishing. Even though B makes a larger public contribution in later rounds with other players, A never benefits from imposing the fine. People

do not act simply to maximize their economic self-interest. They are ruled not only by cold economic logic but by emotion and a sense of fair play."

Lucky thing, too. Groups that include a number of altruistic punishers are better able to survive disasters such as war and famine. As a result, this strategy spreads, anthropologist Robert Boyd of the University of California, Los Angeles, reported in a paper earlier this year.

"Even when naturally selfish individuals are a majority, the presence of people willing to punish freeloaders can enforce social cooperation in much larger groups," says Prof. Fehr. Would-be freeloaders get the message that, if they fail to contribute to the common good, someone out there may nail them for it.

It isn't clear why some people are prone to playing avenging angel, but altruistic punishment seems to have deep neurological roots. A brain-imaging study led by Prof. Fehr this past summer found that people who have the highest activity in the cortex's reward circuit, which fires on all cylinders when we achieve something enjoyable, are also the most likely to punish freeloaders even at a high cost to themselves. Apparently, the economic cost is more than offset by the psychological reward: It feels good.

The Lord may sayeth that vengeance is His, but when it comes to keeping our fellow members of society in line, gleeful vengeance seems to be civilization's glue.

Notes

[1] http://online.wsj.com/article/SB109778104110145657.html