

ALTRUISM FOR FUN AND PROFIT

Stanley Rice
Professor, Biological Sciences
Southeastern Oklahoma State University
<http://www.stanleyrice.com>
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One of the things that evolutionary science has revealed is that people are animals. We already knew that, in terms of the kinds of the atoms (carbon etc.), molecules (proteins etc.), and organs of which we consist. But in two of his books (*Descent of Man, Expression of Emotions in Men and Animals*), Charles Darwin explained that our thoughts, feelings, and behaviors also resemble that of animals (*other* animals). This has been the hardest part of evolutionary science for many people to accept. Many people accept all of evolutionary science except the evolutionary origin of human behavior. Of course conservative religious people reject it. But twentieth century liberals (there are still a few around) also rejected it. They insisted that the human mind is a blank slate, upon which was written our experiences from childhood onward, and that all we have to do is to educate children the right way and we will have a peaceful society. They thought, for example, that men are more violent than women just because they learned to be this way when they were kids battling on the playground. If we could just raise little boys to be as nice as little girls, then violence would go away in our society. But it is now clear that human thoughts, feelings, and behaviors have both a genetic *as well as* an environmental component (nature *and* nurture), and the genetic component came from evolution.

And that is what's scary to many people: if we think we are animals, then we will behave like animals. But let's stop and think about this. First of all, do animals behave so badly? Well, sometimes they do. This came as a surprise to Jane Goodall, who became famous for studying chimpanzees in the wild in Africa. She expected them to be peaceful, and was shocked when she saw them going on occasional killing sprees. Actually there are two species of chimpanzees; the regular chimpanzees can be violent, while the other species, the pygmy chimp or bonobo, is relatively peaceful. The bonobos are the "Make love, not war" chimpanzees. As Frans deWaal says, chimps resolve sex issues with conflict, while bonobos resolve conflict issues with sex. But overall, animals (*other* animals) are less violent than humans. My wife and daughter are cat aficionados, and they miss no opportunity to tell me that cats never have wars, and when they fight they generally just swat rather than kill. Mark Twain objected strongly to the use of the term "bestial," referring to beasts, because the worst behaviors in the world are those of humans.

Second, animals do not always "behave like animals," that is, in violent competition. Evolutionary science has been misrepresented even by some of its supporters, who claim that the successful animal is the one that is the most cold-bloodedly efficient at fighting its competitors. But this is not correct. Nature is not "red in tooth and claw," in Tennyson's

phrase, or “survival of the fittest,” Spencer’s phrase. That is part of the story, but not the whole story. There is also a lot of *cooperation* in the natural world: success has, in millions of cases, come from working together rather than from fighting. According to natural selection, fitness *always* comes from successful competition, but there is more than one way to prevail in competition: some prevail by being tough, whereas others prevail by being cooperative.

First, consider the way *different species* relate to one another. One of these ways is through *mutualism*. As the name would suggest, mutualism is where two species benefit by cooperating rather than competing: the proverbial win-win situation. Examples include pollinators, such as hummingbirds, who get their food from flowers, but in the process they transport pollen from one flower to another, which benefits the plant. Each species, by pursuing its own profit, ends up benefiting the other. Mutualism can, over evolutionary time, go so far that different species can actually merge together into a single organism. This usually happens on the cellular level, as when fungi and algae merge together to form *lichens*. I’m sure you have seen many lichens, although you may not have known what they are. Many of them look like peeling crusts of paint on rocks and tree branches. Lichens are a sandwich, fungus on the outside and algae on the inside. The algae make food from sunlight, the fungi protect the algae from damage. You hardly know where one of them ends and the other begins; they are fused into a single organism. Another example involves cows. I like to tell my students outrageous things. One of them is: cows cannot digest grass. This is odd, since cows just walk around all day and moo and eat grass. But they cannot digest the cellulose that makes up most of the grass that they eat. There are *bacteria* in their first stomach that does digest some of the cellulose. Agricultural researchers have “fistulated” cows with holes in their sides where you can reach in and pull out stomach content samples to study what the bacteria are doing. You could say that you cannot have the cow without the bacteria, or the bacteria (which live nowhere else) without the cow. You could say the cow and the bacteria are a single unit, a single organism. Now that’s mutualism. There are thousands of examples of mutualism in nature, one of evolution’s greatest success stories.

There are also many ways in which animals within a species relate to each other, including fighting, threat displays, dominance hierarchies (I’m the alpha male and don’t you forget it.) In some cases the social environment is so overwhelmingly important that the physical environment—climate and food and all that—are nearly forgotten. A male elephant seal will battle away other males from his harem of females literally until he starves to death. But from an evolutionary viewpoint, he is a success: he got his genes passed on into the next generation. There’s a lot of violent animal behavior within a species. And you can find analogs of all of these behaviors in humans. We fight, use threat displays, and have dominance hierarchies all the time. We do behave like animals, even in church, where factions and preachers sometimes compete with one another for dominance.

One of the most important ways that animals, including humans, relate to other members of their species is *altruism*, the subject of this presentation. Altruism occurs when (1) one animal is nice to another, and (2) there is some cost associated with it. Altruism is extremely common

in the animal kingdom. Humans are the most altruistic species. The title of this talk is “Altruism for Fun and Profit,” and this title recognizes not only that altruism (being nice) is an extremely important way that we interact with one another, but also that it is, for business as in the world of nature, an important key to success and profit.

And it comes naturally to us. Altruism is an instinct, and natural selection has favored the emotions that reinforce altruism. That is, as Michael Shermer says, it *feels* good to be good. Altruism for *Fun* and Profit. It is such an instinct that, according to the research of psychologist Dacher Keltner, we display the facial expressions of altruism—of empathy, embarrassment, etc.—within a split second, before we have time to make a conscious response.

There are three general types of altruism:

The first is *altruism toward relatives*. All the animals in a species have pretty much the same genes, but they may have different versions of those genes. Look around you, you can see it in humans, but it is also true in every other animal species. We all have the same genes, but different versions of them. Your relatives share many of your gene-versions. If you help your relatives to reproduce, to pass their gene-versions on into the next generation, some of those gene-versions are yours. Your genetic fitness *includes* theirs, though diluted by degree of relatedness, and that is why it is called *inclusive fitness*. As British biologist J. B. S. Haldane said, “I would die for two brothers or eight cousins.” Of course, you do not consciously do the calculations. But, as a matter of instinct, you feel a protective and cooperative bond with your relatives. “Blood is thicker than water,” as the saying goes.

The example that comes first to mind is the fierce love that mothers have for their offspring, in many animal species. You don’t come between a mother bear and her cubs. Or, you do so only once. (Fathers have the same genetic relatedness to their offspring as mothers do, but in many animal species, including humans, there is the problem of paternal uncertainty: Mommy’s baby, Daddy’s maybe. This is why, on average and an instinctual level, fathers have less of an emotional bond with the children in their families than do mothers.)

In species with low intelligence, such as insects, altruism toward relatives is the only kind of altruism. But in some of these species it has evolved to a spectacular extent. Consider the social insects such as ants, bees, and wasps. In these species, the queen lays all of the eggs; male drones chase the queen then die, queen stores the sperm from one or more of them. And the workers will give their lives to protect the hive. Honeybees die after they sting you. To give your life for the hive: this is the ultimate altruism. Scientists are uncertain about how this got started, but it seems to be due to the unusually close genetic relatedness of the sister bees to one another, more so than sister mice or sister humans.

The term “queen bee” implies rulership, but it might be more instructive to think of the Queen as a captive egg-laying machine. The queen never goes out for dinner. The workers gather nectar and feed it to the queen. They also process some of the nectar in special stomachs into

honey. That is why beekeepers call honey “bee-puke.” The queen, after all, gives up her freedom, just as the workers may give up their lives.

Altruism toward relatives is a type of altruism found throughout the animal kingdom. But intelligent *social* animals, such as chimps and humans, have another type of altruism, known as *reciprocity*. That’s one of the differences between dogs and cats. Dogs are social, and have a lot of reciprocity; cats are loners, and have very little. Among apes, humans and chimps have a lot of reciprocity; orang-utans are loners and have very little. Reciprocity is as much of an instinct in social ape species, including humans, as is greed and combativeness. And in all our social and business interactions, we need to realize this. Altruism isn’t just being nice for its own sake. It is part of who we are, and it provides direct benefits.

Reciprocity occurs when animals of the same species help each other out, even though they are not genetically related. If I help you out, and you are only distantly related to me (we may have the same great-great-great-great-great grandmother perhaps, or you might have to go back 70,000 years to find our common ancestor, but nothing else), then my kindness and your enhanced fitness will not convey any of my gene-versions into the next generation. But my kindness to you, or yours to me, may confer on me *social advantages that will enhance my evolutionary fitness*.

Then there are two kinds of reciprocity. The first is *direct reciprocity*: I help you, and you help me, either now or sometime in the future. Both end up better off. You can find it beautifully expressed in the book of Ecclesiastes:

“Two are better than one...For if they fall, one will lift up his fellow. But woe to him who is alone when he falls...Again, if two lie together, they are warm, but how can one be warm alone? And though a man might prevail against one who is alone, two will withstand him. A threefold cord is not quickly broken.” [4:9-12]

The examples of direct reciprocity are so numerous and so obvious that it is a wonder that you don’t find it in all animal species. But direct reciprocity can be found primarily in intelligent species of animals. Direct reciprocity cannot be done stupidly; animals need the intelligence to remember who the reciprocators *and who the cheaters are*. As Robin Dunbar points out, social group size in apes (including us) is limited by the number of individuals we can recognize and remember; for humans, this is about 150. Beyond that, and it is difficult to remember whom to trust and whom not to trust.

Humans are the species of animal with the greatest amount of direct reciprocity. One reason for the origin of language, Dunbar speculates, is to share information about reciprocators. Yes, that means gossip. We think of gossip as evil, but in many cases it is good; we spread rumors about nice things that people have done perhaps even more often than about rotten things. Because of this, behavior does not have to be something directly observed; the collective brains of the prehistoric tribe or village is a linguistic archive of the cooperators and the cheaters. With the

invention of writing, this record of reciprocators and cheaters can be immense and cumulative over generations. Most of us know about good and evil people of the past from reading about them.

Natural selection rewards the most efficient competitors. But instead of bloody fights, there can even be a competition for being the best reciprocator. You can be on top of society if you have a good network of friends and colleagues; and every individual in that network benefits.

Altruism is something you do, not necessarily something you feel; that's *empathy*. You can get the benefits of altruism by faking it. That's why brown-nosing sometimes works. Maybe it doesn't matter whether your behavior is sincere or not, so long as you are a trustworthy reciprocator. However, natural selection has rewarded us with two capacities. First, it is much much easier to really feel the kindness that we do; if we are just faking it, we may get confused or get found out. I repeat what Shermer said, it *feels* good to *be* good, and the reason is that natural selection has favored the feelings of kindness because they enhance the acts of kindness. Second, humans have what Ernest Hemingway called a "built-in bullshit detector." So that is one *reason* that it feels good to be good. Admit it: you enjoy being good. It is not something that you just grit your teeth and do out of a sense of religious duty.

The second kind of reciprocity is *indirect reciprocity*, in which you do something good for someone else who will never, ever have the opportunity to return the favor. That is, there can be no direct repayment; the benefits are indirect. The recipient may say, "How can I ever repay you?" and you know that there is no way they can do this. What benefit could there possibly be in this?

The answer may become apparent when we rephrase indirect reciprocity as *conspicuous generosity*. The benefit is not so much that you are generous, but that everybody knows you are generous. That is, indirect reciprocity helps to create a *reputation*. Humans are the only animal species in which individuals can remember what you do for others rather than for them. That's why indirect reciprocity is found almost exclusively in humans.

As evolutionary psychologist Geoffrey Miller points out, we are constantly sending out signals to other members of our species. These signals can either be fake, or can be *genuine*. And the genuine signals are *expensive*. In many cases, these signals are *fitness indicators* intended to be seen by members of the opposite sex. The potential mate knows nothing about your chromosomes, and must rely on some visual or other indicator of how good your genes are. Sometimes these signals proclaim, "I am big and strong and healthy." The large colorful feathers of a bird are genuine fitness indicators, because a weak or poorly-fed male bird cannot produce them. Strong bodies and beautiful faces (this can actually be measured: beautiful faces tend to be more symmetrical than ugly faces) are reliable indicators of health. Driving a big truck around is not a very good indicator of the health or virility of the person driving it. (*Oh, he must be such a man! He can push down a gas pedal!*) In humans, men and women choose one another as mates, and they signal their qualities to one another in order to attract the best

possible mate.

What do women want? Forget Mel Gibson. Of course, there is more than one answer to this question. But one of the things women wanted, especially in prehistoric times, was a mate who would provide for the children. A reputation for altruism is one of the best indicators of a mate that is desirable in that way.

There are dark sides to altruism, which I will briefly mention.

- ◆ Natural selection has favored individuals within tribes that were altruistic within the tribes, but which showed hostility outside of the tribe. People are usually the most cruel to those whom they think are outside of their society, whether it is enemies from outside the walls or slaves within the walls (often captured enemies). Through human history, we have slowly, gradually expanded the inclusiveness of our altruism. We now experience a form of national altruism known as patriotism. Many people feel altruistic toward all humans, and even toward the entire natural world. The whole planet. This is a cultural progression, but it started off as altruism within, and antagonism outside of, local prehistoric societies.
- ◆ Natural selection has favored not only the ability to recognize cheaters, but to feel anger against them. Sweet revenge is an example. I speak for myself, and possibly for you: my most intense anger is toward people whom I feel have cheated the norms of altruism.

Everyone knows the value of reputation. A good reputation is worth money in the bank—lots and lots of money. I just refinanced one of my houses at a local bank in order to get out from underneath a large national bank. The president of the local bank actually knows people in the community, and if he did anti-altruistic things, he couldn't show his face in this town. He knows that altruism pays. The largest banks, on the other hand—nobody even in the city of their corporate headquarters knows who the CEO is on the street. These banks think they can get away with anything. One branch of a large bank even tried to foreclose on a house for which the owners owed no money to anybody—they'd bought the house with cash. But this bank used robo-signing because they just didn't care about reputation.

And some financial corporations actually do the opposite of indirect reciprocity. There was one large financial institution that held a lavish Halloween party for its employees even as it was foreclosing on people in an illegal fashion. The theme of the party? Homeless people. This corporation has shut its doors. The direct reason was its illegal activities. But the story of their Halloween party got all over the news and destroyed their reputation even before the law caught up with them.

Some corporations ridicule altruism because they are TBTF. Too Big To Fail means that reputation doesn't matter. That's why the TBTF situation is so dangerous—these corporations have no altruistic accountability to the rest of society. I have a feeling that the TBTF corporations will suffer the effects of their lack of altruism. When in 2008 AIG got a bailout then gave millions of dollars in bonuses to its executives, the national outcry was immense

(USA today had a front page story showing a rotten tomato on the AIG logo). Federal mortgage companies did the same thing recently, but since they were government-subsidized, they suffered more immediate and direct consequences. Well, you're just asking for trouble if you name your corporation Freddie Mac or Fannie Mae. Would you trust your money to a company that called itself Hiney Winey or Tootsie Wootsie? You can buy your groceries from Piggly Wiggly but I wouldn't recommend that as the name of a bank. Well, unless you are one of the TBTF corporations, reputation matters, and perhaps matters more than anything else. That is, for success in business, *altruism is the most important thing you can do.*

And you can't do it just by creating a slick image. Some corporations try this. They know that millions of Americans care about environmental responsibility. Some oil companies try to advertise themselves as environmental companies. This is called "greenwashing," the green version of whitewashing. One of the companies that tried this was BP, formerly British Petroleum, which after the 2010 oil spill became known as Broken Pipe. The point is that people aren't stupid. Well, most people. Well, some people. They won't fall for greenwashing, or artificially polished images of altruism. An altruistic reputation is something that, like other fitness indicators, must be expensive in order to be genuine; and people have a built-in ability to recognize BS. Indirect reciprocity is expensive, *but worth every penny that you are likely to spare toward it.*

Economist Yochai Benkler has called for a business world based on altruism. He offers altruism as an alternative to both capitalism and socialism. Both capitalism and socialism assume that humans are fundamentally evil. In capitalism, market forces are the "invisible hand" (or invisible fist?) that keeps people good. In socialism, the government has to make you be good. Benkler calls for businesses to trust altruism. Of course, you cannot be naïve in your trust; as Jesus said, be as wise as serpents and as innocent as doves.

Part of what this means is that we must change our expectation of what government is supposed to do. To a socialist, governments control everything for the common good. To them, *taxes are good*, because they feed the all-encompassing government. To capitalists, the government should do as little as possible. To them, *taxes are bad*. Libertarians, for example, want government to provide for the common defense (that's in the constitution) and not much else. But, to an altruist, as opposed to either a socialist or libertarian, the government should *function as a conduit of altruism*. That is, it facilitates people doing things to help one another. It doesn't force them to be good; it makes it easier for them to do good things. To an altruist, *taxes are good if they really help people*, but not if they just create meaningless rules and bureaucracies. That is, if taxes "promote the general welfare," a phrase that is also in the constitution. I take tax writeoffs when I give things to charity. The government loses a few dollars that way. But the people who receive those items do so much, much more cheaply than they would if a government program bought things for them. My tax-exempt generosity is a real bargain for the federal and state governments. Maybe if we were all altruistic, the government might lower our taxes—or at least it could afford to. Now *that* is the third alternative, the Altruism Approach.

Natural selection has produced in humans the ability to use altruism, in three different ways. In all of these ways, altruistic people benefit from their altruistic acts. Altruism doesn't *always* pay, and anti-altruism doesn't always lead to failure. But altruism *usually* pays. People will pay more for a product from a company they can trust. Altruism enhances evolutionary fitness. We have evolved to be good.