

# Getting Out From Number One

## *Selfishness may not dominate human behavior*

By BRUCE BOWER

Within each one of us snarls a savage, selfish beast, argued English political philosopher Thomas Hobbes in his 1651 treatise "Leviathan." Without the civilizing force of an absolute monarchy, people revert to the "state of nature" in which "every man is enemy to every man," Hobbes wrote. A chaotic war of all against all follows, rendering individual existence "solitary, poor, nasty, brutish and short."

Hobbes was not the first social observer to peg humans as selfish to the core, but his argument came at a time when the fledgling social sciences were adopting a similar stance. Seventeenth-century economists and political scientists — the earliest modern social scientists — relied on the assumption that people always act on the basis of rational self-interest. "Looking out for number one" is still considered a cornerstone of the human psyche by social scientists in a variety of disciplines.

In addition, sociobiologists, who study the biological basis of social behavior, argue that natural selection — the preservation of genetically based traits that best contribute to successful reproduction — favors selfish behavior. Helping a close relative may seem a purely friendly gesture, but in the sociobiologists' view, it increases the likelihood that copies of the altruist's genes will filter into future generations. Unrelated comrades may receive help only in the expectation that they will later return the favor.

In the related field of evolutionary biology, an influential theory devised by Richard Dawkins of Oxford (England) University envisions genes as relentlessly selfish replicators attempting to traverse the millennia by using human beings as "survival machines."

Dawkins and many in the sociobiological camp do not contend that genes equal destiny. But he argues that selfish genes get first crack at molding human nature, followed by cultural and other environmental influences.

"Let us try to teach generosity and altruism, because we are born selfish,"

Dawkins writes in the revised edition of *The Selfish Gene* (1989, Oxford University Press). "Our genes may instruct us to be selfish, but we are not necessarily compelled to obey them all our lives."

Indeed, most psychological theories — from Freud's psychoanalysis and Skinner's behaviorism to current concepts of self-esteem and other aspects of the "self" — assume we are ultimately capable of caring only for ourselves. But considerable research suggests otherwise, argues psychologist C. Daniel Batson of the University of Kansas in Lawrence. A growing number of scientists studying social behavior and human evolution now challenge the reign of selfishness theories, notes political scientist Jane Mansbridge of Northwestern University in Evanston, Ill. Unselfish motives, such as solidarity with others and commitment to a principle, sometimes surpass self-interest in their influence on human attitudes and behavior, according to many recent investigations.

"The key question concerns the contexts in which people are most likely to put the good of others ahead of their own," Mansbridge says.

Studies conducted over the past decade reveal that caring sometimes transcends selfish motives when someone empathizes with another person's plight, Batson asserts in the March *AMERICAN PSYCHOLOGIST*. Empathy is the experience of feeling what someone else is experiencing, and includes sentiments of sympathy, compassion, sorrow and pity. Batson and his colleagues find that simply exposing college undergraduates to a peer they believe is receiving mild but uncomfortable electric shocks evokes abundant empathy and numerous offers to help the peer by taking the remaining shocks themselves.

Empathy has its limits, however. Even students who readily empathize with a peer refrain from volunteering to take "clearly painful" shocks. Batson con-

cludes that psychologists must focus on empathy as "a fragile flower, easily crushed by self-concern."

Rational thought, the backbone of selfish behavior in many theories, is also a fragile flower. Psychologists Daniel Kahneman of the University of British Columbia in Vancouver and Amos Tversky of Stanford University, among others, have described various "rules of thumb" for making judgments or inferences that can lead to inconsistent decisions based on how one phrases a problem. For instance, people tend to seek sure gains and avoid sure losses. Thus, the same person who endorses a surgical procedure described as saving 200 out of 600 lives will likely oppose the same operation if it is said to result in death for 400 out of 600 patients.

Psychologist Linnda R. Caporael of Rensselaer Polytechnic Institute in Troy, N.Y., recently launched a frontal assault on theories of human selfishness. In the December 1989 *BEHAVIORAL AND BRAIN SCIENCES*, she and her colleagues describe a series of experiments conducted over the past 10 years that they say demonstrates that human nature is basically social rather than selfish. Their analysis relies heavily on anthropological evidence indicating that the way humans think evolved over several million years. Until as recently as about 10,000 years ago, they note, humans and their ancestors regularly banded into small, cooperative foraging groups, each competing with neighboring groups for survival.

Caporael and company placed volunteers in small groups and confronted them with "social dilemmas" — situations in which an individual's immediate gains conflicted with the group's welfare. Such quandaries are ever-present in daily life. In one type of social dilemma, people have to choose whether or not to contribute resources in hand to promote the common good. Do you, for example, partake of public broadcasting programs and not contribute money to the stations, assuming others will pick up the slack? Or do you dutifully send in a donation

regardless of what others do?

A second incarnation of the social dilemma occurs with the choice of whether or not to refrain from behavior that helps oneself while undermining the public good. During a heating-oil shortage, for instance, do you keep your thermostat high and your house warm, even though oil supplies will run out if others do the same?

The researchers devised experimental social dilemmas falling into the former class of real-world conflicts. In a typical situation set up in these studies, nine strangers each receive \$5. If five or more contribute their money to a general fund, each of the nine receives a \$10 bonus. Thus, if enough people fork over five bucks, contributors end up with \$10 and noncontributors net \$15. In the event too few donate their money to the general fund, contributors end up with nothing and noncontributors keep their \$5.

Each group member in the study made a single, anonymous decision to keep or contribute his or her money. They could not talk to one another immediately before or after the experiment. In some sessions, participants were allowed up to 10 minutes to discuss the problem; in others, they never spoke to one another.

Volunteers in discussion groups always obtained the bonus. Usually seven or eight, rather than the minimum of five, made a contribution. Moreover, nearly all of those who gave up their money told the investigators that they believed their contribution was not necessary to meet the bonus cutoff of at least five contributors.

Groups with no opportunity for discussion fared far less well financially, obtaining the monetary bonus only 60 percent of the time. Noncontributors in both types of groups cited selfish reasons for their behavior, such as wanting to hang on to what they had and possibly make even more if enough others contributed.

Discussion-group contributors were not selfishly trying to massage their egos and walk away with a good conscience, Caporael and her colleagues argue. If conscience alone had served as their guide, contributions would not have plummeted in discussion groups told that their donations and bonuses would go to the members of another group. Discussion elicited contributions only when the participant's own group stood to benefit.

In other words, people affiliate strongly with their own group and reward it preferentially, even at the expense of their own immediate interests. This type of bias appears remarkably strong and easily elicited. For example, several research teams have found that total strangers combined into groups on superficial grounds — such as whether they overestimated or underestimated the number of dots in a display — choose to distribute greater sums of money to members of their own group.

Caporael and her co-workers cite the need for intensive research into the social lives of ancient human ancestors, or hominids, for a fuller understanding of the power of group identification on the way people think. Early hominids living on the African savanna 2 million years ago or more probably coalesced into small groups to keep predators at bay and to forage for food more efficiently, the researchers argue. Not only did the most cooperative groups prevail reproductively, but their individual members adapted better to group living, Caporael's team asserts.

But psychological mechanisms that evolved over millions of years to meet the requirements of small-group living do not always fit neatly into a modern society dominated by much larger groups. For instance, a young person may join the military out of a sense of patriotism and identification with a nationality, but Caporael and her colleagues suggest in their paper that soldiers in small, face-to-face fighting units sacrifice their lives less often for their country than for their comrades.

On the savanna, the scientists add, the pressing problem for early hominids was distributing available resources, not conserving resources for a group's welfare. Thus, among people who identify with a small group, hominid evolution has set the stage for individuals to contribute money willingly toward a group goal. Yet little in our evolutionary background deters individuals from looting the group's general fund if they want or need money and think they can get away with it.

Pilfering from one's comrades is not inevitable, however. Individuals who identify intensely with a group will willingly restrict their own gains to preserve a collective pool of money, according to social-dilemma studies directed by psychologist Marilyn B. Brewer of the University of California, Los Angeles. If the sense of belonging and identity provided by small groups is essential to human functioning, then "clique selfishness" may well be more powerful than even the most rabid individual self-interest, Brewer contends.

If selfishness and altruism both emanate from humanity's evolved capacity for social navigation within small groups, "there's good reason to suspect the same psychological mechanisms account for the most inspiring intellectual achievements and the most discouraging failures of reason, the noblest of moral acts and the lowest of inhumane cruelties," Caporael says.

While Caporael and her colleagues may indeed have a potential alternative to theories of human selfishness, their work remains

far from conclusive, says anthropologist Bruce M. Knauft of Emory University in Atlanta. A major gap lies in their inattention to cultural and ethnic differences in selfish and cooperative behavior, he asserts. For example, individualism emerges more strongly among people living in wealthy, industrialized nations. On a smaller scale, college students are probably more altruistic in social dilemmas than business entrepreneurs or a group of inner-city drug addicts, Knauft argues.

Furthermore, it remains unclear that altruism among early hominids extended outside groups of closely related kin, Knauft says. William D. Hamilton of Oxford University and other sociobiologists argue that human ancestors almost always congregated in groups of genetic relatives. Thus, helpful behavior that also propagated the helper's genes was a primary condition under which cooperation evolved.

Knauft points out that ethnographic studies of simple, foraging societies still in existence — such as Australian aborigines and African pygmies — run counter to Hamilton's argument, suggesting instead that genuine altruism may have appeared early in human evolution under roughly comparable conditions. Individuals in these societies often migrate from one residential group to another, and cooperative acts occur in groups that include persons who are unrelated or distantly related to one another.

Nevertheless, selfishness may lie at the heart of cooperative resolutions to social dilemmas, says psychologist Douglas T. Kenrick of Arizona State University in Tempe. In Caporael's studies, participants may have been concerned primarily with "doing the right thing" or avoiding the guilt linked to keeping one's money and betraying other group members, Kenrick maintains.

Recent studies conducted by Arizona State's Robert B. Cialdini also suggest that empathic helping — such as that studied by Batson at the University of Kansas — is motivated by the desire to feel better about oneself and to avoid the guilt and unpleasant moods associated with selfish behavior.

Studies of early hominid life and modern human social behavior have a long way to go before scientists obtain a clear picture of motivations for empathy and cooperation, Caporael acknowledges. In fact, if her theory is correct, researchers face a daunting task, since it would mean that evolution has equipped people primarily for social decision-making rather than for the scientific study of how such decisions are made.

"The human mind/brain evolved for being social and for learning what that means in our cultures, and not for doing science, philosophy or other sorts of critical reasoning and discourse," Caporael suggests. □