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# ALTRUISM: A Review of Recent Theory and Research<sup>1</sup>

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*Altruism is not . . . an agreeable ornament to social life, but it will forever be its fundamental basis. How can we really dispense with it?*

E. Durkheim, *The Division of Labor in Society*. (1933, p. 228)

*"How selfish soever man be supposed, there are evidently some principles in his nature, which interest him in the fortune of others, and render their happiness necessary to him, though he derives nothing from it, except the pleasure of seeing it."*

Adam Smith, *The Theory of Moral Sentiments* (1969, p. 47)

## *Abstract*

The literature on altruism in social psychology, and to a lesser degree in sociology, economics, political behavior and sociobiology since the early 1980's is reviewed. The authors take the position that in all of these areas, there appears to be a "paradigm shift" away from the earlier position that behavior that appears to be altruistic must, under closer scrutiny, be revealed as reflecting egoistic motives. Rather, theory and data now being advanced are more compatible with the view that true altruism—acting with the goal of benefitting another—does exist and is a part of human nature.

<sup>1</sup>The authors would like to thank Gerald Marwell and Irving Piliavin for careful, critical readings of previous drafts of this manuscript and an anonymous reviewer for helpful comments. We would also like to thank numerous librarians, who must remain nameless, for tracking down elusive references, sometimes over the phone at the last minute.

Research in social psychology during the 80's had a decreased emphasis on situational determinants of helping. Rather, it has focussed mainly on the following topics: the existence and nature of the altruistic personality, the debate concerning the nature of the motivation underlying helping behavior, and the nature of the process of the development of altruism in children and adults. During this time there has also been considerable theoretical and empirical work on possible biological bases for altruism, and on the evolutionary processes by which these might have developed. Within economics, politics, and sociology, the issues of behavior in social dilemmas, the provision of public goods, private and corporate philanthropy, and voluntarism (including donation of time, money, and physical parts of the self) are discussed.

## INTRODUCTION

In spite of these comments from two founders of sociology and economics, for a long time it was intellectually unacceptable to raise the question of whether "true" altruism could exist. Whether one spoke to a biologist, a psychologist, a psychiatrist, a sociologist, an economist, or a political scientist the answer was the same: Anything that *appears* to be motivated by a concern for someone else's needs will, under closer scrutiny, prove to have ulterior selfish motives.

In all of these areas we are now seeing a "paradigm shift."<sup>2</sup> The initial leadership came from sociobiology, systematized in E. O. Wilson's *Sociobiology: A New Synthesis* (1975). Around that same time, Phelps (1975, p. 2), introducing *Altruism, Morality, and Economic Theory*, said, "The range of altruistic behavior . . . is impressive. . . ." By 1982, Margolis stated, "Almost no economist would deny the possibility of altruism in rational choice (p. 12)."<sup>3</sup> In social psychology, it has largely been Batson's experimental work (and Coke 1981; for a review, see Batson 1990) and Hoffman's systematic presentation of his theory of the origins of altruism (1981) that have led to a reconsideration of egoistic models. These American contributions were, however, foreshadowed by work, untranslated, of Reykowski (1979) and Karylowski (1975) in Poland.

<sup>2</sup>Margolis notes that "A reasonable indicator of when a paradigm is starting to become an intellectual handicap might be when things that are obvious and obviously important can be seen more easily by a naive observer than by specialists . . ." (1982, p. 71).

<sup>3</sup>Margolis (1982) points out that three economists in the 1950s—Arrow (1963), Buchanan (1954), and Harsanyi (1955)—touched on the possibility of a dual preference structure that would allow for motives other than pure selfishness. Arrow (1975) suggests that there can be three classes of motives for giving: a generalized desire to benefit others, a desire to be the agent by which others benefit, or a sense of obligation, based on social norms or an implicit social contract.

The central point we attempt to make in this review is that the data from sociology, economics, political science, and social psychology are all at least compatible with the position that altruism is part of human nature. People do have "other-regarding sentiments," they do contribute to public goods from which they benefit little, they do sacrifice for their children and even for others to whom they are not related. Recognizing this, a number of other interesting questions can then be raised. Is there evidence for an "altruistic personality," or is altruism largely determined situationally? How are altruistic motivations developed, and what are some mediating dimensions? Are there different kinds of altruism that can be distinguished on the basis of their underlying mechanism? Is there a genetic component to these altruistic tendencies, and if so, how might it affect the development and expression of altruism? What is the extent of public volunteering and charitable giving in our society, and to what extent can we call it altruism? Our emphasis will be mainly on the social psychology and human development literatures, although we also discuss issues in social dilemmas, public goods provision, philanthropy, and voluntarism.<sup>4</sup>

## WHAT IS ALTRUISM?

Writers from different disciplines define altruism differently. At one extreme, the sociobiologist Wilson (1975, p. 578) defines altruism as "self-destructive behavior performed for the benefit of others." More generally, sociobiologists call behavior altruistic if it benefits the actor less than the recipient. The economist Margolis (1982, p. 15) says, "What defines altruistic behavior is that the actor could have done better for himself had he chosen to ignore the effect of his choice on others. . . ." Altruists are defined in the social dilemma literature as individuals who give more weight to others' than to their own outcomes in deciding on game strategies (Liebrand 1986). What all of these definitions share is an emphasis on the costs to the altruist; they do not mention motives.

Differences in the definitions of psychologists—who have been unable to agree on a single definition of altruism—involve the relative emphasis on two factors: intentions and the amount of benefit or cost to the actor (Krebs 1987).

<sup>4</sup>We do not attempt a thorough review of recent altruism research in all of these academic areas. A review of the biological literature to 1975 is found in Wilson (1975); there are three relatively recent reviews of the sociobiological approach to human altruism and prosocial behavior in Hoffman (1981), Cunningham (1985–1986), and Krebs (1987). Reviews of the social psychological literature can be found in Staub (1978), Piliavin et al (1981), Rushton (1980), Dovidio (1984), and Dovidio, Piliavin, Goertner, Schroeder, and Clark (forthcoming). Reviews of the "social dilemma" literature have been provided by Dawes (1980), Edney (1980; Dawes & Orbell (1981), Stroebe & Frey (1982), and Messick & Brewer (1983). The political area is reviewed by Rasinski & Tyler (1986).

Bar-Tal (1985–1986) notes that, with few exceptions, most of those who emphasize the motivational aspect of altruism agree that: “altruistic behavior (a) must benefit another person, (b) must be performed voluntarily, (c) must be performed intentionally, (d) the benefit must be the goal by itself, and (e) must be performed without expecting any external reward” (p. 5).

Sober (1988) points out the essential differences between “evolutionary altruism”—essentially altruism that emphasizes consequences to the actor and the recipient—and what he calls “vernacular altruism” which “has to do with motives . . . with the motive of benefitting others.” (p. 76). He points out that in order to have motives, one must have a mind, which is clearly not the case for the lower species to whom evolutionary altruism is usually applied. As sociologists, we have chosen to adopt a largely motive-based definition of altruism as behavior costly to the actor involving other-regarding sentiments; if an act is or appears to be motivated mainly out of a consideration of another’s needs rather than one’s own, we call it altruistic. The actor need not have *consciously* formulated an intention to benefit the other for an act to qualify, however.<sup>5</sup>

### *On the Possibility of More Than One Type of Altruism*

Several authors (Hill 1984, Vine 1983, Krebs 1987) suggest that there may be at least two kinds of altruism. Although Hill points out that much altruism is in response to perceived social expectations, he adds that “spontaneous acts of real bravery are undertaken without any such conscious aim in view” (p. 24). Vine (1983, p. 8) states, “Our altruistic impulses are likely to be stronger towards kith and kin partly because of this underlying organismic causation, requiring less rational deliberation and self-persuasion, less active cultivation of altruistic dispositions.”

Wilson (1976) has referred to “hard core” altruism, “irrational and unilaterally directed at others . . . relatively unresponsive to reward and punishment . . . likely to have evolved through . . . kin selection” (p. 371).

Simmons et al (1977) point out that the decision to donate a kidney to a relative is in most cases made very quickly, often without any sense of having made a decision at all. In some cases of bystander intervention, individuals also appear to help almost reflexively. Piliavin et al (1981) note that “the same factors that facilitate impulsive helping—clarity, reality, involvement with the victim—have also been demonstrated to be related to greater levels of bystander arousal” (p. 238). Krebs concludes, “Evidence on impulsive helping suggests that . . . humans . . . may be genetically disposed to engage in impulsive acts of helping . . . The finding that prior experience with a victim

<sup>5</sup>In many cases of extreme heroism, actors have no consciousness of having made a decision to act. We would not wish to exclude such acts from the altruistic category for this reason.

facilitates impulsive helping is consistent with evidence on familiarity in support of the possibility that impulsive helping is an anachronistic anomaly" (1987, p. 113). Hoffman (1981) has suggested two different mechanisms underlying the empathy which precedes helping: a flexible mechanism that is susceptible to developmental influences and a "reflexive" mechanism that is not.

In other words, we may have mechanisms both for "evolutionary altruism" and for "vernacular altruism." The former would be very primitive, leading to impulsive responding in emergencies in which the victim is seen as part of a "we"—the "anachronistic anomaly." The other—probably much more common—would be more complexly developed, although it may have some hereditary components.

## IS THERE AN ALTRUISTIC PERSONALITY?

It is undoubtedly futile to search for the altruistic personality, since there are so many different forms altruistic behavior can take. Summary articles reviewing experimental research have generally found inconsistent relationships between personality characteristics and prosocial behavior. A few regularities do occur: people high in self-esteem, high in competence, high in internal locus of control, low in need for approval, and high in moral development appear to be more likely to engage in prosocial behaviors (Staub 1978, Aronoff & Wilson 1984, Piliavin et al 1981, Rushton 1981). Similarly, a 1981 review of the literature on blood donation (Boe & Ponder) reported only that donors have an altruistic approach to life, a desire for self-sacrifice, and a strong need for recognition and prestige. Romer et al (1986) found that those they had classified as altruists helped significantly more than did others, particularly when they were not going to receive compensation, and that "Few selfish persons volunteered to help, regardless of whether they had been offered compensation" (p. 1007).

Oliner & Oliner (1988) found very few personality differences between 231 gentiles who saved Jews in Nazi Europe and 126 nonrescuers matched on age, sex, education, and geographic location during the war. Rescuers did have higher ethical values, beliefs in equity, greater pity or empathy, and were more likely to see all people as equal. Simmons et al (1977)<sup>6</sup> found no differences between those who donated a kidney to a relative and a standardization group on any of the standard scales of the MMPI. Reddy

<sup>6</sup>The most recent presentation of this work is to be found in Simmons, Marine, and Simmons, *The Gift of Life: The Effect of Organ Transplantation on Individual Family and Societal Dynamics*. New Brunswick, NJ: Transaction Books, 1987. The authors only learned of this new edition after this review had gone to press; thus the references in the text remain to the earlier edition.

(1980) found little evidence for relationships between most personality and attitudinal measures and charitable giving; the exception was alienation, which decreased giving. A more fruitful approach might be to look at certain theoretically promising dimensions of personality and see whether they are related in sensible ways to altruistic action.

### *Moral Norms and Attribution of Responsibility To the Self*

In both the Oliner & Oliner study of the rescuers of Jews and in past reviews of the altruism literature, something like "moral values" seems to be implicated in altruism. Schwartz (1970; Schwartz & Howard 1982, 1984) has postulated that helping behavior is affected by personal norms, i.e. feelings of moral obligation to perform or refrain from certain actions. "Thus personal norms are situated, self-based standards for specific behavior generated from internalized values during the process of behavioral decision making" (Schwartz & Howard 1984, p. 234). The personality construct of attribution of responsibility to the self (AR) measures the extent to which individuals are likely to act on personal norms. Schwartz (1970) found that those with strong personal norms regarding bone marrow donation and high scores on attribution of responsibility to the self were significantly more likely to volunteer to join a marrow donor pool.

A study using blood donation as the behavior later found that 34% of individuals high on both AR and personal norms gave blood when solicited, while less than 10% of all others did so (Zuckerman et al 1977). Attribution of responsibility alone was related to willingness to volunteer as a bone marrow donor in a sample of pheresis donors (Briggs et al 1986). And in a study focussed on the impact of perceived community norms on community differences in blood donation, personal norms were the major factor in predicting donations at an individual level (Piliavin & Libby 1986). On the other hand, sometimes people may feel some degree of moral obligation *not* to give help to some individuals, or in some instances groups. Schwartz & Fleishman (1982) found that people with such negative personal norms (i.e. who felt they should *not* help the welfare recipient) help less than people with no norms.

Karylowski (1982) has argued that altruistic helping can be based either on the need to live up to such a moral imperative (endocentric altruism) or on the desire to improve another's condition (exocentric altruism). In the former case, the individual must actually help in order to feel gratification; in the latter, it is enough that the other receives help, regardless of the source of that help. Little research has been done on exocentric altruism (but see Batson 1987, below).

### *"Free Ridership"*

The concept of "free riding" means the tendency to let others pay the costs of public goods that are available to all, such as public TV. When rendered as a

personality construct, "free-ridership" is closely related to Schwartz's "attribution of responsibility to the self." In one study that found but few dimensions that differentiated blood donors from nondonors, donors were found to display a lesser "free-rider" tendency (Condie et al 1976). More recently, donors with a lower "free-rider" tendency were found to be more likely to develop a psychological commitment to donation and to continue giving (Piliavin & Callero, in press). Closely related to the question of personal norms and free riding is the issue of "fairness." Marwell & Ames (1981) found that investment of funds in a group exchange (the "altruistic" choice) was related quite strongly ( $r = .47$ ) with reports that the individual was "concerned with fairness" when investing.

### *Trust and Faith in People*

The only way in which kidney donors differed from nondonors in the Simmons et al (1977) research was on a five-item scale of faith in people;<sup>7</sup> 74% of donors but only 43% of nondonors scored high. Research on behavior in experimental social dilemmas has found stable individual differences in the willingness to cooperate—to consider the outcomes of the others in making decisions. Cunha (1985) found that subjects who behaved competitively in a social dilemma situation were very low on a battery of measures of trust obtained earlier, as compared to cooperators, who were both trusting and trustworthy. Kramer et al (1986) also found that "others' lack of reciprocation did not cause cooperators to abandon their own efforts to conserve the collective pool . . . This would seem to support our interpretation that social motives reflect individual values . . . rather than merely strategic concerns." The motivation of one cooperator was clear when she said, "Sure, I would have liked to have made more (money), but not if it meant having to hurt others" (p. 590). Liebrand et al (1986) and Beggan et al (1988) present data that indicate that the meaning of the cooperation-competition dimension is different for cooperators and competitors. Cooperators see it as "good-bad;" competitors see it as "strong-weak."

### *Risk-Taking*

There is some evidence that propensities to take risks may be related specifically to willingness to engage in potentially costly altruistic acts. In a study of 27 gentiles who rescued Jews during World War II, London (1970) concluded that they were characterized by "a spirit of adventurousness." Two studies have found risk-taking among blood donors: a measure of "sensation-seeking" was positively related to willingness to consider blood donation (Farnill & Ball 1982), and frequent donors were more likely to agree that they "would

<sup>7</sup>An example item: "Would you say most people are more inclined (1) to help others, or more inclined (2) to look out for themselves?"

try anything once" than non donors (Needham Harper Worldwide 1986). A study of individuals who had been injured by intervening in a crime in progress (Huston et al 1976) found them to be "risk-takers, men on familiar and rather amiable terms with violence . . . much more easily provoked than [a control group] (p. 64)." Wilson & Petruska (1984) found that esteem-oriented subjects (high in self-efficacy, mastery, self-worth) were more likely to initiate helping behavior in a simulated emergency than were safety-oriented subjects (high in need for security, avoidance of anxiety). A group of 20 founders of activist community service organizations were characterized by "Riskiness, not necessarily in the entrepreneurial sense, but rather the readiness to take a chance" (B. Berkowitz 1987, p. 323).

### *Gender and Gender Role*

Piliavin & Unger (1985) reviewed sex and gender differences in the several steps of the psychological process in responding to situations in which help is needed: preattentive processing, arousal, and cost/reward calculations.<sup>8</sup> Evidence for differences in processing comes from Austin (1979), who found that men and women were equally likely to intervene at a high level of harm, but women more likely to intervene at low levels; women seem to have a lower threshold for noticing. In regard to arousal, Hoffman (1977) reviewed 16 studies and found that females had higher scores on the vicarious response to another's expression of affect than did males.<sup>9</sup> Eisenberg et al (1988) found that girls exhibited more facial sympathy and reported more distress than boys. Women report themselves to be more empathic than do men (Eisenberg & Lennon 1983).

Eagly & Crowley (1986) argue that sex differences in helping behavior are derived from social roles occupied by men and women. Women report providing their friends with more personal favors, emotional supports, and counseling about personal problems than men do (Aries & Johnson 1983, Berg 1984, Johnson & Aries 1983). Helping expectations for men are associated with nonroutine and risky actions and protective roles. Using meta-analysis, they found support for social role theory in explaining differences in male and female. Their predictions were confirmed that "men should be more helpful than women to the extent that (a) women perceived helping as more dangerous than men did, (b) an audience witnessed the helping act, and (c) other potential helpers were available." Sex differences in helping behavior may be due to gender-related traits of masculinity and femininity, rather than to sex per se or to gender roles. Results have been extremely inconsistent (see Senneker & Hendrick 1983, Tice & Baumeister 1985, Siem & Spence 1986).

<sup>8</sup>For an elaboration of this model, see Piliavin et al 1981.

<sup>9</sup>He believes this difference to be in part of genetic origin.

### *Situational Factors in Altruism*

The best known situational effect in the literature is the bystander effect, namely, that the knowledge of the presence of others who might help inhibits intervention in an emergency. In an extensive review, Latane et al (1981) found robust evidence of the effect of perceived group size on helping.<sup>10</sup> Striking data not included in these analyses come from Simmons et al (1977). The likelihood of an individual in need of a kidney receiving one from a sibling decreased almost linearly from 51% when there was only one eligible sibling to 0% when there were 10 or 11.

Studies have showed that the bystander effect is caused by diffusion of responsibility (i.e. when an individual believes that there are other bystanders who can offer help, pressure to rescue the victim is reduced), informal social influence (the reactions from other bystanders), and normative social influence (personal beliefs of social evaluations about providing/or not providing help). It is only under very specific circumstances that trigger impulsive helping that the bystander effect does not operate (for a review, see Piliavin et al 1981; and Dovidio 1984).

### *Other Situational Effects*

Although 32% of rescuers of Jews claim to have begun helping Jews on their own initiative, rescuers were more likely to have been asked for help directly than were nonrescuers (Oliner & Oliner 1988). Simmons et al (1977) found that kidney donors were more likely to have been informed *in person* of the need for a donor than were nondonors (80% vs 58%). Studies of those who volunteer time, donate to charity, or give blood indicate strongly that personal request and social pressure are very important reasons for participation (Heshka 1983, Americans . . . 1981, Reddy 1980, Sills 1957, Drake et al 1982), and the commonest reason given for nondonation is not having been asked.

Female victims are likely to receive more help (Eagly & Crowley 1986). Less costly, unambiguous, and highly urgent situations promote helping behaviors (Shotland & Stebbins 1983). Rapoport (1988) found that subjects given a higher level of resources in a social dilemma game—the “rich”—contributed more to the common pool. Poppe & Utens (1986) find that individuals take more from a pool and give less if there are more resources; when resources decrease, they become more altruistic.

<sup>10</sup>“We are aware of 4 dozen published or unpublished studies from nearly 3 dozen different laboratories reporting data from over 5000 persons faced with the opportunity to help either alone or in the presence of others. With very few exceptions, individuals faced with a sudden need for action exhibit a markedly reduced likelihood of response if other people actually are, or are believed to be, available” (Latané et al 1981, p. 290).

*Person-by-Situation Interactions*

Kerber (1984) found that people high in altruism saw helping situations as more rewarding and less costly than did people low in altruism. The same was true for Simmons et al's (1977) kidney donors, as compared to nondonors. Wilson & Petruska (1984) found that the esteem-oriented (high in self-efficacy, mastery, self-worth) subjects were more likely to initiate helping than were safety-oriented (high in need for security, avoidance of anxiety) subjects when interacting with a passive confederate. Esteem-oriented subjects were more likely to be influenced by a high competence confederate, and safety-oriented subjects were more likely to be influenced by a high status confederate.<sup>11</sup> Finally, Deutsch & Lamberti (1986) found differences in the impact of prior social approval on the helping of those low and high in need for approval;<sup>12</sup> "subjects who were high in need for approval were subsequently more likely to help a confederate who had dropped books if they [the subjects] had been socially rewarded than if they had been punished. Subjects low in need for approval were unaffected by the previous social reinforcement" (p. 149).

## THE EMPATHY-ALTRUISM HYPOTHESIS

Empirical studies have consistently shown that empathy is causally related to prosocial behavior. For a comprehensive review of this relationship, see Eisenberg & Miller (1987); however, this link does not necessarily demonstrate that the prosocial behavior is altruistically motivated. The arousal vicariously induced by grasping another's situation may produce either sympathy or aversive arousal such as personal distress or sadness, which Batson and his associates (Batson 1987, Batson et al 1983, see also Piliavin et al 1981) argue are distinct emotional states. For empirical evidence supporting the idea that sympathy and personal distress are distinct emotional states, see Batson (1987 review), Fultz et al (1988), Eisenberg et al (1989), Eisenberg et al (1988), Batson et al (1981), Sterling & Gaertner (1984).

Batson et al then test the hypothesis that sympathy evokes altruistic motivation to have the other's need reduced, while personal distress does not;<sup>13</sup> they

<sup>11</sup>The high vs. low competence model was manipulated by the confederate who performed excellent vs. poor creative thinking tasks in the experiment. The high vs. low status model was manipulated by the confederate being a first year doctoral student vs. freshmen.

<sup>12</sup>Need for approval was measured by the Marlowe-Crowe social desirability scale.

<sup>13</sup>Consistent with Batson's theorizing, the economist Margolis suggests that "... psychic income [feeling better about oneself by behaving in a certain way] . . . does not either explain group-interested motivation or add to it. (p. 68)"

use a paradigm with a 2 (high vs low empathy) by 2 (easy vs difficult escape) design.<sup>14</sup> If high empathy evokes a desire to reduce personal distress, people should help less in a situation that is easy to escape; if empathy evokes a desire to reduce the other's suffering, then there should be no difference in helping between easy and difficult escape situations. Empirical studies have consistently supported the empathy-altruism prediction (Batson et al 1981, Batson et al 1988, Batson et al 1983).

Three egoistic alternatives to the empathy-altruism hypothesis have been proposed. (a) "The empathy-specific punishment hypothesis claims that people have learned through prior reinforcement that a special obligation to help—and special guilt and shame for failure to help—are attendant on feeling empathy. As a result, when they feel empathy . . . they are egoistically motivated to avoid these empathy-specific punishments" (Batson et al 1988, p. 58). (b) The empathy-specific-rewards hypothesis argues that through prior experiences people learn that special rewards (e.g. praise, honor) are attendant on helping when one feels empathy (Batson 1987, Thompson et al 1980, Meindl & Lerner 1983). According to this hypothesis "individuals feeling a high degree of empathy will be in a more positive mood when they have been the agent of the victim's relief than when they have not. . . . the empathy-altruism hypothesis predicts that individuals feeling a high degree of empathy will be in as positive a mood when the victim's need is relieved by other means as when by their own action" (Batson et al 1988, p. 53). (c) The "negative-state relief model" (NSR) proposed by Cialdini and his associates (Baumann et al 1981, Cialdini et al 1987) claims that empathy creates personal sadness that needs to be removed, and that the egoistic desire to manage personal sadness is a primary cause of helping behaviors. However, since empirical studies have failed to find consistent support for any of these three alternative hypotheses (Batson et al 1988, Cialdini et al 1987, Manucia et al 1984, Schaller & Cialdini 1988, Batson et al 1989), we must conclude that there is an altruistic motivation behind prosocial behavior when empathy is aroused.

Using a very similar conceptualization, Weiner's attribution-affect model of helping (1980a, b) holds that another's need, if perceived as beyond the victim's control, leads to empathy<sup>15</sup> and helping; if perceived as controllable, anger and withholding of help result. Considerable support exists for this model as well (Meyer & Mulherin 1980, Reisenzein 1986, Reisenzein et al 1984).

<sup>14</sup>In some studies, empathy is measured; in others, it is manipulated by inducing identification or an objective stance towards the victim.

<sup>15</sup>Weiner actually uses the term "sympathy," as does Eisenberg, for the concept referred to as "empathy" by Batson.

### *Moods and Helping Behavior*

Results of research relating negative moods to helping have been inconsistent; sometimes the negative mood has a positive effect on helping behavior, sometimes a negative effect, and sometimes no effect at all, suggesting that moderator variables affect the influence of negative mood on helping behavior. Carlson & Miller (1987) have summarized three theoretical perspectives and have used metaanalysis to test the results of 47 articles. Results supported a focus of attention model and a responsibility/objective self-awareness model, but not the negative state relief model; these results further weaken theoretical approaches to helping based on reward mechanism (i.e. the relief of distress).

In contrast, research has consistently found that a positive mood promotes helpfulness. People in a good mood may perceive things in a more positive way and may increase positive cognitions<sup>16</sup> (Bower 1981, Clark & Teasdale 1985, Forgas et al 1984). As a result, they may provide more help because they perceive a potential helping opportunity more favorably (Clark & Isen 1982, Clark & Waddell 1983). Carlson and his associates (Carlson et al 1988) have reviewed the literature on positive mood and prosocial behavior, covering six distinctive perspectives, and have done a meta-analysis of 34 articles. Results supported what they call the "focus of attention," "social outlook," and "mood maintenance" hypotheses, but not the "objective self-awareness," "concomitance," and "separate process" models. Objective self-awareness appears to augment helpfulness by enhancing the prosocial feelings and perceptions that result from a good mood, but not because people want to avoid the negative affect that may arise from failing to fulfill what they see as a helping obligation. The critical conclusion is that affect is extremely important as a factor in increasing or decreasing helping, and that its effect is influenced by and influences cognitive processes.

### DEVELOPMENT OF ALTRUISM

Generosity and other forms of helping behavior have been found to increase with children's age, especially as children near adolescence (Chambers & Ascione 1987; see Staub 1979 for an extensive review). Much research has been addressed to the question of what mediating processes may contribute to this change. As children grow up, their altruism may be increased because of growing empathic sensitivity, greater ability in perspective-taking, broader knowledge of cultural norms, increased social responsibility and competence, or enhanced moral reasoning capabilities.

<sup>16</sup>Carlson et al (1988) called this process priming: "A good mood state is hypothesized to function as a cue that temporarily increases the likelihood that positive cognition will be generated in response to a subsequent stimulus. This process, called priming, can set a self-perpetuating cognitive loop of positive thoughts and associations into motion" (p. 211).

## *Empathy*

According to Hoffman's (1981, 1982a, 1984a) proposed developmental model, in the first year of life, a child can not differentiate self and other. Thus, when s/he sees other's distress, a global empathic distress is elicited,<sup>17</sup> and the child is not clear about who is experiencing the distress. Through the end of the first year, the child's helping behavior is still "quasihedonistic," motivated by the need to alleviate its own rather than the other's distress. At 2 or 3 years, the child gains more advanced role-taking skills (the ability to understand others' affective and cognitive states), and his/her helping behaviors are more responsive to other's needs and feelings. The final stage comes when "children can be aroused empathically by information pertinent to someone's feelings even in that person's absence" (1982a, p. 288).

Although research on adults has shown a causal relationship between empathy and helping behavior (see Batson et al 1989), research concerning the same association in children has inconsistent results. However, negative findings (Underwood & Moore 1982, Eisenberg & Miller 1987) may be due to problems with the picture/story procedure, the most common procedure used to assess children's empathy, which has been questioned on both methodological and conceptual grounds (see Eisenberg 1986).<sup>18</sup> When spontaneous facial/gestural responses are used as an indicator, empathy is also only sometimes found in preschool children to be positively associated with helping (Chapman et al 1987, see Eisenberg & Miller 1987). However, Eisenberg et al (1988) argued that the nonsignificant relations may be due to the failure to differentiate between sympathetic reactions and personal distress. They found that sad/concerned expressions (an indicator of sympathy) were positively associated with spontaneous prosocial behaviors; anxious expressions (an indicator of personal distress) were not. Children's self reports were unrelated to facial/gestural expressions and helping behaviors, a result consistent with the view that the nonsignificant relations between empathy and children's helping behaviors may be due to methodological problems.

<sup>17</sup>Hoffman called it "a fusion of unpleasant feelings and of stimuli that come from the infant's own body" (1982a, p. 287).

<sup>18</sup>FASTE (Feshback and Roe Affective Situations Test for Empathy) is the most popular instrument in the picture/story method, which is designed for young, school-age children and consists of 8 stories, depicting emotions of sadness, anger, fear, and happiness. The children are told a brief story with pictures showing, then they are asked to indicate how they feel. Many researchers modify FASTE in their studies.

It is not clear that the short stories induce empathy (Eisenberg-Berg & Lennon 1980); some stories may induce more than one type of emotion, such as fear or anger (Hoffman 1982b); since the children are repeatedly asked how they feel, their answers might be affected by social desirability (Eisenberg & Lennon 1983; Hoffman 1982b); children's answers vary depending on experimenters' sex and children's sex (see Eisenberg & Lennon 1983). Moreover, the children have to be able to label their feeling correctly, and for young children this may be a difficult task (Eisenberg-Berg & Lennon 1980).

### *Prosocial Moral Reasoning*

Children's prosocial moral reasoning changes with age. Studying children's prosocial reasoning about a hypothetical dilemma<sup>19</sup>, Eisenberg and her associates (for review, see Eisenberg 1982, 1986) found that during the elementary school years, hedonistic reasoning decreases, while needs-oriented reasoning increases until the age of 7–8 (Eisenberg & Lennon 1983, Eisenberg et al 1984). Stereotypic and approval-oriented concerns increase in the elementary school years, and then decrease in high school (Eisenberg et al 1984, Eisenberg-Berg 1979). Self-reflective, empathically oriented concern was hardly used by elementary school children, but it increased with age into high school. Reasoning about internal values is very infrequent in school age children but is salient in some high school students (Eisenberg et al 1984, Eisenberg-Berg 1979). Research has shown that there are positive associations between moral reasoning and prosocial behaviors. For a complete review, see Eisenberg (1982, 1986).

### *Self-Attributions of Motivations To Help*

Based on studies of children's self-attributions about their own helping behavior, Bar-Tal proposed six phases in the development of helping behavior (Bar-Tal & Raviv 1982), moving from concrete rewards to true altruism as the child develops.<sup>20</sup> Bar-Tal and his associates found that older children are more likely to help without being told or offered rewards: young children reported altruistic motives relatively infrequently, but these increased with age (Bar-Tal & Nissim 1984; Bar-Tal et al 1980). Levin & Bekerman-Greenberg (1980) categorized kindergarten, second, fourth, and sixth grade children's answers, regarding why they did or did not share, into five levels, similar to those used by Bar-Tal. Eisenberg and her associates have also

<sup>19</sup>Eisenberg and her associates constructed five levels of prosocial moral reasoning: 1) Hedonistic, self-focus orientation: self concerned not moral concerned. 2) Needs-oriented: concerning other's need even though the other's needs directly conflict with one's own need. 3) Stereotyped orientation: Judgments based on stereotyped images of good or bad persons or on other's approval. 4a) Self-reflective empathic orientation: concern with other's humanness. 4b) Transitional level: Concern for the larger society. 5) Strongly internalized stage: judgment based on internal values, norms, or responsibility.

<sup>20</sup>1) Phase 1: Compliance-Concrete and defined reinforcement. Children help because they are asked to do so and the request is accompanied by concrete rewards or threats of punishment. 2) Phase 2: Compliance. The motivation for help is compliance with authority. Concrete reinforcements are not necessary. 3) Phase 3: Internal initiative—concrete reward. Helping behaviors are voluntary but are motivated by the anticipations for rewards. 4) Phase 4: Normative behavior. Compliance with social demands and social norms. 5) Phase 5: Generalized reciprocity. The belief that reciprocal social contracts (i.e. if they help others when they are in need, others will help them in return) motivates the helping behaviors. 6) Phase 6: Altruistic behavior. Helping behavior is motivated by benefits to another person.

examined children's reasoning about their own naturally occurring helping behaviors (Eisenberg et al 1984).

These authors conclude that preschoolers' and elementary school children's self-report reasoning for helping are predominately pragmatic, empathic, or reward oriented. However, from age 4 to elementary-school years, reward-oriented motives seem to decrease, while other-oriented, altruistic motives, and normative reasons increase. In summary, "it appears that the cognition associated with children's prosocial actions becomes more internal and less related to external gain with development" (Eisenberg 1986, p. 92).

### *Sensitivity to Social Norms*

The increases of helping behaviors may be due to the greater sensitivity to social norms. Cialdini et al (1981) proposed a three-step process for the development of altruism: presocialization, awareness that others value altruistic behaviors, and finally the internalization of altruistic norms. If children are in the second stage, they should donate more when they know the social expectations. Forming et al (1985, study 1) found that second and third graders, but not first graders, increased their donations when an evaluative audience was present. Zarbatany et al (1985) studied first, third, and fifth graders and also found that: "Older children were indeed more generous than their younger counterparts, but only under conditions of at least moderate and detectable adult influence. Where such influence was minimal, fifth graders were no more generous than were younger children" (p. 755). However, some studies have also found that generosity does not increase linearly: second graders (seven-year olds) donated less than either younger or older children (Forming et al 1985, study 1; Forming et al 1983; Grunberg et al 1985).

## PROCESSES IN THE DEVELOPMENT OF ALTRUISM

### *Modeling*

According to social learning theory, behaviors can be learned through observation of others, who are referred to as "models" (Bandura 1977). Experimental studies have consistently shown that children display greater generosity when they are exposed to generous models than to selfish models (Lipscomb et al 1982, 1985; also see Rushton 1980). Inconsistent modeling has predictable effects. Lipscomb et al (1985) found that children exposed to a model who behaved inconsistently (once generously, once selfishly) donated less than children exposed to a consistently generous model, but more than children exposed to a consistently selfish model. Studies (Lipscomb et al 1982, 1985) also found that older children—who have presumably internalized social norms—were less affected by the models' behaviors than were kindergarten-age children.

Parents are models for children (for an extensive review on family influences on children's helping behaviors, see Radke-Yarrow & Zahn-Waxler 1986). A study by London (1970) of 27 rescuers of Jews concluded that the rescuers were characterized by "an intense identification with a parental model of moral conduct" (p. 245). Rosenhan (1970) found that "fully committed" civil rights workers differed from those who made only one or two freedom rides mainly in having had a close relationship with a morally committed parent or other person. B. Berkowitz (1987) found that a large proportion of "local heroes"—a group of 20 people who had started grassroots community organizations—spontaneously mentioned the influence of one or both parents. Almost 60% of a sample of 237 first-time college donors said that someone in their families gave blood, and of that 60%, nearly half stated that the family members gave regularly (Piliavin & Callero, in press). One experimental study has also demonstrated a positive impact of modeling on blood donation decisions among adults (Rushton & Campbell 1977).

### *Parental Child-Rearing Practices*

Hoffman (1984b) pointed out the importance of parental discipline: "It is only in discipline encounters that the child may have the earliest experience of being expected to control his deviant actions for reasons that derive from his own active consideration of these norms" (p. 120). Generalizing from a large body of research, Hoffman concluded that "(1) a moral orientation characterized by independence of external sanctions and by high guilt is associated with the use of inductions . . . , discipline techniques that point up the effects of the child's behavior on others; (2) A moral orientation based on fear of external detection and punishment. . . is associated with the frequent use of power-assertive discipline . . . ; (3) that the occasional use of power assertion to let the child know that the parent feels strongly about a particular act of value, or to control the behavior of a child who is acting in an openly defiant manner . . . may make a positive contribution to moral internalization . . . ; (4) there appears to be no relationship between moral internalization and love withdrawal. . . ." (p. 120–21).

Karylowski (1982) points out that "endocentric" and "exocentric" altruism may be developed on the basis of somewhat different child-rearing practices. No consistent relationship between the use of love withdrawal and altruism has been found, although this technique has been consistently associated with the development of other positive moral behaviors. However, he found that mothers of endocentric girls used love withdrawal, persuading a child to apologize, indefinite labeling (e.g. "Good kids act like. . ."), and pointing out inconsistencies between the child's behavior and some social role.

Marwell (1982) has proposed that we learn to be happy when others are

happy and sad when they are sad because of our inherent dependence on those around us, mainly parents. We learn that "When others in our environment are unhappy they tend to punish us, even when we are not the source of their unhappiness." Presumably those who have been more dependent, or more perceptive regarding their dependency, will grow up to be more oriented towards satisfying the needs of others.

### *Learning by Doing: The Impact of Helping on the Helper*

Attribution theory (Heider 1958, Kelley 1967) suggests that if we perceive that we have taken an action ourselves, without external coercion or large reward, we are likely to attribute to ourselves a predisposition toward that action and to be more likely to act in ways consistent with it. Consistent with the theory, people *perceive* themselves to have acted less altruistically if they helped (a) after being offered money as an incentive, (b) under reciprocity pressures, that is, if the person they helped had previously helped them, or (c) if normative expectations to help had been made salient (Batson et al 1978, Thomas & Batson 1981; Thomas et al 1980). One would also expect that those who have helped in the presence of such extrinsic pressures will be less likely to help on another occasion because they are less likely to attribute altruistic motives to themselves. After a review of such research, it was concluded, "These studies suggest that, over time, the use of extrinsic pressure to elicit helping from morally mature adults can backfire" (Batson et al 1987, p. 595).

Lightman (1982) has reported that changes in the motivations reported by blood donors are important both for their initial decision and for their most recent decision. External motivations decreased in importance—company of a friend, persuasion or encouragement by others, there being a blood drive or an emergency, while internal ones—a general desire to help others, a sense of duty, and support for the work of the Red Cross—increased. The author concludes (p. 64), "With the repeated performance of a voluntary act over time, the sense of personal, moral obligation assumed increasing importance as a motivator; a supportive and favourable context in general became much less vital."

In support of this conclusion, a correlational analysis of a longitudinal sample of college donors revealed that the number of donations was significantly related to change in the overall strength of motivation, to decreases in saying that they gave so as not to disappoint others, and to increases in reporting that they were motivated by moral obligation and a sense of responsibility to the community (Piliavin & Callero, in press). The effects were stronger among donors who reported no external justifications (e.g. a blood drive) at their most recent donation.

### *Role Identities*

Some theorists (McCall & Simmons 1978, Stryker 1980, Turner 1978) suggest that commitment to some behaviors can reflect the development of a significant "role-identity," which can become an important dimension of the self. Analyses of a longitudinal sample of adult blood donors found that the two main factors leading to commitment to such a role-identity are repeated donations and the perceived expectations of significant others that one will continue donation (Piliavin & Callero, in press; Callero 1985, 1985–1986; Charng et al 1988). Once developed, this sense of self becomes the primary factor influencing intentions to continue giving blood; intentions and habit were the only significant predictors of continued donation.

### *The Effect of Having One's Help "Spurned"*

Rosen et al (1985–1986, p. 147) propose that "the spurning of . . . altruistic offers has deleterious implications for the mental health and ensuing behavior of those would-be helpers," because rejection has negative implications for the self. The authors cite three correlational studies indicating that client resistance is stressful for professional helpers (Farber 1983), adversely affects their liking for clients (Wills 1978), and may contribute to "burnout" (Pines 1982). Rosen et al (1987) find, based on five studies, that "rejected" subjects had more negative feelings than those whose offer of help was accepted, and the former rated the person in need of help more negatively on one or more scales. Unfortunately, the impact of rejection on the potential helper's altruistic self-concept was not measured.

Being rejected from blood donation also leads to negative mood, to decisions that one is the kind of person who should not give blood, and to lower estimates of the likelihood of return to give again. In five separate samples, temporarily deferred donors are less likely to return; the effect is stronger among early career donors. (Piliavin & Callero 1990; Evans 1981; Piliavin 1987) Thus, it would appear that experiencing rejection *does* affect a would-be-helper's self-image.

## IS ALTRUISM INNATE?

If altruism is part of human nature, it may have a genetic component. Before rejecting this notion out of hand, please remember that we have a great deal in common with other animals.<sup>21</sup> Dennis Wrong, in his classic paper, "The

<sup>21</sup>For example, According to Britten (1986) we share over 98% of our DNA sequences with the chimpanzee, and over 92% with the old world monkeys.

oversocialized conception of man in modern sociology," reminded us, "In the beginning, there is the body (1961, p. 191)." We share the lower centers of our brains—where the "fight or flight" mechanisms operate—with all other vertebrates (MacLean 1973). Many other social animals engage in clearly altruistic behavior: birds give predator alarms; mother rats endure severe shock to rescue their young; baboons help defend their troops; porpoises buoy up their injured fellows. It is parsimonious to assume that we at least share *tendencies* toward similar actions.

Of course, we no longer believe that the higher mammals—such as human beings—usually act under the control of instincts. Vine (1983) stresses that genetic involvement does not imply that traits must be fixed action patterns, essentially suggesting that a variety of traits related to altruism could underly such acts. And MacDonald states, "Altruism, attachment, and the affective systems generally are environment-expectant systems, i.e. systems in which genes specify not the behavioral phenotype, but the reaction of the organism to the environment . . . there may indeed be a biologically based empathic emotion that gives rise to altruistic behavior. However, the affective responses to the models in one's environment as well as the actions of the models are also important in determining the circumstances under which altruistic behavior actually occurs" (1984, p. 107). Hill (1984) points out that, "It is very unlikely that these "social genes" program for a particular pattern . . . they only permit or facilitate the learning of certain forms of behavior and also the internalization which may accompany the learning during socialization" (p. 23).

Secondly, sociobiologists have now demonstrated mathematically (Boorman & Leavitt 1980) and by means of computer simulations (Morgan 1985) that under certain conditions, there are three separate selection processes that can actually lead to the establishment and perpetuation of "altruist" genes in populations. In *group selection*, an altruistic gene can become established if mating takes place in relatively isolated groups, and whole groups will survive or die based on their genetic composition. An altruist gene that got started in such a small group could very well lead to a better outcome for that group relative to other groups. *Kin selection* occurs if self-sacrificing behavior is more likely to benefit others with whom one shares a high proportion of genes. That is, if the altruist dies but saves many brothers, sisters, and cousins who also carry altruist genes, more altruist genes are perpetuated than if the altruist had lived.

*Reciprocity selection* operates if the bearers of an altruist gene—whether they are related or not—are more likely to benefit each other by their altruistic behavior than to benefit random others. Reciprocal altruism is a tricky concept, defined initially by Trivers (1971) as involving (a) a cost to the altruist, (b) a benefit to the recipient, and (c) a "significant" delay between the

time the recipient receives a benefit and repays the altruist.<sup>22</sup> Because of the “payback” aspect, many authors claim that “reciprocal altruism isn’t altruism” (Krebs 1987, Sober 1988).

Morgan (1985) provides a computer simulation of the development of altruism under varying circumstances in a population divided into “clans.”<sup>23</sup> The results show that, if clans do not divide into smaller groups as they grow, it is only under reciprocity conditions that an altruistic gene is able to establish itself. However, when clans do split, and interaction is “clannish”—that is, ingroup oriented—the gene can establish itself under any of three circumstances, whether altruists benefit only kin or only other altruists, or extend benefits to everyone. This study thus provides evidence for the operation of all three possible mechanisms of selection.<sup>24</sup> It is clearly possible that altruism could have evolved as a characteristic of our species.

Finally, from what we can infer based on present day hunting and gathering societies, early humans probably lived in rather isolated groups, mainly composed of close kin. This is exactly the circumstance that—according to these analyses—should most facilitate the development of a genetic predisposition to altruism. They were regularly exposed to danger from predators, making the evolution of warning and rescue behaviors adaptive. And the relative randomness of individual success in obtaining food should also have made the development of reciprocity adaptive.

### *What Might Be the Components of an Inherited Predisposition to Altruism?*

The two main processes that presumably underlie the establishment and maintenance of an altruistic gene in the population are kin selection and reciprocity selection. Assuming this, what sorts of characteristics would we expect to be selected for?

<sup>22</sup>A critical problem for the evolution of strictly defined reciprocal altruism (RA) is that it is hard to see how a new gene for RA could become established. If the frequency of the gene is very low, its bearer will not be likely to meet other RAers, and will be “giving away” its benefits at costs. Rothstein & Pierotti (1988) suggest that other noncostly forms of social behavior could have evolved first, through the operation of kin selection. A generalization of these behaviors to a “time-lagged” form could then more easily have occurred. Moore (1984) also suggests that RA could get started through sharing of resources under circumstances in which this was not costly, such as meat sharing among primates.

<sup>23</sup>The three experimental variations involve, first, whether or not clans divide when they get large; second, whether interactions are limited to clan members or randomly distributed; finally, whether altruists extend benefits (a) to anybody, (b) only to other altruists, or (c) only to other clan members.

<sup>24</sup>The simulations also demonstrate that in clans containing both altruists and nonaltruists, individual altruists have lower survival and leave fewer descendants. However, the more altruists there are in a clan, the better off the clan members are, on average.

### *Cognitive Factors in the Evolution of Altruism*

THE PROBLEM OF RECOGNITION. For kin altruism, the potential altruist must be able to recognize (consciously or unconsciously) who its kin are, and for reciprocal altruism, it is critical that individuals bearing the reciprocity gene must be matched with each other. In proposing genetic similarity theory, Rushton et al (1984) suggest that recognition of the fact that the other is genetically similar underlies both types of selection. They present data showing that a wide variety of animals (e.g. quail, ground squirrels, macaques) reared apart can recognize their relatives and that animals (including humans) mate with those more like them chromosomally. They also bring in the social psychological literature on similarity and attraction and ingroup ethnic preferences in support of their thesis.

The economist Margolis (1982) presents an economic model based on evolutionary theory which assumes that each person has two kinds of preferences: group-oriented and self-oriented.<sup>25</sup> In trying to define the "group" in which an individual might have an interest, Margolis notes, "Specifically, we would expect that the cognitive cues that identify group-interest would have evolved from cues that originally developed as means of identifying kin . . . or cues that served to identify individuals with whom a reciprocity relation exists. For we would suppose that group-commitments arise when evolutionary conditions are such . . . that propensities that have their roots in strictly 'selfish gene' motivation are perpetuated beyond the conditions in which they arose" (p. 48). He later adds that "The Darwinian viewpoint suggests that group-loyalty is triggered by perceived similarities . . . group-loyalty is encouraged toward others who look like us, have similar tastes, follow similar customs, speak the same language, and so on" (pp. 128–129).

Studies provide evidence for kin recognition among humans. New mothers are able to identify their newborn infants by sight or by odor. Unrelated individuals were also able to match mothers and infants with above chance accuracy using the same cues (Porter 1987). Glassman et al (1986) make the following assumptions: (a) each person has critical traits in the self that s/he most highly values, (b) the genes that underly these traits are widely disseminated, (c) individuals will use the possessors of these traits—perceived or sensed through "emotional affinities"—as targets of altruistic efforts. For this selection to work, one need only assume a greater than zero accuracy of trait detection.

DETECTING CHEATING. For reciprocal altruism to develop, there must also be ways of detecting and punishing those who do cheat or of socializing them

<sup>25</sup>He assumes that self-oriented preferences include one's immediate family, and claims that this has all along been a common assumption among economists (rather neatly assuming kin selection). The group (of group-oriented preferences) can be defined narrowly (e.g. a friendship group) or broadly (one's nation, the world).

in such a way that they refrain from cheating. Moore (1984) suggests that the ability to learn quickly, and the propensity to learn the right things (e.g. I get punished for behaving selfishly) may really underlie the development of reciprocal altruism. The arguments of Rushton et al (1984) and Glassman et al (1986) also suggest that intelligence—or at least perceptiveness—should be a factor in successful altruistic action. Cunningham (1985–1986) suggests that “Attributional processes which sometimes precede helping, that involve determining whether the misfortune afflicting the beneficiary was externally or internally caused, may have developed to prevent investment in those who create problems for themselves and are poor risks for reciprocation” (p. 56).

Several writers (Vine 1983, Lopreato 1981, Badcock 1986) focus on the possibility that the capacity for self-deception might have developed in connection with reciprocal altruism. Since being a nonaltruist among altruists is the best possible survival strategy, as long as one is not caught, the ability to deceive both others and oneself regarding one’s altruism would be adaptive. In a theory of altruism that provides a Freudian dynamic linkage between genes and behavior, Badcock (1986) discusses the role of the defense mechanism of repression in this connection. He cites Trivers (1981) as follows, “cheating must be disguised—increasingly—even to the actor himself” (p. 26). “As mechanisms for spotting deception become more subtle, organisms may be selected to render some facts and motives unconscious, the better to conceal deception. In the broadest sense, the organism is selected to become unconscious of some of its deception, in order not to betray, by signs of self-knowledge, the deceptions being practised” (p. 35). Taylor & McGuire (1988) point out that the theory of reciprocal altruism has had an important influence on “our understanding of cheating and on the evolutionary issues associated with detecting noncooperators.” These issues are the same as those dealt with under the rubric of “free riding” in the economics literature.

### *Emotional Factors in the Evolution of Altruism*

Hoffman (1981), Cunningham (1985–1986), and MacDonald (1984) all implicate empathy as the prime candidate for an inherited capacity closely allied with the evolution of altruistic tendencies.<sup>26</sup> In the view of MacLean (1973), the brain structures required for primitive empathy were present early in evolution, making it hard for social beings such as our ancestors to ignore the pain or distress experienced by another.

A wide range of other emotions are suggested as concomitants of the evolution of altruism and as proximal mechanisms by which the altruistic gene might operate. Vine (1983, p. 4) quotes Trivers that reciprocity selection

<sup>26</sup>Hoffman, for example, notes that 1- and 2-day-old infants will cry in response to the sound of another infant’s cry.

will tend to favor the evolution of strong emotions, "not only of liking and gratitude, but of hatred and indignation when aid is not reciprocated as expected . . . guilt at failure to reciprocate, and consequent 'reparative altruism' . . . highly elaborated cognitive-affective capacities and dispositions for the moral regulation of social relationships and interactions." Moore (1984) proposes that selection for sharing (which is not costly) could lead to positive emotions also being associated with all forms of helping. "Conscious manipulation of these emotions could then form the basis of a generalized, or societal, reciprocity ethic such as is now found in humans (Trivers 1971) and possibly odontocete cetaceans [whales and porpoises] (Connor & Norris 1982)." Trust is another possible candidate for an important related affective dimension of relevance.

### *Sociological Concepts in Relationship to the Evolution of Altruism*

A number of writers bring in the concept of social norms as ways in which reciprocal altruism, once established, may be enforced (Morgan 1985, Taylor & McGuire 1988). Lopreato notes that social approval, used to reward conformity to norms, is a "sign that we are doing right as well as a *promise of future reward*. This latter property . . . may have facilitated the evolution . . . of the need for approval" (1981, p. 120). Hill (1984) discusses sociocultural and biological evolution in relation to each other. One conclusion is that the desire to attain prestige—a psychological extension of the dominance relations of other animals—may underly some acts of altruism.<sup>27</sup>

### *Evidence in Support of Sociobiological Hypotheses*

Direct evidence for the heritability of altruistic tendencies comes from a study of 1400 adult monozygotic and dizygotic twins by Rushton et al (1986). Heritability estimates of 56%, 68%, and 72% were obtained for the three traits of altruism, empathy, and nurturance; for all three scales, about 50% of the variance was attributable to genetic effects. Similarly, Segal (1984) found striking evidence for greater cooperation between monozygotic than between dizygotic twins in an experimental study. Thirty-two out of 34 (94%) pairs of monozygotic but only 6 out of 13 (46%) dizygotic pairs completed a cooperative experimental puzzle task. On a second task, on which the choice was to work for self or other, monozygotic twins also worked significantly harder than did dizygotics for their co-twins. On the other hand, Simmons et al (1977) found that 86% of parents, but only 47% of siblings, who were eligible agreed to donate a kidney to their relative when asked. Since both parents and

<sup>27</sup>Food-sharing in primates is related to their place in dominance hierarchies, and in many cultures (e.g. the Kwakiutl) gift-giving is used to enhance prestige.

siblings share half of their genes, this difference must reflect mechanisms other than genetic ones. Based on extensive research on twins, Plomin (as quoted in Franklin 1989) believes that “ ‘niceness’—whether a person is more trusting, sympathetic and cooperative . . . is much more influenced by environment—mostly early environment—than by genes” (p. 38).

A number of studies involving role-playing or “as if” methods (Bar-Tal et al 1977, Cunningham 1983, M. R. Cunningham, J. Jegerski, & C. L. Gruder, in preparation) found that closeness of kinship was associated with expectations that help would be given, with resentment were it to be withheld, and with willingness to provide aid. Using anthropological data Essock-Vitale & McGuire (1980) found support for four hypotheses: (a) Kin will be given more unreciprocated help than nonkin; (b) kin will be given more help than nonkin, with close kin receiving the most help; (c) friendships will be reciprocal; and (d) large gifts and long-term loans are most likely to come from kin. Following 300 interviews with women, Essock-Vitale & McGuire (1985) found that exchanges (financial, emotional, illness-related, etc) with blood relatives (both giving and receiving) were the most common, and the more important the help, the more likely it was to come from kin.

A sociobiological perspective would predict that we would be more likely to help others perceived as similar or those to whom we felt close kin-like ties. Midlarsky (1985–1986) explored the dimensions of the identification of non-Jewish helpers with potential Jewish victims during the Holocaust, and derived three: political, theological, and socioeconomic. Experimental research has also shown that similarity in attitudes, personality, political opinions, and national identifications between the victim and the potential helper promotes helping behaviors. The effect of similarity in race depends on the situation (for a review, see Dovidio 1984; see also Piliavin et al 1981).

Oliner & Oliner (1988) found that rescuers of Jews had somewhat more information about Jews and closer ties with Jews. Simmons et al (1977) had potential kidney recipients rate their emotional closeness to all possible donors before the choice of a donor was made; recipients felt very close to 63% of the eventual donors but to only 42% of the eventual nondonors. Within sibling donor-recipient pairs, donors were significantly closer in age and were more likely to be of the same sex than were nondonors. Although each of these studies is individually open to methodological criticism or to alternative interpretations, most are at least consistent with the possibility that there are hereditary components to human altruism. The same results could of course also occur through a variety of social-psychological processes, such as normative pressures to favor those who are close friends, kin, and similar.

## ALTRUISM AND THE PROVISION OF PUBLIC GOODS

It is within the arena of the provision of public goods that the question of altruism has arisen for economists. As Kim & Walker (1984) put it, "Economic theory . . . makes the . . . prediction: that the free rider problem will cause a group to provide itself with no more than a minimal level of the public good, even when every member of the group could be made better off if the public good were provided at a much greater level" (p. 3). The findings in the area clearly disprove this expectation (Marwell & Ames 1981; see Messick & Brewer 1983 for a review). Although there are clearly individual differences in the extent to which individuals contribute to public goods (see Personality section, above), and although the level of "free riding" is such that the optimal levels of provision of public goods are seldom attained, the "strong version" of the free rider hypothesis is almost never supported (for two exceptions, see Kim & Walker 1984, Isaac et al 1985). Marwell & Ames found support for it only when economists were used as subjects.

### *Potential Solutions to Social Dilemmas*

Messick & Brewer (1983) suggest that there are two classes of solutions to the problems posed by free riding in social dilemmas: individual and structural. Individual solutions depend for their success on changing the attitudes, motivations, perceptions, and eventually the behavior of individuals without altering the essentially voluntary nature of contribution. Structural solutions follow the recommendation of Garrett Hardin (1968), who believed that the only way to change behavior in such situations was through "mutual coercion, mutually agreed upon." Most recent work in social dilemmas has focussed on these issues.

### *Individual Level Solutions To Social Dilemmas*

**COMMUNICATION** The most effective alteration in the social dilemma aimed at individual change is allowing communication among the members. Why does this work? (a) Communication allows group members to develop a strategy in which a subset is designated as those who are to contribute (Braver & Wilson 1986, van de Kragt et al 1986). (b) Discussion reveals or helps develop group norms, group identity, and "other-regarding sentiments" (Braver & Wilson 1986, van de Kragt et al 1986, Orbell et al 1988). (c) Communication makes public the intentions of individual others and allows for the development of trust, eliminating the fear of being a "sucker" (Orbell et al 1988). This fear of being taken advantage of if one contributes is, of course, at the heart of the free rider problem.

Other ways of developing a sense of group identity ought also to increase

cooperation—or altruism—in social dilemma situations. Kramer & Brewer (1986) report four experiments in which groups of three subjects were led to focus on either a subordinate group identity (e.g. college student) or a superordinate identity (resident of Santa Barbara) when playing a dilemma game, purportedly with another subgroup of three (e.g. elderly Santa Barbara residents). The authors state, “In general, individuals were found to be more likely to exercise cooperative restraint to conserve an endangered resource when a collective level group identity was present” (p. 225).

**EFFECT OF INFORMATION** A number of recent studies have explored the effect of information on the development of cooperative behavior in social dilemmas. Allison & Messick (1985) and Powers & Boyle (1983) found positive effects of providing feedback on cooperation; Schroeder et al (1983) found that subjects who were able simply to make comparative appraisals of the actions of others *decreased* in cooperation through a modeling mechanism.

### *Structural Solutions To Social Dilemmas*

Legislation has typically been the route by which “fairness” has been regulated in the marketplace. Baumol (1975) points out that “social responsibility” can’t work for corporations, because their job is to make money for their stockholders. His solution is what he calls “meta-voluntarism”—systematic cooperation in the design and implementation of measures that are basically involuntary—rather than the current situation of resisting all regulation.

A few investigators have examined experimentally what circumstances might lead groups to opt for such structural solutions to social dilemmas as electing a leader to make the decisions or privatization of the public good (Messick et al 1983; Samuelson & Messick 1986a, b; Samuelson et al 1984, 1986). These authors looked at both subjects’ individual “harvesting”—taking resources from the common pool—and their willingness to vote for structural change. In general, the efficiency of use variable—whether the resource pool is being under-, over-, or optimally used—had an effect on harvesting, with subjects taking more in the underuse condition. Subjects in the overuse conditions also voted overwhelmingly for the structural solution of electing a leader, while those in the underuse and optimal use conditions seldom did. In contrast, the inequity factor—whether there is wide variation in how much different individuals are taking—has different effects in the United States and in the Netherlands. It affects harvesting only in the United States,—the greater the variability, the more individual subjects take from the pool—and affects willingness to vote for structural change only in the Netherlands. It seems, then, that the perception of differences in altruism leads to an individualistic solution, namely, “I’m going to get mine,” in a highly in-

dividual-oriented country, the United States, and to a collective solution in a more socialist society, the Netherlands.

### *On the Impossibility of Sharing with Everyone*

In a paper entitled "Discriminating altruisms," Garrett Hardin (1982) states the following, "A species composed only of pure altruists is impossible" (p. 164), and "The central characteristic of all forms of altruism is this: *discrimination is a necessary part of a persisting altruism*" (p. 167). By this he means that a propensity for altruism towards any- and everyone could not logically have evolved, because such individuals inevitably lose out in competition with egoists. It is only when there are groups that *reciprocally* benefit each other more than they benefit other people that an altruist tendency can survive. As soon as it becomes universal altruism, however, it is doomed. He points out some of the mechanisms through which his "discriminating altruisms"—selectively helping only certain people and not others—presumably operate: the power of loyalty and the pleasure of serving a cause greater than oneself. These clearly are operating in the social dilemma situations we have just been discussing. When groups are given the opportunity to communicate, free riding diminishes; the reasons involve the development of a sense of group identity, "other-regarding sentiments", trust, and expectations of reciprocity. It is only with complete anonymity, lack of connection with others, and strong economic incentives towards selfishness that classical economic theory can be expected to operate in the real world (Kim & Walker 1984). The rest of the time—given half a chance, in other words—at least "moderate altruism" (Sober 1990) will often appear.

### *"Altruistic" Voting*

What is the evidence regarding the willingness of citizens to tax themselves for the benefit of others? The major theoretical approach to voting behavior has been essentially the same as classical economics (Becker 1976). Rasinski & Rosenbaum state, "this perspective predicts that citizens will be responsive to increased taxation to the extent that this taxation is in their economic self-interest" (1987, p. 991). While no one would suggest that voters completely ignore their own interests, a newer perspective proposes that non-self-interested factors form the basis for political behavior (see Rasinski & Tyler 1986, for a review). These factors include a sense of civic duty (Katosh & Traugott 1982), public-regardingness (Wilson & Banfield 1964), and concerns about justice (Tyler & Caine 1981; Tyler et al 1985). Rasinski & Rosenbaum state (1987, p. 992), "In fact, . . . research suggests that the citizen's sense of public responsibility may completely overcome his or her own self-interest when making decisions about public services and the funding of such services" (Cook 1979, Smith 1982, Wilson & Banfield 1964).

Rasinski & Tyler (1986) found that non-self-interested factors (e.g. concern for the quality of education and sympathy with teachers over low salaries) carried more weight in predicting hypothetical votes for school tax increases in a school district in Illinois than did self-interest (e.g. home ownership or having children in school). "This suggests an unusually unselfish willingness to sacrifice some of one's own gain in order that those crucial to the maintenance of quality schools receive better treatment" (p. 1002). The authors point out the consistency of this finding with prior work showing strong public support for policies that benefit the general social welfare.

### *The "Third Sector" and the Provision of Public Goods*

Weisbrod (1975) has analyzed the participation of the voluntary nonprofit sector in a three-sector economy (the other sectors are public—government—and private) in the provision of public goods. One conclusion based on his work is that "The function of third sector institutions is thus to voice and act on the demands not of the general body but of minorities whose demands differ in kind or in degree from those of the majority . . ." (Douglas 1983, p. 118). Some of the public goods we want are altruistic—that the old, the poor, and the infirm be cared for adequately. "Weisbrod's model suggests that there will be a minority that believe in a higher level of social services than that for which most of their fellow citizens are willing to pay" (p. 149), and that voluntary action is the answer.

### *Voluntary Organizations and Volunteering*

Alexis de Tocqueville (1974, Part 2, p. 485) said, "The Americans make associations to give entertainments, to found seminaries, to build inns, to construct churches, to diffuse books, to send missionaries to the Antipodes . . . Wherever at the head of some new undertaking you see the government in France, or a man of rank in England, in the United States you will be sure to find an association."

What do we know about volunteers? A survey of 1753 individuals, 14 years of age and older (Americans Volunteer 1981), found that among regular volunteers, the 30% who had done two or more hours per week within the last three months, the median number of hours worked per week was 4. Extrapolating this to 30% of perhaps 150 million adults in the United States suggests over 9 billion volunteer hours worked per year, which at minimum wage of \$3.25 per hour comes to roughly \$30 billion of free work.<sup>28</sup> The three top areas of participation were religion, education, and health.

<sup>28</sup>Clotfelter (1985) states, "In 1980 as many as 80 million Americans did some volunteer work, spending the equivalent of about 8 billion hours in such activity. The market value of this time has been estimated to be on the order of \$60 billion . . ." (p. 3).

Volunteers generally give "altruistic" reasons for becoming involved, such as feelings of obligation to the community and wanting to help others (Americans Volunteer 1981, Sills 1957, Pearce 1983). However, self-oriented reasons are also very common, such as interest in the activity, perceived benefits to those they know, getting job experience, enhancing social status, or simply having social contacts. Two studies of the elderly (see Chambré 1987) suggest that, for them, self-fulfillment is a more important motivation than altruism.

In a case study of 70 heavily involved "society" women, Daniels (1988) reports their primary motive to be a sense of moral obligation to do something for the community because of their privileged position—rather a sense of "noblesse oblige." "They give generously because they have become affluent . . ." (p. 204). It was also clear, however, that their activities provided prestige, power, and the ability to satisfy ambitions from which these intelligent, college-educated women were otherwise blocked.

### *Private Philanthropy*

By far the commonest form of voluntary action in the United States is the donation of money to charitable causes. In 1982, charitable giving by individuals amounted to \$48.69 billion, plus another \$5.45 billion in bequests (Clotfelter 1985). The three most popular areas for voluntary work—religion, education, and health—are also the most popular areas for financial contribution (Reddy 1980).<sup>29</sup> Social desirability, wanting recognition, getting ahead in one's career, expectations of respect from significant others, identification with certain groups (e.g. Jews with Israel), positive attitudes to the community are all important motives in addition to altruism. So are positive or negative attitudes towards the particular charity, especially issues of relative administrative costs and the kind of clients served. "In contrast to the negligible effects of . . . do-good motives the motivation to reduce taxes is the most powerful single variable in those studies that have included it (Reddy 1980, p. 391)."

Reddy (1980) reports seven studies between 1957 and 1975 that have found relationships between participation in voluntary associations and giving: the more participation, the more contributions. Americans Volunteer (1981) also found that volunteers are more likely to give money to charity than are nonvolunteers (91% vs 66%).

### *Helping in Disasters*

Dynes & Quarantelli (1980) reviewed a large number of studies on responses to disasters. Generally, rather high proportions of individuals help under

<sup>29</sup>Not all charitable giving is altruistic. Donations to the church provide activities to the members; supporting the symphony ensures its continuation for one's own enjoyment.

disaster circumstances. In an Arkansas tornado and the Wilkes-Barre flood, for example, about 25% reported participating in rescue efforts. In Wilkes-Barre, 4.5% of households provided multiple volunteers, supplying almost 20% of all volunteers. They conclude, "The social-organizational view suggests behavior is best explained as being guided by norms embedded in roles" (p. 347).

### *Blood Donation*

In 1988, about 14 million units of blood were donated in the United States. The literature on blood donation has recently been reviewed (Piliavin & Callero in press, Piliavin 1990), and discussions of some aspects are to be found in other sections of this report. By far the most frequent reason given for donation is humanitarian or altruistic, although many donors will admit to "a feeling of self-satisfaction" or even pride (Piliavin & Callero in press). Three studies (Boe 1977, Needham Harper Worldwide 1986, Weisenthal & Emmot 1979) found that the most active donors were more likely to make charitable contributions and to do volunteer work and charitable fundraising than were nondonors.

### *Posthumous Organ Donation*

Signing a donor card that allows one's organs to be used in the event of one's sudden death can be seen as a form of voluntarism. A review of the psychological aspects of organ donation is to be found in Perkins (1987). Shanteau & Harris (1990), who provide the most up to date "sampler" of current research, state, "the shortage of donated organs is not due to lack of knowledge or awareness of the plight of would-be recipients. Instead, the problem arises from factors such as unstated motivations, perceived risks, and unarticulated fears about donation." Parisi & Katz (1986) report that their cluster analysis revealed two dimensions of attitudes toward posthumous donation: the positive one involved belief in the humanitarian benefits of organ donation and feelings of pride experienced by the donor, the negative, fears of body mutilation and of receiving inadequate medical treatment when one's life is at risk.

### *Conclusions Regarding Voluntarism*

Humanitarian, altruistic reasons are often given by people who volunteer time, money, or blood, but these are not the only—or sometimes the main—motivations. It is usually not possible to demonstrate that altruism is truly a cause of voluntarism, since longitudinal, prospective work on volunteers has not been done. Only in the area of blood donation is it clear that those who express more "altruistic" and "community oriented" motives are indeed more likely to continue in the activity than are those who do not (Piliavin & Callero, in press).

### *Corporate Philanthropy and Social Responsibility*

Corporate contributions for charitable and similar purposes were \$2.7 billion in 1980 (Frederick 1983), \$2.9 billion in 1981, and \$3.1 billion in 1982 (Galaskiewicz 1985). On the other hand, "corporations have never approached the limits of giving encouraged by Internal Revenue Service rules, which until 1981 permitted the deduction of such contributions up to 5 percent of pretax income and now allow up to 10 percent of pretax income. The national average for corporations hovers around 1 percent" (p. 149).

Our focus in this review has been on individual motivations for altruism. Thus, to pursue the "corporate actor" in depth would be to go a bit far afield. Is there any evidence for corporate "altruism?" The answer appears to be "no." Fry et al (1982) note that "Existing literature has focused on three rationales for corporate philanthropy: through-the-firm giving [by owners and managers], corporate statesmanship [social responsibility], and profit motivated giving" (p. 94). Their review of past work and their own results suggest little support for either of the first two possibilities. Their conclusion is that "it would seem ill-advised to use philanthropy data to measure altruistic responses of corporations" (p. 105). In agreement with earlier results of Galaskiewicz (1985), Moore & Richardson (1988) conclude that "Peer group pressure has also been an important aspect of encouraging a growing corporate responsiveness to these social issues" (p. 270). "Rationales . . . based on community or morality . . . had [no] effect at all on the level of company giving" (Galaskiewicz 1985, pp. 215–217). Clarkson (1988) analyzes the "corporate responsibility" of 32 corporations in Canada and essentially concludes that giving is good for business.

Our conclusion from the limited literature we have been able to discover on corporate responsibility is that "enlightened self-interest" rather than altruism is what drives socially responsible behavior in this area. Normative pressures can increase social responsibility, largely because such pressures lead corporate officers to perceive that socially responsible behavior is in the corporation's own best interest. Although individual corporate officers may feel empathy or have "group-oriented feelings," corporations obviously do not. The behavior of those corporate officers, acting for the corporation, must be largely determined by the self-interest of the company. If altruism is seen as based on those feelings, then, corporate philanthropy is not and cannot be altruism.

### IMPLICATIONS FOR INCREASING ALTRUISM IN SOCIETY

In recent years, Republican administrations have called for "a new voluntarism," most recently expressed in Bush's phrase "a thousand points of light." Concurrently, the "taxpayers' revolt" and the Reagan cutbacks in government

support imply that the provision of many services that used to come from the government must and morally ought now to be provided privately. Yet, as more women have gone out to work, the pool of traditional volunteers has begun to dry up—"there is no one to organize the annual town fair, it is nearly impossible to find a mother to organize a Brownie troop . . ." (p. 212, Kaminer 1984). What is the answer?

The altruistic impulse does exist. We have argued in this review that altruism—or at least the willingness to consider others in our overall calculations of our own interests—is natural to the human species. Whether this "naturalness" is encoded in the genes, inculcated through socialization, or based in social norms, we have suggested that the typical person finds a need to participate in cooperative social endeavors that benefit others or the community at large. Terkel writes, "Most of us have jobs that are too small for our spirit. Jobs are not big enough for people . . . most of us are looking for a calling" (p. xxix, 1972). Kaminer says, "Paid work is simply a matter of earning a living. Volunteering is 'doing something you care about.'" (p. 217).

The solution may thus lie in cooperative arrangements among corporations, government, and voluntary action organizations, supported no longer by "stay at home mothers" but by employed men and women. More people will have to contribute, perhaps during lunch breaks, evenings, and weekends. The challenge must be to arouse the altruistic spirit in individuals by using similarity, group identification, "mock kinship," and to use normative pressure against corporations and other institutions in which feelings cannot be aroused, to work together to provide those services no longer available in the public sector.

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