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HOW PEOPLE REASON ABOUT ETHICS[1]

by
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Abstract

We explore the mounting evidence for general uniformities in the way people reason about ethical matters. Both the substance of their reasoning and the methods for discovering how they think are discussed. Regarding substance, we examine both specific ethical values and the balancing procedures which seem to underlie the decisions. Central to any such inquiry are questions of the prevalence of other-regarding behavior and the effects of context and framing on the form of ethical behavior. We discuss the role of the experimental laboratory in gathering useful observational data on ethical matters.

Keywords: ethics, experiments, methodology, reasoning, framing

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Once upon a time there was an independently wealthy social activist. She worked very hard championing the causes of the poor and the oppressed. She did community organizing in poor black neighborhoods and worked at establishing daycare centers. The pay was not great and she had other talents, and so it seemed clear that she was not doing it for the money. Her actions seemed the epitome of ethically motivated behavior. One day she found herself in need of a dining room table and proceeded to the local flea market. There, at a stand presided over by an obviously poor, frail, old black man, she discovered a solid oak dining room table exactly of the sort she wanted. True it was grimy and shabby looking, but she could see that it was of excellent quality, and with a little work could be made to look very fine indeed. And the price was only $45, well below its true market value. And so she proceeded to bargain with that little old man, brought the price down to $40, and walked away with a real deal. The bargain she struck might, in contrast to her behavior in her work, be thought of as ethically questionable.

So, in different contexts, our social activist was capable of both high minded and petty behavior. For our purposes, the moral of the story is that ethical behavior is no simple matter. To understand it, we may have to examine a variety of contextual factors which both induce and mediate it.

Indeed, although ethics has a very long pedigree in philosophy, there is, even now, no universally agreed upon definition of ethics. But by all accounts, ethics deals with some aspects of morality (often identified as the 'applied' side of ethics). And morality always seems to involve relations between oneself and others.[1] For our purposes we will stipulate that a situation involves an ethical question when the best interests of two or more parties do not coincide, or put another way, when the preferred alternatives of the two parties do not coincide.[2] In particular, a sufficient condition for a decision to have ethical content is that, in the decision, improving the payoff to one party requires bearing some cost by another.

Implicit in this definition is the notion that to "resolve" an ethically problematic decision some balancing of one's interests with that of another's must take place. This places ethics near the antipode of self-interest. But most philosophers have long understood ethical concerns to begin with the reining in of self-interest. This is not to

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1/ Of course morality can involve relations between one human and a non-human. Thus we need to keep a broad definition of 'others' in mind.

2/ All distributional or zero-sum issues would, therefore, have an ethical component. This definition obviously doesn't get us to bedrock: after all, what are 'best interests'? On the other hand, we must stop somewhere, and there probably is some agreement as to what constitutes the important interests of a person.

assert the illegitimacy of one's self-interest. Rather, it is to specify the territory under exploration. And, of course, individuals in any situation may, or may not, believe that their choices can affect the welfare of others. Further, that belief may, or may not, be accurate. If the principals lack the relevant information, there may be no ethical component to the behavior even if, with better information, the situation would call for it. Thus, the evaluation of an act as ethical or not must take into account an inherently subjective component. We seek to discover whether there are:

< cognitive conditions which lead one to place limits on self-interest in decision making;

and

< patterns to the limits one places on self-interested decision making i.e. varieties of ethical orientations.

The evaluation of a choice as being ethical or not requires knowledge of whether an individual is actually limiting self-interest or simply acting instrumentally (even if it is in a way that appears to limit those interests) for some other gain. Hence, data for a research program on ethical behavior must be able to reveal whether observed behavior is, or is not, self-interested.[3] It would be most convenient if we could observe humanity's every-day encounters and use these data as the basis for our conclusions. But for reasons which will become clear, we need to go well beyond observing everyday behavior to test for the existence of other-regarding behavior.

For any of our findings to be correctable, we will have to identify, and even measure, empirical other-regarding behavior as a moral or ethical response to situations (see Frohlich and Oppenheimer, 1997). The small building blocks of observations in the experimental literature can be used to build a case regarding the way we, as human beings, reason about ethical matters. We will try to show that the apparently other-regarding responses found in the literature (which we presumably also find as an everyday component of human behavior) are what they appear to be and are generalizable to a range of ethical situations and contexts. But, we will argue, the extension to other contexts is likely to be far from a simple matter.

A research program based on observing and understanding decisions faces some preliminary difficulties. As noted above, decisions are a function of the subjective understanding of the individuals. Given our interest in decisions with ethical content, we note that some contextual conditions will highlight some ethical aspects of the situation for the decision maker. They might even engender a particular ethical orientation towards that situation. Exactly what conditions are

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3/ It goes without saying that this can be tricky. For a (somewhat overly) detailed research design consider Batson, 1987.

contextually important in ethical theorizing and how do these conditions affect individuals' responses? Are some conditions more likely to trigger the behavioral responses which ethical theory prescribes? Of course, there is the further question of what people actually notice in their decision situations and the comparison of this with what ethical theory would say they *ought* to notice. Are the observed behaviors universal responses, or are they mere cultural artifacts, learned differentially in different societies?[4]

REASONING ABOUT ETHICS

One can't travel very far in one's study of ethics and behavior before one meets the skeptic. The skeptic questions the very existence of ethical behavior. In starkest terms, the skeptic believes all behavior to be self-interested. Thus the skeptic raises the fundamental existential, and even ontological, question regarding other-regarding behavior (and hence self-interest). After all, concern for others, as expressed by such terms as altruism, is probably the foundational concern of moral or ethical theory. The skeptic's question is particularly problematic in the context of rationality theory. It has often been claimed that we can reduce virtually all other-regarding behavior to self-interest. And, truth be told, at some level this must be possible: neurologically the behavioral impulses (or values) are all generated in the brain of the same person. So reductionism appears plausible and possible; but is it useful?

In part the issue here is definitional. If the values of one individual reflect the welfare of both self and others, certain difficulties must be overcome prior to the commencement of serious theorizing. First, we must analytically separate self-interest and other-regardedness. After all, to state that the individual must get something out of the other oriented behavior would appear tautological. At the very least, the individual is acting in terms of his or her values. For our purposes, and for the sake of clarity, we propose a stipulative solution by defining other-regarded preferences as those that include placing a value on others' consumption bundles or welfares.[5] Second, there is the question as to how to avoid infinite feed-back loops if one actor's welfare is a function of another's and conversely.[6] This problem has been worked out some time ago (see

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4/ This is a key point in the arguments regarding cultural relativism in ethics. We do not pretend to be initiating this discussion, de novo. There is a long and rich tradition of such inquiries. Consider, for example, the work of Axelrod (1984), who tries to identify conditions which would develop patterns of cooperation.

5/ We can stipulate this as something like *i*'s preferences, R_i, are a function of *j*'s consumption of goods x_j or j's welfare, U_j, . In other words: $R_i = f(U_i, x_j)$ or $R_i = f(U_i, U_j)$.

6/ These loops come about as follows. Say *i* values *j*'s welfare, and the relationship is reciprocal. Then, were *i* to give *j*, say $1, *j*'s welfare would increase. Since *i* would be happier,

(continued...)

Frohlich, 1974 and Valavanis, 1958). Such loops can be precluded by insisting that we differentiate between direct (first stage) payoffs and secondary payoffs. Thus, if (x_{is}, y_{it}) is a vector of i's consumption bundle of s private goods, x_{is}, and t public goods, y_{it}, then i may be said to be other regarding or if i's welfare $U_i = U_i(x_{is}, y_{it}, x_{js}, y_{jt})$, where the last two terms enter into the function non trivially. Or, alternatively, $U_i = U_i(x_{is}, y_{it}, U_j(x_{js}, y_{jt}))$. The traditional self-interest assumption posits that the last two terms of the first expression and the last of the latter are null.

To understand how individuals can and do relate to ethical situations, we can look at the attributes of such situations and see how these attributes might, (and should) affect the individual's choices.

The attributes of a situation include but are not restricted to:

1. The number of other individuals involved in the situation. For example, the number of individuals affected by a collective project helps determine the total effects on others of any action.

2. The structural characteristics of the situation (i.e. how all relevant individuals would be affected by the different choices available). That is: the specific relations between the choices of each of the individuals and the payoffs that they themselves and the others each receive.

3. The perception of the situation by (or information available to) the individuals making choices.

Since any individual must choose relative to their subjective conception of the situation, there can be divergence between the objective state and the subjective understanding of it. This divergence may be in both the number and identity of other affected individuals, as well as in the impact of any choices on all individuals. The reality may, or may not be objectively specifiable and it may or may not correspond to how any person perceives the situation.[7]

Clearly variation in any one of these elements of an ethical situation may engender different responses from individuals. The empirical questions we propose to address can then be ordered as follows:

6/ (...continued)
and *j* values *i*'s welfare, *j* would have a secondary gain.

7/ Many factors may account for divergences between subjective understanding and the objective conditions. We would highlight, at this time, an individual's history of interactions in similar situations with the same or similar individuals. Also important are the aspects of the objective situation highlighted in any presentation. Both can be influential in determining how an individual perceives a given situation, and hence reacts.

< First, can we differentiate between selfish and other-regarding values and behavior; and can we demonstrate that the other-regarding values exist?

< What might trigger other-regarding behavior?

< Can we discover any patterns which might help us understand how people reason about ethics and behave in ethical situation?

We end by putting forth conjectures of universal behavioral characteristics with regard to other-regarding decisions.

REASONING ABOUT OTHER-REGARDING BEHAVIOR: EXISTENCE AND VARIETIES

Many behavioral scientists have traditionally assumed self-interest to be the template individuals use to evaluate options. Occam's razor would argue that this conjecture be taken seriously. Many have held that if properly and carefully searched for, other-regarding behavior either would prove to be non-existent or relatively rare and unimportant. This has been especially true of economists, who have built much of their theoretical structure on the self-interest assumption.[8]

AN EARLY EXPERIMENT: A number of years ago, we conducted a series of experiments designed to identify whether, and how, subjects, under laboratory conditions, would exhibit behavior that took into account the welfare of others. We also wondered whether such dispositions would be related to other identifiable aspects of the individuals (Frohlich, et. al., 1984).

The experiment was structured to focus on the question of self-interest. Students in classes at the Universities of Manitoba and Maryland were recruited into an experiment. All subjects were told that they were paired with another person (anonymously) in another class. In class, a research assistant gave subjects a sheet of paper containing a set of choice situations. The choices were non-strategic. Each choice would unequivocally establish a payoff for the chooser and an (unknown) other. Subjects were told to record their choices and that one of the choice situations would be selected at random to determine a payoff to the chooser and the other student. To insure reliability, the choices were administered seven times over the course of a semester. A few weeks after the last administration subjects collected their payoffs individually from a Departmental Secretary by showing up, at their convenience, and identifying themselves.

8/ Not all aspects of economics are constructed on such assumptions. So, for example, the social choice literature and game theory have eschewed self-interest. Indeed, Kenneth Arrow has argued that for a way around his impossibility theorem to exist individuals *must* have a broader basis for preferences than simple self interest (Arrow, 1973, p. 122-123).

In Table 1, eleven choice situations are represented. In each, the subject is to choose one row. The first number in each row represents the payoff to the chooser, the second, that to the recipient. The choice situations were designed to distinguish between four different types of preference functions. Choice 11 demonstrates what they are. An individual who chose Row A would maximize her own payoff, and the choice would correspond to simple self-interested maximizing behavior. Contra Row A, every other alternative yields a lower return to the chooser, and presumably would be chosen only if the different payoff to the other party were of importance to the chooser.[9] The choice of Row B would involve a decreased payoff for the chooser, but an increase for the paired other, and hence connotes Altruistic preferences. A chooser of C takes a decrease in payoff, but gains an increased difference between her own payoff and the payoff of the paired other, a motive we characterize as Difference Maximizing. D connotes Egalitarianism since a chooser would be giving up some payoff in order that both receive the same payoffs. Thus the experimental design reflects our attempt to identify the existence, prevalence and characteristics of self-interested and three types of other-regarding behavior: Altruism, Egalitarianism and Difference Maximizing.

9/ Of course, misunderstandings, errors, and other extraneous factors can also lead to deviations from the hypothesized individually maximizing payoff choices. These factors were minimized by the research design: Subjects repeated the experiment numerous times on separate days.

Table 1: Experimental Situations for Revealing Other-Regarding Behavior*

Situations to reveal Altruistic Deviance from Self-Maximizing Preferences:

1.	**2.**	**3.**
A. 8,7	**A.** 8,7	**A.** 8,7
B. 7,14	**B.** 5,14	**B.** 3,14

Situations to reveal Egalitarian Deviance from Self Maximizing Preferences:

4.	**5.**	**6.**
A. 8,7	**A.** 8,7	**A.** 8,7
B. 6,6	**B.** 3,3	**B.** 0,0

Situations to reveal Difference Maximizing Deviance from Self Maximizing Preferences:

7.	**8.**	**9.**
A. 8,7	**A.** 8,7	**A.** 8,7
B. 7,2	**B.** 6,1	**B.** 5,0

Situations to reveal a choice from among the set of Preference Types:

10.	**11.**
A. 7,7 Egalitarianism	**A.** 8,7 Self Maximizing
B. 7,6 Difference Maximizing	**B.** 7,8 Altruism
C. 7,8 Altruism	**C.** 7,5 Difference Maximizing
	D. 7,7 Egalitarianism

*Note: The first number represents the payoff to the subject, while the second represents the payoff to the person paired subject. Thus, in situation 1, a choice of B would yield the subject 7 units and the other person 14 units.

The results of that experiment showed that the self-interested behavior was modal (42.7%). More choices were consistent with a preference function which was strictly self-interested than with any other type. But other-regarding behavior was far from negligible. Averaging across the test dates 57.3% of all subjects made some other-regarding choices. Instances of Altruism, (19.6%), Egalitarianism, (22%) and Difference Maximizing (19.4%) were all observed. A skeptic might argue that the apparent other-regarding behavior was simply error, but a number of factors put the lie to that interpretation. There was consistency and specialization regarding the form of other-regarding behavior exhibited. Almost no one (7 out of 151 subjects) made a choice that was consistent with more than one type of other-regarding behavior. In addition, the choices were designed to test for price sensitivity of the other-regarding preferences. The three types of other-regarding choices scaled at between .83 and .89 with regard to price sensitivity. The preferences for the states of others seemed to behave like preferences for traditional goods.

To check for other indications that the choices reflected true underlying preferences, social/demographic correlates of the choices were examined. Differences were found between the distribution of other-regarding behavior in Canada and the USA (the experiment was run in both Manitoba and Maryland) with altruism being more pronounced in

the USA and Difference Maximizing in Canada.[10] No male/female differences were found in the choices per se. However, an examination of the relationship between the type of choice and self identification with a political party revealed significant relationships between type of other-regarding choices and partisan preferences, especially in Canada.[11]

In sum, these early experiments demonstrated the consistent existence of other-regarding behavior in a significant subset of the experimental population in a replicable, controlled experimental environment. Moreover, it showed these inclinations to be reliable, price sensitive, and correlated with other plausible preferences. These experiments can be criticized: Although subjects did not know with whom they were paired with (and could not find out), they had to pick up their payoffs at the end of the entire experiment from a Departmental representative. This contact meant that the subjects were not assured of anonymity. Thus the choices of the subjects could be affected by the subjects' attempts to please the experimenters. But they certainly established findings at variance with the traditional self-interest assumptions in economics, yet consistent with notions of rational choice.

DICTATOR EXPERIMENTS: With the growth of game theory as a field of study in economics, a few years later, some economists (mainly working in game theoretic and experimental areas) began to treat the assumption of self-interest less as an axiom, and more as a bold, testable, conjecture. Other social scientists have joined in the effort. This has led to a number of experimental tests of the conjecture. Most direct tests have had a similar basic structure, one which resembles, but simplifies and refines, the experiments described above. They are known as dictator experiments.

Dictator experiments, were explicitly designed to insure the two-way anonymity of the subject: protecting the chooser's identity from both the experimenter and the paired other. This is done by having subjects in one room (called Room A) each receive an envelope with money in it. In a privacy booth, they then each take what they want and leave the rest for an anonymously paired other in the second room (called Room B)

10/ While, this result may be confounded by the fact that students in Canada were recruited from a Business School while those in the USA were Arts and Sciences students, the fact remains that differences were found.

11/ In both countries, gender played a mediating role between choices and partisan preferences. In Canada, male Conservatives were more prone to difference maximizing and disinclined towards altruism; male Liberals leaned towards egalitarianism, and male New Democrats (social democrats) inclined towards altruism and away from difference maximizing. Females followed no discernable pattern. In the USA the relationships showed significantly only in females. Female Democrats were inclined towards egalitarianism and against difference maximizing while female Republicans favored difference maximizing. But some of this lack of significance may be due to small samples in the USA (28 males and 27 females).

by dropping the resealed envelope in a box.[12] This anonymity deprives the choosing individual of any motive to choose to get a reputational, or other, secondary gain from either the experimenter or the paired other.[13]

Very roughly, one could describe the results of these traditional dictator experiments, as follows: about one half to two thirds of the subjects take all the money; half of the others (i.e. between one sixth and one quarter) leave half of the money for the other person; virtually all the rest leave less than half, but there are some few who leave a lion's share for the other person.[14]

Dictator experiments improve the research design by increasing the anonymity of subjects making the choices and by focussing solely on simple division problem. Hoffman et al. (1996) interpret the results of a series of experimental variants of the dictatorship protocols. In these, the psychic distance between the subjects and the experimenter are varied. At one extreme there is a so-called "double blind" condition. Subjects are called upon to divide a provisional payoff of $10 in cash with an unknown, unseen, other in another room. No one can know the subject's identity because the subject makes the division of dollars behind a screen, when the experimenter is out of the room, replaced by a randomly selected student monitor running the experiment. No record is available to link the subject's choice with the subject. The subject's decision cannot be known to the experimenter. Hence, no experimenter can reward or punish the subject on the basis of her choice. At the other extreme the subject must reveal a tentative

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12/ More details of the experiment are relevant in that they help insure the double anonymity of the choosing subject: see Roth, 1995a, for a discussion of the designs. It should be noted that the current design deviates from our early experiments reported in the previous section. For example, the game which is played here purely distributional, or zero sum. Our early experiments were variable sum games.

13/ Contra the need for anonymity, it should be noted that, despite the imperfect anonymity, in the Frohlich, et. al. 1984 experiments 19 percent of the subjects showed no compunction in exhibiting (nasty) difference maximizing behavior and 47 percent were unshamefacedly self-interested. This result is quite similar to the results in current dictator experiments (see the discussion below, on page 9).

14/ It is perhaps instructive to compare the results of these dictator experiments with the results of our early experiments described above. The results reinforce each other nicely. The dictator experiments are not designed to discriminate between self-interested behavior and difference maximizing behavior: both types of preferences would lead a subject to keep all the money. Hence, the 64% of subjects in Hoffman et al. 1996 who took all the money roughly correspond with the 65% who were either self-interested or difference maximizing in the Frohlich and Oppenheimer (1984) experiments. In both experiments, the rest of the subjects may be assumed to exhibit some form of beneficent other-regarding behavior (altruism, egalitarianism, or perhaps some other form). Among those who do leave money, about half, leave exactly half of the money and most of the rest leave less. This also roughly corresponds to the division between altruists and egalitarians found in our earlier experiments.

division to the experimenter before actually receiving any payoff, thus violating the subject's anonymity with the experimenter.

Results from these experiments show the existence of an experimenter effect, as posited. In the most anonymous condition 64 percent of the subjects keep all ten dollar bills. In the least anonymous condition roughly 18 percent take it all. Intermediate levels of anonymity engender intermediate levels of division. Increased anonymity between subject, experimenter, and the recipient of largess seems to increase self-interested behavior. But it does not extinguish other-regarding behavior. If, in the most anonymous condition, 64% leave nothing, that still leaves 36% who leave something.

Increasing the anonymity of the dictator and/or the social distance between dictator and potential recipient was designed to reveal the true nature of other regarding behavior. But the separation of dictator from both recipient and experimenter may have introduced another confounding factor. Roberta Frohlich, a perennial critic of context-thin experiments, upon hearing about the results of some anonymous experiments posited the following explanation: "Dictators don't believe that anyone is there." Indeed, in the anonymous double blind experiment there is an absence of definitive evidence that there really are others in another room who will receive whatever money left by the dictator. While some dictators may have believed the experiments are as depicted, others could well question the real impact of leaving money in the envelope.

To test for the possibility of this confound we designed a set of double blind dictator experiments in which subjects anonymously answered questions about their beliefs in the existence of others and the fate of the money to be left in the envelope purportedly for the paired other (Frohlich and Oppenheimer, 1996b). Subjects took a chit with a number on it with them out of the experiment and were, without warning, intercepted in the hall and asked to fill out a questionnaire, anonymously, putting their number, unknown to the experimenter, in a sealed envelope with the questionnaire. Out of a total of 41, dictators, 23 left amount greater than zero for the other person. The quotations below are from responses in these experiments. The anonymity can be seen to function for some, albeit imperfectly (Frohlich and Oppenheimer, 1996b):[15]

> (Amount left: 0; Place: MD) "I took all of the money and all of the pieces of paper. I believed that there were "Room B" people because I met other people along the way who were going to a different room. I assumed that that was room B. I took everything because I thought they would never know if I didn't give them any money, and therefore, I wouldn't feel guilty. The amount of money made no difference. "

15/ For brevity we present only a single representative comment to illustrate each point we wish to emphasize. We also report the amount left in the envelope for the other person, and the place in which the experiment was run, Maryland, USA, or Manitoba, Canada.

But the research design raised questions in the minds of some other regarding the true nature of the experiment:

> (Amount left: 0; Place: Canada) "I am a student and I needed the money. I doubted the existence of Room B. I took the opportunity (and the money), as I do not care about the person with whom I am paired. You snooze you loose."

Note that the latter dictator reports doubt regarding the existence of others but the doubt doesn't seem to have played a major role since raw self-interest is the reported motivation. Some others, who, it ought be noted, tended to give more, had other interpretations of the experimental frame including doubts that the anonymity would actually be maintained:

> (Amount left: 5; Place: Canada) "I made the decision that I did because if we are saying out loud what we left in the envelope I didn't want people to think I was greedy."

So even carefully designed experiments must be subjectively interpreted by the subjects, and there is no certain iso-morphism between the *objectively* constructed and *subjectively* understood realities.

But the bottom line was that subjects' beliefs regarding the true nature of the experiment affected their behavior. About 25% of the variance of the money left is reflective of beliefs regarding the existence of others who are to receive the money and the less likely they believed the money would go to the others, the less they left. And on the basis of the comments written on the questionnaire, a number of individuals (at least 6 of the 18 who left nothing) seemed to be choosing as if the outcomes were gambles, and a form of probabilistic discounting was affecting much of the behavior. Consider the following comments:

> (Amount left: 0 Place: Canada) "I really didn't believe that someone was paired with me. When making my decision I thought about whether or not if I was indeed paired with someone - should I leave half for them and take half for me. Since however I concluded there probably wasn't anyone in the other room, I took all of the money myself."

> (Amount left: 1; Place: MD) "I wasn't sure whether or not there are people in the other room."

In the most anonymous conditions in dictator experiments significant amounts of money are left and variations in context affect the amount left. These data support the previous evidence cited (Frohlich and Oppenheimer, (1984) for the existence of other-regarding behavior. But, additional experiments have demonstrated that other factors of the decision context can affect behavior, giving further credence to the existence of other-regarding behavior.

Roth, (1995) presents an excellent review of the dictator and closely related literature and notes (p. 282) that a laboratory experiment framed in a market context generates choices which are more self-interested than does a laboratory 'dictator' environment. He also notes that two different procedures for paying subjects have been used. In some experiments subjects are paid a show up fee for attending the experiment, in other experiments, not. The amounts left were different under the two conditions, being higher when subjects were not paid a show up fee. In that case, the modal behavior was to leave half of the money for the other person. More than 40 percent of the subjects left one-half of the money when subjects were not paid a show up fee! This behavior is consistent with an assumption either that benevolent other-regarding preferences exhibit diminishing marginal returns (re others' payoffs) or that they are sensitive to other distributional characteristics of the payoffs between the self and others (perhaps to a minimum payment others are entitled to for showing up).[16]

Grossman and Eckel (1996) have argued that the lack of context in the double blind dictator experiment threatens the external validity of any results found. Put simply, it is hard to find real world situations devoid of contextual details. Such "thin" contexts, as they appear in the laboratory, may make it more difficult to interpret what is at the base of other-regarding behavior. Their point is that when some attributes of the other person are invoked, it can change what a chooser leaves in the envelope. By always sterilizing the context, we can't come to understand what triggers other-regarding choices: elements of the context may be what leads people to behave altruistically.

They (1996) have run a number of experiments in which they varied the characteristics of the recipient of the monies: changing the nature of the other's need or entitlement. In one variant they introduced information on the potential recipient's behavior in previously played modified dictator games. In another they made the recipient a charity. They altered the gender of subjects. And they even altered the benefit associated with leaving money for the other - matching funds left to increase the value to the recipient of any money left by the subject. Not surprisingly, they found that contexts to be important. Each of the varied factors changed behavior significantly.[17]

SOME CONCLUSIONS ABOUT CONTEXT AND OTHER REGARDING BEHAVIOR

Designers of the dictator experiments hoped that they would confirm the empirical simplicity of self-interest as the universal template, but it hasn't quite worked out that way. And, in retrospect, achieving a definitive answer to such a simple research question is problematic. After all, what evidence could falsify the self-interest hypothesis?

16/ See Frohlich and Oppenheimer, 1992 for a discussion of the ethical importance of floor or minimum incomes in income distribution problems.

17/ Similar findings were reported in experiments by Cain (Forthcoming).

Technically, it might be thought that if there is a statistically significant (say with a $p < .05$, or $p < .01$), and persistently observable, gap between the observed amount left in the envelopes and 0, we have falsified the hypothesis. But this does take into account other experimental findings, such as those of Saijo et. al., 1992, (discussed further below in footnote 22). Their findings showed that even in pure cooperation games one often gets levels of cooperation of only around 80%. The 20% shortfall seems to reflect errors of judgement by the subjects. Falsification would require more than 20% variance from zero. And the data tend towards falsification. In the majority of experimental tests of self-interested behavior, the amount left, as well as the number of subjects leaving money for the second person, are unlikely to be explicable as simply an error of understanding as they are in the Saijo experiments. The residuals are much higher in the Dictator experiments.

Current efforts at establishing a purely self-interested explanation for choice seem to have foundered, or at least stalled. The results from the various experiments described above indicate that the degree to which self-interest accounts for observed behavior in laboratory experiments seems to be a function of a number of variables. The degree of anonymity/social distance seems to matter, but even when controlling for it other variables enter and affect other regarding behavior. Hence, the problem of more complex individual motivations and the role of context must continue to haunt theorists of 'non-market' decision making and economics, and give comfort to those who posit the possibility of ethical behavior.

And so we begin to exorcise the skeptic. The empirical program of ethical inquiry is a meaningful enterprise which may help us understand the nature of human ethics. Having established that main point, we must now consider how investigating other decision contexts may enable us to build on the findings above.

Reasoning About Fairness and Distributive Issues

Rule Based Concerns for Fairness

Above we have been concerned with establishing the existence of other-regarding behavior interpreted as interacting utility. But other forms of ethical concern and other bases of ethical behavior exist. Individuals may hold that certain types of actions are simply "right" and may base their choices on following the appropriate ethical rules.

In the Frohlich and Oppenheimer dictator experiments (1996b) described above, a number of individuals who left money admitted to doing so because it was the right thing to do. Indeed, even a subset of dictators who admitted doubts about the existence of people in a second room reported that they didn't use probabilistic discounts in making their decisions. The comments of 11 individuals (out of the 24 who left

some monies)[18] indicate that they chose on the basis of moral rules. Here a range of comments is provided to illustrate the variety of different rules which may have governed subjects' decisions:

> (Amount left: 1; Place: MD) "I thought if there were people in the other room they deserved to make at least $6 / hr so I left $1 to add to Oppenheimer's $5."
>
> (Amount left: 3; Place: Canada) "I decided to do what I did because it is human nature to be selfish, but on the other hand most of us do have a small, little conscience."
>
> (Amount left: 5; Place: Canada) "I chose to leave the amount that I did because I felt that it was a fair amount, in terms of equality. I know I would have felt cheated if I got less than half so what I did is left $5 and 5 slips of paper so that whoever got my envelope (if they did exist) would feel that they had not been cheated. But I was also thinking of taking all $10 and splitting it with the monitor since he didn't get any extra money and since it was only a small amount of money, he deserved something. I know he exists."
>
> (Amount left: 5; Place: MD) "The world isn't fair but that doesn't mean that we should not try to make it fair (i.e. I split it 50/50)."
>
> (Amount left: 5; Place: MD) "I wanted to be fair to whoever was paired with me so I decided we would split the money. I was fairly confident there were actually people there. Even if there weren't others, I feel I have been fair. "
>
> (Amount left: 5; Place: MD) "I was not at all convinced that there really were people in room B, but since there could have been, my conscience wouldn't let me take more than half. My Christian value system strongly affected my decision."
>
> (Amount left: 10; Place: Canada) "I have left all 10 bills for the simple reason that the money does not belong to me and as promised the professor has paid $5. I don't want money which is not mine. Thank you."

The relatively large number of individuals who say they made their decisions on the basis of a deontological decision structure is evidence for another factor influencing the way people reason about ethics. See Olson, 1967 and Prior, 1967 for a quick summary of some of the basis for deontology in ethical reasoning. Implicit in some of the rules seems to be a concern for distributive justice.

CONCERNS FOR DISTRIBUTIVE JUSTICE

18/ One Canadian individual who gave nothing cited such rules as dictating that he take all the money he received and give it to his church for charity.

For the most part, the experiments we have discussed above involved one-shot or transient, two person relationships. In these situations, the main factors that would appear to explain other-regarding behavior have been interdependent preferences and choices based on ethical decision rules. But other contexts involve more people and many other ways in which the welfare of others are affected by an individual's choice. And this can lead the individual to marshal more complicated ethical judgements. For example, rather than being directly and solely concerned about the welfare of others, an individual may be concerned about the fairness of a pattern of the distribution of payoffs among individuals.[19] The concern for fairness may be the primary motivator, rather than the direct concern for the other. There are many empirical contexts in which fairness is likely to be a salient factor: families, teams, working groups, and coalitions are just a few which come quickly to mind. In examining how people reason about ethics it may be important to go beyond simple binary determinate choices to differentiate among underlying motives.

One of the earliest such experiments (Miller and Oppenheimer, 1982) looked at the role of fairness in the choice of coalitional partners and outcomes in voting contexts. As with the other experiments described above, the test was based on whether individuals would choose to take lower monetary payoffs for themselves to insure a fairer distribution of payoffs across players. But in this case the context was a coalition game involving more than two players. They found that individuals, in the absence of anonymity, allowed concern for fairness to affect their choices. Individuals accepted substantially lower payoffs than they need have.[20]

Later experiments (Roth, 1995) have been concerned about precisely which environments seem to support and squelch such motivations. They found that some contexts extinguish all but simple self-interested behavior. In other words, concerns for fairness seem vulnerable to the institutional structure of the choice. But since a concern for fairness does exhibit itself in a number of well defined, and replicable choice situations, it is potentially important to consider the factors which might affect its emergence.

Hoffman and Spitzer (1985) were among the first to examine the role entitlements play in defining (at least subjectively) what might constitute a fair division of money in an experiment. They found that when the right to divide money between oneself and another is determined by means of a mechanism based on skill or knowledge, the divider (the prototype of the dictator) was more inclined to take a larger proportion of the money than when the assignment of the division right was done at

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19/ These differences in motivation may be characterized as a difference between altruism and notions of fairness such as egalitarianism.

20/ A number of other experiments have been run to expand these findings. See, for example, Eavey and Miller, 1984, and Eavey, 1986.

random. In a series of scenarios sketched to subjects via phone calls, Konow (1994) demonstrated that willingness to surrender resources to another party were a function both of entitlements and the needs of the other. And Kahneman, Knetsch and Thaler (1986) have demonstrated that, even in market contexts, the definition of what constitutes a fair pricing policy is dependent on the context of the exchange.

Perhaps the most celebrated modern attempt to address the question of fairness in distribution is John Rawls', A Theory of Justice (1971). Rawls addressed, from a philosophical point of view, what might constitute fairness in the organization of society in general, and in the distribution of what he called "primary goods" in particular. In one of his most widely commented upon arguments he presents a sort of thought experiment in which he proposes how one might consider an ideal way of reasoning about distributive justice. A key component in his argument is the hypothetical device of a set of representative individuals reasoning from behind a veil of ignorance in what he called an original position. This arrangement is presumed to invoke impartial reasoning among the individuals - reasoning which takes the interests of all into account in an evenhanded fashion. A crucial link in Rawls' argument is the notion - shared in many philosophical circles - that impartial reasoning applied to an ethically problematic situation yields a solution with a claim to ethical validity. The bite in Rawls argument is that the individuals in question are not allowed to know what role they are to play in society they are choosing. Not knowing which position they are to occupy, they must weigh everyone's interests fairly in their choices of the principles which will determine the payoff structure in society. In this way, ignorance induces impartial reasoning. By explicitly using the assumptions of rationality and self-interest Rawls attempts to identify their normative implications when they are applied in a context of impartial reasoning.

In a series of experiments (Frohlich and Oppenheimer, 1992) we have shown that many of the conditions identified in Rawls' argument can be approximated in the laboratory and that experimental methods can be used to identify what constitute fair outcomes regarding income distribution. In experiments conducted in Canada, the US, Poland, Australia (Jackson and Hill, 1995) and Japan (Saijo et. al. 1996), under a number of experimentally varied conditions, the vast majority of experimental groups (about 75% in each country) were able to reach consensus on the same principle as the fairest for the distribution of income in society. That principle guaranteed a minimum income for all in society with the proviso that after those needs were funded, no constraints should impede individuals' earnings. Groups were committed to the notion that a guaranteed floor income was required but rejected the imposition on a ceiling for incomes.

Groups' deliberations were taped, and an analysis of their conversations revealed that the preferred principle was favored because it constituted a compromise among three competing ethical imperatives which lie at the heart of the distribution problem: need, entitlement, and efficiency. These are also the dimensions identified by Konow

(1994, 1995). There was general consensus that: 1) there would always be some deserving poor who, for reasons beyond their control, could not support themselves and merited support at some level above survival; 2) individuals who exert efforts to earn income should be entitled to a reasonable proportion of their earnings and so the support that they give to the deserving poor should not be overly confiscatory; 3) the level of support granted the deserving poor should not be so high as to encourage individuals to shirk work responsibilities and rely on a guaranteed income. This is to insure that all who could work have an incentive to do so. The level of support for the deserving poor (the floor income without a ceiling on the high producers) constituted the compromise between these competing imperatives. In their discussions, subjects often explicitly referred to the trade-offs between these ethical principles. And in that sense, the ethical principles were treated similarly to economic goods, much as subjects in simple division problems, described above, treated others' well being.

Those experiments indicate that in some ethical situations, subjects from diverse cultures can reach agreement on what is fair. Further, they show that reasoning about fairness resembles in still other ways individual reasoning about purely self-regarding matters. For example, we saw (1992) that compromises regarding ethical values seem to take place analogously to compromises on other values (see chapter 6 on how the groups went about setting an income floor).

ETHICAL BEHAVIOR IN COLLECTIVE ACTION SITUATIONS

Many substantively important ethical situations outside the laboratory involve the strategic interdependence of individuals' choices. To study how individuals reason about ethics, therefore, it is also important to examine laboratory situations in which the payoffs to the individuals involved are strategically interdependent.

The problem of the social distribution of income carries within it, implicitly, a collective action problem. The total product of a society can be viewed as a divisible public good towards which each member of society can contribute by exerting productive energy.[21] And the problem of collective action (Olson, 1965) to achieve a group benefit is perhaps the area which has attracted the greatest scholarly interest among students of social problems. Often modelled as an n person prisoner's dilemma game [hereafter referred to as an N-PD] (Hardin, 1971, 1982), the models juxtapose the self-interested choice of withholding valuable resources from a group effort with the socially beneficial choice of contributing those resources. In the prisoner's dilemma the only

21/ Indeed, this widely understood fact may be the major barrier against the libertarian notion of a minimalist state (c.f. Nozick, 1974).

theoretically justifiable outcome is said to be that of non-cooperation, or the Nash outcome (see Binmore, 1993).[22]

However, evidence of socially oriented behavior have been reported in prisoner dilemma type situations since the first description of the game by Flood (1952, 1958) and others. This behavior has been reported both in laboratory experiments, and in reports of 'field' data (Baumol and Oates, (1979). Other-regarded motivations furnish one possible explanation for the observed cooperation. But it is often difficult to know precisely what is generating the behavior.[23] In a review of the experimental literature in this area (Ledyard, 1995) found a wide variety of circumstances under which individual behavior diverged from the self-interested economic prescription. But he noted that in well designed experiments "... about 20 - 25% of the aggregate contributions (are) unexplained."

Other-regarding or fairness oriented behavior furnishes a possible explanation for these widely reported divergences from the prescriptions of the self-interest assumptions. But, in these situation as well, it is important to note that contextual details dramatically affect behavior and, presumably, some aspects of the weighting of ethical considerations in the reasoning which leads to individual choices. Certainly these details affect individuals' propensity to cooperate at some cost to themselves. Some contexts, again markets are a good example,[24] seem to squelch most other-regarding behavior. Other factors, for example, simple forms of communication, can insure virtually complete cooperation.

22/ Other sorts of games have been used to describe collective action (see Schelling, 1973; Frohlich, et. al., 1975; and Hardin, 1982). In cases where an individual can make a difference under some circumstances, but not all, even altruists may not find they are sufficiently efficacious to warrant contributing to a collective effort. Hence it can be very difficult to tell whether behavior which is *not* supportive of the socially optimum outcome is motivated by selfishness. It often could be just as easily explained by rather simple consequentialist behavior.

23/ For example, when there is a consistent but small level of disconfirming data one is always attracted to the idea that the disconfirming data reflect noise in an experimental design. One serious study which lends credence to such a view is by Saijo and Yamaguchi, 1992. They found that cooperation rates in N-PD games or games involving voluntary contribution mechanisms to public goods with no provision points and without communications typically settle down to about 20%. But, of course, that result can also be interpreted as the "altruists" and/or "egalitarians" identified in previous experiments. Changing the payoffs so that the game has a dominant cooperative strategy, they observed just about 20% non-cooperative behavior. One interpretation they put forward is that we can expect about 20% error in choices. But again, that 20% may just be our old enemy the "difference maximizer."

24/ Perhaps the most astounding results showing the importance of context are those reported by Plott (1983). He shows that in the case of externalities in an unregulated market (p. 112) the public good can go virtually ignored. He then goes on to show that non-incentive compatible systems of regulation do little to correct the situation. (p. 115).

Recently, we constructed a two phased experiment which parallels the structure of a repeated (5 person) n-person prisoner's dilemma (N-PD). All groups of subjects played a repeated, N-PD without communication in Phase 2. But in Phase 1 there were a variety of experimental conditions. In some groups, subjects made decisions which were not tied to their *own* payoffs during phase 1. Rather, the choices led to payoff outcomes which then were reassigned randomly to members of the decision group.[25] This was done to invoke impartial reasoning within a N-PD context. This "impartial transformation" of the Prisoner's Dilemma has a dominant strategy of complete cooperation and may be viewed as a device for aligning individual and group interests. By aligning individual and group incentives, this arrangement was expected to lead to more cooperative behavior and to invoke ethical motivation in individuals (Frohlich and Oppenheimer, 1995 and 1996a). As mentioned, different communication conditions were also introduced in different treatments within groups in Phase 1. It was anticipated that in Phase 2, which was constituted as a set of subsequent rounds of the simple 5 person N-PD, with no communication, the subjects who had experienced impartial reasoning, would exhibit more cooperative (ethical) behavior.

These experiments showed that impartial reasoning can move groups a long way towards optimal provision of benefits. But the use of the impartiality device had two unanticipated consequences. First, subjects playing the N-PD from an impartial point of view, although they were more successful in achieving cooperative outcomes in Phase 1, evidenced no relationship between their reported ethical concerns and their behavior. By contrast, individuals in a control group playing a regular N-PD showed a strong and significant relationship between their ethical concerns and behavior. In the second phase of the experiments - when both experimental and control groups played repeated, regular N-PD's[26] higher levels of cooperation persisted in the group that played the *regular* N-PD. In other words, the effect of greater cooperation due to impartial reasoning was not only transient - in that it disappeared after phase 1 - it seemed to undermine subsequent cooperation and leave the group worse off than those in the control group who had played a regular N-PD.

One possible interpretation of these findings is that the device of impartial reasoning - by virtue of the very fact that it aligns individual and group interests - may blind participants to the ethical dilemmas inherent in the situation. As Professor Steve Turnbull commented at a presentation of the results - "It prevents subjects from flexing their ethical muscles." By removing the opportunity to wrestle with the dilemma, the device may be cueing individuals simply to follow

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25/ Some groups, as a control, played a regular N-PD without such payoff randomization during this phase.

26/ Another variation in the experiment allowed for forms of communication in Phase 1. We found that communication, especially when subjects were in a regular N-PD, led to an improved level of cooperation after communication was ended (i.e. in Phase 2).

their individual interests, and may cause self-interested behavior to be reinforced and carried over into subsequent decisions.[27]

Our results suggest that when sequential decisions are made, and the earlier decisions are ones which do not involve ethical tension but invite individuals to exercise simple self-interest, those early decisions may blind individuals from the ethical dilemma they face in subsequent decisions and might undermine ethical reasoning. Their subsequent behavior therefore may yield worse outcomes than would have been obtainable had they practice in wrestling with ethical dilemmas.[28] The decision context and experience matter.

CONCLUSIONS

There are powerful disputes concerning how individuals reason about ethics. The findings we have cited and discussed are still preliminary. But it appears that there is an irreducible core of behavior which looks like, smells like, and which is best thought to be: moral behavior. The data indicate that its existence is not preposterous. It puts the burden on the skeptic. The simplest assumption which can account for the facts appears to be a moral concern. In general, the value one places on one's own consumption is only one of many values. To figure out how people reason about decisions with numerous values, we must identify some of those other values, and how people deal with conflicts among those values.

At this point, we cannot develop an overall theory of the general subject. But we can identify a number of properties about how people reason about choices when the welfare of others is at stake. We can say a few things about the existence of other-regarding as well as other forms of ethical behavior, and we can identify factors which affect both the invocation and form of this behavior.

The following italicized statements are the minimal lessons we can carry away from the experiments designed to confront the self-interest conjecture and moral behavior: First, recall that even when deciding in context free situations, about 1/2 the observations violate the simplest version of the self-interest assumption. The self interest assumption seems very vulnerable to the following two observations.

A substantial subset of individuals consider the welfare of others, as a value, in itself, when making a decision.

27/ Note that this would be consistent with conjectures that markets would squelch other-regarding behavior (see the discussion of Plott's findings above in footnote 23).

28/ Of course, this tendency must be contrasted with the contrary tendency for subjects in repeated rounds of prisoners' dilemmas to reduce their contributions as they experience free riding by others.

But for a substantial number of individuals ethical choices may be determined on the basis of rules, which are simply believed to be right (Frohlich and Oppenheimer, 1996b).

Some individuals use deontological rules which are at variance with purely self-interested behavior.

Given the existence of ethical behavior, we can conclude that the form it takes is sensitive to the characteristics of the chooser and the object of the behavior. Thus a number of characteristics can affect behavior:

The relative moral status of the other party in an experiment matters (see Cain, forthcoming as well as Eckel and Grossman, 1996).

Individual choices to help others are mediated by judgements of moral worthiness.

Ascriptive identity characteristics of the individual choosers make a difference: (Eckel and Grossman, 1996 focus on gender; Frohlich and Oppenheimer, 1992, Appendix C, examine a number of variables).

Cultural differences, as may exist between individuals socialized into different sex roles, will generate different patterns of choices.

But we can also make some general statements about the form of ethical behavior. Many instances of ethical behavior resemble traditional economic behavior in their characteristics. They are subject to the same calculi as are evident in other economic decisions. This is important in that it opens the possibility of analyzing a number of forms of ethical behavior with traditional economic tools[29]:

The relative cost - benefit context matters (Frohlich, et. al. 1984, Frohlich and Oppenheimer, 1992, Eckel and Grossman 1996, Roth, 1995; Eckel and Grossman 1996; and Cain, forthcoming).

Individual choices to help others usually reflect costs and benefits leading to marginal calculations.

The perceived likelihood of others actually being helped by the behavior affects other-regarding behavior (Frohlich and Oppenheimer, 1996b).

Individual choices to help others are subject to probabilistic discounting.[30]

29/ This may be less true of deontologically motivated behavior

30/ The impact of this on behavior in collective action situations with high stakes and

(continued...)

Finally we note that the context of the decision matters, and this includes the institutional structure within which the decision is made: (Roth, 1995), Frohlich and Oppenheimer, (1996a).

Some social contexts, such as markets, turn - off, while others turn - on, other-regarding behavioral patterns.

A decision context's anonymity matters (see Hoffman et al., 1996), although the extent of the effect may be affected by uncertainty invoked by experimental design factors (Frohlich and Oppenheimer, 1996b).

Individual choices to accept a lower monetary payoff may really be designed to capture broadly construed reputational payoffs (including anticipated reciprocity).

THE EFFECTS OF CONTEXT AND ITS INTERPRETATION

We have noted that significant instances of ethical behavior are observed in the laboratory. That being said, it has to be emphasized that the *way* in which others' interests, or ethical principles affect behavior are variable. Some decisions are largely self-interested; some, altruistic; some concerned with equity; and some concerned that a person do better than some other(s). And these decisions reflect basic dispositions whose weightings are potentially variable as a function of who the "other" is, how the choice situation is sized up, and the like. So it is not inconsistent for an individual to be altruistic regarding a spouse, a member of his club, a close friend, or even the average citizen of his town, and yet behave as a difference maximizer regarding a member of an ethnic group which he dislikes. Other individuals may display different mixes of other-regarding behavior in differing situations. These dispositions are variable both within and across individuals.

To say that any individual's decision is based on that person's perceptions and understandings of the situation she faces does not say much. Many aspects of a situation may play a role in determining a decision. These aspects may include: the nature of the others involved; entitlements such as just desserts and need; historical experiences in similar situations; and ethical values such as efficiency and equity. For any decision maker, some situations will evoke some of these aspects more strongly than others. Hence the type of ethical behavior exhibited will often be situationally specific. Even more troublesome, the variability will be a function of how the situation is sized up by the individual decision maker. Hence the findings tell us that there are

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30/ (...continued)
substantial ethical content could be severe. For example, in discussing the "good German" syndrome, Oppenheimer (1985) shows that if such discounting takes place, we can expect that where no one individual is very likely to make a difference, substantial failure of ethical behavior can be counted upon to enable political evil to remain unchallenged.

some categorical variables which may, or may not be, picked up by the individual, and which invoke differing weightings and decision models.

But it would seem that we can say more. Take, for example, a situation in which a group is attempting to obtaining a valued public good. We have seen that its context can determine the outcome. And the outcome can vary from extreme suboptimality to optimal provision. The extreme divergence of behavior under varying contexts seems to contain a lesson. It would appear that in situations where self-interested behavior is the norm (e.g. markets, and other situations with policies governing the structure of payoffs to prevent any divergence between individual and group interests) ethical motivations don't come into play much. And there is little development of connections between the cues of the situation and ethical rules. It may be that there are only a few, "switches" which determine how people classify decision contexts.

Let us call these different cognitive classifications available for making sense of decision situations "models." Then, put another way, the actions taken by an individual may dependent on which "model' an individual uses to make sense of a given situation. And which model an individual uses is likely to be dependent on cues in the decision making environment. Some cues may invoke a model favoring ethical behavior, others, favoring purely self-interested behavior. Thus there may be replicable cues which can cause a substantial alterations in behavior: flip flops if you will. These cues may be viewed as stimuli which frame a decision context as one kind of situation or another.

If this is so, then part of the task of understanding ethical behavior might be to understand why and when people categorize situations one way rather than another.

Such categorization is likely to depend on individuals' social experience and result in a culturally defined categorization of the situations. What we have referred to as 'cues' will be the stimuli that lead individuals to recognize a situation as being of a particular type. If these contextual cues are important to our behavior, the acceptance of a particular set of cues may reflect deep cultural consensus among individuals who have come to live together. However, despite a substantial degree of uniformity within a society, we would still expect variation in the set of cues, based, among other things, on social history and accident.

By contrast, moral behavior based on built up trust and reciprocity between two or more individuals might take place in a much simpler fashion. It could be built up simply as a result of the acceptance, by the individuals, of the cues in a simple decision context. This conjecture is at the heart of the somewhat complex, multi-phased experiments of Berg, et. al., and Dickhaut et. al., who consider whether we can come to understand the development of trust as a simple response of reciprocity over time.

In those experiments subjects in room A and B each get $10. Those in A are told they can pass any portion to those in B. When the money is received in B it is tripled, and the individuals in B have the right to pass some back to A's. The second stage of the experiment is thus a dictatorship game. And what is found is simple: reciprocity exists. People do hand back enough to make it pay to have given. This is especially true if more is trusted to the B's. The correlation between the receipt in B and payback to A is .34.

So the development of trust, which would be crucial for the working of cuing mechanisms might be understandable. But the evidence would also indicate that there is the possibility of considerable consensus regarding what the 'moral response' is once a situation is categorized. This would seem to be true in both the general N-PD games, and the experiments regarding distributive justice. If this is so, it may become possible to identify the sorts of behaviors to expect from individuals who "size up" a situation similarly.

To make these observations more concrete we can return to the true fable (it really happened) with which we began. The social activist's behavior can be interpreted in terms of some of the concepts we have been discussing. From our personal point of view, and, we believe, from an impartial reasoning point of view, it was wrong for her to bargain the poor man down. The basic argument, roughly put, is that it is ethically wrong for an highly economically advantaged person to take advantage of a poor person in a bargaining situation when the former has better information and has already been offered a price well below the true market value of the good.

How then can we explain this arguably unethical behavior on the part of someone who otherwise works unselfishly for the welfare of the poor? We believe that her behavior is a function of the different models she uses to interpret the various situations she faces. She may have viewed her everyday work as one concerning the welfare of many deserving others. They are individuals of moral worth, worthy of sacrifices on her part. In that context she is an altruist to the poor: willing to pay a large price to help them. In the flea market, perhaps she considers the situation a market transaction. We have seen that situations in the laboratory, framed as markets, induce more self-interested behavior. In the flea market, the cues may have evoked a simple self-interest model in our activist's mind. She may well have failed to notice that this hard-working poor black man also had moral worth. Moreover, she clearly missed the distributive justice implications of taking an extra $5 from this poor man's net worth and adding it to her own substantial wealth (even though, who knows, part the proceeds from the sale might go to support daycare for the old man's granddaughter). And her behavior might well have been changed if her friends, rather than standing by mutely in stunned disbelief, had said: "That's a really poor guy you're bargaining with." Those words might have led her to adopt a different model, or they might just have put social pressure on her to change her behavior (equivalent to an experimenter, or reputational, effect).

What is clear, is that the way in which an individual acts in a situation, either in the laboratory or in the rest of the real world, is subject to the model which they use to interpret the situation.[31] And the model they use depends on a variety of cues imbedded in the decision context. Much variability in behavior may be attributable to the contextual factors facing decision makers and the way in which these factors evoke different models.

What then can we conclude? Starting with the skeptic from Missouri who demanded, "Show me!" we have seen that the landscape of ethical behavior is far from barren and leaves much room for exploration. The skeptic appears to have been answered: humans are often capable of moral behavior. And luckily perhaps, the moral behavior of humans can be understood in ways that are similar to other sets of behavior, with many of the same basic patterns. Less obvious, it would appear that moral behavior may be triggered by and affected by just a few parameters of a situation. And, further, empirical methods can be used to dig deeper into the origins of the trust and other factors needed to support moral behavior in a community.

If experimental studies continue to yield insight into the bases and nature of moral behavior, in the long run, the accrued knowledge will have an impact throughout the behavioral sciences. Understanding the relationship between a decision structure and the individual's decoding of the situation by its cues is sure to be useful in the design of public policy (and other institutions) (Frohlich and Oppenheimer, 1995). Finally, the philosophical study of ethics will also be affected. This does not mean, of course, that the empirical world will dictate the nature of the 'oughts' of concern to philosophy. But the accumulated understanding about how humans form moral judgements, and the increased understanding of the shapes which such judgments take, is sure to influence how we argue about and understand ethical matters.

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31/ Of course the most influential scholarly example of this is Tversky and Kahneman, 1981.

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