

Project Approval

Finally, last but most certainly not least:

UNIVERSITY HONORS PROGRAM: SENIOR PROJECT APPROVAL

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Project Title: Ethical Intuitions and their Implications for Liberationist Ethics

I have reviewed this completed senior honors thesis with this student and certify that it is a project commensurate with honors level undergraduate research in this field.

Signed: James L. Nelson, Faculty Mentor

Date: 2 June 1999

Comments (optional): *I am very favorably impressed by the originality and thoughtfulness of this study. The author points out opportunities for further work in this sort of interdisciplinary psychological/philosophical research -- I very much hope that he pursues them.*

Ethical Intuitions and their Implications for Liberationist Ethics

A senior honors thesis by Martin Woodlee

University of Tennessee Honors Program

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A note about referencing: Virtually all borrowed ideas in this paper come from Peter Unger's work *Living High and Letting Die* (New York: Oxford University Press, 1996). As such, I will omit references to this book except in specific instances (e.g., direct quotations), hoping that the interested reader of this project will take the time to read that work in its entirety. When referencing Unger's book I will simply use page numbers in parentheses.

Abstract and Introduction

In his 1996 work *Living High and Letting Die*, Dr. Peter Unger of New York University analyzes the issue of the moral obligations of the well-to-do towards the remote impoverished of the world from the perspective of the liberation hypothesis, which is summarized by him as follows:

In addition to being influenced by our basic moral values, often our moral intuitions on cases are affected by contrary psychological factors. While our values encourage us to respond positively to conduct that clearly does more to lessen the serious loss befalling innocent others, often these contrary factors *inhibit* us from, or *constrain* us from, responding in that way. Indeed, often their influence is so great as to have us respond negatively. But, in certain several-options cases, there's material that *liberates* us from the influence of the constraining factors. And, by doing that, it *allows us to* respond positively to such loss-minimizing conduct, in accord with our values (94).

In his efforts to prove the truth of this hypothesis, Unger uses several hypothetical scenarios to illustrate the hypothesis at work. However, he often makes assumptions about how ordinary folks would morally judge the behavior of the agent in these situations. His assumptions have not previously been backed by empirical research.

In this project, I have conducted empirical research concerning peoples' ethical intuitions regarding Unger's hypothetical cases and the psychological factors and biases implied therein, and will comment on the impact that the results have for the liberation hypothesis.

I. The Reason for Being of this Project

Dr. Peter Unger of New York University argues in his 1996 work *Living High and Letting Die* that the relatively wealthy denizens of such advanced countries as the United States have a moral obligation to donate to effective worldwide charities such as UNICEF and OXFAM to ease the suffering of our planet's third-world citizens. Unger's arguments are powerful, and if each of us wishes to be morally "reasonable", we would do well to either point out potential flaws in Unger's ideas or else do as he suggests and give most everything we have to such charities. Given that the latter option is obviously rather drastic in light of our current standards of living, this project aims to analyze some of the assumptions upon which Unger's theories are based to determine the extent of their validity. It is important to say out front that I have no particular persuasive goals in this project; I only wish to see if there are reasonable ways around Unger's ideas that might unleash us from an otherwise ponderous burden. Of course, even if the results of this project were to support Unger and even if I might be able to refute every objection that anyone has ever brought up against him, we must of course interject the necessary platitude that this is all merely theoretical: even if his argument is ironclad, there will be plenty of folks out there who feel just peachy about not being bound to an argumentative sort of reason in making their ethical decisions, or who plain would not care to listen, leaving the remote impoverished of the world little better-off than they are today.

That aside, I'll go on now to present a brief outline of the argument formed in *LH& LD*. At the core is Unger's *liberation hypothesis* (presented in the abstract to this paper, on the preceding page). According to this hypothesis, *preservationism*, which Unger believes to be the prevailing idea concerning the expression of values, is wrong when it claims that our outward actions are really reflective of our "deep-down" moral convictions. Rather,

according to the liberationists, these deep-seated values are obscured by various psychological factors which often prevent the values from being expressed accurately in our actions. If we are aware of these factors, Unger holds, we may be able to *liberate* ourselves from their influence and act in accord with our true values, hence the term *liberationism*.

To illustrate these psychological factors at work, Unger constructs a series of cases (which can usually be matched up as pairs), in which the decision faced by an agent in the two cases is informed by all of the same data save for whatever supposedly elicits the obscuring factor. For example, one of the many such factors that Unger deals with involves the conspicuousness of a person in need. To show that conspicuousness is merely an obscuring factor and not something that should really be relevant to our ethical decision-making or underlying values, he constructs two cases which are almost the same save for the degree to which the needy person is conspicuous. In the one case (i.e., the one where the need is more conspicuous), Unger *assumes* that we would judge a non-helping behavior on the part of the agent much more harshly than if the need was not as conspicuous. Nonetheless, says Unger, the nature of the need and the agent's situation are otherwise the same, suggesting that our judgments should not show so much variation between the two conditions.

The critical word here is *assumes*, and is italicized for a reason. Unger, a professor of philosophy, has made these critical assumptions in his book (about the effect of conspicuousness and many other such proposed factors) without the empirical research necessary to back up such claims. It may be contested that, in fact, these assumptions are not so critical to Unger's ethics, but I maintain that they are: if these obscuring factors (most of which are specifically chosen by Unger to show that we really *ought* to donate to UNICEF or OXFAM just as well as we ought to pull small drowning children out of very shallow

ponds that we walk by) do *not* in fact exist or exert control over our ethical decisions to the extent that Unger believes they do, this suggests that there may be other, potentially meaningful, reasons that explain our less-helpful behaviors in situations that would seem to have equal (or even more positive) outcomes in a utilitarian sense. If this is the case, then work to elucidate *those* factors might be helpful in determining whether Unger's ethic is the one we ought to follow. Though it will be beyond the scope of this project to offer up detailed alternative explanations to explain our varying behaviors, I hope that this work may be able to spur further research to that end.

In this study, six of the more critical obscuring psychological factors from Unger's book have been empirically tested through the use of surveys. In the following section, I will first discuss each of these factors in detail, and then go on to describe the surveys and the results. As a final note, even if these studies are shown to be altogether irrelevant to Unger's ideas from a philosophical standpoint, there are nonetheless some very interesting factors discussed which might merit further study in the decision-making and psychology arenas.

II. The Experiment

First, a description of the six factors studied:

1) **Projective separation.** This term, apparently coined by Unger, refers to a hypothesized psychological bias which, in cases where some person or group must be harmed to help others (helpful harming), makes us more likely to judge an agent's behavior harshly if that harmed person or group cannot be seen as somehow connected to the original negative situation. For example, if I have to harm an innocent person sitting somewhere in Nashville to help a group of people sitting in front of me here in Knoxville,

my behavior will be judged more harshly than if I had rather harmed a member of the Knoxville group to help the rest.

2) The protophysical bias. Another Unger-coined term, this refers to a proposed bias which causes us to judge more harshly when we move a *person* into the path of an oncoming (and ostensibly harm-causing) inanimate object, as opposed to changing the path of said object such that it strikes a stationary person. For example, by this hypothesis I would be more in the wrong if I pushed you in front of a car than if I caused a car to veer such that it hit you.

The two above-mentioned factors are two of the more radical ones in the book and ones that have not been as thoroughly studied in psychological literature as the remaining four, which are:

3) Extra-options influences. According to this one, we are more likely to judge a behavior more favorably than otherwise, *if* we add additional options to the set of possible solutions of an ethical dilemma. If, for example, I choose to harm one person in a questionable way to save a present group of people as opposed to harming five in a not-so-questionable way, this behavior may be looked upon more favorably if I also had options to harm two people or four people to effect the same outcome. In both cases (i.e., having two options vs. four options), if I choose the same option in both cases, it's less harshly judged if more options were present.

4) Conspicuousness. As discussed earlier, this one is rather straightforward. Quite simply, all other things being equal, non-helping behavior is supposed to be less harshly judged if the person in need was not conspicuous to the decision-maker.

5) Dramatic trouble. Again, a relatively straightforward one. All other things being equal, we are more likely to be forgiving of behavior that harms some to help others if the

needy people were in some form or another of *dramatic* trouble (e.g., being victims of a hostage situations, vs. being a hungry homeless person on the street).

6) **Proximity.** A final easy one, here Unger believes that will we judge folks less harshly if they exhibit non-helping behavior towards faraway people as opposed to people which are near at hand. Note that this is distinguished from conspicuousness, which involves the ability to *sense* the need; here, we're rather talking about simple physical distance, whether you can see/hear the person or not.

Experimental Design

To test how people responded to such factors, a survey was performed. The survey consisted of two versions, each of which, by permission, had five of the cases presented by Unger in LH&LD (using Unger's cases was something I was advised to do in the early stages of this project, though that decision may well have made the results less valid than they might have been otherwise, as stated later in the *Design problems* section). This led to data on a total of ten scenarios, which could be paired off in various ways to illustrate the degree of influence the six factors had in the subjects' judgments. In each scenario, our fictional agent Bob is presented with a situation in which he must make an ethically weighty decision. After reading the situation and being told what Bob's action was, each subject was asked to judge Bob's behavior on a five-point scale which went as follows:

- 1 = The behavior was very wrong.
- 2 = The behavior was questionable.
- 3 = The behavior was morally neutral, or I cannot decide.
- 4 = The behavior was acceptable.
- 5 = The behavior was very good.

Two surveys were used so that, in most cases, subjects would not encounter both members of a pair of scenarios meant to examine a particular factor.

The surveys were presented in the form of a web page, and subjects were asked to take the survey only once to ensure that they didn't take both forms of the survey (unfortunately no device was used to verify if everyone complied with this request, but the data strongly suggest that they did). Fifty responses to each form of the survey were recorded, for a total of 100 subjects. Subjects were gleaned from e-mails sent out to various students at the University of Tennessee, Knoxville and Tennessee Tech University campuses, which asked them to take the survey and to also encourage their acquaintances to do so. Information statements which preceded the willing subjects' taking of the survey, as well as copies of the survey web pages, can be found in the appendix.

Additionally, a small amount of demographic information (namely age, sex, occupation, and self-reported socioeconomic class both of upbringing and at the current time) was taken from each subject to see if any correlations existed between these data and subject responses to the scenarios, just for fun. See the *Results* section for more on this.

The actual text of the scenarios will not be listed here; they can, rather, be found in the aforementioned printouts of the web pages found in the appendix. I will, though, elaborate on which cases were meant to study which effects. It is important to note that in cases where Bob must actively harm someone, this is always being done with the goal of helping another person or group. The original versions of all of these cases may be found in Unger's book--you can look them up by name in the Index of Cases on page 181.

Projective separation:

- 1) The foot (person harmed by Bob not easily associable with imperiled group)
- 2) The trolley (person harmed by Bob more easily associated with imperiled group)

Protophysical bias:

- 1) The trolley (object path altered to harm stationary person)
- 2) The heavy skater (path of a person altered to intersect harmful object)

Extra-options influences:

- 1) The heavy skater (only two options available to Bob)
- 2) The switches and skates (more options, harming intermediate numbers of people)

Conspicuousness:

- 1) The CB radio (needy person not visible, can only be heard)
- 2) The sedan (same as CB radio, but person is interacted with directly)

Dramatic trouble:

- 1) The key call (dramatic, movie-plot-like trouble)
- 2) Cases such as the envelope, the sedan, etc. (less dramatic trouble)

Proximity:

- 1) The envelope (needy people are very far away)
- 2) The bungalow (same as the envelope, but the needy are very nearby)

There is one final case pair that is important; not because it studies one of our factors, but because it addresses the issue of whether Unger's book was necessary in the first place. In other words, perhaps people already feel the way that Unger is suggesting they should, but just aren't acting on it. To test this (*The basic question*), the following cases were used:

The basic question:

- 1) The envelope (worldwide charities need money to save lives)
- 2) The shallow pond (a small child needs minimal help to avoid drowning)

Now, without further ado, we shall move along to the...

Results

Now, as we recall, the subjects judged Bob's behavior on a 1-5 scale with 1 denoting a harsh judgment and 5 denoting a favorable judgment. The following data are expressed in

terms of this scale. Only means and standard deviations are reported here; the entire data matrix (along with the demographic info) can be found in the appendix. In all cases, $n = 50$.

	Mean Response	Standard Deviation
<i>Bungalow</i>	2.48	0.97
<i>CB Radio</i>	1.42	0.64
<i>Envelope</i>	2.60	1.11
<i>Heavy Skater</i>	3.18	1.38
<i>Foot</i>	2.26	1.16
<i>Key Call</i>	4.38	0.88
<i>Sedan</i>	1.30	0.84
<i>Shallow Pond</i>	1.08	0.44
<i>Switches & Skates</i>	2.94	1.11
<i>Trolley</i>	4.04	0.81

Table 1: Survey results arranged by case name.

Below are the results grouped together in terms of the six phenomena (plus the basic question) studied. Included are p values from t -tests on the data.

Factor Name and Cases	p
Protophysical bias: 1) The trolley* ($\bar{x} = 4.04$, SD = 0.81) vs. 2) The heavy skater ($\bar{x} = 3.18$, SD = 1.38)	<001
Extra-options influences: 1) The heavy skater ($\bar{x} = 3.18$, SD = 1.38) vs. 2) The switches and skates* ($\bar{x} = 2.94$, SD = 1.11)	0.169
Conspicuousness: 1) The CB radio* ($\bar{x} = 1.42$, SD = 0.64) vs. 2) The sedan ($\bar{x} = 1.30$, SD = 0.84)	0.201

Dramatic trouble:	
1) The key call* ($\bar{x} = 4.38$, $SD = 0.88$)	
vs. 2) The sedan ($\bar{x} = 1.30$, $SD = 0.84$)	<.001
Proximity:	
1) The envelope* ($\bar{x} = 2.60$, $SD = 1.11$)	
vs. 2) The bungalow ($\bar{x} = 2.48$, $SD = 0.97$)	0.266
The basic question:	
1) The envelope* ($\bar{x} = 2.60$, $SD = 1.11$)	
vs. 2) The shallow pond ($\bar{x} = 1.08$, $SD = 0.44$)	<.001
Projective separation:	
1) The foot ($\bar{x} = 2.26$, $SD = 1.16$)	
vs. 2) The trolley* ($\bar{x} = 4.04$, $SD = 0.81$)	<.001

Table 2: Survey results arranged by factors. Given p values are one-tailed. Asterisks denote which case in each pair would be expected to be judged more favorably in light of Unger's hypotheses.

As we can see, significant effects in the direction that Unger expected can be demonstrated for projective separation, dramatic trouble, and the protophysical bias. In addition, a significant difference was found in the pair of cases dealing with the "basic question", suggesting that, at least among this sample, the basic attitude shift that Unger is attempting to effect has not yet been adopted. We see a different story, though, for extra-options influences, conspicuousness, and proximity: these supposedly obscuring (and seemingly more straightforward) factors may not have the strong effect that Unger assumed.

Correlations were run between judgments of Bob's behavior in each case and the subjects' demographic information, including 1) sex, 2) age, and 3) self-reported socioeconomic class of upbringing and at present. No significant correlations ($r < 0.2$ for all cases) were found.

For more discussion on these results, you may skip directly to section III of this paper. The remainder of this section will be devoted to a discussion of this survey's...

Design Problems and Limitations

I have thought of some problems with this experiment that might affect the validity of the results produced. My hope is that I or some other researcher will be able to delve further into these issues in future studies, using the following criticisms as a starting point:

First and foremost is the dissimilarity present in some of the case pairs. As mentioned earlier, I decided early to use the scenarios almost exactly as they appeared in Unger's book (in fact, the only significant change I made was to convert them from being first-person into situations that involved a third-person agent, namely, Bob). For the case pairs that studied dramatic trouble (Key Call/Sedan), the "basic question" (Envelope/Shallow Pond), and projective separation (Foot/Trolley), the cases were sufficiently dissimilar enough that other factors may well have caused the disparity (or lack thereof) of judgments made by the survey subjects. I do not feel, though, that this issue will figure significantly into the other four factors studied, since their case pairs are reasonably similar apart from the critical factor. In any case, further studies that use more carefully controlled cases may prove helpful in ferreting out the nature of these factors.

A second problem involved ambiguity in the response options on the survey.

Recalling from earlier, subjects judged Bob's behavior on the following five-point scale:

- 1 = The behavior was very wrong.
- 2 = The behavior was questionable.
- 3 = The behavior was morally neutral, or I cannot decide.
- 4 = The behavior was acceptable.
- 5 = The behavior was very good.

The main problem is in options (2) and (4). Not only are they somewhat ambiguous, they also (as it was pointed out to me by a survey-taker who took advantage of the optional comments section of the survey) are not necessarily mutually exclusive responses.

The third problem is really nothing very specific, but consists of that set of problems that normally plagues surveys of this sort. Among these are 1) the nature of the subject pool (being largely college students, who may well have had some ethics courses, might affect the outcome) 2) problems associated with there being only two or three possible solutions that Bob could have acted on in each scenario (some subjects commented about some other clever solution that Bob might have tried, and 3) lack of information (many subjects complained, for example, that they'd want to know what kinds of people these six folks tied to the trolley tracks were before deciding whether to throw the switch).

III. Implications, Recommendations, and Conclusions

Unger is counting on us to not be hypocrites; if this is not important to someone, however, they may not be much influenced by Unger's ideas, even if all these factors were working on us as he thought they would. He is trying to show that these factors *alone* are what contribute to our different judgments, and not some difference in our actual values. From there, if he can show that the factors are irrelevant to the ethical content of a situation (and it seems, on the surface anyway, that they should be), then we should be pressured into seeing past them and sending in our check to UNICEF. Unfortunately, though, these mixed results don't tell us much about whether these factors are the only ones at work. We see that this particular survey has provided evidence in support of projective separation, the protophysical bias, and dramatic trouble as psychological factors which alter ethical value judgments that might otherwise be equivalent. Extra-options influences, conspicuousness, and proximity, though, were not so well supported. Based on just this, however, we can certainly make no wide-sweeping statements which claim that there aren't, in fact, obscuring psychological factors which affect our ethical decisions; at best, we can say that Unger may

have missed the target on some of them and suggest that more work be done to understand why some of these factors have more influence than the others.

Unger's book provides a plethora of starting points for psychologists in the social and cognitive areas to work from. As mentioned earlier, the phenomenon of projective separation has not been well studied, and the protophysical bias, as best I can tell, has not been studied at all. It would perhaps be useful, whether or not with regard to the theories of Unger or other liberationists, to study these and the other factors in Unger's book using more focused and controlled methods than those employed in this research. For the protophysical bias and a few of the other factors from the book, interesting research could possibly be done in the field of evolutionary psychology.

In any case, further studies of some sort need to be done if we want to make any more definitive claims about Unger's philosophical ideas from a psychological point of view. Should research be able to show that these factors can indeed almost totally account for our different judgments, we can then toss the ball back into philosophy's court to show that such factors really *are* irrelevant, and that our values ought to spring from some other source. The present study, though, suggests that these factors are much more complicated than discrete and binary things which flip our judgments this way and that. The mixed results may have behind them some other factor or set of factors which we may somehow be ethically relevant. Hopefully further research will be able to elucidate some of these factors, and more importantly, tell us *why* factors like projective separation or dramatic trouble are so important to us, so that we might determine whether our direction ought to be with the preservationists in saying that these factors are driven by our values, or with the liberationists, in spawning a new way of thinking about such decisions.

Appendices

The Surveys

What follows is a presentation of the cases and related survey information as they were presented to subjects on the web. When first visiting the site, subjects read the following information:

Ethical Intuitions Survey

Thanks very much for visiting this site. The survey you are about to take is part of a senior honors thesis I am doing at the University of Tennessee entitled *Ethical Intuitions and their Implications for Liberation Ethics*. The survey will take about 10 minutes to complete. At no time will you be asked to provide your name or any other identifying information, so you can be assured that your answers are confidential.

There are only two conditions under which I would ask that you *not* take this survey: 1) you have already taken it before, or 2) you are already familiar with the concepts of an ethical theory known as liberation ethics, or you have read the book *Living High and Letting Die* by Peter Unger.

If neither of the above applies to you, then please review the study information below, then click the link at the bottom to proceed. Once again, thanks very much for your help with this project!

--Marty Woodlee, woodlee@utk.edu.

STUDY INFORMATION SHEET ***Ethical Intuitions and their Implications for Liberation Ethics***

You are invited to participate in a study. The purpose of this study is to determine the ethical intuitions that people show in judging the moral appropriateness of an agent's behavior in certain hypothetical situations. This data will be used to shed light on an ethical theory known as *liberation ethics*.

INFORMATION

In participating in this study, you will be presented with five hypothetical situations in which an agent has to make a moral decision. After reading the situation and learning what action the agent takes, you will be asked to rate the moral appropriateness of the agent's behavior on a five-point scale. The survey will take approximately ten minutes to complete, and there will be no follow-up surveys or questionnaires. This research will hopefully shed light on certain questions concerning a relatively new theory of ethics known as liberation ethics. If you participate, you will be one of approximately 100 subjects involved in this research.

CONFIDENTIALITY

The information in the study records will be kept confidential. Data will be stored securely and will be made available only to persons conducting the study unless you specifically give permission in writing to do otherwise. Your name will not be taken as part of this study, and no reference will be made in written or oral reports which could link you to this study.

CONTACT

If you have any questions at any time about the study or the procedures, you may contact the researcher, Marty Woodlee, at (423) 595-8758 or by e-mail at woodlee@utk.edu. If you have any questions about your right as a participant, contact the Compliance Section of the Office of Research at the University of Tennessee, Knoxville at (423) 974-3466.

PARTICIPATION

Your participation in this study is voluntary, and you may decline to participate without penalty. If you decide to participate, you may withdraw from the study at any time without penalty. If you withdraw from the study before data collection is completed your data will be returned or destroyed. The submission of your responses to this survey constitutes your consent to participate in this study.

If subjects elected to participate after reading this, they proceeded to the survey page. Here they read:

INSTRUCTIONS: First, you will be asked to provide a small amount of demographic information about yourself. Then you will be presented with five hypothetical cases in which Bob, our fictional agent, has to make an ethically weighty decision. Read each scenario carefully and answer the question that follows each scenario regarding your judgment of Bob's decision. When you have completed the survey, please click the SUBMIT button at the bottom of the page.

The first section collected demographic information with the following question: 1) How old are you? 2) Indicate your sex 3) What would you consider to be the economic class of your *upbringing*? 4) What would you consider to be your *current* economic class?, and 5) What is your current occupation? For (3) and (4), subjects chose between the following options: upper class, upper-middle class, middle class, lower-middle class, and lower class.

After responding to all these, the subjects finally got down to the scenarios.

Depending on when they took the survey, they received either survey A or B. Each is

presented in turn here, with the scenarios within each survey in the same order they were presented. After each scenario, there was the following question:

How would you judge Bob's behavior in this situation?

- ☐ The behavior was very wrong.
- ☐ The behavior was questionable.
- ☐ The behavior was morally neutral, or I cannot decide.
- ☐ The behavior was acceptable.
- ☐ The behavior was very good.

Survey A:

THE SCENARIOS

Case #1: The Case of the Foot

In the park outside Bob's window, there's a man reading the sports pages. In homes bordering the park, there are sixty neighbors who, just because they were bitten by certain rats and through no fault of their own, have contracted a fatal disease. Now, if Bob does nothing about this situation, his first option, then in a couple of days these sixty will die from their disease. So, on this first option, he'll let the sixty die. Still, Bob has precisely one other option: Because he has a certain very rare body chemistry, a life-saving antidote can be made from only a foot's worth of the reader in the park. (Now, Bob may first ask this man to give up a foot for the neighbors. But, saying he's no hero, the man will decline.) On this other option, after rendering the reader unconscious, Bob pushes a button and, with his trusty laser knife, slices off the man's left foot. After liquefying the free foot, he injects a sixtieth of the product into each of the neighbors. So, on this second option, Bob would save sixty and make one just have a single foot for the rest of his own long life. On reflection, Bob chooses this latter option and, in consequence, the sixty are prevented from dying.

Case #2: The Switches and the Skates

An empty trolley is rolling down a track, and if Bob does nothing about the situation, his first option, it will soon roll over and kill six innocents trapped down the line. However, Bob has three other options: On his second option, if he pushes a remote-control button, he'll change the position of a certain switch, sending the trolley onto a different track on which three innocents are trapped. So, on this second option Bob would save six lives and take three. On his third option, Bob can push another button to send a trolley containing two trapped and innocent passengers on a collision course with the original trolley, thus derailing both trolleys into an uninhabited area, but killing the two people in the second trolley. So, on this third option, Bob would save six lives but take two. Finally, on his fourth option, there's this: further up the track, near where the empty trolley is starting to move, there's a path crossing the main track and, on it, there's a very heavy man on motorized roller skates. If Bob turns a remote-control dial, he'll start up the skates, sending the heavy man in front of the trolley, where he will effectively stop it but be killed in the process. So, on this fourth option, Bob will save six lives but take one. On reflection, he chooses this last option and, in consequence, the six are prevented from dying.

Case #3: The Shallow Pond

A path that Bob walks by on a regular basis passes a shallow ornamental pond. On his way to an important meeting, he notices that a small child has fallen in and is in danger of drowning. If he wades in and pulls the child out, it will mean getting his clothes muddy and either canceling the important meeting or delaying it until he can find something clean and dry to wear. If he passes by the child, then, while he'll make the meeting on time, the child will die straightaway. He passes by and, as expected, the child dies.

Case #4: The Case of the Key Call

Some lunatics have placed time-bombs in 10 of the world's 100 busiest airports. Though nobody outside their small circle knows which 10 busy airports are imperiled, many people, including Bob himself, know certain related facts: All 10 bombs are set to explode in the next 24 hours, though not all at once, and each explosion will kill several people. And, while nobody else can do anything about this situation, Bob can do something: If he steals an intransigent billionaire's antique gold key, he can open a certain door. While that must so badly damage the key as to decrease its value by a million bucks, he'll get to see a certain note, which will tell him precisely where one of the bombs is located. By calling the authorities of the airport specified in the note, Bob can quickly get that one bomb rendered harmless. So, Bob takes the key and makes the call. While many are violently killed at several busy airports anyway, Bob prevents several from being blown to smithereens at one.

Case #5: The Case of the Haitian Bungalow

Not being truly rich, Bob owns a one-twelfth share in a small bungalow that's part of a beach resort compound in an exotic but poor country, say, Haiti. Long since there's been much strife in the land, right now it's Bob's month to enjoy the bungalow, and he's there on his annual vacation. In his mailbox, there's an envelope from UNICEF asking for money to help save children's lives in the town nearest to Bob. In Bob's very typical case, quite a few such needy kids are within a few blocks and, just over the compound wall, some are only a few feet away. As the appeal makes clear, your \$100 will mean the difference between long life and early death for these nearby children. But, of course, each month such appeals are sent to many bungalows in many Haitian resort compounds. Bob contributes nothing and, so, more nearby children die soon than if he'd sent the \$100.

Survey B:

THE SCENARIOS

Case #1: The Case of the Trolley

By sheer accident, an empty trolley, nobody aboard, is starting to roll down a certain track. Now, if Bob does nothing about the situation, his first option, then very soon it will run over and kill six innocent people who, through no fault of their own, are trapped down the line. (Let's say they've been tied down by some villain.) So, on his first option, he'll let the six die. Still, Bob has precisely one other option: If he pushes a remote control button, then he'll change the position of a certain switch-track and, before it gets to the six, the trolley will roll onto another line. Now, on this other line, there's another who's similarly trapped and, if switched, the trolley will roll over her. So, on his second option, Bob will save six lives and take one. On reflection, he chooses this second option and, in consequence, the six are prevented from dying.

Case #2: The Vintage Sedan

Not truly rich, Bob's one luxury in life is a vintage Mercedes sedan that, with much time, attention, and money, he's restored to mint condition. In particular, he's pleased by the auto's fine leather seating. One day, he stops at the intersection of two small country roads, both lightly traveled. Hearing a voice screaming for help, Bob gets out and sees a man who's wounded and covered with a lot of his own blood. Assuring Bob that the wound's confined to one of his legs, the man also informs Bob that he was a medical student for two full years. And, despite his expulsion for cheating on his second year final exams, which explains his indigent status since, he's knowledgeably tied his shirt near the wound to stop the blood flow. So, there's no urgent danger of losing his life, Bob is informed, but there is great danger of him losing his limb. This can be prevented, however, if Bob drives him to a rural hospital fifty miles away. "How did the wound occur?", Bob asks. An avid bird-watcher, the man admits that he trespassed on a nearby field and, in carelessly leaving, cut himself on rusty barbed wire. Now, if Bob aids this trespasser, he must lay him across his fine back seat. But, then, Bob's fine upholstery will be soaked through with blood, and restoring the car will cost over five thousand dollars. So, Bob drives away. Picked up the next day by another driver, the man survives but loses his leg.

Case #3: The Envelope

In Bob's mailbox, there's something from UNICEF. After reading it through, he correctly believes that, unless he soon sends in a check for \$100, then, instead of each living many more years, over thirty more children will die soon. But, he throws the material in his trash basket, including the convenient return envelope provided, and sends nothing; so, instead of living many years, over thirty more children soon die than would have had he sent in the requested \$100.

Case #4: The Case of the CB Radio

A man has injured his leg as described in the Case of the Sedan, above. But this time, instead of coming upon the erstwhile student at a crossroads, Bob hears from him on the CB radio that's in his fine sedan. Along with the rest of his story, the trespasser informs Bob, by talking into his much cheaper CB radio, that he's stranded there with an old jalopy, which can't even be started and which, to boot, is out of gas. Citing landmarks to each other, he truthfully says that Bob is just ten miles from where he is stranded. He asks Bob to pick him up and take him to a hospital, where his leg can be saved. Thinking about an upholstery bill for over \$5,000, Bob drives in another direction. As a foreseen result of that, the man loses his leg, though not his life.

Case #5: The Case of the Heavy Skater

By sheer accident, an empty trolley, nobody aboard, is starting to roll down a certain track. Now, if Bob does nothing about the situation, his first option, then, in a couple of minutes, it will run over and kill six innocents who, through no fault of their own, are trapped down the line. So, on this first option, Bob will let the six die. Regarding their plight, Bob has precisely one other option: Further up the track, near where the trolley's starting to move, there's a path crossing the main track and, on it, there's a very heavy man on motorized roller skates. If Bob turns a remote-control dial, he'll start up the skates, sending the man in front of the trolley where'll he'll effectively be a trolley-stopper but will be killed in the process. So, on this second option, Bob will save six lives and take one. On reflection, Bob chooses this second option and, in consequence, the six are prevented from dying.

At the bottom of each survey was an empty text box, preceded by the following:

If you have any comments or questions about this survey, please enter them below. Whether or not you enter any comments, please remember to press the SUBMIT button to record your responses. Please note that you must give your e-mail address if you wish for a reply, but be aware that this address will be attached to the data you have just entered if you do so.

The Data

Following are the data collected. Responses were codified as follows: for socioeconomic demographic information, responses were converted to a 1 to 5 scale with 1 = lower class and 5 = upper class. Responses to the actual scenarios were also placed on a 1 to 5 scale, with 1 = very wrong, 2 = questionable, 3 = neutral / cannot decide, 4 = acceptable, and 5 = very good.

Survey A:

Age	Sex	Upbring.	Current	Occupation	1A-Foot	2A-Switches	3A-Pond	4A-Keycall	5A-Bungalow
43	F	2	4	sales	2	4	1	4	2
49	M	2	4	radio station mgr	2	2	1	4	2
20	F	1	1	student	1	3	1	5	2
21	F	4	4	student	3	2	1	4	3
18	F	4	4	student	4	3	1	3	2
19	M	3	3	student	1	1	1	4	3
20	F	3	3	student	1	2	1	4	4
21	F	3	1	student	2	5	1	5	2
25	M	4	1	student	1	4	1	5	4
21	F	2	2	student	4	3	1	5	3
21	M	4	4	student	4	3	1	4	3
21	F	3	2	student	2	3	1	4	2
21	F	4	4	student	3	3	1	5	1
21	F	3	3	student	3	3	1	5	2
20	F	4	4	student	2	4	1	5	2
22	M	3	3	student	2	4	1	4	1
22	M	2	2	student	1	1	1	5	4
21	F	3	3	Resch Asst	1	4	1	5	2
20	M	4	4	student	4	4	1	5	2
19	F	3	4	student	2	3	1	5	1

47	F	4	3	Hospice nurse	1	4	1	2	4
38	F	3	3	Ofc Manager	1	2	1	3	1
21	F	4	4	student	1	1	1	5	2
20	F	3	3	student	3	2	1	4	3
19	M	3	2	none	4	2	2	3	2
43	M	3	3	computer tech	3	3	1	5	3
34	F	4	3	RN	1	3	1	4	3
21	F	3	4	student	2	4	1	5	3
21	M	3	3	student	4	2	1	5	2
30	F	3	3	housewife	4	4	1	5	1
32	M	2	3	tech suppt	2	1	1	4	4
18	F	3	3		2	2	1	5	2
22	F	4	3	student	3	3	1	5	2
28	M	3	3	comp. Progrmmr.	1	2	1	4	2
40	M	3	3	police officer	4	4	1	4	4
21	F	4	2	student	2	2	1	4	3
30	M	2	3	real estate	1	1	1	5	4
19	F	5	5	student	4	4	1	4	2
23	F	3	2	retail	3	5	4	1	2
20	F	4	4	administration	2	2	1	5	3
22	M	3	3	student	1	3	1	5	2
20	F	2	1	disabled	2	4	1	4	5
20	M	3	4	student, EE	4	2	1	5	2
20	M	4	4	student	1	4	1	5	2
20	F	4	3	student	3	4	1	5	3
24	F	3	3	sales rep/radio	1	1	1	5	2
24	M	2	3	utility worker	1	4	1	5	1
19	F	2	2	student	4	4	1	5	2
20	F	3	2	cashier	2	4	1	5	4
33	F	3	3	secretary	1	3	1	3	2

Survey B:

Age	Sex	Upbring.	Current	Occupation	1B-Trolley	2B-Sedan	3B-Envlp.	4B-CB Radio	5B-Heavy
42	F	3	3	college instr.	4	1	4	1	2
33	M	3	2	nurse	5	1	2	1	5
23	M	4	2	student	5	1	3	2	3
19	F	3	4	student	5	2	4	4	5
22	M	3	3	student	3	1	1	1	3
20	M	4	4	student	5	5	2	1	4
48	M	2	3	comp progrmmr.	4	1	2	1	4
35	F	3	3	social worker	4	2	2	2	3
20	F	5	1	student	4	1	2	1	4
20	M	3	3	student	5	1	2	1	4
22	M	3	3	student	4	2	4	2	4
21	F	3	3	student	4	1	4	1	4
19	M	2	3	student	5	1	2	1	5

21	M	3	3	student	4	1	3	1	4
25	M	4	2	student	5	1	1	2	5
20	M	3	3	student	4	1	1	1	3
22	M	2	3	student	3	2	3	2	3
22	M	3	3	network admin.	5	2	3	2	2
25	M	4	4	chemical engr.	4	2	1	2	4
20	M	3	4	student	5	1	2	1	1
21	M	3	3	student	4	1	3	2	3
22	M	4	3	student	4	1	1	1	4
19	M	3	4	student	4	1	2	1	4
23	M	2	3	engineering	2	1	3	2	2
19	F	4	4	student	4	1	2	1	1
19	F	4	4	student	4	1	4	2	2
27	M	4	2	student	3	5	5	1	2
55	M	3	3	nursing home mgr	4	1	4	1	4
34	F	4	4	student	3	1	1	1	2
23	M	4	4	student	4	1	3	1	4
23	F	2	2	therapist	4	1	2	1	2
21	M	3	3	student/engr	4	1	2	2	4
38	F	3	2	researcher	4	1	4	1	1
30	M	5	3	constr. co owner	4	1	3	3	2
31	M	2	3	teacher	4	1	2	1	1
22	M	3	3	student	5	1	3	2	5
52	F	3	2	ret'd teacher	4	1	1	1	2
22	F	4	2	student	2	1	4	1	1
51	M	4	4	ret'd	5	1	1	1	5
59	M	4	4	investments	5	1	4	2	5
15	F	4	4	HS student	5	1	4	2	5
42	F	3	3	RN	4	1	3	2	4
20	M	3	3	student	5	1	1	1	5
20	M	3	3	student	4	1	3	1	4
47	F	3	4	Healthcare consult	4	1	4	1	4
21	F	2	2	student	3	1	2	1	1
20	M	2	2	student	4	1	2	1	2
19	F	4	4	pre-med	4	1	3	1	4
22	F	4	4	student	2	1	2	1	1
15	F	3	3	HS student	3	2	4	2	1