ABSTRACT

UNUSUAL BEHAVIOR AND THE
ATTRIBUTION OF RESPONSIBILITY

By

Robert Dean Fischer

A laboratory experiment was used to test the hypothesis that perceivers attribute a greater degree of responsibility for the outcome of his behavior to an actor who has behaved unusually than they would attribute to an actor who has behaved in the usual manner. Forty male and forty female subjects observed a video-tape recording of two confederates who played a laboratory game which required each of them to make a decision which effected the outcome of the game. The subjects were instructed that the behavior of each confederate was either usual or unusual. The analysis of the data revealed that the hypothesis was supported.

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By

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With deepest appreciation

to my grandparents

Robert Lewis and Dorothy Mae Bown

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As the experimenter in this study, I have known all along who really was responsible and I would like to make an attribution or two, or three, myself. The following people get a "seven" on a seven-point bipolar rating scale from "Helped a Little" to "Could Never Have Done It Without Them."

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Any remaining credit for this endeavor I will share with my wife Carol, just as we have shared the long hours of work, worry, and waiting that went into it.

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Statement of the Problems

When the massacre of the women and children of Mai Lai was revealed, many Americans were stunned and outraged, but they were in the minority. Far more Americans defended Lt. Calley and his men on the grounds that the destruction of civilian populations is commonplace in this war, and that there is no difference between annihilating entire villages from 40,000 feet with explosives and plastic pellets, and doing the same thing on the ground with small arms.

After the 1968 elections, the news media exposed the fact that certain corporations had used phantom political organizations to funnel millions of dollars into political campaigns illegally. Although the corporations had violated the law, people shrugged it off because such chicanery is not at all uncommon in American politics.

Recently, the National Poultry Farmers Association petitioned congress for permission to destroy one-fourth of all the laying hens in the country in order to reduce the supply of eggs and increase the selling price. Their solution to the problem of having surplus of food while, at the same time, having millions of hungry people in the nation and the world is to destroy the surplus food. Incredible! Criminal! And yet, not a murmur of protest is raised because creating

artificial scarcities in order to increase profits is standard operating procedure in this society.

On the other side of the coin, all Americans are familiar with the intense hostility aroused by Black students who trespassed by sitting at lunchcounters where no Black had sat before. Equally familiar are the moral indignation and heated criticism with which radical changes in fashion are met: young men who were the first to wear long hair and beards, and young women who behaved "unusually" by wearing mini-skirts, hot pants, blue jeans, or pant suits, or simply by not wearing bras, before it became common to do these things, found themselves in serious trouble with school authorities and personnel managers.

In each of these instances, the guilt or innocence of the people involved was judged not by the consequence of the act, nor by the intentions of the actor, but simply by the fact that their behavior was or was not conventional. In those examples where the actors' motives were selfish or cruel, and the results harmful to others, the actors were excused because they had behaved as most people do. In those examples where the actors' motives and effects were to enjoy themselves and harm no one the actors were censured because they had behaved as most people do not. The point the author wishes to argue is that there appears to be a pervasive tendency for perceivers to evaluate observed behavior on the basis of what they believe is the usual behavior in that particular situation. When the observed

behavior conforms to the conventional pattern, the actor is less likely to be perceived as responsible for that behavior than he would be were his behavior unlike that of most people in the same situation.

The problem, then, is to demonstrate that perceivers who believe that observed behavior is unusual will tent to attribute greater responsibility to the actors for their actions, than will perceivers who believe the actors have behaved as most people do in that situation.

Review of the Literature

Research on the attribution of responsibility incicates that observers' perceptions are effected by a number of factors. Shaw (1967), and Sulzer and Burglass (1968) have presented evidence that the age of the perceiver is important in assigning responsibility, adults taking intentions more into account than children do. Nevertheless, Pepitone and Sherberg (1957), and Jones and Nisbett (1971) found that intentions are not nearly so important as behavior in attributing responsibility, even among adults. Shaw and Sulzer (1964), and Shaw, Floyd and Gwin (1971), demonstrated that behavior which produces negative results will evoke attributions of greater responsibility to the actor than will behavior that results in positive outcomes. Walster (1966) found that the more severe a negative outcome the greater the degree of attributed responsibility, however, her results could not be replicated in two other studies of severity and responsibility, Shaver (1970), and

Shaw and Skolnick (1971). A study by deCharms, Carpenter, and Kuperman (1965) revealed that greater responsibility is attributed to an actor for behavior which is intended to make a gain than for similar behavior intended to prevent a loss or to avoid punishment. Strickland (1958), and Kruglanski (1970) found that actors who performed tasks without supervision were accorded greater responsibility for their actions than were actors who worked under surveillance.

The literature makes no mention, however, of the effect of unusual behavior on attributions of responsibility. To introduce this independent variable into the growing literature one must make a fresh start. A logical starting place seems to be a discussion of the nature of information about people which is available to perceivers.

There are two major forms of information about persons: preinterpreted reports of behavior, and behavioral cues. Much of the information people receive about other people comes from some third party and is already evaluated. Gossip, report cards, letters of recommendation, and eulogies are common sources of ready-made attributions. The most common source of this kind of information is the mass media. People learn far more about other people, many of whom are remote from them in space, time, and social position, from the mass media than from any other source. The other form of information is behavioral cues from the actor, himself. Cues are only observable hints about the nature of the person. They must be cognitively assembled and organized

by the perceiver before he can make attributions about the actor. Both forms of information, the ready-made attribution from the mass media, and the do-it-yourself cues from the actor, present problems for the perceiver.

A problem for perceivers (actually receivers), who must depend upon the mass media for information about current events, social problems, political movements, and so forth, is that very frequently the information about a particular individual or group is very sparce. The reporter's guideline is Who, What, When, and Where. "Why" is not included. Perhaps this is due to the difficulty of getting such information, or to the time pressures of deadlines, or perhaps the media do not have the money and personnel necessary to pursue that question. But more likely, it is not necessary to explain why a particular person behaved in a manner so singular as to attract the notice of the media. Perhaps the editors assume that, given their audience's knowledge of what is usual behavior, people can well decide for themselves why it is that "man bites dog."

The author would like to suggest that in the case of information from the mass media all a perceiver needs to know in order to make attributions about an actor is: (a) what did he do, and (b) what would most people do? Interestingly, in the case of making attributions on the basis of cues the problem is different, but the solution is similar.

The problem for the perceiver is not that cues from which to make attributions are scarce, but rather that they are too abundant. A perceiver is inundated by a flood of stimuli from both the focal person and the environment. Anything an actor does or does not do is a potential cue. His every choice from among the courses of action open to him, the statements he makes, the words he chooses, the tone of his voice, the look in his eyes, and even his posture, provide cues about his character and the inner forces which motivate him. The perceiver's knowledge of the situation provides another torrent of cues. The social situation: cultural values and beliefs, norms and social control mechanisms, and societal goals are especially important cues about the causes of behavior. Even the physical setting in which the behavior takes place: the location, the time of day, down to the temperature and humidity may share the responsibility for a person's behavior.

The problem for the perceiver, then, is to process the information efficiently so that he avoids overloading his information handling capacity. If he is unable to do this quickly, and with a minimum of effort, he will be swamped by the incoming stimuli and will be unable to make predictions about others' behavior and the effects of his behavior on them. Heider (1958) claims that the ability to make reliable predictions about the outcomes of interaction is critical to one's capacity to create a stable, controlled environment. If a person is to survive and benefit from his

day-to-day confrontations with other human beings, he must be able to anticipate correctly, at least most of the time, just how they will act and react toward him. That is, he must develop an adequate "theory" of the causes of people's behavior, a "theory" that may be applied parsimoniously to the cues provided to him by actors and situations.

Heider suggests two such "theories." He points out that men are perceived as causal agents, a fact that makes them unique in the world as we understand it. Unlike other causes of natural phenomena which are themselves, seen as being caused, man is seen as the first cause at least of the moral quality of his acts. Thus, one theory about the cause of an individual's behavior is that there is something about the character of the individual, himself, that is responsible. The second theory, based on the unstated assumption that man, too, is a natural phenomena holds that man's behavior is frequently caused by impersonal situations, external to him, and located in the social or physical world. But which "theory" to apply to any given observation? What is needed is a principle by which to select the most reliable and parsimonious explanation for each social interaction.

Although they do not consider the person versus situation causal attribution problem, Jones and Davis (1965), in their classic paper on person perception, point out that when a person's behavior conforms to the model of standard behavior, the perceiver learns very little about the unique

characteristics of that person. In other words, to learn that a man chooses to act in the conventional manner is to learn only that he is like most other men in that regard. This observation, taken by itself, is not especially dramatic, but it can be developed into the basis for the principle which we are seeking.

Although knowing that a person behaves like others may be inadequate if the perceiver's purpose is to discover the other's character traits, this information may be a sufficient basis upon which to predict his future behavior. If the perceiver can assume that the other's behavior will conform with conventional behavior, then he does not need to know about the other's unique characteristic to predict his behavior, he needs only to know what behavior is conventional.

Returning to Heider, we are told that the perceiver seeks to find a <u>sufficient</u> reason why a particular person acted in a particular way. Once he discovers a sufficient reason the search stops (Heider, 1958). If we incorporate this into the Jones and Davis argument, we may now assert that if the perceiver "discovers" that the actor behaved in a particular manner because society values that specific kind of behavior, that is, in that particular situation most people behave in a conventional manner, the search process stops and the perceiver attributes the cause of the behavior to the societal values. Should the perceiver decide that

the actor has not acted as most other men would in that situation, then the search must continue and he will consider the actor's unique characteristics as a causal locus.

Here, then, is a principle by which perceivers may select between the personal and impersonal explanations of the cause of behavior. To identify this principle we will borrow Stain's (1971) label for the earlier concept from Jones and Davis and call it the "priority principle." The priority principle may be stated as follows: Perceivers consider societal values as a possible explanation of observed behavior before they consider personal factors, and if the societal values are perceived as a sufficient explanation, personal factors receive little or no consideration. However, when societal values fail to provide a sufficient explanation, the perceiver's attention is then directed to personal factors.

The perceiver is almost certain to "discover" some personality trait to account for the behavior, his search being guided by the folk wisdom that "they wouldn't act that way if there wasn't something wrong with them." A few more words are required on this point.

As Mills has pointed out, we ask about people's motives only in those situations which involve alternative or unexpected purposes or conduct (Mills, 1940). The author would like to extend this to point out that questions about an actor's motives, or questions in general about the possible cause of his behavior are probably never raised

unless his behavior is unusual. Ordinary behavior is taken for granted and questions are asked about the reason for it only rarely. More than likely, most people are not aware of the causes of ordinary behavior, and are probably unaware that it is caused. It is not until something happens, such as an experimenter who insists that they answer questions about the cause of the particular socially accepted pattern of behavior, do they become aware that they have never considered the reason for that behavior, but have always taken it for granted. The Putneys call this the "yellow-eyed cat" phenomenon (1966, p. 7). When people are forced to consider the cause of common behavior, as in an experiment such as this one, it seems reasonable that they would consider situational causes first, as the priority principle states, and it seems unlikely that they would attribute the behavior to the idiosyncracies of the actors.

Out of the ordinary behavior, however, invites attributions about the actor's personal characteristics. Unusual behavior cannot be explained by referring to society's values, and, indeed, the first cue that the actor is different from other people is the fact that he acts unusually. Obviously, this is circular reasoning, but, nevertheless, probably a very common cognitive pattern. The important implication of such a phenomenon, if it does exist, is that because of the way in which perceivers process cues (and evaluate information) there exists a tendency to blame individual idiosyncracies or perhaps individuals'

psychological emotional problems for deviant behavior and social problems and to stop the search for the cause of anti-social behavior before considering that the real cause may lie with societal conditions in which these people find themselves. Frequently, people who behave unusually simply are labelled as lazy, violent, brain-washed, or just plain crazy, and no attempt is made to go beyond these labels to seek the actual sources of deviant behavior. On the other hand, and perhaps just as frequently, perceivers tend not to make personal causal attributions with regard to social problems if the behavior is regarded as being usual and this, also, is a form of negligence.

This model of person perception assumes that most people operate on a kind of naive sociology. They are aware of a societal standard of behavior they uncritically accept as the correct way of behaving. They may be unaware of sub-group behavior patterns which conflict with the behavior patterns of the larger society, or perhaps, they simply refuse to recognize as legitimate other group's standards of behavior. Of course, there are many exceptions to this "Archie Bunker" approach to the world. It appears, however, that this is more frequently the case than not--unfortunately.

One final point remains to be established. As stated above, when the observed behavior is unusual, it is likely that the perceiver will infer personal characteristics as a way of accounting for the other's actions. These personal characteristics may vary in the degree to which

they correspond with the behavior to be explained. "Correspondence refers to the extent that the act and the underlying characteristic or attribute are similarly described by the inference" (Jones and Davis, p. 223). The greater the correspondence, the greater the degree to which the inferred characteristics are perceived to account for the observed behavior. To put it the other way around, the correspondence of an inferred characteristic declines to the degree that the action observed appears to be common.

For example, if a person behaves in a dominant fashion in a situation where dominant behavior is common, say the person is an Army platoon leader giving orders to his men, a perceiver would most likely not search for an explanation for his behavior. If the perceiver were asked to rate him on a scale from dominant to submissive, in terms of his personal characteristics, the perceiver would probably rate him as "somewhat dominant." He would be unlikely to rate him as "extremely domineering." What is more, it would be likely that the perceiver would not place great confidence in this inference. In such a case, the inference would have low correspondence with the observed behavior. On the other hand, if the actor had behaved in a domineering fashion in a situation where dominance is not common, say in a conversation with a peer, an observer would probably infer that this behavior is a reflection of a disposition to dominate others. In this case, the perceiver would probably rate the actor as "extremely dominant," and would be likely

to place high confidence in this attribution. In this latter case, the inference would have high correspondence with the observed behavior.

An experiment by Jones, Davis, and Gergen (1961) demonstrates that behavior which conforms to clearly defined role requirements (usual behavior) is seen as uninformative about the individual's personal characteristics, whereas a considerable amount of information will be extracted from unusual, out-of-role behavior. The subjects listened to one of four tapes recorded "job interviews" in which the interviewee was instructed to appear to be interested in qualifying as a submariner or as an astronaut. The subjects were told that the ideal submariner is "other-directed," and that the ideal astronaut is "inner-directed." In the two conditions in which the prospective submariner responded as if he were "other-directed," and the prospective astronaut responded as "inner-directed" (in-role-behavior) the subjects inferences of what the interviewee "was <u>really</u> like as a person," revealed that they perceived him as moderately conforming and moderately affiliative. The confidence the subjects place in each rating was extremely low. On the other hand, out-of-role behavior (submariner-inner, and astronaut-other) produced very extreme ratings on the two characteristics, and both inferences were made with high confidence. In other words, the unusual behavior produced highly correspondent inferences about the stimulus person's personal characteristics, but usual behavior produced only low correspondence.

The point then is that the attribution of responsibility for his behavior to the actor, and the attribution to him of unique character traits are not two separate attributions but rather only one. The explanation of the actor's behavior is in terms of his perceived characteristics. Therefore, to attribute particular traits to an actor is to explain the reason for his behavior. The degree to which the perceiver attributes extreme characteristics to the actor, and the confidence he places in those attributions are a measure of his certainty that the actor is indeed the cause of the observed behavior.

Theoretical Development of the Hypothesis

The theoretical development of the hypothesis may be summarized as follows: Heider states that the ability to predict other peoples' behavior is necessary to the success of social interaction. To predict behavior, one must know the cause of the behavior and Heider suggests two types of causes: personal causes and situational causes. It is assumed that if cause is the situational type, then people in that situation will behave as the situation demands, that is, they will behave similarly.

Jones and Davis point out that if a person behaves in a particular situation as others do, a perceiver does not learn much of the actor's character, but he does not need to know much about the actor's character in order to predict his behavior, he needs only to know how others act in that

situation. Heider subgests that people look for "sufficient explanations" of behavior and once one is found, they look no further. These two ideas were combined to form the "priority principle," which claims that people first consider the situational causes of behavior, i.e., they ask if the behavior observed is conventional behavior and if it is the search for the cause is terminated because a "sufficient cause" has been located. If the behavior is not ordinary, the personal causes must be considered and the perceiver asks what is it about the actor's unique character that causes him to act in this manner. Some character trait (or traits) will be identified as responsible for the act because usual behavior elicits attributions of corresponding unusual traits. The greater the correspondence the greater the degree to which the inferred unusual trait is perceived to account for the observed unusual behavior. And, therefore, since the person is seen as the source of his unusual behavior, it is hypothesized that he will be held responsible for that behavior to a greater degree than he would be if his behavior had been conventional.

The author suggests that a major factor in the attribution of responsibility is the perceivers concept of what constitutes conventional behavior. The purpose of this dissertation is to demonstrate that the manipulation of information given to perceivers about what constitutes "usual" behavior, will effect their attributions of responsibility to the stimulus persons. In particular, it is

hypothesized that:

> Perceivers will attribute a greater degree of responsibility for the outcome of his behavior to an actor who has behaved unusually than they will attribute to an actor who has behaved in the conventional manner.

To anticipate what is to be presented in the section on experimental design, four treatment groups are created by instructions about the unusualness or usualness of the behaviors of two confederates. In the data collection proceedure, the subjects are asked to indicate, on a seven-point scale, the degree to which each of the confederates and the rules of the laboratory game they play are responsible for the game's outcome, i.e., the amount of money won or lost by each of the confederates. It is reasonable to assume that these three attributions will not be independent, and that if the amount of responsibility attributed to one of the confederates is higher in the condition in which the subjects are instructed that his behavior is unusual, the degree of responsibility attributed to the other confederate, and to the game, would be less than in the "usual condition. Therefore, it is hypothesized that:

> If greater responsibility is attributed to an actor because his behavior was unusual, the amount of responsibility attributed to the other actor, and to the game, will be less than if the first actor had behaved in the conventional manner.

COLLECTION OF DATA

Experimental Design

In order to test the hypotheses, it was necessary to create a situation in which two essential conditions could be met. First, it had to be possible to manipulate the perceivers' beliefs about the usualness or unusualness of a specific behavior in a particular situation. The requisite circumstance was one in which one group of perceivers believed the action observed was usual, while a second group of observers believed the identical behavior was unusual. Holding constant the behavior, while varying the "usualness" of that behavior, would permit the observation of the effect on the perceivers' attributions of responsibility to the actors.

The second necessary condition was one in which interfering variables were eliminated or controlled. To be assured that the effects observed were in fact produced by the independent variable, it was essential to avoid the possibility that extraneous factors, such as potentially applicable cultural norms, religious, ethical or political values, or influence from others, might contaminate the results.

These two requirements are best met by the method of laboratory experimentation. The laboratory provides an environment in which it is possible to regulate the

information about a specific event which is available to the perceivers. Specifically, by designing a laboratory game, about which the perceivers could have no previous knowledge of how people behaved when playing the game, it was possible to supply them with a variety of information about what was "usual" and "unusual" behavior.

Furthermore, it was hoped that the fact that the stimulus situation was a novel one would reduce the likelihood that the behavioral information supplied by the experimenter would be superseded, by those standards of behavior which apply to events in day-to-day life, in influencing the subjects' perceptions.

Sample

The subjects for this experiment were volunteers from two sections of an undergraduate social psychology class, in the Spring of 1972. They were recruited with the aid of the Subject Recruitment Form [see APPENDIX E] which also served as the instrument by which the background data were collected.

There were forty male subjects and forty female subjects. Because of scheduling difficulties, the number of males and females in each condition was not equal. The distribution of male and female subjects in each condition is shown in Table 1. Each subject is reported twice, once for Blue's behavior, and once for Red's.

TABLE 1

DISTRIBUTION OF SUBJECTS BY BEHAVIOR AND SEX

Perceiver's Sex	Blue's Behavior		Red's Behavior	
	Usual	Unusual	Usual	Unusual
Males	19	21	24	16
Females	21	19	16	24
Totals	40	40	40	40

About seventy-five percent of the subjects were in the nineteen through twenty-one years old age group. The rest were over twenty-one, but only three were twenty-five or older.

About fifty percent of the subjects were social science majors, fifteen percent were in the humanities and the rest from a wide variety of schools and programs throughout the University. The majority (seventy-three percent) were sophomores and juniors.

Over eighty percent reported their social class to be upper-middle or middle-middle, and all were white with the exceptions of one Black, one Mexican American, and one American Indian.

Three people were eliminated from the sample because they recognized one of the stimulus persons. No other subjects were eliminated from the sample for any reason.

Laboratory Setting

The subjects, in groups of up to five persons each, were met by the experimenter in the waiting room of the Sociology Department's experimental laboratory. Here they were greeted by the experimenter, who identified himself and directed them into the laboratory. The laboratory is a medium-sized room of about 15 X 30 feet. The walls and ceiling are covered by white acoustical tiles, and the room is well lighted. A one-way mirror runs the length of one wall, but since this was not used it was covered by draw-drapes.

At one end of the laboratory, flush against the wall and midway from either side of the room, was a small table upon which stood the game board. The game board was a 4 X 4 sheet of plywood, it was painted white, and held erect by a wooden stand. Along the left side of the board were mounted two blue light bulbs, one above the other. The left side of the board was labelled "BLUE." Across the top of the board were two red light bulbs, mounted side by side. The top of the board was labelled "RED." The four lights were controlled by switches placed on two smaller tables located about five feet in front of the larger one. One set of switches, for the "Blue" player, were labelled "Up" and "Down;" the second set, for "Red" were labelled "Left" and "Right." The game board had two hooks located under the two light bulbs at the top of the board. These hooks were for attaching the pay off structures to the game board.

The two pay off structures were four-cell matrices with numbers in each cell to indicate the amount each player would win if that cell were chosen. One matrix was labelled "Low-Risk Payoff Structure," the other was labelled "High-Risk Payoff Structure" [see APPENDIX A for Payoff Structures]. The payoff structures were printed on 3 X 3 feet pieces of white posterboard. The four light bulbs were located so that the blue lights indicated which one of the two rows (up or down) the "Blue" player selected and the red lights indicated "Red's" choice of the left or right column. Chairs were placed at each of the two smaller tables so that the confederates sat facing the game board.

At the opposite end of the room, facing the game board, was the television camera used to make the video-tape of the two confederates who were the stimulus persons. Beside the camera was a special-effects generator which is a piece of television studio equipment that has two television screens in its console. These two pieces of equipment were not used during the experiment, but were left in the laboratory as props, to demonstrate that the video-tape was actually made in the room.

Along the length of one side of the room were five desk-top chairs, each isolated from the one beside it by a rather large room-divider. It was in these chairs that the subjects sat as they watched the video-tape as it was played on a television set located on the opposite side of the room. The Ampax video-tape recorder was on the table

beside the television set so that the subjects could see the experimenter turn the tape on and off, and so that they could see the actual tape on the equipment as it played. The only other items in the room were a table, in the corner of the room just to the right of the game board, on which were stacked the questionnaires and other materials, and a chair for the experimenter to use while the subjects filled out the questionnaires.

Cover Story

After the subjects were taken into the laboratory, they were told the following cover story:

> "We are interested in the way in which people non-verbally project cues about their character traits to other people. We want to know more about how people reveal what kinds of persons they are without actually telling others verbally. We want to discover how much information about a person's character is revealed by a person's behavior. In other words, how much can we know about a person without talking to him. We are going to have you watch two subjects play a laboratory game and then have you report back to us what kinds of impressions of the subjects you picked up just by watching them.
>
> Last term, we administered a questionnaire to a large sociology class. The questionnaire consisted of a battery of questions designed to reveal how the subjects see themselves as persons. Using the results from this, we selected thirty subjects and enlisted their cooperation in this research. We asked each for a list of people who knew him very well, and who would be willing to tell us their impression of him. We then contacted these people by mail and asked them to fill out a questionnaire similar to the one each subject had filled out about himself. Of course, all of the replies are kept confidential.
>
> So now, at this point, we had information about how each subject, and several of his close friends, see him as a person. What we want to do now is see how

each subject is seen by complete strangers who have observed his behavior, but who have never talked with him.

What we are going to have you do is watch a video-tape recording of two of these subjects as they perform a task in a laboratory setting. We will then ask you to fill out the same questionnaire that our other respondents have filled out.

Are there any questions?" If there were, they were answered in a manner in keeping with the cover story.

Stimulus Situation

After they were told the cover story the subjects' attention was directed to the game board on the table at one end of the room. They were then given the following explanation of the game:

"What you will see on the video-tape is two of the thirty subjects playing this game. This is a very simple laboratory game which is often used in experiments like this one. There are two players: "Blue" and "Red." Each player has two switches which operate his set of lights. Blue's switches are labelled "Up" which turns on that light right there, [the experimenter demonstrated each operation as the explanation proceeded] and "Down," which lights that one. Red's switches are for "Left," . . . and "Right." Any questions so far? [If there were questions at any time, they were answered; if there were none, the experimenter proceeded with the explanation.]

Now, this part of the game board is called the "payoff structure." There are four cells in the payoff structure, and these numbers inside each cell indicate how much money each player wins on each trial. There are ten trials altogether, and at the end of the ten trials, each players winnings are added up and he actually gets paid that amount of money. The amount that the "Blue" player wins is indicated by the number in the lower left-hand corner of each cell; the number in the upper right-hand corner indicates how much the "Red" player wins.

Now then, which cell is selected on each trial depends upon which lights Blue and Red turn on with their

switches. They take turns going first; on the first trial Blue turns on his light first and then Red lights his; on the second trial, Red goes first and then Blue. Let's say that it's Blue's turn to go first and he chooses to light the "Up" bulb--like this. And, then Red decides to go to the left--like this. The combination of the two lights indicates which cell has been selected. In this case, "Up" and "Left" are lighted, so the upper left-hand cell is the cell that has been selected. This means that Blue would receive forty cents for this trial and so would Red. If they used these same two lights on each of the ten trials, at the end of the game, each player would be paid four dollars.

[At this point, the experimenter used the various combinations of switches to indicate each of the remaining cells. With each cell, he asked one of the subjects to report which cell has been selected and how much money each player would receive. When he was satisfied that each subject understood the mechanics of the game, he asked if there are any questions, and proceeded to explain the low-risk, and high-risk payoff structures.]

O.K. so far, so good. Now then, there are actually two payoff structures. This one is the low-risk payoff structure; the other one is underneath [the experimenter raised the low-risk matrix slightly to expose the other matrix beneath it, then dropped it down again and went on to explain the low-risk matrix.] It's called a low-risk payoff structure because of the way the payoffs are arranged. You can see that the "Blue" player receives forty cents whenever he chooses "Up," regardless of whether Red chooses "Left" or "Right." If Blue were to choose "Down" he would get nothing, so we would expect him to choose "Up" every time. The same kind of thing is true for Red. When he lights his left bulb he gets forty cents, no matter which light Blue chooses. If Red lights his right light he gets nothing, so we would expect him to choose "Left" on every trial. Now, since we can be pretty sure that Blue will choose "Up," and that Red will choose "Left" on each of the ten trials, its a safe bet that each player will have won four dollars at the end of the game, and that is why this payoff structure is called "Low-Risk." Are there any questions about the low-risk payoff structure?

[The experimenter removed the low-risk matrix from the hooks, exposing the high-risk matrix. He set the low-risk matrix aside and said:]

This is the high-risk payoff structure. It is somewhat like the other one with two important exceptions. First, if the combination of lights chosen by the players indicates that the upper left-hand cell has been selected, each player receives sixty cents instead of only forty cents. This means that if this cell were selected on each of the ten trials, both players would be paid six dollars at the end of the game. So there is the possibility of winning more money with the high-risk payoff structure.

But now look at this: on the high-risk payoff structure the "Red" player can go to the right and win eighty cents on each trial. If he chooses the right light on the low-risk payoff structure he would get nothing, but if he chooses it on the high-risk payoff structure he gets eighty cents and the "Blue" player gets nothing regardless of whether he chooses "Up" or "Down." So there is this risk to the "Blue" player that Red might go to the right and win eight dollars on the game, if he goes to the right every trial, and then Blue would get zero. And, that is why this payoff structure is called a high-risk payoff structure: because of the risk to Blue. Are there any questions about the high-risk payoff structure?

Now, since Blue is the player who takes the risk on the high-risk payoff structure, we allow him to decide whether the game will be played with the low-risk or high-risk payoff structure. Are there any questions about that?

Alright, now then, there is one more important thing for you to know about this game. [At this point in the explanation of the game, the experimenter supplied the treatment information about the "usual" behaviors for both Blue and Red. The treatment conditions are discussed in the next section of this chapter. Note that in the explanation of the game, no mention was made about whether the goal of the game was to compete or to cooperate.]

Does any one have any questions now? None? Very well, if you'll have a seat over here, we'll watch the tape. You'll see the whole explanation, again, on the tape, as the game is explained to the two subjects [this was done to insure that the subjects understood the game's mechanics.] You'll notice that the game begins with a toss of a coin to determine which subject will be "Blue" and which one will be "Red."

> As you watch the subjects play the game, we will have you keep score on this score sheet. [See APPENDIX D for the Score Sheet. The score sheet was employed to be sure that the subjects knew which player did what and how much he had won. It also acted as a double-check to be sure that the subjects correctly understood the treatment instructions.] It is easy to keep score, because the subjects were told how much they won after each trial, so all you have to do is write that down in the proper column on the score sheet. This is just a record for you so that when you are filling out the questionnaire you'll know who did what on each trial. There are two questions on the bottom of the score sheet that you won't be able to answer until after you've seen the tape.
>
> Since the dividers block your view of the game board, I'll give each of you a copy of the payoff structures. [This handout also included the instructions about "usual" behavior, according to the subjects' treatment condition. See APPENDIX C for Treatment Instruction Sheets.]

All of the subjects regardless of their treatment condition, watched the same video-tape. Therefore, any differences in perceptions, between the four groups, may be assumed to be due to the treatment instructions received and not to the behavior observed. Also, because video-tape was employed, the observed behavior is perfectly standardized, an important advantage over laboratory experimental designs that use "live" confederates each time the experiment is run.

The two confederates were white, male undergraduates. They were clean-shaven, had medium length hair, and were dressed in sports shirts and wash trousers. Because of the camera angle, one's face was never visible on the video-tape, and the other's was seen for only a second or two. Their dialogues consisted of an occasional one-word response

to the experimenter's questions. Aside from their pre-arranged choices during the game, they evidenced no distinguishing characteristics, except that they were "typical" college students to the point of being practically nondescript.

The confederates' roles called for them to make two important decisions which were apparently critical to the outcome of the game. The first of these was Blue's choice of payoff matrix. Blue "chose" the high-risk payoff structure, and this "decision" presented Red with the option of cooperating with his partner by electing to light the left bulb, and, thereby winning six dollars each, or of exploiting his partner by choosing to go to the right on each trial, winning eight dollars for himself while leaving Blue with nothing. Red "chose" to go to the right on each of the ten trials.

It was important to the design of the experiment that both players have a hand in the determination of the final outcome of the stimulus game. The burden of responsibility could fall on Blue for having chosen the high-risk payoff structure, when he might have played it safe and opted for the low-risk, or it might fall on Red for having chosen to go to the right on each trial instead of to the left. Then, too, it is likely that both may be seen as being equally responsible. Since the stimulus situation is a novel one for the perceivers, it is reasonable to assume that the treatment information about whether each player's

behavior was usual or unusual would have an impact on the subjects attributions of responsibility.

After the subjects had watched the video-tape, the experimenter asked them to answer the two questions at the bottom of the score sheet. The questions asked whether each player's behavior had been usual or unusual. The experimenter checked each subject's answers right away to be sure that the treatment information had been understood. If any subject had questions about whether the behavior was usual or unusual, the experimenter reminded the subject of the instructions given about this, and referred him to his copy of the payoff structures which had the treatment instructions written out. The experimenter would then ask the subject to tell him whether the observed behaviors were usual or unusual. When experimenter was satisfied that each subject understood and accepted the treatment instructions, the post-observation questionnaire was administered.

As each subject completed his questionnaire, he was asked to fill out the report request form [see APPENDIX G] so that each subject would receive, by mail, a report on the experiment's purpose and findings. After data had been collected from eighty subjects, the experimenter discussed the experiment in class. It was felt that the discussion and individual reports would be an improvement over the more commonly used talk-down immediately following the experiment since the only deception was in the fact that the study was actually concerned with the effect of norms on

perceptions rather than with non-verbal communication, and that the players observed were actually confederates. The experimenter felt that this in no way would be harmful to the subjects and that the explanation of the experiment would be a more meaningful learning experience if the results of the experiment could be discussed along with its purpose.

Each subject was paid two dollars for participating in the experiment, and the experimenter made a point of expressing his sincere appreciation, for his or her participation and cooperation, to each subject, individually, at the completion of each session.

Treatment

During the experimenter's explanation of the mechanics of the game, following the discussion of the low- and high-risk payoff structures, he explained that the "Blue" subject was allowed to choose which payoff structure would be used, and then asked the subjects if they have any questions. If there were none, or after questions had been answered, he said: "Alright, now then, there is one more important thing for you to know about this game."

At this point the experimenter supplied the treatment information; that is, he told the subjects what is the "usual" behavior for both players. The information for each of the four conditions is as follows:

Condition One: Blue usual/Red usual.

We know from previous experience that almost all of the subjects will choose the High-Risk Payoff Structure. In fact, more than 95% of the "Blue" subjects choose the High-Risk Payoff Structure. We also know that when the High-Risk Payoff Structure is chosen, more than 95% of the "Red" subjects will choose "Right" every trial so that the result of the game is that Red wins $8, and Blue gets $0.

Condition Two: Blue usual/Red unusual.

We know from previous experience that almost all of the subjects will choose the High-Risk Payoff Structure. In fact more than 95% of the "Blue" subjects choose the High-Risk Payoff Structure. We also know that when the High-Risk Payoff Structure is chosen, more than 95% of the "Red" subjects will cooperate with their partners and choose "Left" every trial so that the result of the game is that both players win $6.

Condition Three: Blue unusual/Red usual.

We know from previous experience that almost all of the subjects will choose the Low-Risk Payoff Structure. In fact, less than 5% of the "Blue" subjects choose the High-Risk Payoff Structure. We also know that if the High-Risk Payoff Structure is chosen, more than 95% of the "Red" subjects will choose "Right" every trial so that the result of the game is that Red wins $8, and Blue gets $0.

Condition Four: Blue unusual/Red unusual.

We know from previous experience that almost all of the subjects will choose the Low-Risk Payoff Structure. In fact, less than 5% of the "Blue" subjects choose the High-Risk Payoff Structure. But, we also know that when the High-Risk Payoff Structure is chosen, more than 95% of the "Red" subjects will cooperate with their partners and choose "Left" every trial so that the result of the game is that both players win $6.

Instrument

The data was collected with an eighteen page questionnaire [see APPENDIX B for Post-Observation Questionnaire.] There were three parts to the questionnaire:

The first part of the questionnaire was concerned with the perceived character traits of Blue and Red.

To examine the degree of extremity in attributions of character traits, two sets of fifteen seven-point bipolar adjective rating scales were used. One set was for the "Blue" stimulus person and one set was for the "Red." The subject was asked to indicate what he thought each stimulus person was "really like as a person." The fifteen scale items comprise three clusters of five items each. The clusters were selected on the basis of their relevance to the observed behaviors. The first cluster deals with attributions of friendliness, i.e., it asks about the degree to which either stimulus person was perceived as displaying a disposition to make friendly overtures to others. The scale items in the friendliness cluster were: friendly--unfriendly, trusting--suspicious, warm--cold, pleasant--unpleasant, likeable--irritating. The second cluster deals with attributions of aggressiveness. This cluster is concerned with the degree to which either stimulus person was perceived as displaying a disposition to dominate others in a determined, calculating, and energetic pursuit of his own ends. The items in the aggressiveness cluster were:

competitive--cooperative, smart--stupid, forceful--weak, dominant--submissive, stubborn--flexible. The third, the altruism cluster dealt with the degree to which either stimulus person was perceived to display a regard for the interests of others. The items in this cluster were: considerate of others--selfcentered, honest--dishonest, reliable--untrustworthy, generous--not generous, humane--ruthless.

The measure of the subject's confidence in each of the above attributions was taken by a seven-point bipolar rating scale ranging from "Not Certain At All" to "Extremely Certain."

The subjects were also asked to report their general impression of each stimulus person on a seven-point scale margin from "Very Bad Impression" to "Very Good Impression."

They were also asked to write a brief statement describing what they felt each subject "was really like as a person."

Questions 3 through 6a made up the section on responsibility. The first question in this section (Q-3) asked "Who do you feel is responsible for the final score in this experiment?" This was a closed-ended question and the subject was required to select from "Blue," "Red," "both," or "neither." Questions 4, 5, and 6 asked "To what degree was the "Blue" subject (the "Red" subject, the rules of the game) responsible for the final score?" These three

questions required the subjects to indicate the degree of perceived responsibility on seven-point scales ranging from "Not At All Responsible" to "Totally Responsible." Each of these questions was followed by an open-ended question which asked "Why do you say that?"

The third section of the questionnaire dealt with attributions of the degree to which each stimulus person was unrestrained in his behavior. Three seven-point scales ranging from "Not Free At All" to "Completely Free" were provided for responses as to Blue's freedom in choosing the payoff structure, his freedom in choosing "Up" or "Down," and Red's freedom in choosing "Right" or "Left." Each of the three scales were followed by an open-ended question which asked: "Why do you say that?"

Method of Analysis

The procedure employed to analyze the data from the scales was to compute means on each item for each condition (usual or unusual) for each of the two stimulus persons (Blue and Red). These means were compared by the use of a one-tailed t ratio. The one-tailed test is appropriate since the hypothesis predicted that responsibility scores would be greater in the "unusual" conditions.

The data from non-scale items were analyzed by means of contingency tables. The obtained frequency distributions were compared with the expected frequency distributions by using Pearson's chi-square statistic.

Each analysis was done twice: once using the entire sample as a whole, and then, again, controlling on the sex of the subject to reveal possible differences in the responses of males and females.

ANALYSIS AND INTERPRETATION

Unusual Behavior and Responsibility

The principle hypothesis tested was that unusual behavior will elicit more extreme attributions of responsibility than will usual behavior. The independent variables were the instructions given to the subjects about whether Blue's and Red's behaviors were conventional or unconventional, and the dependent variables were the attributions of responsibility. The data for the dependent variables were collected by three questions: "To what degree was the Blue subject responsible for the final score?; To what degree was the Red subject responsible for the final score?; and, To what degree were the rules of the game responsible for the final score?"

Since the hypotheses clearly indicated the particular effects expected, a "planned-comparison" research design is the appropriate analysis procedure to employ. However, it is frequently useful to begin analysis using a "post-hoc" design, the data for general patterns of relationships between variables. This method is presented below using three independent variables.

Analyses of Variance

The first two variables (A and B) are the instructions about the confederates' behaviors. These were

explained in the section on treatment. The third variable (C) is the sex of the perceiver. The legitimacy of, and the necessity for, including the sex of the perceiver as one of the three variables becomes obvious in the analysis which follows. Table 2 shows the summary of the three-way analysis of variance of the data from the question about the degree of Blue's responsibility for the final outcome of the game.

TABLE 2

THREE-WAY ANALYSIS OF
DEGREE OF BLUE'S RESPONSIBILITY

Source	SS	df	MS	F[a]
Blue usual/unusual (A)	5.53	1	5.53	1.99
Red usual/unusual (B)	3.51	1	3.51	1.27
Perceiver's Sex (C)	.37	1	.37	.13
A x B	5.24	1	5.24	1.89
A x C	4.09	1	4.09	1.48
B x C	.00	1	.00	.00
A x B x C	.19	1	.19	.07
Error Term	199.63	72	2.77	

[a]F ratio required for $p < .05 = 3.98$

Since all of the three-way analyses of variance were done with unequal cell frequencies, they were somewhat more conservative tests than they would be otherwise. As may be seen in Table 2, none of the F ratios, for the first analysis approached the level of significance, and it appears that neither of the instructions about the confederates' behaviors nor the sex of the respondent made a significant difference in the degree of responsibility

attributed to the Blue confederate. Furthermore interaction effects are not in evidence. Although they were not revealed in this analysis, there were effects on the degree of responsibility attributed to Blue which are revealed by another analysis techinque which provides a more appropriate test of the hypotheses. These effects are demonstrated in the section on planned comparisons.

TABLE 3

THREE-WAY ANALYSIS OF DEGREE OF RED'S RESPONSIBILITY

Source	SS	df	MS	F
Blue usual/unusual (A)	.00	1	.00	.00
Red usual/unusual (B)	7.62	1	7.62	3.91[b]
Perceiver's Sex (C)	4.02	1	4.02	2.07
A x B	9.60	1	9.60	4.93[a]
A x C	11.76	1	11.76	6.04[a]
B x C	3.30	1	3.30	1.69
A x B x C	1.26	1	1.26	.65
Error Term	140.18	72	1.95	

[a] $p < .05$

[b] $p < .10$

In Table 3, it may be seen that the instructions given about Red's behavior (B) had some influence on the degree of responsibility attributed to him. However, the effect is significant only at the .10 level of probability. Of greater interest is the significant effect caused by the interaction between the instructions given the subjects about Blue's behavior and the instructions about Red's (A x B). Apparently, both instructions taken together have

a major effect on the amount of responsibility attributed to Red. But still more interesting is the finding that the largest effect on the degree to which Red was perceived to be responsible was caused by the interaction between the instructions given about Blue's behavior and the sex of the perceiver (A x C). These two findings are explained in detail in the section on planned comparisons.

TABLE 4

THREE-WAY ANALYSIS OF
DEGREE OF GAME'S RESPONSIBILITY

Source	SS	df	MS	F
Blue usual/unusual (A)	7.88	1	7.88	2.60
Red usual/unusual (B)	.49	1	.49	.16
Perceiver's Sex (C)	6.82	1	6.82	2.25
A x B	.04	1	.04	.01
A x C	2.94	1	2.94	.97
B x C	16.26	1	16.26	5.36[a]
A x B x C	12.05	1	12.05	3.98[a]
Error Term	218.31	72	3.03	

[a] $p < .05$

In Table 4, two more effects are revealed. The first of these was due to the interaction between the instructions given about Red's behavior, and the sex of the perceiver (B x C). These two variables operating together have a rather considerable effect on the degree to which the rules of the game were perceived to be responsible for the players' winnings. The second significant effect is due to the interaction between all three variables (A x B x C).

Tables 3 and 4 suggest that the next step in the analysis is to present a two-way analysis of variance for the degree of Red's responsibility, and for the degree of the game's responsibility, this time controlling on sex rather than using it as one of the variables. Since Table 2 indicated no significant effects on the degree of Blue's responsibility that could be attributed to the two treatment variables, or to sex differences, the degree of responsibility attributed to Blue will be omitted from consideration until the section on planned comparisons.

Tables 5 and 6 are for male subjects only, and Tables 7 and 8 are for female subjects only.

TABLE 5

TWO-WAY ANALYSIS OF DEGREE OF RED'S RESPONSIBILITY--MALES ONLY

Source	SS	df	MS	F[a]
Blue usual/unusual (A)	5.89	1	5.89	2.18
Red usual/unusual (B)	.45	1	.45	.17
A x B	8.93	1	8.93	3.31
Error Term	97.14	36	2.70	

[a]F ratio required for $p < .05 = 4.11$, for $p < .10 = 2.86$.

Table 5 indicates that for male subjects, neither the instructions that Blue's behavior was usual or unusual, the instructions that Red's behavior was usual or unusual, nor interaction between the two sets of instructions had a significant effect on the degree of responsibility attributed to Red.

TABLE 6

TWO-WAY ANALYSIS OF DEGREE OF GAME'S RESPONSIBILITY--MALES ONLY

Source	SS	df	MS	F[a]
Blue usual/unusual (A)	10.26	1	10.26	2.80
Red usual/unusual (B)	5.57	1	5.57	1.52
A x B	6.75	1	6.75	1.84
Error Term	131.98	36	3.67	

[a] F ratio required for $p < .05 = 4.11$, for $p < .10 = 2.86$.

Once more, no significant effect is indicated for males. Table 6 shows that the instructions about the confederates' behaviors had no significant effect on the amount of responsibility male subjects attributed to the game.

TABLE 7

TWO-WAY ANALYSIS OF DEGREE OF RED'S RESPONSIBILITY--FEMALES ONLY

Source	SS	df	MS	F
Blue usual/unusual (A)	5.87	1	5.87	4.91[b]
Red usual/unusual (B)	10.44	1	10.44	8.73[a]
A x B	1.95	1	1.95	1.63
Error Term	43.05	36	1.20	

[a] $p < .01$

[b] $p < .05$

Table 7 indicates that for female subjects, the amount of responsibility attributed to the Red confederate was significantly affected by both sets of instructions.

The instructions about Blue's behavior produced an effect which was significant at the .05 level of probability. The effect produced by the instructions about Red's behavior was significant at the .01 level of probability. The effect due to interaction between the two sets of instructions was not significant.

TABLE 8

TWO-WAY ANALYSIS OF DEGREE OF GAME'S RESPONSIBILITY--FEMALES ONLY

Source	SS	df	MS	Fa
Blue usual/unusual (A)	.59	1	.59	.25
Red usual/unusual (B)	11.16	1	11.16	4.65a
A x B	5.35	1	5.35	2.23
Error Term	86.33	36	2.40	

[a] $p < .05$

Table 8 reveals that for female subjects the amount of responsibility attributed to the game was significantly effected (at the .05 level of probability) by the instructions given about Red's behavior. No other significant effects are indicated by the table.

Summary of the Analyses of Variance

The three-way analyses of variance revealed four significant relationships: The level of responsibility attributed to Red was affected significantly by the interaction between the instructions about Blue's behavior and the instructions about Red's behavior; and, also, by

interaction between the instructions about Blue's behavior and the sex of the subject. The level of responsibility attributed to the game was affected significantly by the interaction between the instructions given about Red's behavior and the sex of the subject; and, again, by the interaction between all three of the independent variables, the instructions about Blue's behavior, the instructions about Red's behavior, and the sex of the subject. No significant relationships were indicated between the independent variables and the level of responsibility attributed to the Blue confederate.

Pursuing the significant relationships uncovered by the three-way analyses of variance, two-way analyses of variance controlling on the subject's sex, revealed no significant relationships for male subjects, and only three for female subjects. These were: the amount of responsibility attributed by females to the Red confederate was significantly affected by the instructions about Blue's behavior; and it was significantly affected by the instructions about Red's behavior. The amount of responsibility attributed by females to the game was significantly affected by the instructions about Red's behavior.

In sum, out of twenty-one possible relationships affecting the attribution of responsibility in Tables 2, 3, and 4, only four were found to be significant. These may be attributed to the significant relationships indicated in Tables 5, 6, 7, and 8. There were twelve possible

relationships in these tables, and only three were found to be significant. In short, the result of electing to begin the analysis using a "post-hoc" analysis of variance design, which is an especially conservative measure when working with unequal cell frequencies, as in this case, was to set unreasonably high standards on what would be accepted as a "significant" result. Consequently, only particularly strong relationships passed the significance test, with the result that the analysis has been artificially restricted to the point that further analysis would be a futile and empty exercise. What is needed for an intellectually satisfying and useful study, is a more sensitive significance test which will not be limited to ponderous relationships.

Planned Comparisons Among Means

The t test for significant differences between means is such a test. It is not adversely affected by unequal cell frequencies. Furthermore, since the hypotheses predict whether the level of responsibility attributed to the three agents (Blue, Red, and the Game) will be greater or less in the "unusual" condition for the confederates' behaviors, then the assumption is met which makes legitimate the use of the one-tailed test. One might expect, then, that this more powerful test of significance for planned comparisons between means would be sensitive to relationships between variables that would be overlooked by the

F test for the analysis of variance. Indeed, this is precisely the case.

Turning, now, to the test of the hypotheses, Table 9 answers the questions: Did the level of responsibility attributed to an actor increase when the subjects were told that his behavior was unusual? Did the amount of responsibility attributed to the other actor and to the game go down?

Table 9 shows the mean scores of the subjects responses to the three scales which ask for a report on the degree to which each agent is responsible. Each subject's response to a given scale is used in the computations of two sets of means. The first set of means are the subjects' responses sorted according to the instructions about Blue's behavior, and the second set are the same responses sorted according to the instructions given about Red's behavior.

TABLE 9

MEAN LEVELS OF RESPONSIBILITY BY BEHAVIOR

Responsible Agent	Blue's Behavior		Red's Behavior	
	Usual	Unusual	Usual	Unusual
Blue	3.20	3.72[a]	3.70	3.22[b]
Red	5.25	5.30	4.90	5.65[a]
Game	4.42	3.92[b]	4.32	4.02

[a] $p < .01$

[b] $p < .05$

Table 9 indicates that, as hypothesized higher levels of responsibility were attributed to both Blue and Red when the subjects were told their behaviors were unusual than was attributed to them when the subjects were told they had behaved conventionally. The mean level of responsibility attributed to Blue by subjects in the "usual" condition was 3.20, and this increased to 3.72 in the "unusual" condition. For Red, the corresponding scores were 4.90 and 5.65. In both cases the difference in the levels of responsibility attributed is significant at the .01 level of probability. These findings support the first hypothesis, but to accept the hypothesis at this point would be premature. One might conclude that, in general, the hypothesis is supported, but its acceptance must be qualified by the fact that there are important differences in the attributions of male and female perceivers, as will be shown in Table 10, below.

The second hypothesis received only partial support. As predicted, the level of responsibility attributed to the game is less in the Blue-unusual condition than in the Blue-usual condition (3.92 to 4.42) and this finding is significant at the .05 level of probability. However, the degree of responsibility attributed to Red in the Blue-unusual condition (5.30) is not less than that attributed to Red in the Blue-usual condition (5.25). Further, while the level of responsibility attributed to Blue is significantly less in the Red-unusual condition (3.22 to 3.70)

which, again, supports the second hypothesis, the decrease in the level of responsibility attributed to the game is not large enough to be significant (4.02 to 4.32). In the case of the second hypothesis, then, it is probably best to withhold judgment until more investigation can be done.

The data presented in Table 9 are for male and female subjects combined. It will be recalled that the analyses of variance indicated particularly strong effects due to the sex of the perceiver. When the data presented in Table 9 are controlled on the subjects sex, an extremely interesting phenomenon comes to light.

The Displacement of Responsibility

TABLE 10

MEAN LEVEL OF RESPONSIBILITY BY BEHAVIOR AND PERCEIVER'S SEX

Perceiver's Sex	Responsible Agent	Blue's Behavior		Red's Behavior	
		Usual	Unusual	Usual	Unusual
Males	Blue	3.11	4.00[a]	3.72	3.31
	Red	5.32	4.71[b]	4.92	5.13
	Game	4.95	4.05[a]	4.17	4.94[b]
Females	Blue	3.29	3.42	3.63	3.17[c]
	Red	5.19	5.95[a]	4.88	6.00[a]
	Game	3.95	3.79	4.56	3.42[a]

[a] $p < .01$

[b] $p < .05$

[c] $p < .10$

Before getting to the differences between the scores of men and women, in Table 10, there are some similarities to be noted. Males and females gave very similar scores to Blue in the Blue "usual" condition (3.11 and 3.29) and to Red in the Blue "usual" condition (5.32 and 5.19). In the Red usual condition, the scores for Blue were 3.75 for men and 3.63 for women, and for Red in the same condition they were 4.92 (males) and 4.88 (females). There the similarities end, and it should be noted that all of the similarities were for Red and Blue in the "usual" condition. In other words, for the "usual" conditions, men and women showed general agreement in the levels of responsibility attributed to Blue and Red. They differed only in the amount of responsibility they assigned to the rules of the game.

The principle hypothesis stated that if an actor's behavior was unusual, the amount of responsibility attributed to him would be greater than if his behavior had been conventional. The second hypothesis stated that if one actor's level of responsibility went up, due to his unusual behavior, the amount of responsibility attributed to the other, and to the game, would go down. This is very close to what is reported in Table 9. Table 10 shows that this happened in males' scores according to Blue's behavior and in females' scores according to Red's behavior. For males, in response to instructions about Blue's behavior, the amount of responsibility attributed to Blue increased in the

"unusual" condition (from 3.11 to 4.00) while their scores for Red decreased (5.32 to 4.71) as did their scores for the game (4.95 to 4.05). The differences in the first and last pair of scores were significant at the .01 level of probability, and the difference in the scores for Red was significant at .05. In the women's scores according to Red's behavior, a similar pattern was observed. Red's scores were increased when his behavior was unusual (4.88 to 6.00) while the scores went down for Blue (3.63 to 3.17) and the game (4.56 to 3.42). The differences in the scores for Red and the game were significant at the .01 level, and for Blue's scores at the .10 level. In other words, the two hypotheses are supported by the mean scores of male subjects when their responses are sorted according to the instructions they received about Blue's behavior, and by the mean scores of female subjects when their responses are sorted according to the instructions they received about Red's behavior.

However, as Table 10 reveals, the two hypotheses are not supported by males' scores according to Red's behavior, or by females' scores according to Blue's behavior. Looking at male's scores according to Red's behavior, one sees that the scores for Red were in the prediced direction, i.e., they increased in the "unusual" condition (4.92 to 5.13) and that Blue's scores decreased as predicted (3.75 to 3.31) but that neither of these scores were significant even at the .10 level. Furthermore, the score for the game changed

in the direction opposite to that predicted, i.e., it increased rather than decreased (4.17 to 4.94) and this difference was not likely to have happened by chance since it is significant at the .05 level. The women's scores according to Blue's behavior revealed this same pattern. The women's scores for Blue went in the predicted direction (3.29 to 3.42) as did their scores for the game (3.95 to 3.79). However, as above, neither of these scores were significant even at the .10 level. Furthermore, the females scores for Red went in the direction opposite to that predicted by the hypothesis, i.e., they increased (5.19 to 5.95) and this increase was significant also, this one at the .01 level. In other words, the male subjects' mean level of responsibility attributed to the game in the conditions where Red's behavior was unusual increased significantly and unexpectedly. The same thing occured in the female subjects' attributions to Red in the condition where Blue was unusual. Instead of perceiving a higher level of responsibility to be associated with Red's unusual behavior, as women did, men perceived the increased responsibility to lie with the rules of the game. In a like manner, instead of perceiving a higher level of responsibility to be associated with Blue's unusual behavior, as men did, women perceived the increased responsibility to lie with Red. This is no apparent, or "logical" reason why responsibility of the game should have increased because Red had behaved

unusually, or why Red's responsibility should have increased because Blue had behaved unusually.

What apparently had happened was that the male subjects displaced the increased responsibility away from Red and onto the rules of the game, and, in a like manner, the female subjects displaced the increased responsibility away from Blue and onto Red. Undoubtably, this displacement of responsibility took place at an unconscious level in the same manner as hostility is displaced from one target to another. It will be recalled that the displacement of hostility theory was presented by Doob, Dollard, Miller, Mower and Sears (1939) in their analysis of the inverse relationship between cotton prices and the frequency of lynching of Blacks by poor southern Whites.

At this point it will probably be useful to summarize briefly the evidence for making the claim that the displacement of responsibility did in fact occur. First, as noted above, male and female subjects agreed on the levels of responsibility attributed to Blue and Red in both the "usual" condition for Blue and the "usual" condition for Red. In spite of this, they differed greatly in their attributions in the "unusual" conditions. Men did attribute greater responsibility to Blue when he was "unusual," and women did attribute greater responsibility to Red when he was "unusual," just as predicted by the principle hypotheses, and both effects were significant at the .01 level. However, males scores for Red did not increase significantly in the

Red "unusual" condition, nor did females scores for Blue in the Blue "unusual" condition. Instead, the amount of responsibility attributed to the game increased significantly for males, and the amount of responsibility attributed to the other confederate, Red, increased significantly for females. Both of these increases (the displaced responsibility) were in the direction opposite to that predicted, and opposite to that actually attributed by subjects of the opposite sex, and both were at the .01 level of probability.

And finally, it should be noted that the differences between each pair of scores in Table 10 (there are twelve pairs) are completely accounted for by either the effect of unusual behavior on attributions of responsibility or by the displacement of responsibility.

Mean Scores of Individual Treatment Groups

It would seem that a logical next step in the analysis would be to test the two hypotheses, and the displacement of responsibility proposition, against the mean scores of the individual treatment groups. Recall that each of the eighty subjects was told that Blue's behavior was usual or unusual, and the same about Red's behavior, which creates a total of four treatment groups. When first considered, it seems reasonable that the hypotheses and the proposition, if they are valid, would hold up if one were to compare the mean scores of the Blue-usual, Red-usual

treatment group, for example, with the mean scores of Blue-usual, Red-unusual treatment group. On closer examination, however, it becomes apparent that this would not be a legitimate test of the claims made so far. There are two reasons for saying this: The first is that the hypotheses refer to unusual behavior per se, that is, in the abstract without reference to social interaction. By attempting to test the hypotheses, and the proposition, against the individual treatment groups, a new and intervening factor is added to the analysis. This new factor is the interaction between the two behaviors (Blue's and Red's) when they are taken together. This is illustrated in Table 11.

One of the more obvious examples of the effect of interaction is in the male subjects' attribution about the degree of Red's responsibility. The males in the two treatment groups which were told that Red had behaved unusually attributed the highest level of responsibility to Red of any of the four groups, when they were also told that Blue was usual (treatment group II), and the lowest of any of the four groups when they were told that Blue was unusual (treatment group IV). Clearly, such extremes in scores cannot be attributed to the instruction that Red was unusual in his behavior. Neither were they due to only the instructions about Blue's behavior. These extremes were produced by the interaction of the two. But this study is not concerned with the interactive effects of various paired combinations of usual and unusual behavior. It is

TABLE 11

MEAN LEVELS OF RESPONSIBILITY BY TREATMENT GROUP AND PERCEIVER'S SEX

Perceiver's Sex	Responsible Agent	Instructions about: Blue's Behavior / Red's Behavior Group 1 Usual / Usual	Group 2 Usual / Unusual	Group 3 Unusual / Usual	Group 4 Unusual / Unusual
Males	Blue	3.55	2.50	3.92	4.13
	Red	4.82	6.00	5.00	4.25
	Game	4.27	5.88	4.08	4.00
	(n)	(11)	(8)	(13)	(8)
Females	Blue	3.78	2.92	3.43	3.42
	Red	4.33	5.83	5.57	6.17
	Game	5.00	3.17	4.00	3.67
	(n)	(9)	(12)	(7)	(12)

concerned with the effects of unusual behavior in the abstract. This is why the proper comparisons to make are those of the type in Table 10, which average the mean scores of the pairs of treatment groups in which the two actors were "usual," or "unusual." Taking the average score of the pairs of groups minimizes the effects of interaction.

The second reason that the mean scores of the treatment groups would not provide satisfactory tests of the hypotheses, and the proposal, is that the response frequencies of the groups are reduced below a useful level when controlling on the sex of the subjects. At this level

of analysis the responses are spread too thinly to place much confidence in the group means. The cell n's are given in Table 11.

Degree of Association between Attributions

It would considerably strengthen the credibility of the two hypotheses, and the proposition, about the displacement of responsibility, if it could be demonstrated that the generalizations made at the group level held at the individual level as well. It would be helpful to know if, within each treatment group, the same people who attributed a low level of responsibility to Blue also attributed high levels of responsibility to Red and to the game, or if one set of subjects in that treatment group attribute a low level of responsibility to Blue, while another set attributes a high level to Red, and still another set attributes a high level to the game.

Table 12 answers this question using Pearson product moment correlation coefficient as the measure of association between attributions of responsibility within each treatment group, and the t test to determine the level of significance of the association. In attempting to interpret Table 12, the low cell response frequencies should be kept in mind.

Several things are immediately noticeable in the table: First, male subjects have an extremely strong inverse relationship between their attributions about Blue's and Red's levels of responsibility in all four treatment groups.

TABLE 12

ASSOCIATION BETWEEN ATTRIBUTIONS BY TREATMENT GROUP AND PERCEIVER'S SEX

Perceiver's Sex	Correlated Agents	Instructions about: Blue's Behavior / Red's Behavior			
		Group 1 Usual / Usual	Group 2 Usual / Unusual	Group 3 Unusual / Usual	Group 4 Unusual / Unusual
Males	Blue & Red	-.85[a]	-.71[b]	-.69[a]	-.90[a]
	Blue & Game	-.44[c]	-.59[c]	-.09	-.79[a]
	Red & Game	.36[c]	.20	.08	.91[a]
	(n)	(11)	(8)	(13)	(8)
Females	Blue & Red	-.16	-.41[c]	-.67[b]	.24
	Blue & Game	-.73[b]	.49[c]	-.44	.32
	Red & Game	.31	-.23	.29	.04
	(n)	(9)	(12)	(7)	(12)

[a] $p < .01$

[b] $p < .05$

[c] $p < .10$

Furthermore, males also have a strong inverse relationship between their attributions about Blue and the game, with the exception of treatment group III. These two findings offer very strong support to the generalizations offered above.

While the table indicates that males show a significant level of association among attributions in nine out of the twelve correlations, women produced only four relationships of sufficient strength to pass the significance test.

However, within each treatment group, with the exception of group IV women demonstrated a high level of association on at least one pair of attributions, and while this may not be interpreted as strong support for the hypotheses and the proposition it cannot be said to discredit them.

Table 13 shows the correlation coefficients for males and females across all treatment groups.

TABLE 13

ASSOCIATION BETWEEN
ATTRIBUTIONS BY PERCEIVER'S SEX

Correlated Agents	Perceiver's Sex	
	Males	Females
Blue & Red	-.77[a]	-.30[c]
Blue & Game	-.35[b]	.06
Red & Game	.40[a]	-.14

[a] $p < .01$

[b] $p < .05$

[c] $p < .10$

All of the measures of association for male subjects, and one of the three for female subjects, are sufficiently strong to be significant. The remaining two for the female subjects are lower than the coefficients shown in Table 12 for the individual treatment groups because some of the relationships within the treatment groups were positive and

some were negative. Combining these, in Table 13, produced low over-all correlation coefficients.

In general, it may be said that the measures of associations between individual's attributions are of sufficient magnitude to lend support to the evidence in favor of accepting, at least tentatively, the two hypotheses and the displacement of responsibility proposition.

Summary and Conclusion

The primary purpose of this dissertation was to demonstrate that perceivers attribute a greater degree of responsibility for the outcome of his behavior to an actor who is believed to have behaved unusually than they attribute to an actor who is believed to have behaved in a usual manner.

It was argued that because of the necessity to predict efficiently how others will behave, perceivers consider situational causes as the possible explanation of behavior before they consider the personal characteristics of the actor as a possible cause. If the actor's behavior is perceived to be conventional, the search for the reason for the behavior is terminated. Unusual behavior, however, cannot be attributed to situational causes, and, therefore, the perceiver considers the personal characteristics of the actor as the possible cause of the observed behavior. The greater the degree to which an actor is perceived to be the

cause of his behavior, the greater the level of responsibility attributed to him for the consequences of his actions.

The second hypothesis tested was that if greater responsibility was attributed to an actor because his behavior was unusual, the amount of responsibility attributed to the other actor, and to the game, would be less than otherwise.

To test the hypotheses, a laboratory experiment was designed in which forty male subjects and forty female subjects observed a video-tape recording of two confederates, Blue and Red, who played a laboratory game. The stimulus situation was such that the "Blue" confederate chose to play the game with the high-risk payoff structure, and the "Red" confederate chose to take advantage of his opportunity to win eight dollars leaving Blue with no winnings. Before observing the tape, the subjects were told that such behaviors were either usual or unusual.

The analysis of the data revealed that the first hypothesis was generally supported, but with the qualification that, apparently, male subjects tended to displace attributions of increased levels of responsibility, due to Red's unusual behavior, away from Red and onto Blue and the rules of the game. In a like manner, female subjects apparently tended to displace increased responsibility, due to Blue's unusual behavior, away from Blue and onto Red.

While there was some evidence in support of the second hypothesis, it was felt that there was not sufficient evidence to render a verdict at this time, and that it would be best to suspend judgment until more research can be done on the subject.

In closing, it should be noted that the variable of usual-unusual behavior is an abstraction from the total perceptual field presented to the subjects. We may safely assume that the subjects did not respond to the instructions about the subjects' behaviors in isolation from the rest of the stimuli impinging upon them, but rather that the instructions affected the meaning of the observed interaction. The term "meaning" is used here in the sense of "the definition of the situation." That the various treatment conditions produced different definitions of the situation may be seen in the following two examples taken from Table 11.

In treatment group II, Blue's behavior was said to be usual, and in treatment group IV it was said to be unusual. In both treatments Red's behavior was unusual. A comparison of the patterns of attributions made by the subjects in the two groups makes it clear that the instructions about Blue's behavior gave entirely different meanings to the two situations. Looking just at the male subjects' responses we see that in group II that the mean level of attributions of responsibility to Blue is the lowest of any of the treatment groups (2.50) and the highest

for Red and the rules of the game (6.00 and 5.88). In group IV just the opposite is true. The mean level of attribution to Blue is the highest of any of the treatment groups (4.13) while Red and the game receive their lowest scores (4.25 and 4.00). In short, the instructions about Blue's behavior produced extreme differences in attributions not only to Blue, but to Red and the game as well. We may speculate that the subjects defined the situation in group II, where Blue first did the usual thing and then Red did an unusual thing and took the eight dollars leaving Blue with nothing, to be a stab-in-the-back situation where Red cruelly exploited Blue's trusting offer of mutual gain. We might suppose, also, that the situation in group IV was defined as a tit-for-tat exchange of unusual behaviors where Red responds in kind to Blue's action thereby causing the attributed responsibility to be distributed equally among the deviants.

That the rules of the game held different meanings for male and female subjects may be seen in attributions of treatment group II. This is the "stab-in-the-back" situation, where Blue was usual and Red was unusual. Men attributed to the game the highest level of responsibility assigned to it in any of the treatment conditions, while women gave it their lowest mean level of responsibility. Male subjects apparently defined the explanation of Blue by Red as a failure of the rules of the game to prevent the use of an unfair power advantage, while female subjects

interpreted the meaning of the situation to be that Red was a willful villian and that he, not the game, deserved the blame for his dastardly conduct.

To interpret the findings of this study in terms of the perceiver's definition of the situation is to suggest that the perspective of the symbolic interactionists George Herbert Mead, Charles Morton Cooley, and W. I. Thomas has relevance for the area of person perception. Although experimental social psychologists have studiously avoided symbolic interactionism, it may well be the case that future research may make good advantage of it.

In any event, the conclusions drawn in this paper should be taken as tentative only, and hopefully, as suggestions for further research in the area of attribution of responsibility.

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APPENDICES

APPENDIX A

PAYOFF STRUCTURES

LOW-RISK PAYOFF STRUCTURE

		Red	
		40	0
Blue	40	40	40
	0	40	0
		0	0

($4 guaranteed to both)

HIGH-RISK PAYOFF STRUCTURE

		Red	
		60	80
Blue	60	60	0
	0	0	80
		0	0

($6 and 6; or $8 and 0)

APPENDIX B

POST OBSERVATION QUESTIONNAIRE

On the following pages are a number of questions concerning your impressions of the experiment. Please try to answer all of the questions. If you have comments about the questionnaire, feel free to write them on the back side of the last page.

Below you will be asked to list your student identification number. This number will be used to identify your questionnaire.

If you have questions while filling out this questionnaire, please feel free to ask them.

Thank you.

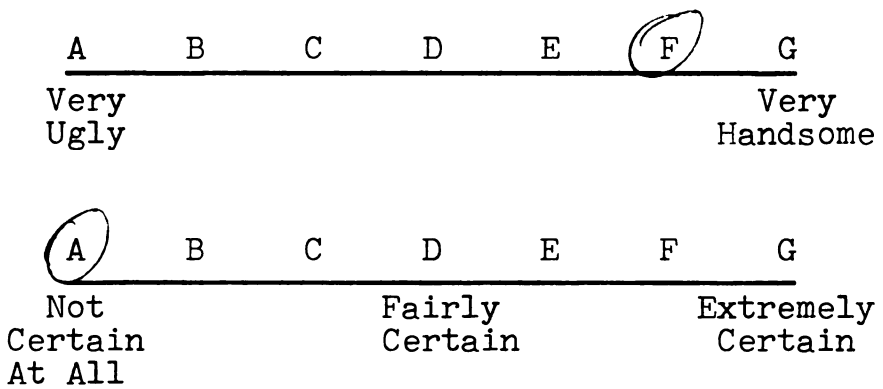
PLEASE WRITE YOUR STUDENT IDENTIFICATION NUMBER ON THE LINE BELOW:

STUDENT ID#_____

Impressions of the "BLUE" subject.

First, we'd like to find out what you've learned about the "BLUE" subject from the way he behaved during the decision-making experiment. We would like you to make use of a series of pairs of scales like the pair below to describe what you think the "BLUE" subject is <u>really</u> like as a person. The sample presented here is of the same form as the pairs of scales on the next few pages on which we will ask you to rate him.

EXAMPLE



The first scale of each pair is the descriptive scale. For example, if you thought he was pretty handsome, you might circle F as is indicated on the example. However, if you really weren't very confident of that judgment you would indicate that on the second scale by circling A above "Not Certain At All."

Please fill out both scales in each of the pairs presented on the following pages. On the first scale in

each pair indicate what you think he is really like as a person. On the second scale indicate your level of confidence in your rating of him.

SCALES FOR RATING THE "BLUE" SUBJECT IN THIS EXPERIMENT

On the first scale in each pair indicate what you think the "BLUE" subject is really like as a person. On the second scale indicate your level of confidence in your rating of him. CIRCLE THE CORRECT LETTER ON EACH SCALE.

A B C D E F G

Forceful ——— Weak

A B C D E F G

Not Certain At All ——— Fairly Certain ——— Extremely Certain

A B C D E F G

Stubborn ——— Flexible

A B C D E F G

Not Certain At All ——— Fairly Certain ——— Extremely Certain

A B C D E F G

Likeable ——— Irritating

A B C D E F G

Not Certain At All ——— Fairly Certain ——— Extremely Certain

A B C D E F G

Smart ——— Stupid

A B C D E F G

Not Certain At All ——— Fairly Certain ——— Extremely Certain

On the first Scale in each pair indicate what you think the "BLUE" subject is really like as a person. On the second scale indicate your level of confidence in your rating of him. CIRCLE THE CORRECT LETTER ON EACH SCALE.

A B C D E F G

Considerate of Others — Self Centered

A B C D E F G

Not Certain At All — Fairly Certain — Extremely Certain

A B C D E F G

Suspicious — Trusting

A B C D E F G

Not Certain At All — Fairly Certain — Extremely Certain

A B C D E F G

Reliable — Undependable

A B C D E F G

Not Certain At All — Fairly Certain — Extremely Certain

A B C D E F G

Competitive — Cooperative

A B C D E F G

Not Certain At All — Fairly Certain — Extremely Certain

On the first scale in each pair indicate what you think the "BLUE" subject is really like as a person. On the second scale indicate your level of confidence in your rating of him. CIRCLE THE CORRECT LETTER ON EACH SCALE.

A B C D E F G

Not Generous — Generous

A B C D E F G

Not Certain At All — Fairly Certain — Extremely Certain

A B C D E F G

Humane — Ruthless

A B C D E F G

Not Certain At All — Fairly Certain — Extremely Certain

A B C D E F G

Dominant — Submissive

A B C D E F G

Not Certain At All — Fairly Certain — Extremely Certain

A B C D E F G

Friendly — Unfriendly

A B C D E F G

Not Certain At All — Fairly Certain — Extremely Certain

On the first scale in each pair indicate what you think the "BLUE" subject is really like as a person. On the second scale indicate your level of confidence in your rating of him. CIRCLE THE CORRECT LETTER ON EACH SCALE.

A B C D E F G

Cold Warm

A B C D E F G

Not Certain At All — Fairly Certain — Extremely Certain

A B C D E F G

Pleasant Unpleasant

A B C D E F G

Not Certain At All — Fairly Certain — Extremely Certain

A B C D E F G

Dishonest Honest

A B C D E F G

Not Certain At All — Fairly Certain — Extremely Certain

SOME ADDITIONAL QUESTIONS ABOUT THE "BLUE" SUBJECT

(1) In general, how good of an impression did the "BLUE" subject make on you in this experiment? (CIRCLE CORRECT LETTER)

A B C D E F G

Very Bad Impression — Very Good Impression

(2) Briefly would you please describe what you feel the "BLUE" subject in this experiment is probably like as a person.

Impressions of the "RED" Subject

Now, we'd like to find out what you've learned about the "RED" subject from the way he behaved during the decision-making experiment. We would like you to use the series of pairs of scales, just as you did for the other subject, to describe what you think the "RED" subject is <u>really</u> like as a person.

Please fill out both scales in each of the pairs presented on the following pages. On the first scale in each pair indicate what you think he is really like as a person. On the second scale indicate your level of confidence in your rating of him.

SCALES FOR RATING THE "RED" SUBJECT IN THIS EXPERIMENT

On the first scale in each pair indicate what you think the "RED" subject is really like as a person. On the second scale indicate your level of confidence in your rating of him. CIRCLE THE CORRECT LETTER ON EACH SCALE.

A B C D E F G

Forceful Weak

A B C D E F G

Not Certain At All — Fairly Certain — Extremely Certain

A B C D E F G

Stubborn Flexible

A B C D E F G

Not Certain At All — Fairly Certain — Extremely Certain

A B C D E F G

Likeable Irritating

A B C D E F G

Not Certain At All — Fairly Certain — Extremely Certain

A B C D E F G

Smart Stupid

A B C D E F G

Not Certain At All — Fairly Certain — Extremely Certain

On the first scale in each pair indicate what you think the "RED" subject is really like as a person. On the second scale indicate your level of confidence in your rating of him. CIRCLE THE CORRECT LETTER ON EACH SCALE.

A B C D E F G

Considerate of Others — Self Centered

A B C D E F G

Not Certain At All — Fairly Certain — Extremely Certain

A B C D E F G

Suspicious — Trusting

A B C D E F G

Not Certain At All — Fairly Certain — Extremely Certain

A B C D E F G

Reliable — Undependable

A B C D E F G

Not Certain At All — Fairly Certain — Extremely Certain

A B C D E F G

Competitive — Cooperative

A B C D E F G

Not Certain At All — Fairly Certain — Extremely Certain

On the first scale in each pair indicate what you think the "RED" subject is really like as a person. On the second scale indicate your level of confidence in your rating of him. CIRCLE THE CORRECT LETTER ON EACH SCALE.

A B C D E F G

Not Generous ——— Generous

A B C D E F G

Not Certain At All ——— Fairly Certain ——— Extremely Certain

A B C D E F G

Humane ——— Ruthless

A B C D E F G

Not Certain At All ——— Fairly Certain ——— Extremely Certain

A B C D E F G

Dominant ——— Submissive

A B C D E F G

Not Certain At All ——— Fairly Certain ——— Extremely Certain

A B C D E F G

Friendly ——— Unfriendly

A B C D E F G

Not Certain At All ——— Fairly Certain ——— Extremely Certain

On the first scale in each pair indicate what you think the "RED" subject is really like as a person. On the second scale indicate your level of confidence in your rating of him. CIRCLE THE CORRECT LETTER ON EACH SCALE.

A B C D E F G

Cold Warm

A B C D E F G

Not Certain At All — Fairly Certain — Extremely Certain

A B C D E F G

Pleasant Unpleasant

A B C D E F G

Not Certain At All — Fairly Certain — Extremely Certain

A B C D E F G

Dishonest Honest

A B C D E F G

Not Certain At All — Fairly Certain — Extremely Certain

SOME ADDITIONAL QUESTIONS ABOUT THE "RED" SUBJECT

(1) In general, how good of an impression did the "RED" subject make on you in this experiment? (CIRCLE CORRECT LETTER)

A B C D E F G

Very Bad Impression — Very Good Impression

(2) Briefly would you please describe what you feel the "RED" subject in this experiment was probably like as a person?

(3) Who do you feel was responsible for the final score in this experiment? (CIRCLE ONE ONLY)

1. The "BLUE" subject was mostly responsible.
2. The "RED" subject was mostly responsible.
3. BOTH subjects were about equally responsible.
4. NEITHER subject was really responsible.

(3a) Why do you say that?

(4) To what degree was the "BLUE" subject responsible for the final score?

A B C D E F G

Not At All Responsible — Totally Responsible

(4a) Why do you say that?

(5) To what degree was the "RED" subject responsible for the final score?

A B C D E F G

Not At All Responsible — Totally Responsible

(5a) Why do you say that?

(6) To what degree were the rules of the game responsible for the final score?

A B C D E F G

Not At All Responsible — Totally Responsible

(6a) Why do you say that?

(7) How much freedom do you feel that "Blue" subject had in making his choice of which Payoff Structure to use?

A B C D E F G

Completely Free — Not Free At All

(7a) Why do you say that?

(8) How much freedom do you feel the "Blue" subject had in choosing "Up" or "Down?"

A B C D E F G

Completely Free — Not Free At All

(8a) Why do you say that?

(9) How much freedom do you feel the "Red" subject had in making his choice of "Right" or "Left?"

A B C D E F G

Completely Free — Not Free At All

(9a) Why do you say that?

_____

_____

_____

_____

_____

(10) Did you recognize either subject on the television?

NO_____ YES_____; Who was it_____

(11) What do you think was the primary purpose of the experiment?

_____

_____

_____

_____

(12) How much did you like or dislike participating in this experiment? (CIRCLE CORRECT NUMBER)

1. I disliked it very much.
2. I disliked it a little.
3. I neither disliked it nor liked it.
4. I liked it a little.
5. I liked it very much.

(13) Are there any other comments which you would like to make about this experiment?

_____

_____

_____

I M P O R T A N T

PLEASE DO NOT DISCUSS ANYTHING ABOUT THIS EXPERIMENT WITH ANYONE UNTIL AFTER IT IS PRESENTED IN CLASS.

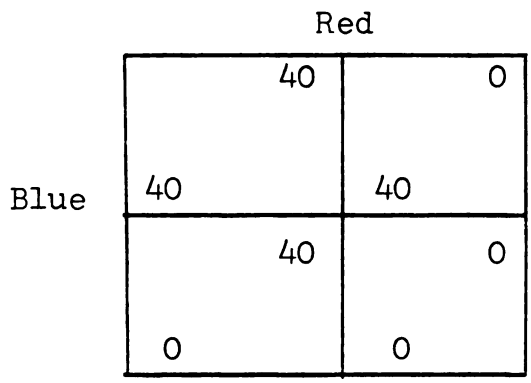
Thank you very much for your assistance in this project.

APPENDIX C

TREATMENT INSTRUCTION SHEETS

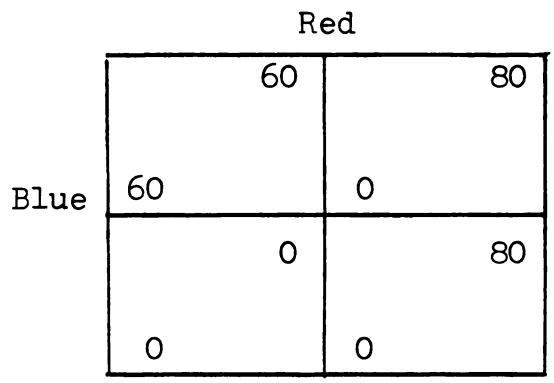
Treatment Group I: Blue usual, Red usual

LOW-RISK PAYOFF STRUCTURE



($4 guaranteed to both)

HIGH-RISK PAYOFF STRUCTURE



($6 and $6; or $8 and 0)

Norms for Subjects

Blue: Majority of subjects choose High-Risk Payoff Structure.

Red: Majority of subjects choose "Right" every trial.

The game ordinarily ends with Red winning $8, and Blue winning $0.

Treatment Group II: Blue usual, Red unusual

LOW-RISK PAYOFF STRUCTURE

		Red	
		40	0
Blue	40	40	40
		40	0
	0	0	0

($4 guaranteed to both)

HIGH-RISK PAYOFF STRUCTURE

		Red	
		60	80
Blue	60	0	0
		0	80
	0	0	0

($6 and $6; or $8 and 0)

Norms for Subjects

Blue: Majority of subjects choose High-Risk Payoff Structure.

Red: Majority of subjects choose "Left" every trial.

The game ordinarily ends with both players winning $6.

Treatment Group III: Blue unusual, Red usual

LOW-RISK PAYOFF STRUCTURE

		Red	
		40	0
Blue	40	40	40
		40	0
	0	0	0

($4 guaranteed to both)

HIGH-RISK PAYOFF STRUCTURE

		Red	
		60	80
Blue	60	0	0
		0	80
	0	0	0

($6 and $6; or $8 and 0)

Norms for Subjects

Blue: Majority of subjects choose Low-Risk Payoff Structure.

Red: Majority of subjects behave as follows:

(a) with Low-Risk Payoff Structure--choose "Left" every trial.

(b) with High-Risk Payoff Structure--choose "Right" every trial.

Treatment Group IV: Blue unusual, Red unusual

LOW-RISK PAYOFF STRUCTURE

		Red	
		40	0
Blue	40	40	
		40	0

($4 guaranteed to both)

HIGH-RISK PAYOFF STRUCTURE

		Red	
		60	80
Blue	60	0	
		0	80

($6 and $6; or $8 and 0)

Norms for Subjects

Blue: Majority of subjects choose Low-Risk Payoff Structure.

Red: Majority of subjects choose "Left" every trial on either Payoff Structure.

APPENDIX D

SCORE SHEET FOR DECISION MAKING EXPERIMENT

Instructions: Record the amount won by each subject after each trial. At the end of the experiment, total each subject's score.

TRIAL	"BLUE"	"RED"
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
TOTAL		

I M P O R T A N T

After recording the scores and adding the total, answer the two questions below.

"BLUE'S" choice of Payoff Structure was (circle appropriate response)

1. USUAL--like most other subjects.
2. UNUSUAL--<u>not</u> like most other subjects.

"RED'S" choice of "Right" or "Left" was (circle appropriate response)

1. USUAL--like most other subjects.
   UNUSUAL--<u>not</u> like most other subjects.

APPENDIX E

RECRUITING FORM

Sociology 351
Spring, 1972

SOCIAL PSYCHOLOGY LABORATORY EXPERIMENT

If you wish to participate in this experiment, please check the appropriate boxes below to indicate the times when you will be available. Please check a number of different times so that we will be able to fit you in. The experiment last 50 minutes.

PLEASE CHECK THE TIMES WHEN YOU ARE AVAILABLE:

	Mon.	Tues.	Weds.	Thurs.	Fri.	Sat.
10:20-11:10						
11:30-12:20						
3:20-4:10						
4:30-5:20						
7:40-8:30						
8:50-9:40						

Name (Please Print)_____

Address_____

PHONE_____Student Number_____

In order to make descriptive comments about our sample we need to know a few simple facts about our respondents' backgrounds.

PLEASE CIRCLE

1. Your sex:

   Male. . . .1
   Female. . .2

2. Your age:

   17. 1
   18. 2
   19. 3
   20. 4
   21. 5
   22. 6
   23. 7
   24. 8

3. Your major:

   _____

4. Marital status:

   Single. . .1
   Married . .2
   Divorced. .3

5. Your year:

   Freshman. 1
   Sophomore 2
   Junior. 3
   Senior. 4
   Other 5

6. In which social class would you say you and your family belong:

   Upper class 1
   Upper middle. . . .2
   Middle-middle . . .3
   Lower-middle. . . .4
   Working class . . .5
   Lower class 6

7. Are you:

   White 1
   Black 2
   Mexican-American. .3
   American Indian . .4
   Japanese. 5
   Chinese 6
   Filipino. 7
   Hawaiian. 8
   Other 9

APPENDIX F

TIME SCHEDULE FOR SUBJECTS

Time_____ Date:_____

Subjects	Phone	Condition

Time_____

Subjects	Phone	Condition

Time_____

Subjects	Phone	Condition

APPENDIX G

REPORT REQUEST

If you would like a written report concerning this research, please fill out the information below.

NAME_____

(PLEASE PRINT)

ADDRESS (Where you can be reached in July)

_____

_____

_____

APPENDIX H

RECEIPT FORM

I acknowledge receipt of two dollars ($2) for participation in the Fischer-Ewens Sociology experiment.

	Signed	Date
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		
17.		