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## Some correlates and determinants of attributed freedom.

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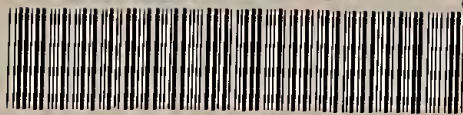
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SOME CORRELATES AND DETERMINANTS  
OF ATTRIBUTED FREEDOM

A Thesis Presented

By

ANN DETRICK

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University of Massachusetts in partial fulfillment  
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Psychology

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# C H A P T E R    I

## INTRODUCTION

Research dealing with a wide range of social psychological issues suggests that individuals' reactions to the behavior of another are mediated, in part, by the amount of freedom they attribute to him. For example, research suggests that individuals are less inclined to attribute personal characteristics to another when his actions appear to be role determined than when they are thought to be performed in the absence of such constraints (Jones, Davis, & Gergen, 1961; Jones & Harris, 1967; Steiner & Field, 1960). Furthermore, given the existence of external controls over an actor's behavior, others are less likely to be persuaded by his attitudinal statements (Walster & Festinger, 1962) and are less inclined to evaluate him extremely favorable or unfavorably (Aronson & Linder, 1965). Individuals are also less likely to express gratitude for a favor that is believed to be externally controlled than one which is thought to be performed voluntarily or in spite of environmental constraints (Tesser, Gatewood, & Driver, 1968; Goranson & Berkowitz, 1966; Gouldner, 1960; Thibaut & Riechen, 1955). Other studies indicate that reactions such as liking and blame also depend upon the amount of freedom attributed to an

actor (Burnstein & Worchel, 1962; Cohen, 1955; Lanzetta & Hannah, 1969; Mills & Jellison, 1967; Pastore, 1952; Wiggins, Dill & Schwartz, 1965).

In research of the kind cited above, attributed freedom is experimentally varied by manipulating the subjects' environment or the facts that are known about an actor (e.g., by presenting the actor as low in ability or knowledge). However, research of this type provides little evidence as to the existence of individual differences in the propensity to attribute freedom. Nor does such research indicate whether individual differences, if they exist, are broad tendencies which span diverse situations, or whether, instead, they reflect propensities to attribute freedom in more specific situations.

#### Dispositional Variables and the Attribution of Freedom

Steiner and associates (unpublished paper) have examined tendencies to attribute freedom to persons who perform positive or negative acts, and have obtained low negative correlations between attributions in these two types of situations. This evidence suggests the absence of very broad tendencies to attribute freedom, but does provide evidence for propensities that are consistent across more narrowly defined situations (i.e., positive

vs. negative acts). Steiner and associates also obtained moderate correlations between external locus on control (Rotter, 1966) and the tendency to attribute much freedom when actions were negative and little freedom when actions were positive. Similar correlations were obtained when the measure of external control was an instrument of their own construction. Furthermore, a measure of the tendency to view the environment benevolently or malevolently was found to correlate with the attribution of freedom. That is, subjects who viewed the environment benevolently were inclined to attribute little freedom when acts were negative and much freedom when acts were positive. These finds suggest that dispositional differences between people affect their attribution of freedom. Such dispositional differences are reflected, to some degree, by scores and by a measure of benevolence-malevolence toward the environment.

These findings suggest that scores on the Machiavellianism (Mach) scale (Christie & Geis, 1970) may also relate to the tendency to attribute differing amounts of freedom when actions are positive or negative. Because those who score high on the Mach scale have a rather unflattering opinion of others, and a cynical view of people in general, it is expected that they will attribute greater freedom when acts are negative than when they are

positive. This line of reasoning suggests that those who score high on the Mach scale make attributions of freedom that are similar to the attributions of externals, and to the attributions of malevolently oriented individuals. One might also expect that those who score low on the Mach scale like internals and benevolently oriented individuals, will attribute greater freedom when acts are positive than when they are negative. It must be noted that these statements are merely speculative, since there is no research pertaining directly to the issue of Machiavellianism and the attribution of freedom. However, a study by Rest (1967) does provide a bit of suggestive evidence. He found a positive correlation between externality (Rotter I-E scale) and Machiavellianism, which suggests that externals and those scoring high on the Mach scale may make similar attributions of freedom. Although there is no evidence that indicates a positive correlation between Machiavellianism and a malevolent view of the environment, it seems likely that such a relationship may exist.

#### Sex and the Attribution of Freedom

It is reasonable to ask whether attribution of freedom may also be determined in part by the sex of the attributor, sex of the actor, and/or sex of the person



toward whom the actor's behaviors are directed. Although there is little empirical evidence that relates to this issue, casual observations suggest that there are sex differences in the propensity to attribute freedom. For example, many people have heard a husband say that he has less freedom than his wife. He may point out that, pressured to meet the financial needs of his family, he must spend most of his day obeying the demands of an employer, while his wife can stay home, free from such constraints. Of course, the husband might be reminded that "women's work is never done," and indeed, a housewife might argue that, although she isn't tied to a nine-to-five job, she is nevertheless subject to the continuous demands of her family, and is therefore less free than her husband.

This argument is presented more forcefully in the following statement, written by a group of women:

As long as woman's time is subject to the demands of others, she is not free even in the most minimal sense. A man's time is not entirely his own either, since eight hours belong to his employer, but however degrading his servitude may be, it ends after eight hours. For a woman, on the other hand, the demands of others define her every waking moment. (Canatrow, Diggs, Ellis, Marx, Robinson & Schein, 1979, p. 443).

Opposition to such a viewpoint is reflected in comments sometimes heard from men, such as, "What are American women complaining about? They have never had it so good." These examples are admittedly simplistic and certainly

may not reflect the perceptions of all husbands and wives, or more generally, of all men and women. However, they do suggest the possibility that sex of the attributor and sex of the actor affect the attribution of freedom.

One might make the somewhat different proposal that of the two factors, sex of the attributor and sex of the actor, that latter is a more important determinant of attribution of freedom. Such a suggestion is based upon an analysis of socialization processes in our society, whereby both boys and girls are taught the same set of assumptions about males and females. For example, in regard to job opportunities, boys and girls have traditionally been taught that men are capable of achieving success in many different occupations, while women's potential success is limited to a small range of jobs. This suggests that, at least in regard to the world of work, both sexes perceive men as having more freedom than women. Such an example is perhaps indicative of other situations in which the sex of the perceived affects the attribution of freedom, but the sex of the perceiver does not.

At an empirical level, there is evidence that supports this observation. However, it must be noted that such evidence does not pertain specifically to attribution of freedom. For instance, in several studies that



presented a general description of the performance of a male or female author (Goldberg, 1968), a male or female artist (Pheterson, Kiesler & Goldberg, 1971), or a male or female applicant for a study-abroad program (Deaux & Taynor, 1973), the authors found that both males and females rated the male's performance more favorable than the female's. An exception to this tendency was reported by Pheterson et al. (1971). They found that in a condition in which the label "winner" was attached to the evidence, a painting, male and female artists were not rated differently on measure of competence and future success.

Other studies also suggest that the sex of the perceived makes a difference in attributions, but the sex of the perceiver does not. For example, in a study which presented a description of a male or female performing in an emergency situation that had previously been shown to be "masculine", (Taynor & Deaux, 1973), both sexes overrated the performance of the female. Evidence of sex differences in attributions is also provided by Broverman, Broverman, Clarkson, Rosencrantz, and Vogel (1970). They found that for both male and female clinicians the behavior and characteristics judged healthy for an adult were similar to those judged healthy for a male, but different from those judged healthy for a female. Evidence of sex differences in attributions is also provided by Deaux and

Emswiller (1974). They report that for both male and female subjects, performance by a male on a masculine task was attributed to skill, whereas an equivalent performance by a female was attributed to luck. The reverse did not hold true for male and female performance on a feminine task.

There is also evidence suggesting that the sex of the perceiver and sex of the perceived are sometimes equally important determinants of attributions. For instance, MacBrayer (1960) found that among young, unmarried adults, females perceived males more favorably than males perceived females. Also, Bennett, Price and Linskold (1973) report sex effects which suggest that men make more severe judgments than do women when a female is wronging another female. Sex differences are also reported by Nowacki and Poe (1973), who asked college students to rate a mentally healthy male and a mentally healthy female. Significant differences were found between the rating for a mentally healthy male and female and between the ratings by a male and a female. Other evidence also suggests that both the sex of the perceiver and the sex of the perceived are important determinants of attributions (Abel & Sahinkaya, 1962; de Jung & Meyer, 1963; Kohn & Fiedler, 1961).

Attitude toward the Feminist Movement  
and the Attribution of Freedom

The evidence that has been presented suggests that attributions of freedom are partly determined by the attributor's dispositional traits, the sex of the attributor, and the sex of the actor. Sex of the person toward whom the act is directed may also be a partial determinant, though no evidence has been found that relates to this issue. In addition to these factors, one may ask whether attribution of freedom is also partially determined by the attributor's attitudes toward the actor or the actor's category. The evidence relating to sex differences implies that attributions are affected by attitudes. For example, MacBrayer (1960) provided data suggesting that young men's and women's differing perceptions of one another may be affected by their differing attitudes toward marriage. For young women marriage is believed to be a security and prestige goal, which therefore makes men seem quite valuable. However, the same is not true for men. As MacBrayer states, "In fact, marriage for men usually involves assumptions of financial responsibility and loss of personal cherished freedom". (p. 312) This attitude may contribute to young men's rather unfavorable perceptions of women.

At a more general level there is also evidence to suggest that attitudes determine perceptions. For example, individuals are inclined to perceive that people they like

also like them and that people they dislike also dislike them (Tagiuri, Bruner, and Blake, 1958). Also, the more similar another person is perceived to be, the more one likes him (Byrne, 1961; Byrne & Nelson, 1964). These findings, though not surprising, suggest that attitudes may serve both as antecedents and consequences of attributions. Given this possibility, it seems reasonable to ask whether certain attitudes may be determinants and/or consequences of attributions of freedom. More specifically, one might ask how attitudes toward the feminist movement and toward the role of women relate to attribution of freedom. An analysis of this relationship seems especially appropriate since certain assumptions about the freedom of women are implicit in the goals and strategies of the feminist movement. One would readily expect, for example, that males and females who support the ideals of the feminist movement, and advocate less restrictive roles for women, perceive women as having less freedom than do men. Whether such a tendency might hold true across more specific situations is unclear.

To gain a better understanding of the relationship between attribution of freedom and attitudes toward the feminist movement, it may be useful to correlate certain dispositional traits with pro- or anti-feminist attitudes. Worell and Worell (1971) obtained such correlational data



from college women and found that, on a number of personality measure, females who supported the women's liberation movement differed significantly from females who were nonsupportive. Since it has been suggested that I-E scores, Mach scores, and measures of benevolence-malevolence toward the environment may be related to the attribution of freedom, it seems appropriate that these traits be correlated with attitudes toward the feminist movement, to determine whether relationships exist. In addition to correlating these three measures with attitudes of support-nonsupport for the feminist movement, it may also be useful to correlate them with self-respect measures of actual participation in the feminist movement. Evidence suggests that women who are active participants in the feminist movement differ from those who are not active on a number of factors, such as internality-externality, authoritarianism, tolerance of ambiguity, and self-esteem (Cherniss, 1972; Pawlicki & Almquist, 1973; Sanger & Alker, 1972; Stoloff, 1973). Though evidence that has been cited indicates that certain dispositional characteristics may be related to supportiveness (nonsupportiveness) toward the feminist movement and participation (nonparticipation) in the movement, it is unclear how all of these dispositional, attitudinal, and behavioral indices relate to the attribution of freedom. Further research is needed

if the strength and meaning of these relationships are to be understood.

At this point it may be useful to summarize the questions that have been raised:

- 1) Is attribution of freedom partially determined by sex of the attributor, sex of the actor, and sex of the person toward whom the act is directed?
- 2) Is the attribution of freedom partially determined by the attributor's dispositional traits, as reflected by scores on internal vs. external locus of control, by a measure of benevolence-malevolence toward the environment, and by scores on Christie's "Mach" scale?
- 3) Is attribution of freedom related to attitudes toward the actor or the actor's category? More specifically, is attribution of freedom related to attitudes toward the feminist movement and the role of women?
- 4) Are attitudes toward the feminist movement and the role of women, related to dispositional traits, as reflected by scores on locus of control, by a measure of benevolence-malevolence toward the environment, and by scores on Christie's "Mach" scale? Furthermore, are self-report measures of participation (nonparticipation) in the feminist movement related to these three dispositional traits?

#### Assessment of Dispositional Traits

Two of the four questions posed above concern the possible impact of dispositional variables: Machiavellianism, internal vs. external attribution of control, and benevolent vs. malevolent conception of the environment. The Christie (1970) scale for assessing Machiavellianism seems to be an appropriate instrument with which to seek



answers to the foregoing questions, but the Rotter (1966) I-E scale may not be an entirely satisfactory measure of internal versus external attribution of control, and there is no commonly accepted device for assessing benevolent vs. malevolent conception of the environment.

Although scores generated by the Rotter scale have been empirically linked to many other variables (Lefcourt, 1965, 1966a, 1966b, 1972), doubts concerning the meaning of those scores persist. Rotter's intent was to identify and assess a pervasive inclination to explain people's outcomes as consequences of their own actions or characteristics or as consequences of events that are external to them. Consequently, his instrument samples a wide assortment of situations and outcomes. Some items concern the respondent's own outcomes, whereas other items focus on the outcomes of broad categories of people. Some of the outcomes the respondent is asked to explain are clearly good or beneficial; some are clearly bad or detrimental; and some are so vaguely described that they cannot be fitted into either of these two categories. Furthermore, the cited outcomes concern a wide variety of issues: political benefits, leadership status, employment, happiness, popularity, and grades on tests. Of course, if Rotter was correct in assuming that propensities to invoke internal versus external causes are very

broad and pervasive, it should not matter whether test items concern one's own or other people's outcomes, good or bad outcomes, or outcomes that reflect political, interpersonal, or academic issues. But there is increasing evidence that such considerations do affect subjects' responses to items on the Rotter scale, and that propensities to involve internal versus external explanations are more situation-specific than Rotter apparently believed them to be.

Gurin, Gurin, Lao and Beattie (1969) reported a series of factor analytic studies in which items phrased in the first-person singular were found to load on one of two principal factors, and items phrased in the third-person tended to load on the other factor. Somewhat parallel findings were obtained by Sanger and Alker (1972). Research by Mirels (1970) and by Cherlin and Bourque (1974) also obtained two principal factors, one of which appeared to reflect attributions concerning political issues and world affairs, while the other factor subsumed attributions concerning the remaining issues sampled by Rotter. Collins (1974) altered the traditional force-choice format of the Rotter scale and asked subjects to respond separately, on Likert-type scales, to each of the 46 options contained in Rotter's 23 items. Varimax rotations yielded four factors with remarkable simple structure. Collins

labeled his four factors belief in a difficult world, a just world, a predictable world, and a politically responsive world. Although these factors are not orthogonal, the fact that they form a simple structure suggests that the Rotter scale is not unidimensional. Using Collins' approach enables one to obtain a separate score for each of the four factors, as well as an overall internal-external score. The latter is derived by subtracting the sum of the subject's responses to internal options from his sum of responses to external options. Overall scores obtained by administering the Rotter instrument in this fashion are reported by Collins to correlate .85 with scores obtained by administering the Rotter instrument in its traditional form. Split-half reliability of the traditional Rotter scale has ranged from .65 to .79 (Rotter, 1966).

Because negative, positive, and unclearly specified outcomes are intermingled throughout the options of the 23 items of the Rotter scale, it is virtually impossible to determine whether a subject's score on the instrument reflects a propensity to be external (or internal) with respect to good outcomes, bad outcomes, or both kinds. But many writers (Eysenck, 1964; Weiner & Kukla, 1970; Streufert & Streufert, 1969) have suggested that people are generally more prone to cite internal explanations

when they succeed than when they fail. Freize and Weiner (1971) noted a similar tendency on the part of subjects who were asked to explain someone else's outcomes. Crandall, Katovsky and Crandall (1965) have emphasized the potential importance of distinguishing between a subject's explanations of positive and negative outcomes, since the dynamics and consequences of assuming credit for causing good things to happen may be quite different from those operating when blame for bad outcomes is accepted. Steiner (1970) has suggested that people who hold the environment responsible for their own bad outcomes but fail to credit it for their successes have a malevolent view of the world. By contrast, people who attribute good, but not bad, outcomes to the workings of the environment have a benevolent view of the world.

Steiner and associates (unpublished paper, 1974) have proposed an approach which, although still in an early stage of development, avoids some of the ambiguities of the Rotter scale, and yields an indication of the respondent's benevolent vs. malevolent orientation. The rationale for their approach is as follows.

People who are prone to locate cause in the environment should report that external factors have often been instrumental in determining their own past outcomes. People who are prone to locate cause within themselves



should report that external factors have seldom been instrumental in determining their outcomes. People who see the environment as a benevolent influence should report that external factors have more often been instrumental in producing good outcomes than bad ones. People who see the environment as a malevolent influence should reverse this trend.

In accordance with this logic, Steiner and associates developed an instrument (see Appendix A) that elicits the respondent's judgments of the frequencies with which selected external factors (bureaucratic organizations, other people, the weather, and luck) have been instrumental in determining past outcomes. A subject obtains a high score on "external orientation" by reporting that external factors have often had effects on his past (good or bad) outcomes, and a high score on "benevolent orientation" by reporting that the frequency of effects on good outcomes is a high proportion of the total frequency of effects on good and bad outcomes. Because all items concern the subject's own outcomes, and because the good or bad quality of the outcomes is clearly specified, some of the ambiguities of the Rotter scale are avoided.

The internal consistency of responses to the instrument was assessed by factor analyzing data obtained from three samples of college students. For each of the three

samples and for both "external orientation" and "benevolent orientation", the first unrotated factor accounted for about 20 percent of the total item variances, and the second factor had an eigenvalue of less than one. No item loaded negatively on the first factor for more than one sample, and the largest negative loading was  $-.05$ . These findings suggested that internal consistency was sufficiently high to justify further work on the instrument. Test-retest reliability over an interval of approximately one week was  $.74$  for external orientation and  $.83$  for benevolent orientation.

The benevolent orientation score has been found to correlate in predictable fashion with several self-report measures. It has correlated  $.35$  with subject's reports of their own willingness to make decisions in a series of hypothetical situations,  $.26$  with subjects' expressed optimism concerning their status and well being ten years hence, and  $-.25$  with scores on the Spielberger, Gorsuch, and Lushene (1968) scale for assessing trait anxiety. Benevolent orientation has also been found to be a significant predictor of laboratory subjects' willingness to make a decision that will affect a partner as well as themselves. All of these findings were anticipated on the grounds that people who are benevolently oriented should feel more confident and less anxious than people



who believe they must contend with a malevolent environment. Considered separately, none of these findings is very impressive, but together they constitute evidence of the "predictive validity" of the benevolent orientation score. This interpretation of the findings is buttressed by the fact that benevolent orientation correlates only .09 with the favorableness of subjects' ratings of their own abilities and characteristics. Thus the greater confidence and lower anxiety of the benevolently oriented persons appear to reflect their benevolent view of the environment rather than their self perception or self esteem.

Little evidence is available concerning the validity of the external orientation score. It has been found to correlate .36 with the Rotter scale when the instruments are administered two weeks apart, and .48 to .61 when the instruments are administered during a single session. Although these correlations seem low for two devices that are intended to measure the same thing, it must be remembered that the test-retest reliabilities of both instruments are not very high (.74 for the external orientation over a one-week period; from .60 to .83 for the Rotter scale over a one-month period, and .49 over a two-month period). Moreover, the factor analytic evidence cited earlier suggests that the Rotter scale is multidimen-

sional, whereas the external orientation score may be more nearly unidimensional. Indeed, doubt concerning the validity of the Rotter scale was a primary reason for developing an alternative measure of external orientation that clearly focuses on the respondent's explanations of his own outcomes, and unequivocally distinguishes between good and bad outcomes. Under these circumstances, the external orientation score should not be expected to correlate extremely highly with the Rotter scale, and one might question its validity if it did.

In the research to be described on subsequent pages, benevolent and external orientation are assessed by Steiner's instrument. Collins' version of the Rotter scale is employed as a second measure of propensity to locate cause in the environment, as well as to generate scores on belief in a difficult world, a just world, a predictable world, and a politically responsive world.

## C H A P T E R I I

### METHOD

#### Subjects

Subjects were 146 students (73 males, 57 females, and 16 for whom sex was unidentified) enrolled in an undergraduate social psychology course at the University of Massachusetts. The study was conducted over a period of five regular class sessions, with the number of students present at any one session varying from 79 to 109. It should be noted that throughout this paper the abbreviation S will be used to designate the word "subject" and Ss will be used to designate "subjects").

#### Instruments and Procedure

Students were asked to respond to each of five instruments. Only one instrument was administered during each session, and no two sessions occurred within the same week. Before responding to an instrument, Ss were asked to indicate their sex and identification code (consisting of the first and last initials of their mother's maiden name, followed by their father's first and last initial) in the top right corner of the first page.

Benevolence-Malevolence (B+M) Scale. During the second

week of the semester the benevolence-malevolence scale was administered. This instrument, developed by Steiner and associates, assesses an individual's tendency to view environmental forces as benevolent (supportive, helpful) or malevolent (negative, obstructive of one's goals, etc). The benevolence-malevolence scale consists on 11 pairs of questions, with one question in each pair asking how often a particular environmental factor has contributed to the respondent's success. For instance, one such question reads, "How often have the bureaucratic organizations with which you have dealt (e.g., college administration, governmental units) seemed especially helpful to you?" The other question in each pair asks how often bureaucratic organizations have impeded the respondent's progress. For instance, "How often have the bureaucratic organizations with which you have dealt (e.g., college administration, governmental units) seemed especially uncooperative with you?"

The response to each item is indicated on a seven-step scale, the ends of which are labeled "very often" and "almost never". Within the instrument the 22 questions are positioned so that the benevolent and malevolent members of a pair are separated by at least seven other questions, and so that the benevolent member precedes its malevolent counterpart about half the time. Appendix B reports the wording employed in the benevolent



versions of the questions. The malevolent versions are exactly the same except for substitution of the words shown in parentheses. Subjects' responses are scored by assigning numerical values of one (almost never) to seven (very often). The following two scores are then derived for each S:

- 1) The sum of his responses to the malevolent and benevolent questions (B+M), with a high score indicating that S perceives external factors as having often affected his past outcomes (good or bad).
- 2) A score obtained by dividing the sum of S's response to the benevolent questions (B) by the sum of his responses to the benevolent and malevolent questions (B+M). This yields the quotient,  $B/B+M$ . A subject obtains a high score by reporting that a high percentage of all past external effects have had good outcomes; that is, he sees the environment as a benevolent influence.

Modified Rotter Internal-External (I-E) Scale (see Appendix C). In accordance with a procedure suggested by Collins (1974), forty-six Likert-type items, taken from the 23 forced-choice items of the Rotter (1966) scale, were presented to Ss during the third week of the semester. A subject indicates his response to each item on a seven-point scale, the ends of which are labeled, "agree" and "disagree". An overall score is derived by summing across the numerical values of S's responses to the 23 "external" items and across his responses to the 23 "internal" items; the latter sum is then subtracted from the former. A high score indicates that the subject tends to view

the external world as having control over events in his life. Collins reports a correlation of .82 between such overall scores and scores obtained on the standard Rotter scale. In the present research the scale was also scored for Collins' (1974) four factors: Difficult World, Just World, Predictable World, and Politically Responsive World. In a factor analysis of the 46 Likert format statements, 37 of the 46 items were found to load greater than  $\pm .35$  on one, and only one of the four factors, thus revealing a remarkably simple structure.

Slides. A set of 24 slides was shown to the Ss during the seventh week of the semester. Each slide presents a cartoon-like sketch in which an actor is saying something positive or negative to another person. Of the 24 slides, three are included in each of the following categories: male positive to male, male negative to male, male positive to female, male negative to female, female positive to female, female negative to female, female positive to male, and female negative to male.

After seeing each slide, Ss are asked to interpret the actor's behavior and to indicate their interpretation on a seven-step scale. The caption at one end of the scale always implies that the speaker's statement is freely expressed, while the caption at the other end always implies that the speaker's statement is the result of ex-



ternal constraints. For example, one of the slides shows a secretary (a female) telling a male employee that she is too busy to type something for him. For this slide the caption at the "free" end of the scale reads, "You're getting to be a pain in the neck, I type all those memos for you and nothing ever happens to them". The caption at the "unfree" end of the scale reads, "The boss told me you were supposed to have someone else type your memos. I have to follow orders". (Appendix D contains a line drawing of each slide and reports the contrasting interpretations of the actor's behaviors that were used to anchor the seven-step response scales).

Subjects' responses are scored by assigning numerical values of one (unfree) to six (free) for each item. The following scores are then derived for each S:

- 1) Eight sums, representing a S's response to each of the eight slide categories, with high scores indicating high attribution of freedom.
- 2) A score indicating a general tendency to assume that actors are free. This score is obtained by adding the eight sums mentioned above.
- 3) A score indicating the charitability of a respondent's attribution, obtained by subtracting the sum of responses to the negative slides from the sum of responses to the positive slides.

Christie's Machiavellianism (Mach IV) Scale (see Appendix E). During the ninth week of the semester, Ss were asked to respond to the Christie's Mach IV scale, which is com-

posed of 20 belief statements, half of which express Machiavellianism, and the other half of which express anti-Machiavellianism. Subjects indicate, on a six-step scale, the degree to which they agree or disagree with each statement. An example of a Machiavellianism statement is, "The best way to handle people is to tell them what they want to hear". A sample anti-Machiavellian statement is, "Honesty is the best policy in all cases". High item scores result from strong agreement with Machiavellian statements and strong disagreement with anti-Machiavellian statements. Split-half reliability for the Mach IV scale has been found to range from .69 to .79 (Christie & Geis, 1970).

Self-report measures pertaining to the feminist movement

(see Appendix F). During the eleventh week of the semester, Ss were asked to respond to a questionnaire which includes nine items pertaining to family and social background, three items pertaining to attitudes toward, and participation in, various social movements, and eight which focus on feminist issues. Though the questionnaire was constructed in order to obtain specific information about attitudes toward and participation in the feminist movement, Ss were lead to believe that other social movements were also being studied. This was done to minimize demand characteristics which might influence Ss' responses.

To summarize, over a period of nine weeks, Ss responded to (1) Steiner's Benevolence-Malevolence scale, (2) Collins' version of the Rotter scale, (3) a series of slides to which Ss indicated their appraisal of actors' behavioral freedom, (4) the Christie Mach IV scale, and (5) a questionnaire concerning their family background, their interest and participation in various social movements, and their attitudes and beliefs concerning the feminist movement.

## CHAPTER III

### RESULTS

Results will be reported for each of the following categories: 1) Attribution of freedom to actors depicted on slides, 2) Relationship between dispositional traits and attribution of freedom to slides, 3) Attitudes toward, and participation in, the feminist movement, and 4) Relationship of attitudes toward, and participation in, the feminist movement with attribution of freedom to slides and to dispositional traits.

#### Attribution of Freedom to Actors Depicted on Slides

Primary interest centers upon the question of whether sex of subject, sex of actor, sex of target, and affect of the act are determinants of attribution of freedom. The results of a 2 X 2 X 2 X 2 analysis of variance indicated that Ss' attributions of freedom are dependent upon two of these four factors, sex of target and affect of the act. Significantly more freedom was attributed when the target was female than when the target was male (Means = 23.43 and 22.89;  $F = 79.16$ ,  $df = 1/85$ ,  $p < .0001$ ), and when the act was positive rather than negative (Means = 25.73 and 20.74;  $F = 64.76$ ,  $df = 1/85$ ,  $p < .0001$ ). It should be noted that Appendix I contains a brief descrip-



tion of each statistical symbol appearing in this paper. There was no main effect of sex of actor or sex of subject. Furthermore, sex of subject did not interact significantly with any of the other three factors, and it will, therefore, be ignored in the discussion that follows.

There were, however, several significant interactions involving other factors. Table 1 (see p. 30) shows an Affect X Actor interaction ( $F = 29.99$ ,  $df = 1/85$ ,  $p < .0001$ ), indicating that, for positive acts, more freedom was attributed to a male actor than to a female actor. For negative acts, the opposite was true. In other words, Ss were more charitable to male actors than to female actors. Table 2 (see p. 31) shows a Target X Affect interaction ( $F = 34.83$ ,  $df = 1/85$ ,  $p < .0001$ ), indicating that, for positive acts, more freedom was attributed when the target was female than when the target was male. For negative acts, there was no significant difference in the amount of freedom attributed when targets were male versus female ( $t = 1.88$ ,  $df = 86$ ,  $p < .063$ ).

There was no interaction of Actor X Target. There was, however, a significant three-way interaction of Actor X Target X Affect ( $F = 19.26$ ,  $df = 1/85$ ,  $p < .0001$ ). Table 3 (see p. 33) indicates that more freedom was attributed when acts were positive than when they were negative, except for the situation in which the actor was female and

Table 1

Mean Perceived Freedom Scores for  
Sex of Actor X Affect of Act\*

	positive acts	negative acts
male actors	26.53	19.79
female actors	24.92	21.49

\*Means represent average perceived freedom scores for male and female actors and positive and negative acts, summed across sex of subject and sex of target. The higher the mean, the higher the attribution of freedom.

(N = 87)

Table 2  
Mean Perceived Freedom Scores for  
Sex of Target X Affect of Act\*

	positive acts	negative acts
male targets	24.67	21.11
female targets	26.78	20.08

\*Means represent average perceived freedom scores for male and female targets and positive and negative acts, summed across sex of subject and sex of actor. The higher the mean, the higher the attribution of freedom.

(N = 87)

the target male. In this condition, there was no significant difference in the amount of freedom attributed to positive and negative acts ( $t = .18$ ,  $df = 86$ ,  $p < .86$ ). For negative acts, more freedom was attributed to opposite-sex slides (e.g., male actor, female target) than to same-sex slides (e.g., male actor, male target). However, this same effect did not hold true for all positive acts. When a positive act was performed by a female actor, there was no significant difference in the amount of freedom attributed to male and female targets ( $t = 1.10$ ,  $df = 86$ ,  $p < .27$ ).

#### Dispositional Traits and Attribution of Freedom to Slides

A second area of interest concerns the relationship of attribution of freedom with certain dispositional traits. Table 4 (see p. 34) presents Pearson correlation coefficients ( $r$ ) for each index of internality-externality (Rotter and Collins' four factors) with each of the eight slide categories and the sum of perceived freedom responses. Data from this table indicate a tendency for external orientation to be positively associated with attributed freedom when acts are negative, and negatively associated with attributed freedom when acts are positive. Data in Table 5 (see p. 36) suggest a similar tendency in regard to charitability scores. That is, Ss who score high on externality tend to score low on charitability,



Table 3

Mean Perceived Freedom Scores for Sex of Actor X  
Sex of Target X Affect of Act\*

	Male Actor		Female Actor	
	male target	female target	male target	female target
Positive Acts	12.43	14.10	12.24	12.68
Negative Acts	8.79	10.91	12.32	9.17

\*Means represent average perceived freedom scores for male and female actors, male and female targets, and positive and negative acts, summed across sex of subject. The higher the mean, the higher the attribution of freedom.

(N = 87)

Table 4

Pearson Correlation Coefficients (r)

for Each Internality-Externality Index with Each

Perceived Freedom Score Slide Categories

	male to male negative	male to male positive	male to female negative	male to female positive	female to female negative	female to female positive	female to male negative	female to male positive	Sum of perceived freedom scores
Rotter	.23	-.19	.04	-.11	.15	-.22	.33***	-.36***	-.01
Difficult World	.12	-.11	.07	-.14	.13	-.19	.21	-.45***	-.10
Predictable World	-.23	.34***	-.08	.15	.00	.24	-.28*	.18	.08
Just World	-.14	.11	-.06	-.12	-.13	.29*	-.17	.15	-.02
Politically Responsive World	-.07	.09	.08	.11	-.03	.02	-.12	.30**	.12

\*p < .05, \*\*p < .01, \*\*\*p < .005, \*\*\*p < .002 (N = 72)

while Ss scoring low on externality (i.e., those more internally oriented) score high on charitability.

The data from Table 4 (see p. 34) and Table 5 (see p. 36) also suggest that indices on internality-externality are better predictors of attributed freedom and charitability when actors are female than when they are male, with this tendency being especially strong when the target is male. To determine whether these tendencies are significant differences, a  $3 \times 2 \times 2 \times 2$  analysis of variance was computed, with the four factors being Rotter scores (divided into three levels), sex of actor, sex of target, and affect of the act.

As in the analysis of variance reported earlier, there were significant effects for Target ( $F = 70.26$ ,  $df = 1/69$ ,  $p < .0001$ ), Affect ( $F = 55.64$ ,  $df = 1/69$ ,  $p < .0001$ ), Actor X Affect ( $F = 24.27$ ,  $df = 1/69$ ,  $p < .0001$ ), Target X Affect ( $F = 21.33$ ,  $df = 1/69$ ,  $p < .0001$ ), and Actor X Target X Affect ( $F = 15.27$ ,  $df = 1/69$ ,  $p < .0003$ ). Table 6 (see p. 37) indicates that there also was an interaction of Rotter scores X Affect ( $F = 5.63$ ,  $df = 1/69$ ,  $p < .02$ ). Though attributed freedom for positive acts did not vary significantly across the three levels of Rotter scores, there was a significant difference in the amount of freedom attributed when acts were negative. More freedom was attributed to negative acts at the third level of Rotter

Table 5

Pearson Correlation Coefficients (r) for Each Internality-Externality

Index with Each Charitability Score

Slide Combinations

	Male actor, male or female target	Female actor, male or female target	All actors, all targets	Male actor, male target	Male actor, female target	Female actor, female target	Female actor, male target
Rotter	-.26*	-.31**	-.36***	-.27*	-.14	-.24*	-.44***
Difficult World	-.23*	-.34***	-.32**	-.14	-.19	-.22	-.42***
Predictable World	.33***	.20	.33***	.32***	.14	.13	.27*
Just World	.03	.20	.23	.16	.03	.28*	.27*
politically Respon- sive World	.06	.13	.15	.16	.04	.05	.27*

\*p < .05, \*\*p < .01, \*\*\*p < .005, \*\*\*\*p < .0001 (N = 72)



Table 6  
 Mean Perceived Freedom Scores for  
 Rotter Scores X Affect of Act\*

Rotter Scores\*\*

	Level 1	Level 2	Level 3
Positive Acts	53.79	51.25	50.29
Negative Acts	39.29	41.46	43.79

\*Means represent average perceived freedom scores for positive and negative acts, summed across sex of subject, sex of actor, and sex of target.

\*\*Level 1 = Rotter scores from 5 to 80 (N = 24)

Level 2 = Rotter scores from 82 to 104 (N = 24)

Level 3 = Rotter scores from 105 to 183

(N = 24)

scores (high external scores) than at the first level ( $t = -2.20$ ,  $df = 46$ ,  $p < .033$ ). However, there were no significant differences between the perceived freedom scores of levels one and two, or levels two and three. There was no main effect for Rotter scores, nor was there an interaction of Rotter X Actor or Rotter X Target. Thus, the actor and target differences suggested by Tables 4 (see p. 34) and 5 (see p. 36) are not significant.

Table 7 (see p. 39) reports the correlation of B+M and B/B+M with each of the eight slide categories and with the sum of perceived freedom scores. Only one of the slide categories, male to male negative, is significantly related to B+M scores ( $r = .24$ ,  $p < .05$ ), with those scoring higher on B+M (i.e., those more externally oriented) attributing more freedom, and those scoring lower on B+M attributing less freedom. B/B+M scores are significantly correlated with five of the eight slide categories and with the sum of perceived freedom responses. All of the correlations are in the negative direction with those scoring higher on B/B+M attributing less freedom in response to the slides, and those scoring lower on B/B+M attributing more freedom. The data in Table 7 (see p. 39) indicate that this tendency held true for both male and female actors, male and female targets, and surprisingly, for both positive and negative acts.

Table 7

Pearson Correlation Coefficients (r) for Each Benevolence-  
Malevolence Score with Each Attribution of Freedom Score

Slide Categories

	male to male negative	male to male positive	male to female negative	male to female positive	female to female negative	female to female positive	female to male negative	female to male positive	Sum of perceived freedom scores
B+M	.24*	-.05	.13	-.12	.17	.18	.22	+.09	.13
B/B+M	.13	-.21	-.46***	-.49***	.54***	-.48***	-.37**	.20	-.53***

\*p < .05, \*\*p < .002, \*\*\*p < .0001 (N = 70)

A correlational analysis was also computed for B+M and B/B+M scores with charitability scores. The results of this analysis are presented in Table 8 (see p. 41). B+M scores are negatively correlated with charitability toward female actors ( $r = -.24$ ,  $p < .05$ ) and with an overall measure of charitability toward both male and female actors ( $r = -.28$ ,  $p < .02$ ). In other words, for these two slide combinations, those who scored higher on B+M were less charitable than those who scored lower. For B/B+M scores this tendency is reversed. That is, B/B+M scores are positively correlated with an overall measure of charitability toward both male and female actors ( $r = .35$ ,  $p < .003$ ). Thus, for these two slide combinations, SS who scored higher on B/B+M were more charitable than SS whose scores were lower.

To further test the relationship of B+M and B/B+M scores with the slide data, a  $3 \times 3 \times 2 \times 2 \times 2$  analysis of variance was computed. The between factors are B+M scores (divided into three levels) and B/B+M scores (divided into three levels). The within factors are sex of actor, sex of target, and affect of act. Again, significant effects were obtained for Target ( $F = 56.74$ ,  $df = 1/61$ ,  $p < .0001$ ), Actor X Affect ( $F = 22.67$ ,  $df = 1/61$ ,  $p < .0001$ ), Target X Affect ( $F = 20.19$ ,  $df = 1/61$ ,  $p < .0001$ ), and Actor X Target X Affect ( $F = 16.03$ ,  $df = 1/61$ ,



Table 8

Pearson Correlation Coefficients (r) for Each  
Benevolence-Malevolence Score with  
Charitability Score

	B+M	B/B+M
Male actor, male or female target	-.21	.09
Female actor, male or female target	-.24*	.43***
All actors, all targets	-.28*	.35**
Male actor, male target	-.16	-.07
Male actor, female target	-.17	-.16
Female actor, female target	.23	.18
Female actor, male target	-.22	.06

\* $p < .05$

\*\* $p < .005$

\*\*\* $p < .0001$

(N = 70)

$p < .0002$ ).

While there was no main effect for B+M or B/B+M scores, there were several significant interactions. As Table 9 (see p. 43) indicates, there was a B+M Affect interaction ( $F = 4.1$ ,  $df = 2/62$ ,  $p < .02$ ). Though attributed freedom for positive acts did not vary across the three levels of B+M scores, there were significant differences in the amount of freedom attributed to negative acts. More freedom was attributed to negative acts at the third level of B+M than at the first level ( $t = 2.27$ ,  $df = 44$ ,  $p < .05$ ) or second level ( $t = 3.2$ ,  $df = 43$ ,  $p < .01$ ). There was no significant difference between the perceived freedom scores of levels one and two.

Table 10 (see p. 44) shows a significant B/B+M Affect interaction ( $F = 3.57$ ,  $df = 2/61$ ,  $p < .034$ ). Again, for positive slides, there were no significant differences in attributed freedom scores across the three levels of B/B+M. However, for negative slides, more freedom was attributed at the first level of B/B+M than at the second level ( $t = 2.02$ ,  $df = 47$ ,  $p < .05$ ) or third level ( $t = 2.62$ ,  $df = 40$ ,  $p < .02$ ). The difference between the perceived freedom scores of levels two and three was not significant.

There was also a B+M X B/B+M X Actor interaction, as is shown in Table 11 (see p. 45) ( $F = 3.65$ ,  $df = 4/61$ ,

Table 9  
Mean Perceived Freedom Scores for  
B+M X Affect of Act\*

B+M**				
		Level 1	Level 2	Level 3
Positive Acts		53.2	52.3	50.1
Negative Acts		40.3	38.8	45.3

\*Means represent average perceived freedom scores for positive and negative acts, summed across sex of subject, sex of actors, and sex of target.

\*\*Level 1 = B+M scores from 37 to 76 (N = 25)

Level 2 = B+M scores from 77 to 84 (N = 24)

Level 3 = B+M scores from 85 to 98 (N = 21)

Table 10  
Mean Perceived Freedom Scores for  
B/B+M X Affect of Act\*

		B/B+M**		
		Level 1	Level 2	Level 3
Positive acts		50.86	51.54	53.71
Negative acts		44.76	40.93	38.33

\*Means represent average perceived freedom scores for positive and negative acts, summed across sex of subject, sex of actor, and sex of target.

\*\*Level 1 = B/B+M scores from .27 to .48 (N = 21)

Level 2 = B/B+M scores from .49 to .55 (N = 28)

Level 3 = B/B+M scores from .56 to .75 (N = 21)



Table 11

Mean Perceived Freedom Scores for  
B+M X B/B+M X Sex of Actor\*

		B+M Level 1			B+M Level 2			B+M Level 3		
	B/B+M level 1	B/B+M level 2		B/B+M level 3	B/B+M level 1		B/B+M level 2	B/B+M level 3		
		1	2		1	2		1	2	
Male actors	50.0	45.8	43.25	(N = 8)	42.0	48.43	46.2	50.38	47.1	45.3
	(N = 6)	(N = 11)	(N = 8)		(N = 7)	(N = 7)	(N = 10)	(N = 8)	(N = 10)	(N = 3)
Female actors	48.83	45.73	49.00	(N = 8)	48.0	43.28	45.3	47.75	46.9	48.0
	(N = 6)	(N = 11)	(N = 8)		(N = 7)	(N = 7)	(N = 10)	(N = 8)	(N = 10)	(N = 3)

\*Means represent average perceived freedom scores for male and female actors, summed across sex of subject, sex of target, and affect of act. The higher the mean, the higher the attribution of freedom.

$p < .009$ ). For female actors, there were no significant differences in attributed freedom across the levels of B+M and B/B+M. There were, however, significant differences in the amount of freedom attributed when actors were male. For the first level of B+M, more freedom was attributed at level one of B/B+M than at level two of B/B+M ( $t = 2.66$ ,  $df = 15$ ,  $p < .018$  or at level three of B/B+M ( $t = 2.74$ ,  $df = 12$ ,  $p < .018$ ). For the second level of B+M, less freedom was attributed at level one of B/B+M than at level two of B/B+M ( $t = 2.31$ ,  $df = 12$ ,  $p < .05$ ). At the third level of B+M the amount of freedom attributed to male actors did not vary significantly across the three levels of B/B+M.

There were significant differences in the amount of freedom attributed to male and female actors for the following B+M and B/B+M combinations: level one of B+M, level three of B/B+M ( $t = 5.11$ ,  $df = 7$ ,  $p < .01$ ), level two of B+M, level one of B/B+M ( $t = 4.83$ ,  $df = 6$ ,  $p < .01$ ), level two of B+M, level two of B/B+M ( $t = 4.85$ ,  $df = 6$ ,  $p < .01$ ), and level three of B+M, level one of B/B+M ( $t = 2.79$ ,  $df = 7$ ,  $p < .05$ ).

Correlation coefficients were computed for Christie Mach IV scores with perceived freedom responses and charity scores. No significant relationships emerged.

Attitudes toward, and Participation in,  
the Feminist Movement

The following items (or subdivisions of items) from the "social movement" questionnaire (see Appendix F) were used to gain information about attitudes toward women and the feminist movement, about participation in the feminist movement, and about familiarity with women's problems:

- 1) From Item 10, the rank Ss assign to the plight of women, relative to that assigned to the other six kinds of people.
- 2) From Item 11, Ss' indications of participation or nonparticipation in organizations promoting the freedom and welfare of women.
- 3) From Item 12, Ss' reported familiarity with the special problems of women.
- 4) From Item 13, Ss' agreement or disagreement with six statements pertaining to women in the labor force.
- 5) From Item 14, Ss' indications of approval or disapproval with the goals of the feminist movement.
- 6) From Item 15, Ss' indications of approval or disapproval with the procedures and tactics of the feminist movement.

A principal components factor analysis was undertaken to assess the internal consistency of Items 13, 14, and 15 (those items aimed at measuring Ss' attitudes toward the role of women and the feminist movement). Data from the 43 males and 41 females completing those items were used in the analysis. It should be noted that each of the six statements in Item 13 was treated as a separate entity,

so that, in total, eight items were actually used in the factor analysis.

The first unrotated orthogonal factor accounted for 24.6% of the total variance. The second unrotated orthogonal factor accounted for 20.3% of the total variance, while the third accounted for 14.8% of the total variance. The eigenvalue for each of these three factors was greater than one, therefore rotations were undertaken.

As can be seen in Table 12 (see p. 49), a three-factor rotation yielded a comparatively simple structure. Each of the eight items loaded at least +.31 or higher on one, and only one, of the three factors. Therefore it is possible to divide the eight items into three distinct subscales, which might be labeled as follows: 1) career-orientation (A, B, and D of Item 13), 2) exploitation and powerlessness (C, E, and F of Item 13), and 3) goals and tactics of the feminist movement (Items 14 and 15). These three subscales, along with the three women-related subdivisions of Items 10, 11, and 12, comprise the six indices that were used to assess attitudes toward women and the feminist movement, participation in the feminist movement, and familiarity with women's problems.

Table 13 (see p. 50) reports the means and standard deviations for each of these six indices. Relationships among the six indices appear in Table 14 (see p. 51). Five



Table 12

Items 13, 14, and 15 from the "Social Movement"  
Questionnaire and Their Loadings  
on the Three Rotated Factors

		Factor 1	Factor 2	Factor 3
Item 13.	A) Women tend to leave work for marriage and/or to rear children.	.51	-.09	.12
	B) Women tend to be less career-oriented and compete less strongly for advancement.	.50	.02	.10
	C) Women are the victims of discriminatory attitudes and legislation.	-.05	.48	.03
	D) Women often don't try as hard as men because they know their husbands will support them if the need arises.	.31	.10	-.16
	E) Women lack the political power to change the system or to gain good positions within the system.	-.01	.37	-.09
	F) Women are often exploited by men who want to keep them in weak and subordinate positions.	.06	.47	-.04
Item 14.	The feminist movement is designed to achieve greater freedom, power, social status, and economic well being for women? How do you feel about these aims?	.05	.06	.54
Item 15.	Regardless of how you feel about the aims of the feminist movement, how do you feel about the <u>procedures and tactics</u> of the movement?	.06	-.13	.60



Table 13

Means and Standard Deviations for  
Each of the Six "Feminist" Indices

		<u>Mean</u>	<u>S.D.</u>
Item 10.	Level at which Ss rank the plight of women. (Ranks can range from 1 to 7. The higher the number, the less "bad off" a group is believed to be.)	4.28	1.65
Item 11.	Indicated participation or nonparticipation in organizations which promote the freedom and welfare of women. (1 indicates participation, 2 indicates nonparticipation.)	1.82	.385
Item 12.	Familiarity with the special problems of women. (1 = very familiar, 2 = somewhat familiar, 3 = little or no familiarity.)	1.49	.589
Item 13.	Career-orientation subscale. (Possible values range from 3 to 21. The higher the score, the greater the disagreement with statements suggesting that women are less career-oriented than men.)	12.16	3.68
Item 13.	Exploitation, powerlessness subscale. (Possible values range from 3 to 21. The higher the score, the greater the disagreement with statements which suggest that women are victims of discrimination, exploited by men, etc.)	9.37	3.65
Items 14 and 15.	Subscale pertaining to goals and tactics of the feminist movement. (Possible values range from 2 to 10. The higher the score, the greater the disapproval with feminist movement goals and tactics.)	4.63	1.62

Table 14

Pearson Correlation Coefficients (r)  
for the Six "Feminist" Indices

	Rank of women's plight	Participation-nonparticipation in organizations that promote the welfare of women	Familiarity with women's special problems	Career-orientation subscale	Exploitation, powerlessness subscale	Subscale pertaining to the goals and tactics of the feminist movement
Rank of women's plight	.20	.12	-.13	.30**	.12	
Participation-non participation in organizations that promote the welfare of women		.30**	-.15	.26*	.31**	
Familiarity with women's problems			.05	.29**	.13	
Career-orientation subscale				-.01	-.16	
Exploitation Powerlessness subscale						.13

\*p < .02

\*\*p < .008

of the correlations are statistically significant. The rank Ss assigned to the plight of women and Ss' familiarity with women's problems were found to be positively related to the "exploitation, powerless" subscale. That is, Ss who perceived women's plight as less severe than that of the other groups, and who reported less familiarity with women's problems, tended to disagree with statements suggesting that women are victims of discrimination, exploited by men, etc. ( $r = .30, p < .008$ ;  $r = .29, p < .008$ ).

Scores on participation in organizations that promote the welfare of women were found to be related to three of the other "feminist" indices: familiarity with women's problems, the "exploitation, powerlessness" subscale, and the subscale pertaining to the goals and tactics of the feminist movement. In other words, Ss who reported no participation in organizations which promote the welfare of women tended to report less familiarity with the special problems of women ( $r = .30, p < .008$ ). Furthermore, there was a tendency for those who reported no such participation to disagree with statements suggesting that women are victims of discrimination, and to express disapproval with the goals and tactics of the feminist movement ( $r = .26, p < .02$ ;  $r = .31, p < .008$ ).

Chi-square analyses were computed to determine whether there were significant differences between male and female

responses to each of the six indices. Only one analysis yielded a significant difference. As might be expected, more females than males indicated that they had participated in organizations which promote the welfare of women (corrected chi-square = 4.24,  $df = 1$ ,  $p < .039$ ).

#### Relationship of the Six "Feminist" Indices with Attribution of Freedom to Slides and to Dispositional Traits

Pearson correlation coefficients ( $r$ ) were computed for each of the six "feminist" indices with each of the eight slide categories, the seven charitability scores, and the sum of perceived freedom responses. Only two of these correlations reached statistical significance. Female-to-male-negative (one of the eight slide categories) was found to be positively related to the career-orientation subscale ( $r = .295$ ,  $p < .015$ ). The total sum of perceived freedom responses was also found to be positively related to this subscale ( $r = .35$ ,  $p < .003$ ). Thus, for these two slide categories, the greater an  $S$ 's attribution of freedom, the greater is his disagreement with statements which suggest that women are less career-oriented than men.

Pearson correlation coefficients ( $r$ ) were also computed for each of the six "feminist" indices with each dispositional measure, specifically, B+M and B/B+M scores,



Rotter scores, Collins' four factors, and Mach scores. Only five of the correlations were significant. B/B+M scores and Collins' Predictable World factor were positively correlated with scores on participation in organizations that promote the welfare of women (high score means no participation). In other words, those scoring higher on the Predictable World factor (i.e., those who believe the world is not ruled by luck) and those scoring higher on B/B+M reported no participation in such organizations ( $r = .24, p < .047$ ;  $r = .35, p < .003$ ). B+M scores were found to correlate positively with the "exploitation, powerlessness" subscale. That is, those scoring higher on B+M (i.e., those more externally oriented) tended to disagree with statements suggesting that women are victims of discrimination, exploited by men, etc. ( $r = .25, p < .029$ ).

Collins' Difficult World factor and Machiavellianism were both positively related to the subscale pertaining to the goals and tactics of the feminist movement. Those scoring higher on the Difficult World factor (i.e., those who believe the world is composed of difficult, unsolvable tasks) and those scoring higher on the Mach scale tend to disapprove of the goals and tactics of the feminist movement ( $r = .286, p < .014$ ;  $r = .35, p < .003$ ). The correlation of Mach scores with the "career-orientation" subscale



just missed significance at the .05 level. The trend was in the negative direction, with those scoring higher on the Mach scale tending to express greater agreement with statements which suggest that women are less career-oriented than men ( $f = -.25$ ,  $p < .057$ ).

Analysis of the data also revealed findings that do not bear directly on any of the issues that prompted this research. They concern:

- 1) Relationships among the dispositional traits, i.e., B+M and B/B+M scores, Rotter scores, Collins' four factors, and Mach scores.
- 2) Relationships of those items from the "social movement" questionnaire, which do not pertain to feminism or the role of women, with (a) attribution of freedom to actors depicted on slides, (b) dispositional traits, and (c) feminist or women-related items from the "social movement" questionnaire.

Findings concerning these issues are reported in

Appendix G.

## C H A P T E R I V

### DISCUSSION

The results of this study indicate that attribution of freedom is partially determined by the sex of the target of an act and the affect of the act. The findings suggest that attribution of freedom does not vary as a simple function of two other factors, sex of subject (the attributor) or sex of the actor. However, there are strong interaction effects, suggesting that attribution of freedom is partially determined by the interrelationship of two or more factors.

Consistent with the findings of Steiner and associates (unpublished paper), the present study reveals a tendency for external locus of control (as measured by both Rotter and B+M scores) to be positively correlated with attributed freedom when acts are negative, and negatively correlated with attributed freedom when acts are positive. Benevolently oriented subjects (high B/B+M scores) tend to attribute less freedom to actors depicted in slides than do malevolent subjects, regardless of whether their actions are positive or negative.

Although benevolently oriented subjects are not inclined to attribute much freedom to actors, they are nevertheless prone to be "charitable" when they do attribute

freedom. Thus, they are more inclined than malevolently oriented subjects to ascribe greater freedom when acts are positive than when they are negative. A similar relationship has been reported by Steiner and associates (unpublished paper). In regard to scores on the Mach scale, the expectation that those who score high on the Mach scale would attribute more freedom when acts were negative than when they were positive is not confirmed.

As might be expected, there are significant relationships among some of the "feminist" items from the social movement questionnaire. Three of the items, rank assigned to the plight of women, familiarity with women's problems, and participation in organizations promoting the welfare of women, are related to the "exploitation, powerlessness" subscale. Participation in behalf of women is also related to familiarity with women's problems and to the subscale pertaining to the goals and tactics of the feminist movement. Surprisingly, none of the "feminist" items is significantly correlated with the "career-orientation" subscale.

Correlational analyses between each of the "feminist" indices and each perceived freedom response yields only two significant relationships. The female-to-male negative slide category and the total sum of perceived freedom responses are positively correlated with the "career-orienta-

tion" subscale. That is, the greater the attribution of freedom, the greater the disagreement with statements suggesting that women are less career-oriented than men.

Though there are few significant correlations between the "feminist" indices and the dispositional measures, some interesting relationships emerge. Participation in behalf of women (with a high score indicating no participation) is positively correlated with B/B+M scores and with Collins' Predictable World factor. B+M scores are positively related to the "exploitation, powerlessness" subscale, and the Collins' Difficult World factor, and Mach scores are positively related to the subscale pertaining to goals and tactics of the feminist movement.

Although the findings identify some dispositional correlates of participation in, and support for, the feminist movement, they do not provide very secure evidence linking such participation or support to the attribution of freedom.

Before presenting a more detailed discussion of the results, it should be noted that the data elicited through the presentation of cartoon-like slides may have limited validity. Because the 24 slides presented to the subjects differed from one another on a number of dimensions, it is difficult to determine whether a subject's attribution to any given slide, or category of slides, was a response



to the experimental manipulation (i.e., sex of the target, sex of the actor, or affect of the act) or whether it was a response to some other characteristic unique to the slide(s). Appendix H includes a more detailed account of this problem and presents the procedures and results of a study aimed at minimizing any systematic confounding effects.

The results of this follow-up study indicate that perceived freedom responses varied as a function of sex of subject. It will be recalled that such an effect did not reach statistical significance in the present study. Furthermore, the significant sex composition effects reported in the present study were not replicated by the follow-up study. The significant correlations, obtained in the present study, of B+M and B/B+M scores with perceived freedom responses also did not reach statistical significance. (It should be noted that the study reported in Appendix H had its own set of methodological problems, and these should be taken into account when comparing the findings of the two studies). Nevertheless, the failure to obtain consistent findings suggests that great care be taken when interpreting the significant sex composition effects, and the nonsignificant sex-of-subject effect, reported in the present study. Great care should also be taken when interpreting the significant relationship of benevolence-male-



volence scores with the attribution of freedom.

A second methodological problem involves the response scales which were used to assess attribution of freedom. The response scales were intended to vary along a single dimension of "free" versus "unfree", but a second dimension of positivity versus negativity may have been operative as well (see the anchor statements in Appendix D). Because the response scales may have measured more than one dimension, it is unclear whether a subject's response to a given slide indicated attribution of freedom or a general tendency to view others as kind versus unkind (or benevolent versus malevolent). Since the response scales from the initial study were also used in the follow-up study, the meaning of a subject's response to the slides remains unclear.

Given the problems described above, generalizing the findings to situations beyond the immediate experimental setting may seem unwarranted. However, the study yielded a number of findings with interesting implications, and a consideration of these implications may be helpful in the development of future research.

#### Analysis of Variance:

##### Sex and the Attribution of Freedom

Evidence cited in the introduction suggests

that greater freedom will be attributed when an actor seems to be doing what he personally wants to do, and less freedom will be attributed when an actor seems to be doing what he feels bound to do, by situational constraints, etc. One may also assume that subjects expect actors to prefer behaving in positive rather than negative ways. Given these assumptions, one would expect more freedom to be attributed when acts are positive than when they are negative and charitability scores to tend to be positive. The significant Affect of Act main effect and the general positivity of charitability scores are consistent with these expectations.

One can also suggest that subjects (both male and female) will perceive actors as wanting to be nicer to women than to men. This suggestion is based on the assumption that traditional "chivalrous" notions (i.e., people wanting to be nice to females) are still prevalent in society. Consistent with the assumption of "chivalry", one would expect sex of target to interact with the affect of the act, such that more freedom is attributed when positive acts are directed toward females rather than toward males, and more freedom is attributed when negative acts are directed toward males rather than toward females. This expectation is only partially confirmed by the results. For positive acts, more freedom was attributed when the

target was female rather than male, but for negative acts, there were no significant differences in the amount of freedom attributed when targets were male versus female. Thus, the significant Sex of Target main effect was due solely to differences in the amount of freedom attributed when acts were positive. Despite the absence of significant differences when acts were negative, the assumption of "chivalry" is not necessarily invalid.

Indeed, the means presented in Table 3 (see p. 33) indicate that, for negative acts, there are significant differences in the amount of freedom attributed when targets are male versus female, depending upon whether the actor is male or female. These differences suggest that there may be a second assumption operating with, or perhaps to the exclusion of, the "chivalry" assumption. This second assumption, which takes into account the sex of the actor, suggests that subjects (both male and female) will be inclined to assume that actors want to be nicer to targets of their own sex (males want to be nicer to males and females want to be nicer to females) than to targets of the opposite sex.

Given these two assumptions ("chivalry" and "brotherhood-sisterhood"), one might expect the following to obtain: 1) Greatest charity will be manifest when both the actor and the target are female ("chivalry" and "sis-

terhood" combined). 2) Least charity will be manifest when the actor is female and the target male (neither "chivalry" or "sisterhood" operates). 3) Charity will be at an intermediate level when actors are male, since one but not the other biasing assumption is operating.

To assess the merit of these three propositions, charitability scores were calculated from the cell means in Table 3 (see p. 33) (Mean perceived freedom scores for negative acts were subtracted from mean perceived freedom scores for positive acts). The charitability scores for each actor-target combination are: male actor-male target +3.64, female actor-female target +3.51, male actor-female target +3.19, and female actor-male target -.08.

As these values indicate, the first and third propositions are not supported by the charitability scores. Contrary to the first proposition, the greatest charity is manifest when both the actor and the target are male (i.e., only "brotherhood" operates), though only slightly less charity is expressed when both the actor and target are female (i.e., both "chivalry" and "sisterhood" are operating). The third proposition is partially supported, in that charitability toward the male actor-female target combination (i.e., only "chivalry" is operating) falls at



an intermediate level. As predicted, least charity is manifest when the actor is female and the target male (both "chivalry" and "sisterhood" are absent).

Differences between the three highest charitability scores suggest that "brotherhood" may have more impact than "sisterhood", and both (i.e., "brotherhood-sisterhood") may have more impact than "chivalry". However, these three charitability scores differ only slightly, thus, any conclusions about the relative impact of "brotherhood" versus "sisterhood" and about whether either will be stronger than "chivalry" are somewhat tenuous. What can be said is that the presence of "chivalry" and "brotherhood-sisterhood", either alone or in combination, seems to account for the similarly high charitability expressed toward the male-to-male, female-to-female, and the male-to-female categories, while the absence of both notions seems to account for subjects' much lower charitability toward the female-to-male category.

Though the notions of "chivalry" and "brotherhood-sisterhood" seem to explain the significant three-way interaction of Actor X Target X Affect, these notions do not necessarily prohibit the significantly greater overall charity toward male actors. It will be recalled that when acts were positive, more freedom was attributed to male



actors than to female actors. However, when acts were negative, more freedom was attributed to female actors than to male actors. These results suggest that when a female was the initiator of an act, subjects tended to believe that she treated others unkindly because she chose to do so, and treated others kindly because she felt bound to do so. However, the results suggest that when a male was the initiator of an act, subjects tended to believe that he treated others unkindly because he felt bound to do so, and treated others kindly because he chose to do so.

It is not immediately clear why such differences obtained. However, a few clues are provided by the charity scores calculated from Table 3 (see p. 33) and recorded on p. 64. These scores indicate that subjects' responses to the female-to-male category are the critical determinant of greater overall charity shown toward the male than toward the female actors. Note the discrepancy between the first three categories (male-to-male, female-to-female, male-to-female) and the female-to-male category.

Although the absence of both "chivalry" and "brotherhoods-sisterhood" may explain the relatively low charity scores when actors are female and targets male, one could also suggest that these low charity scores reflect subjects' adherence to sex-role stereotypes which

have traditionally defined "initiation" of activity as inappropriate female behavior, and the more passive "reception" of activity as inappropriate male behavior. As Broverman, Vogel, Broverman, Clarkson, and Rosencrantz (1972) indicate, initiation of activity is more socially approved, and more positively valued, in men than in women, while passivity is more socially approved and more positively valued in women than in men.

Consequently, those slides in which a woman is initiating activity toward a male are likely to have been perceived as rather unusual, since they contradict traditional notions of male as "active" and female as "passive". This reversal of the traditional sex roles may have caused subjects to feel somewhat ambivalent toward, or perhaps disapproving of, the behavior depicted in the slides, with these feelings being especially strong toward the behavior of the female, since she is the initiator of the act, and the one with potentially more control. The relatively low charitability scores when actors are female and targets male may reflect subjects' disapproval of, or ambivalence toward, this rather atypical situation.

Though such an explanation seems intuitively plausible, it is also problematic. First, two mediating variables are assumed to be operating: 1) sex-role stereotypes and 2) the disapproval or ambivalence which are be-

lieved to result from perceiving nonstereotypic sex-role behavior. However, the present study provides no data that can confirm the existence of such mediating processes. Thus, the existence of such processes and their role in determining subjects' responses to the slides remain highly speculative.

Moreover, the argument outlined above assumes that actors in the slides are perceived as "initiators" of activity. However, many of the slides suggest an on-going behavioral exchange between the actor and target. Hence, subjects may have been responding to the actor as both initiator and recipient.

These problems undermine the suggestion that the Actor X Affect interaction can be explained by reference to traditional sex-role stereotypes which define men as "initiators" and women as "recipients". However, intriguing such an explanation may be, future research will be needed to confirm or disconfirm its validity.

Though it is unclear whether responses to the slides were influenced by a "passivity-activity" sex-role stereotype, it seems possible that another sex-role stereotype may have been operative. This stereotype, which is focused upon the positive and negative actions of males versus females, assumes that women are expected to be kind to others, while men are less socially required, or expected,

to do so. These assumptions may have been the basis for subjects' attributions of freedom, such that a female who performed a positive act was not necessarily perceived to be acting freely, since her behavior was socially expected. However, a female who performed a negative act may have been perceived as "free" (i.e., wanting to be unkind) since her behavior was contrary to social expectation. Such an effect is consistent with evidence, cited in the introduction (e.g., Jones, Davis & Gergen, 1961; Jones & Harris, 1967). This evidence suggests that more freedom is attributed when an act appears to be contrary to existing social rules, external constraints, etc. A similar effect obtained in the present study, with females who performed negative acts, being perceived as "free", and those who performed positive acts being perceived as less "free".

The converse obtained for male actors who were perceived as more free than females when they performed positive acts, and less free than females when they performed negative acts. This pattern of findings might be expected to occur if the male stereotype implies less social pressure to behave in a kindly manner than does the female stereotype.

Though the assumptions about sex-role stereotypes that are cited above seem to account for subjects' greater charity when evaluating male actors than when evaluating



female actors, they do not explain the differences which obtained when targets were male versus female. If both the targets were male versus female. If both the target and actor effects are to be accounted for, it may be necessary to invoke a more differentiated set of stereotypes. The charitability scores calculated from Table 3 (see p. 33) suggest that females are expected to act quite positively toward males, but are not expected to act positively toward females. Although there seem to be fewer behavioral expectations for males than for females, (regardless of the sex of the target) the charitability scores suggest that men are expected to act a little more positively toward females than toward males.

The charitability scores for all actor-target combinations seem to be accounted for by these differing behavioral expectations when actors and targets are male versus female. However, these expectations contradict the assumption of "chivalry" that was proposed earlier. It will be recalled that subjects were expected to perceive actors (both male and female) as wanting to be nicer to females than to males. However, the differences outlined in the preceding paragraph suggest that, although men are expected to act more kindly toward females than toward males, women are expected to act more kindly toward males than toward females. Thus, it is the expectation that females will be



less kind to females than to males which is inconsistent with the "chivalry" notion (and the "sisterhood" notion), discussed earlier.

The present study provides no solid data to suggest that one of these two "chivalry" assumptions is more valid than the other. An interesting goal of future research would be to determine whether either of these two "chivalry" assumptions (i.e., sex-role stereotypes) provide a frame of reference for individuals' attributions of freedom. It would be also interesting to determine whether other normative assumptions (such as "brotherhood-sisterhood" or "passivity-activity") contribute to individuals' attributions of freedom.

#### Dispositional Variables and the Attribution of Freedom

The results indicate that external locus of control (as measured by both Rotter and B+M scores) is positively correlated with attributed freedom when acts are negative, and negatively correlated with attributed freedom when acts are positive. These tendencies, which have also been reported by Steiner and associates, suggest that people who score high on the Rotter scale and those who score high on the B+M scale are malevolently oriented.

Benevolently oriented subjects (those scoring high on

the B/B+M scale) tended to attribute little overall freedom to others (i.e., to those persons depicted in the slides) but were inclined to be charitable when they did attribute freedom. These correlations suggest that benevolently oriented subjects tend to see the environment (including the human part) as supportive and helpful. However, their tendency to attribute little overall freedom to others suggests that benevolently oriented subjects perceive the environment as a relatively unfree place in which people can be expected to act in predictable ways. Thus, it seems likely that a benevolently oriented subject considers a supportive human environment to be one in which there are many rules and regulations that guarantee a degree of mutuality and minimize chaos.

However, given that such rules and regulations always allow a margin of freedom, it is likely that benevolently oriented subjects will be inclined to perceive others as wanting to use that freedom in helpful, supportive ways. This explanation seems to account for the fact that, although benevolently oriented subjects were less inclined than malevolently oriented subjects to attribute high levels of freedom to others ( $-.53$  correlation between B/B+M scores and total attribution of freedom), they were more inclined than malevolently oriented subjects to be charitable when they did attribute freedom ( $+.35$  correla-

tion between B/B+M scores and charitability scores).

There is little evidence to suggest that participation in, or support for, the feminist movement is linked to the attribution of freedom. However, there are a few significant correlations between the dispositional measures and the "feminist" indices. Perhaps the most interesting finding from the "social movement" questionnaire from the factor analysis, undertaken to assess the internal consistency of eight items pertaining to attitudes toward the role of women and the feminist movement. It will be recalled that the factor analysis yielded three distinct subscales - "exploitation, powerlessness", "career-orientation", and a subscale pertaining to goals and tactics of the feminist movement. The emergence of these three factors suggests that attitudes toward the role of women and the feminist movement are focused around a number of different, and not necessarily highly related, issues. In other words, feminism appears to be a multidimensional, rather than unidimensional, concept.

Consequently, it seems likely that an individual might be supportive of some aspects of feminism, but non-supportive of others. For instance, in the present study, some subjects indicated strong support for increased career opportunities for women, but did not perceive women as the victims of discrimination, nor did they express strong ap-

proval for the goals and tactics of the feminist movement. Such differences indicate that the terms "feminism", "women's libber", etc., as they are used in the media, and in our everyday language, are somewhat misleading, since they fail to identify the degree to which an individual is supportive (or nonsupportive) of a number of more specific issues.



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## APPENDIX A



## APPENDIX C

## A P P E N D I X C

## MODIFIED ROTTER INTERNAL-EXTERNAL (I-E) SCALE

Debatable Issues

Listed below are a series of statements with which some people agree and others disagree. Evidence can be advanced in favor of each statement, and against each statement.

Please indicate the extent to which you agree or disagree with a statement by placing a checkmark or X in one of the spaces on the line below the statement. Please don't skip any statements even if you don't have much feeling one way or the other.

1. Children get into trouble because their parents punish them too much.

Agree \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_ Disagree

2. The trouble with most children nowadays is that their parents are too easy with them.

Agree \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_ Disagree

3. Many of the unhappy things in people's lives are partly due to bad luck.

Agree \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_ Disagree

4. People's misfortunes result from the mistakes they make.

Agree \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_ Disagree

5. One of the major reasons why we have wars is because people don't take enough interest in politics.

Agree \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_ Disagree

6. There will always be wars, no matter how hard people try to prevent them.

Agree \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_ Disagree

7. In the long run people get the respect they deserve in this world.

Agree \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_ Disagree

8. Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.

Agree \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_ Disagree

9. The idea that teachers are unfair to students is nonsense.

Agree \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_ Disagree

10. Most students don't realize the extent to which their grades are influenced by accidental happenings.

Agree \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_ Disagree

11. Without the right breaks, one cannot be an effective leader.

Agree \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_ Disagree

12. Capable people who fail to become leaders have not taken advantage of their opportunities.

Agree \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_ Disagree

13. No matter how hard you try some people just don't like you.

Agree \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_ Disagree

14. People who can't get others to like them don't understand how to get along with others.

Agree \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_ Disagree

15. I have found that what is going to happen will happen.

Agree \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_ Disagree

16. Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.

Agree \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_ Disagree

17. In the case of the well prepared student there is rarely if ever such a thing as an unfair test.

Agree \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_ Disagree

18. Many times exam questions tend to be so unrelated to course work that studying is really useless.

Agree \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_ Disagree

19. Becoming a success is a matter of hard work; luck has little or nothing to do with it.

Agree \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_ Disagree

20. Getting a good job depends mainly on being in the right place at the right time.

Agree \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_ Disagree

21. The average citizen can have an influence in government decisions.

Agree \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_ Disagree

22. This world is run by the few people in power, and there is not much the little guy can do about it.

Agree \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_ Disagree

23. When I make plans, I am almost certain that I can make them work.

Agree \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_ Disagree

24. It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.

Agree \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_ Disagree

25. In my case getting what I want has little or nothing to do with luck.

Agree \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_ Disagree

26. Many times we might just as well decide what to do by flipping a coin.

Agree \_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_Disagree

27. Who gets to be the boss often depends on who was lucky enough to be in the right place first.

Agree \_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_Disagree

28. Getting people to do the right thing depends upon ability; luck has little or nothing to do with it.

Agree \_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_Disagree

29. As far as world affairs are concerned, most of us are the victims of forces we can neither understand, nor control.

Agree' \_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_Disagree

30. By taking an active part in politics and social affairs the people can control world events.

Agree \_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_Disagree

31. Most people don't realize the extent to which their lives are controlled by accidental happenings.

Agree \_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_Disagree

32. There really is no such thing as "luck".

Agree \_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_Disagree

33. It is hard to know whether or not a person really likes you.

Agree \_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_Disagree

34. How many friends you have depends upon how nice a person you are.

Agree \_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_Disagree

35. In the long run the bad things that happen to us are balanced by the good ones.

Agree \_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_Disagree

36. Most misfortunes are the result of lack of ability, ignorance, laziness or all three.



Agree \_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_ Disagree

37. With enough effort we can wipe out political corruption.

Agree \_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_ Disagree

38. It is difficult for people to have much control over the things politicians do in offices.

Agree \_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_ Disagree

39. Sometimes I can't understand how teachers arrive at the grades they give.

Agree \_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_ Disagree

40. There is a direct connection between how hard I study and the grades I get.

Agree \_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_ Disagree

41. Many times I feel that I have little influence over the things that happen to me.

Agree \_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_ Disagree

42. It is impossible for me to believe that chance or luck plays an important role in my life.

Agree \_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_ Disagree

43. People are lonely because they don't try to be friendly.

Agree \_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_ Disagree

44. There's not much use in trying too hard to please people; if they like you, they like you.

Agree \_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_ Disagree

45. What happens to me is my own doing.

Agree \_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_ Disagree

46. Sometimes I feel that I don't have enough control over the direction my life is taking.

Agree \_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_Disagree

47. Most of the time I can't understand why politicians behave the way they do.

Agree \_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_Disagree

48. In the long run people are responsible for bad government on a national as well as on a local level.

Agree \_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_Disagree

APPENDIX D

A P P E N D I X D  
SLIDE INTERPRETATION SCALE

Instructions

Sometimes it is unclear what a person means when he says something to another person. For example, a teacher may tell a student: "Your term paper is OK". The teacher may really feel that it is barely acceptable, or that the student has done a fine job.

You will be shown a series of slides, each of which depicts a person saying something to another person. You are an observer of this scene. Your job is to look at the slide and decide what the speaker's sentiments really are. How does he really feel toward the other person, and why is he speaking as he is? Read the words the person is speaking and then decide which of the two translations comes closest to indicating what his true motivation really is.

For example, if a slide shows a teacher telling a student his term paper is OK, you might be asked to decide whether the teacher's true feeling is closer to: "It's barely acceptable", or "It's a great paper". You would indicate your guess by putting a checkmark on a scale that would look like this:

:          :          :          :          :

It's barely acceptable.

It's a great paper.

If you are quite sure you know what the teacher's feelings really are, you would indicate that feeling by checking one of the end spaces. If you aren't so very sure, you would check one of the spaces closer to the middle of the scale.

Remember, your job is to guess the speaker's true feelings- which may or may not correspond very closely to what he is saying.

Turn the page so you will be ready for the first slide.



1. \_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:

I don't like doing this to you, but a special order from headquarters says all trucks must be unloaded today.

I could let you go through if I wanted to, but I don't feel like it.

2. \_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:

I'll bet she's a terrible bore, but a ship's captain has to be friendly to wealthy passengers.

She seems charming. My wife and I will enjoy her company.

3. \_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:

I'm tired of giving refunds to freeloaders like you. I bet you haven't seen the movie.

Rules are rules. If I gave you a refund it would have to come out of my pocket.

4. \_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:

I really think the beef stew is the best thing on the menu today.

The cook says "push the stew", so who am I to argue with him?

5. \_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:

It's stupid, but what can I do? He's the son of a big stockholder.

I've always liked you, so I decided to move you up fast.

6. \_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:

I'm tired of waiting on you day after day while you play the invalid act.

The Doctor says that walking without support is the only way you'll be cured.

7. \_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:

One has to seem appreciative or next time they'll ignore you.

It's so much easier to decide when the clerk is helpful.

8. \_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:

I have no choice. The Governing Board of the College has established strict rules that I have to enforce.

Sure, I could let you graduate right away, but why should I give you a special break?

9. \_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:

I think patients make more progress if we give them responsibility right away.

The Legislature says we have to let all the patients run loose.

10. \_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:

I'm supposed to be a bus driver, not a bank teller.

Orders from headquarters, lady. Nothing I can do about it.

11. \_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:

The law won't let us foreclose on dead-beats like you without giving two months notice.

Times are rough and I'm glad to be able to extend your mortgage.

12. \_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:

Guys like you turn my stomach. I'm doing the public a favor by keeping you on the post.

I'd sure like to let you go, but the general called a 48-hour alert, so everyone has to stay.

13. \_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:

If the chief didn't have those crazy ideas about being polite I could spend my time on important things.

It's a pleasure to do a good deed once in a while, instead of always having to arrest people.

14. \_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:

Hospital Inspectors are coming and the Chief of Staff says we have to be ready for them.

You nurses on station just sit around anyway, and if I have to stay, you can stay, too.

15. \_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:

Last time I turned  
down a request like  
that it turned out to  
be the manager's  
nephew.

It's no skin off my  
back, and I like to be  
helpful.

16. \_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:

You're getting to be  
a pain in the neck. I  
type all those memos  
for you and nothing ever  
happens to them.

The boss told me you  
are supposed to have  
someone else type your  
memos. I have to  
follow orders.

17. \_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:

I always liked English  
and you make things  
interesting.

Saying this is the  
only way I'll get an A  
out of you.

18. \_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:

The boss wouldn't let  
me bring the meat because  
you haven't paid your  
last week's bill.

I knew if I hurried, I'd  
forget something. I  
still have time to go  
back and get it.

19. \_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:

It's an excellent ana-  
lysis of the problems  
confronting the city.

Your father's a big  
wheel in town, so what  
choice do I have?

20. \_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:

My boss will chew me  
out if I don't sweep  
here now. He won't let  
me make any exceptions.

I make everybody move.  
That's the way I oper-  
ate.

21. \_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:

You really deserve a  
break, and I'm glad  
I could arrange it.

I don't see why the  
Warden insists on cod-  
dling criminals like  
you.

22. \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_

Your kids are brats,  
and I don't want to  
be stuck with them again.

My mother says I have  
to stay home and study  
tonight.

23. \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_

You're probably one of  
those students who gets  
very nervous at exam  
time.

The Dean says we have  
to let students do  
whatever they want to  
do.

24. \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_

I'd give you a quarter  
or so, but I promised  
my husband never to do  
it again.

If no-good loafers like  
you were willing to  
work, they wouldn't  
need to beg.

LINE DRAWINGS OF SLIDES PRESENTING  
STATEMENTS WHICH MAY BE INTERPRETED  
AS FREE VERSUS UNFREE EXPRESSIONS







Slide 2

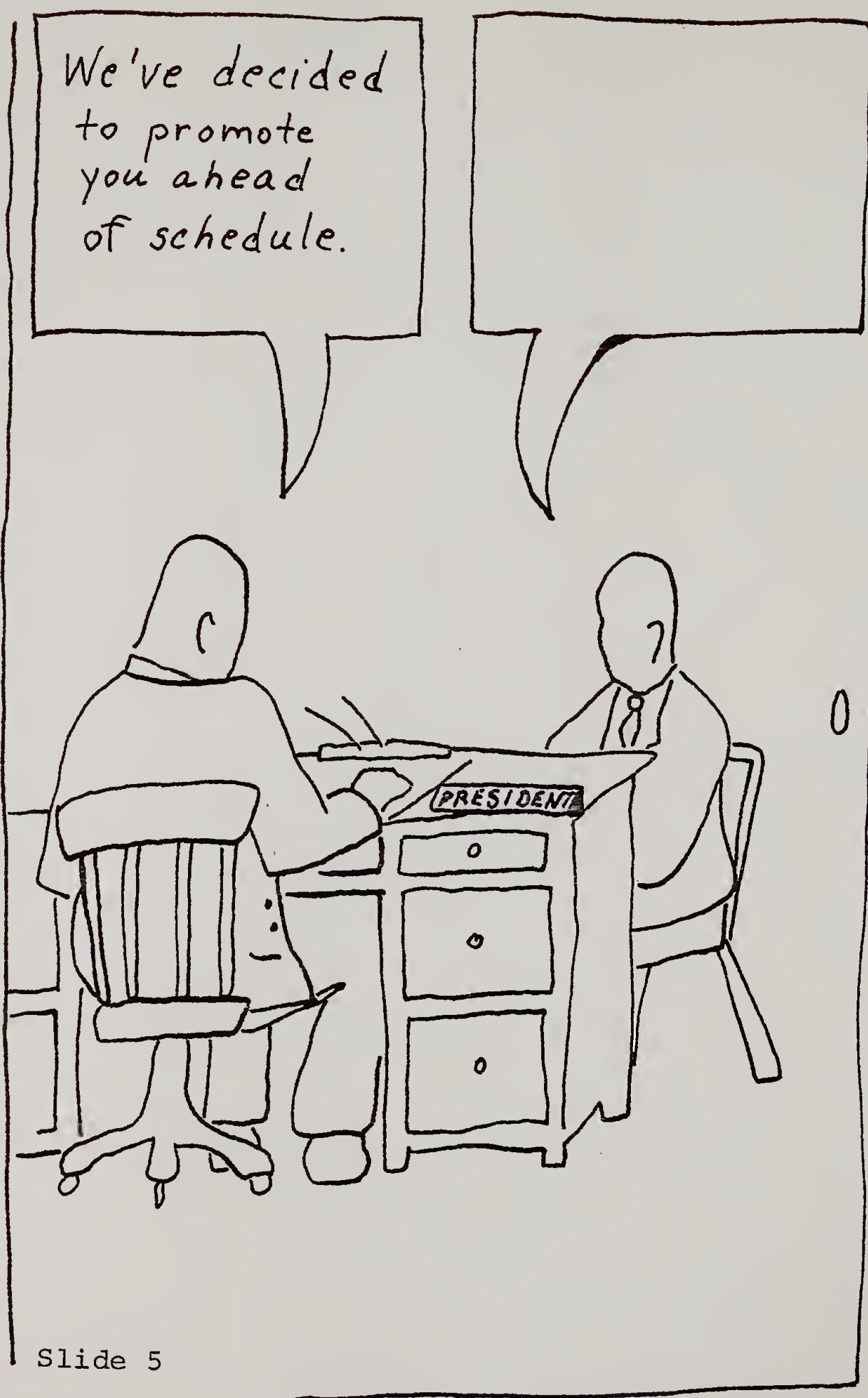


Slide 3

The beef stew  
is especially  
good tonight.



Slide 4







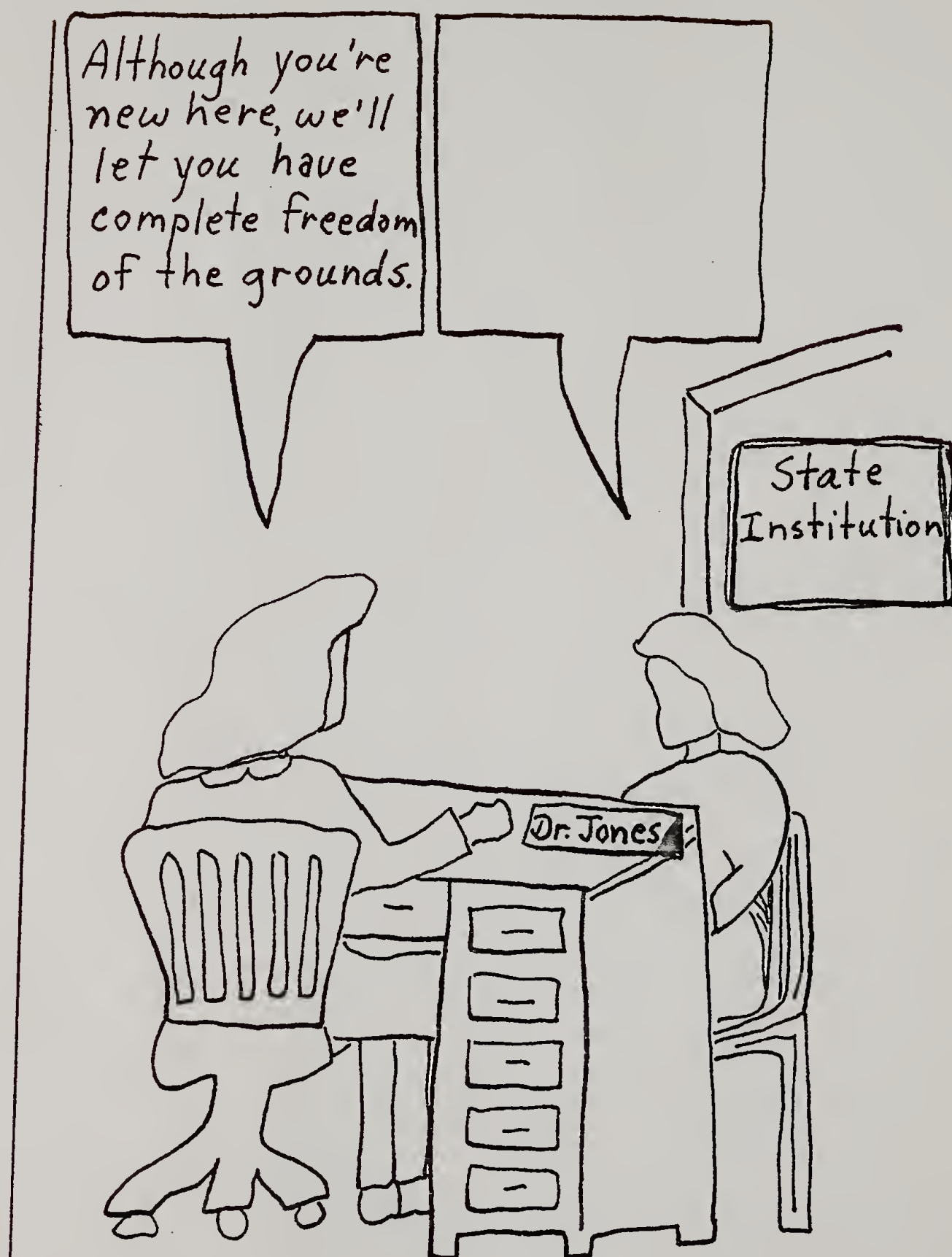
Slide 6



Slide 7

Even with all your credits you'll have to spend another semester here before you graduate.



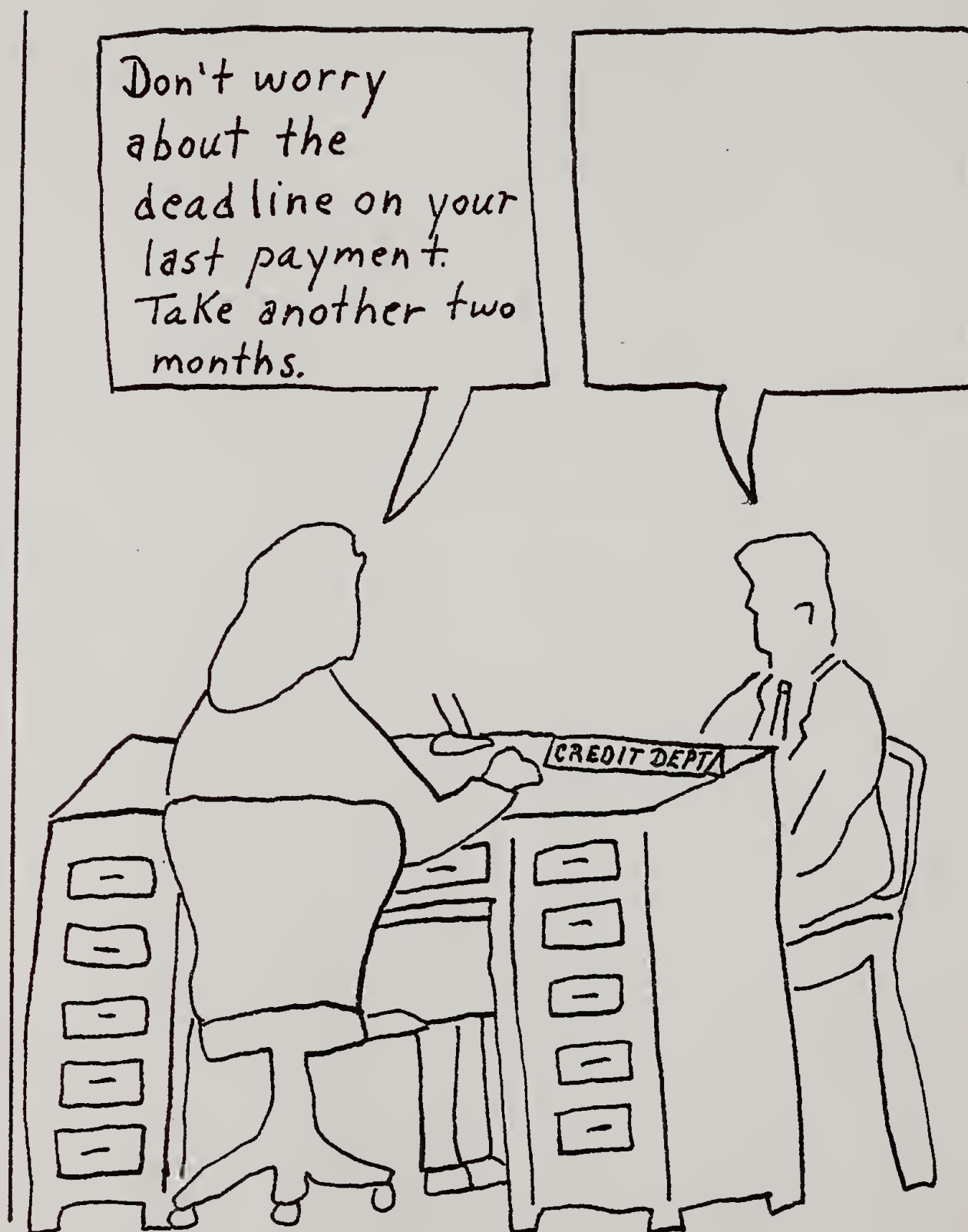


Slide 9



Slide 10





Slide 11

I Know I promised  
you a pass this  
weekend, but you'll  
have to stay here  
and stand guard  
duty.



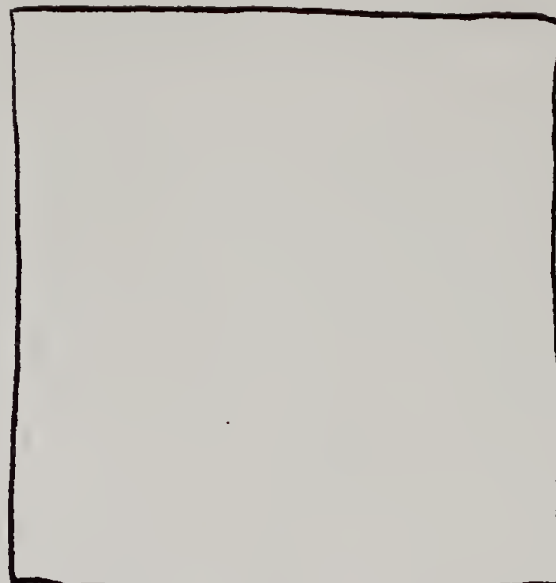
Slide 12

I'll show you  
how to get there,  
lady. Just follow  
me.

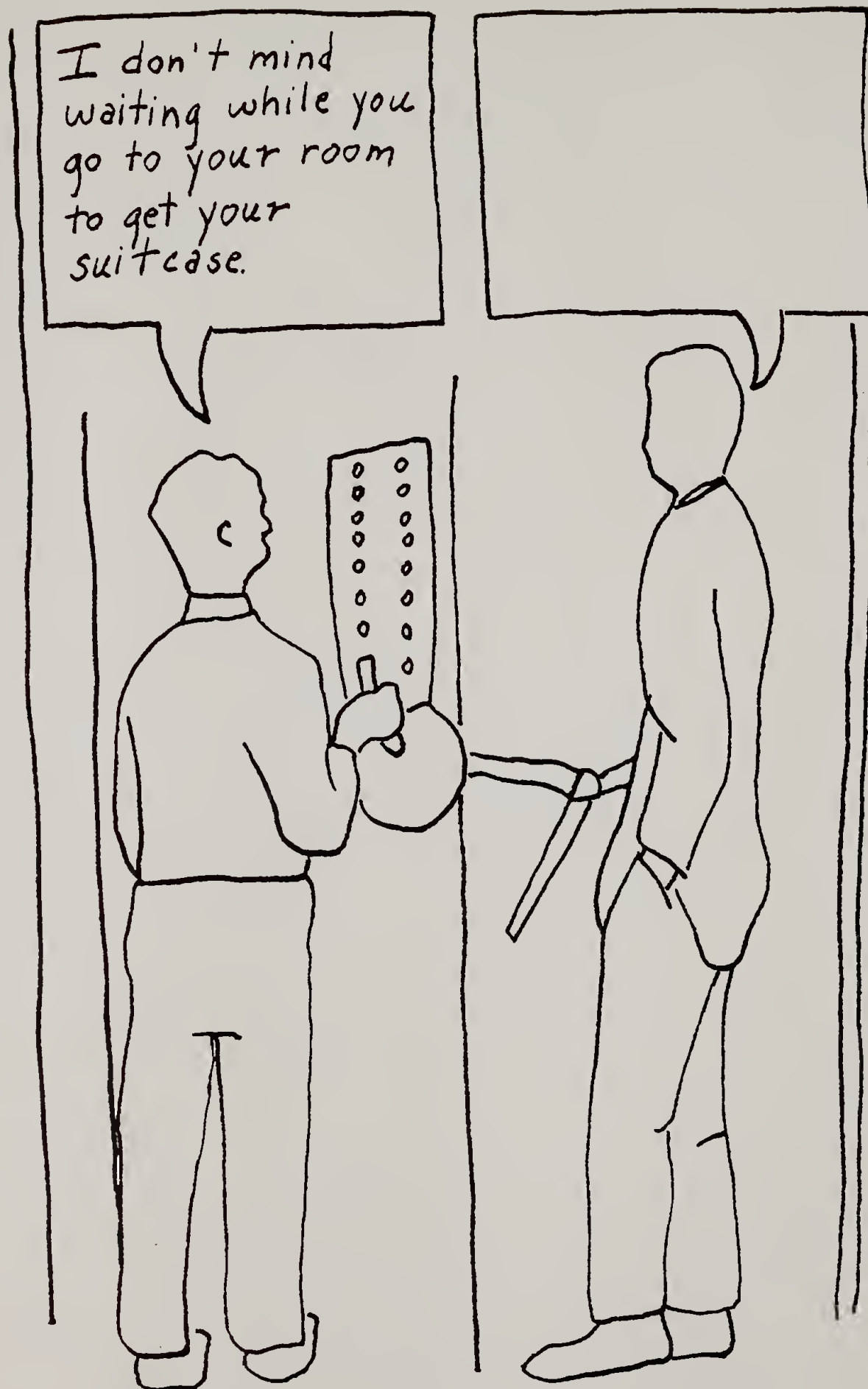


Slide 13

Nurse, I know you've already worked three extra hours today, but you'll have to help me with a few more patients before you can leave.



NURSES' STATION



Slide 15





Slide 16



Slide 17

I forgot the  
meat. I didn't  
know it was  
important.



Slide 18



Slide 19



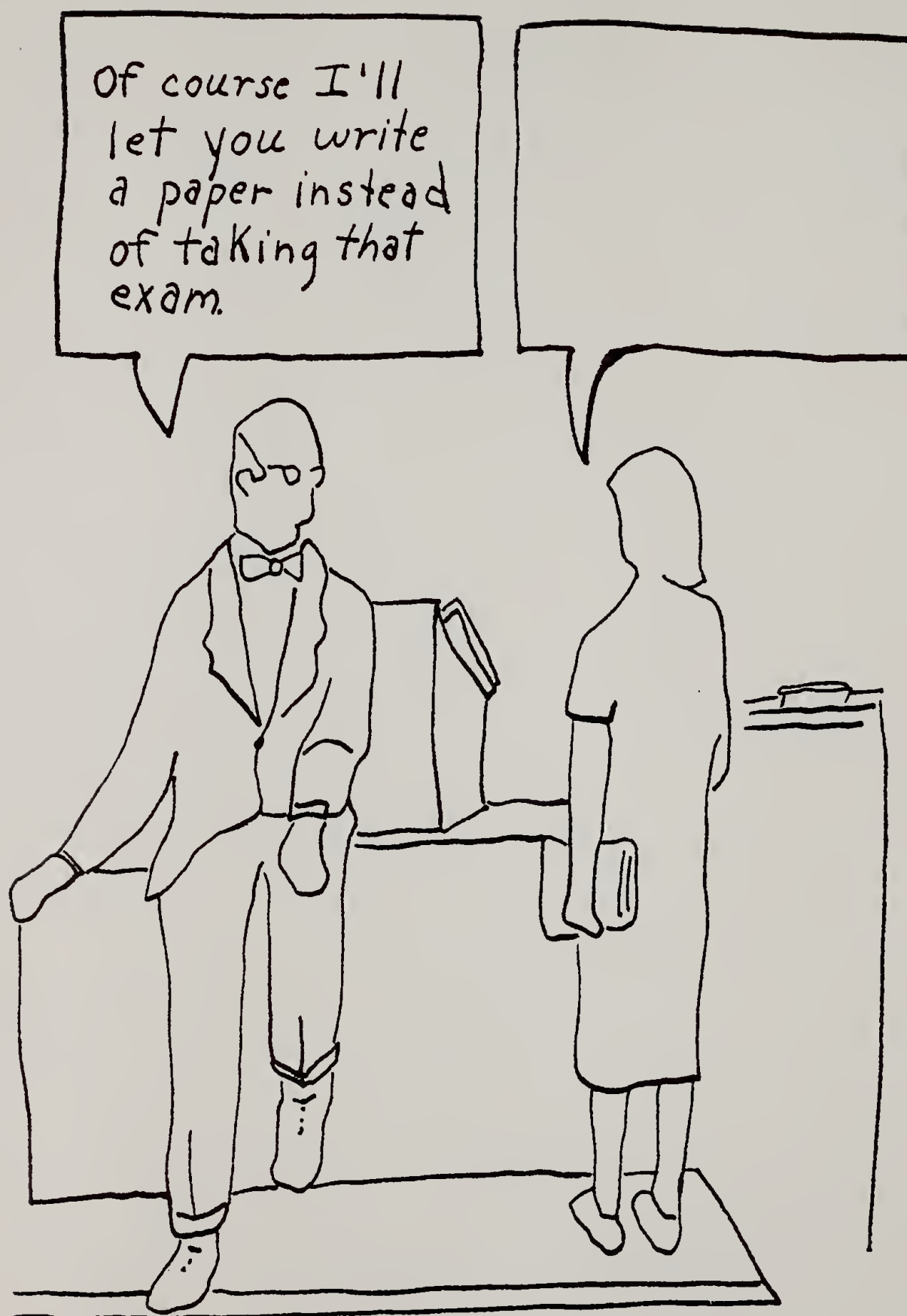
Slide 20



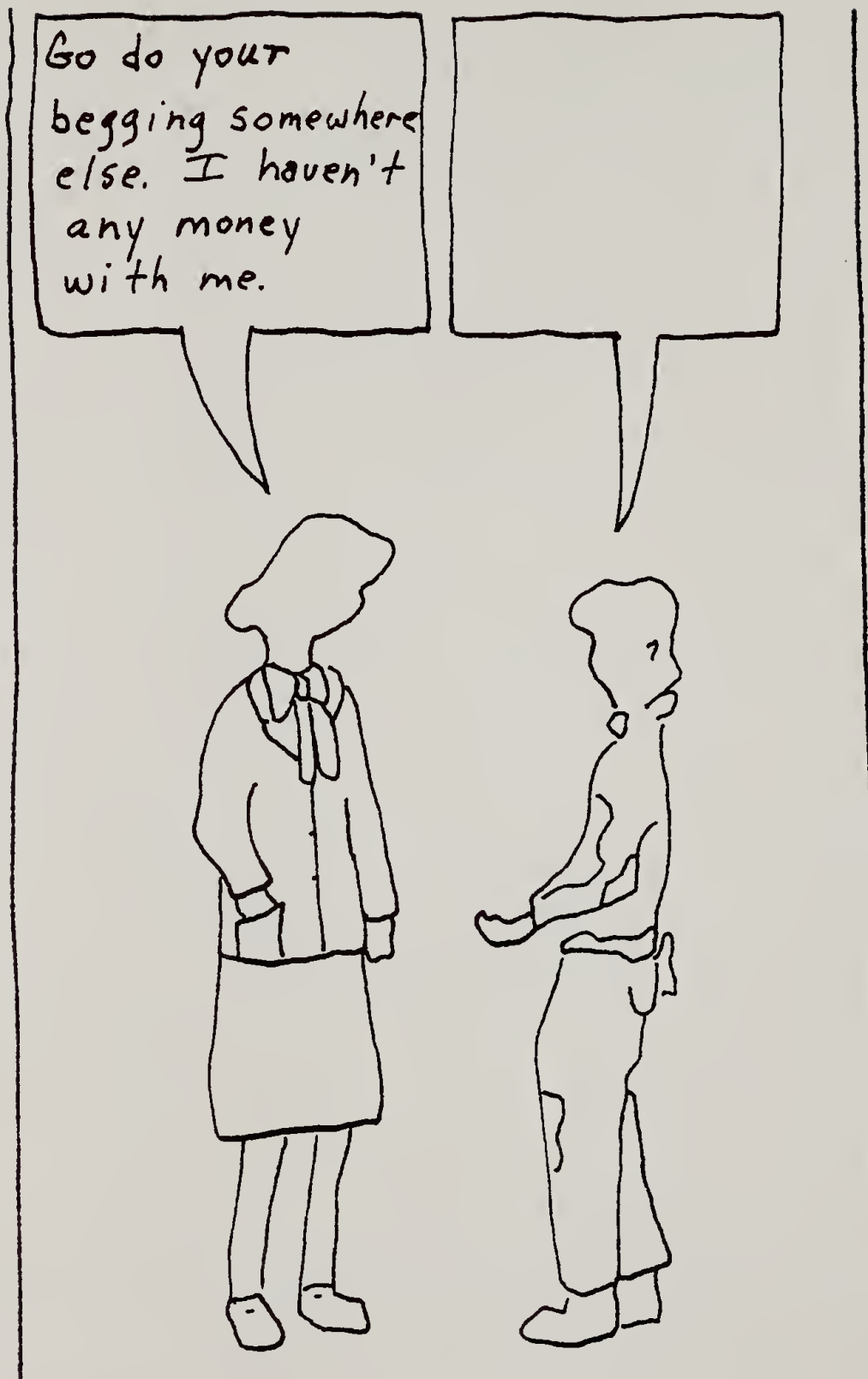


Slide 21





Slide 23



Slide 24

APPENDIX E



## A P P E N D I X E

## CHRISTIE MACH IV SCALE

Opinion Inventory

Listed below are a number of statements. Each represents a commonly held opinion and there are no right or wrong answers. You will probably disagree with some items and agree with others. We are interested in the extent to which you agree or disagree with such matters of opinion.

Read each statement carefully. Then indicate the extent to which you agree or disagree by circling the number in front of each statement. The numbers and their meaning are indicated below:

If you agree strongly circle +3

If you agree somewhat circle +2

If you agree slightly circle +1

If you disagree slightly circle -1

If you disagree somewhat circle -2

If you disagree strongly circle -3

First impressions are usually best in such matters. Read each statement, decide if you agree or disagree and the strength of your opinion, and then circle the appropriate number in front of the statement. Give your opinion on every statement.

If you find that the numbers to be used in answering do not adequately indicate your own opinion, use the one which is closest to the way you feel. Respond to every item, even if your answer has to be a sheer guess.

-3 -2 -1 +1 +2 +3 1. Never tell anyone the real reason you did something unless it is useful to do so.

-3 -2 -1 +1 +2 +3 2. The best way to handle people is to tell them what they want to hear.

- 3 -2 -1 +1 +2 +3 3. One should take action only when sure it is morally right.
- 3 -2 -1 +1 +2 +3 4. Most people are basically good and kind.
- 3 -2 -1 +1 +2 +3 5. It is safest to assume that all people have a vicious streak and it will come out when they are given a chance.
- 3 -2 -1 +1 +2 +3 6. Honesty is the best policy.
- 3 -2 -1 +1 +2 +3 7. There is no excuse for lying to someone else.
- 3 -2 -1 +1 +2 +3 8. Generally speaking, men won't work hard unless they are forced to do so.
- 3 -2 -1 +1 +2 +3 9. All in all, it is better to be humble and honest than to be important and dishonest.
- 3 -2 -1 +1 +2 +3 10. When you ask someone to do something for you, it is best to give the real reason for wanting it rather than giving reasons which carry more weight.
- 3 -2 -1 +1 +2 +3 11. Most people who get ahead in the world lead clean, moral lives.
- 3 -2 -1 +1 +2 +3 12. Anyone who completely trusts anyone else is asking for trouble.
- 3 -2 -1 +1 +2 +3 13. The biggest difference between most criminals and other people is that the criminals are stupid enough to get caught.
- 3 -2 -1 +1 +2 +3 14. Most men are brave.
- 3 -2 -1 +1 +2 +3 15. It is wise to flatter important people.
- 3 -2 -1 +1 +2 +3 16. It is possible to be good in all respects.
- 3 -2 -1 +1 +2 +3 17. Barnum was wrong when he said that

there's a sucker born every minute.

- 3 -2 -1 +1 +2 +3 18. It is hard to get ahead without cutting corners here and there.
- 3 -2 -1 +1 +2 +3 19. People suffering from incurable diseases should have the choice of being put painlessly to death.
- 3 -2 -1 +1 +2 +3 20. Most men forget more easily the death of their father than the loss of their property.

APPENDIX F

## A P P E N D I X F

## SOCIAL MOVEMENT QUESTIONNAIRE

The following questions are concerned with your interest and participation in certain social movements. Because interest and participation may be related to background variables, we are asking a few questions about your background as well. If any of these questions seem unduly personal to you, feel free to skip them. However, you may be sure that we will never attempt to identify who you are as an individual, and have no desire whatever to know what you are.

1. What is your college major? \_\_\_\_\_

2. In what size city or town did you spend most of your childhood (check one)

- \_\_\_\_\_ Large city--over a million.  
\_\_\_\_\_ Small city--100,000 to a million.  
\_\_\_\_\_ Metropolitan suburb.  
\_\_\_\_\_ Small town or rural area.

3. What is the religion of your parents?

- \_\_\_\_\_ Protestant  
\_\_\_\_\_ Roman Catholic  
\_\_\_\_\_ Jewish  
\_\_\_\_\_ Other  
\_\_\_\_\_ none

4. How would you describe your parents' political position?

- \_\_\_\_\_ Radical  
\_\_\_\_\_ Liberal  
\_\_\_\_\_ Moderate  
\_\_\_\_\_ Somewhat conservative  
\_\_\_\_\_ Very conservative

5. How would you describe your own political position?

- \_\_\_\_\_ Radical  
\_\_\_\_\_ Liberal  
\_\_\_\_\_ Moderate  
\_\_\_\_\_ Somewhat conservative  
\_\_\_\_\_ Very conservative



6. When you were growing up, about what per cent of the total family income was earned by your mother? \_\_\_\_\_ %  
by your father? \_\_\_\_\_ %
7. Were you the oldest child in your family?  
\_\_\_\_\_ Yes  
\_\_\_\_\_ No
8. How would you describe your family's financial status when you were growing up?  
\_\_\_\_\_ Rather wealthy  
\_\_\_\_\_ Comfortable, but not wealthy  
\_\_\_\_\_ Moderate income--like most families  
\_\_\_\_\_ Fairly low income, but adequate  
\_\_\_\_\_ Rather poor
9. Which of your parents seemed to make more of the important family decisions when you were growing up?  
\_\_\_\_\_ Mother more      \_\_\_\_\_ Father more      \_\_\_\_\_ About equal
10. Listed below are several kinds of people who are sometimes said to get a bad break in our society. They are sometimes said to have less power, freedom, material wealth, or security than they deserve. How true do you think such statements are of each kind of person? Place a "1" before the type you think get the worst break, a "2" before the type you think get the second worst break, etc. (Two or three types may be given the same rank, if you feel they are equally "bad off"). Rank them all, please.  
\_\_\_\_\_ American Indians  
\_\_\_\_\_ Blacks  
\_\_\_\_\_ Children  
\_\_\_\_\_ The elderly  
\_\_\_\_\_ Migrant workers  
\_\_\_\_\_ Women  
\_\_\_\_\_ Institutionalized mental patients
11. Now go back through the above list and circle any of the kinds of people in whose behalf you have actually worked in the past. For example, if you have participated in meetings or organizations designed to promote the freedom and welfare of American Indians, circle the words "American Indians".
12. How familiar are you with the special problems of the above types of people? How much have you read about

each kind's problem? How much have you discussed the problems of each with other people? In the spaces below place a checkmark after each kind of people to indicate how familiar you feel you are with their problems.

Very	Somewhat	Little or no
Familiar	Familiar	Familiarity

American Indians

Blacks

Children

The elderly

Migrant workers

Women

Mental patients

Prisoners

From this point on the questionnaire deals with the special circumstances of only one of the above kinds of people. Different versions of the questionnaire focus on different kinds of people. Regardless of your familiarity with the particular group that is discussed in the version you happened to receive, please answer the questions as thoughtfully as you can.

13. Women constitute a large part of the labor force, but they are known to be concentrated in the low paying and/or menial occupations. Listed below are several reasons that have been advanced to explain their concentration in such occupations. Indicate how much you agree or disagree with each of these explanations.

A. Women tend to leave work for marriage and/or to rear children.

Strongly		Strongly
agree	____:____:____:____:____:____	disagree

B. Women tend to be less career-oriented and compete less strongly for advancement.

Strongly  
agree    \_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_ Strongly  
disagree

- C. Women are the victims of discriminatory attitudes and legislation.

Strongly  
agree    \_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_ Strongly  
disagree

- D. Women often don't try as hard as men because they know their husbands will support them if the need arises.

Strongly  
agree    \_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_ Strongly  
disagree

- E. Women lack the political power to change the system or to gain good positions within the system.

Strongly  
agree    \_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_ Strongly  
disagree

- F. Women are often exploited by men who want to keep them in weak or subordinate positions.

Strongly  
agree    \_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_ Strongly  
disagree

14. The "feminist movement" is designed to achieve greater freedom, power, social status, and economic well being for women. How do you feel about these aims?

\_\_\_\_\_ I fully approve of them.  
\_\_\_\_\_ I fully approve of some, but have some mis-  
givings about others  
\_\_\_\_\_ I have very mixed feelings, partly "pro"  
and partly "con".  
\_\_\_\_\_ Although I see some merit in them, I tend  
to be more opposed than favorable.  
\_\_\_\_\_ I think achievement of those aims would  
be bad for women and for society as a whole.

15. Regardless of how you feel about the aims of the "feminist movement", how do you feel about the pro-  
cedures and tactics of the "movement"?

\_\_\_\_\_ The tactics are completely appropriate for  
achieving the aims.

\_\_\_\_\_ The tactics are generally appropriate, but sometimes they don't seem consistent with the goals for which the movement is supposed to be working.

\_\_\_\_\_ I feel neutral about the tactics of the movement.

\_\_\_\_\_ Some of the tactics are OK, but members and leaders sometimes seem more concerned about getting publicity and attention than about gaining the goals they profess.

\_\_\_\_\_ The tactics often seem to me to reflect a paranoid view of the world, and failure to understand how other people (women who aren't "feminists", and men) feel and behave.

APPENDIX G



## A P P E N D I X G

## ADDITIONAL FINDINGS

Relationships among the Dispositional Measures

Relationships among the eight dispositional measures are reported in Table 15 (see p.136). As data in the table indicate, there was a significant positive correlation of B+M scores with Rotter scores ( $r = .42, p < .0001$ ) and with Collins' Difficult World factor ( $r = .32, p < .002$ ). In other words, there was a tendency for those scoring high on B+M to score high on the Rotter scale (high scores indicate externality) and to express belief in a world composed of difficult, unsolvable tasks. There was a significant negative correlation of B+M scores with two of Collins' factors, Just World and Politically Responsive World ( $r = -.37, p < .0001$ ;  $r = -.27, p < .012$ ). Thus, Ss scoring higher on B+M tended to express belief in a world that is unjust and politically unresponsive. B/B+M scores correlated with only one of the other dispositional measures, scores on the Rotter scale. The correlation was in the negative direction ( $r = -.32, p < .0002$ ), with those scoring higher on B/B+M (i.e., those more benevolently oriented) tending to score lower on the Rotter scale (lower scores indicate internality).

Rotter scores were significantly correlated with each

Table 15  
 Pearson Correlation Coefficients (r) for  
 the Eight Dispositional Measures

B+M scores	B/B+M scores	Rotter scores	Difficult World factor	Predictable World factor	Just World factor	Political Responsiveness factor	Mach Scores
B+M scores	-.14	.42***	.32**	-.16	-.37***	-.27**	.22
B/B+M scores		-.32**	-.17	.15	.01	.19	-.19
Rotter scores			.80***	-.65***	-.66***	-.66***	.36**
Difficult World factor				-.36***	-.58***	-.41***	.37**
Predictable World factor					.44***	.28**	-.19
Just World factor						.19	-.26*
Politically Responsive World factor							-.25*

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\*p < .05

\*\*p < .02

\*\*\*p < .0001

Collins' four factors and with scores on the Mach scale. Rotter scores were positively correlated with Collins' Difficult World factor ( $r = .80, p < .0001$ ) and negatively correlated with the Predictable World factor ( $r = -.65, p < .0001$ ), the Just World factor ( $r = -.66, p < .0001$ ) and the Politically Responsive World factor ( $r = -.66, p < .0001$ ). Thus, Ss scoring high on the Rotter scale (i.e., those more externally oriented) tended to express belief in a world that is difficult, unpredictable, unjust, and politically unresponsive. The correlation of Rotter with Mach scores was positive ( $r = .36, p < .003$ ), with those scoring higher on the Rotter scale (i.e., those more externally oriented) tending to score higher on the Mach scale (high scores indicate a Machiavellian orientation).

Significant correlations were also obtained for the following:

1) The Difficult World factor with:

- (a) the Predictable World factor ( $r = -.36, p < .0001$ ). Those expressing belief in a difficult world also tended to express belief in an unpredictable world.
- (b) the Just World factor ( $r = -.58, p < .0001$ ). Those expressing belief in a difficult world also tended to express belief in an unjust world.
- (c) the Political Responsiveness factor ( $r = -.41, p < .0001$ ). Those expressing belief in a difficult world also tended to express belief in a politically unresponsive world.

- (d) Mach scores ( $r = .37, p < .002$ ). Those expressing belief in a difficult world tended to score higher on the Mach scale (with high scores indicating a Machiavellian orientation).
- 2) The Predictable World factor with:
- (a) the Just World factor ( $r = .44, p < .0001$ ). Those expressing belief in a predictable world also tended to express belief in a just world.
  - (b) the Political Responsiveness factor ( $r = .28, p < .004$ ). Those expressing belief in a predictable world also tended to express belief in a politically responsive world.
- 3) Mach scores with:
- (a) the Just World factor ( $r = -.26, p < .032$ ). Those scoring higher on the Mach scale tended to express belief in a world that is unjust.
  - (b) the Politically Responsiveness factor ( $r = -.25, p < .045$ ). Those scoring higher on the Mach scale tended to express belief in a world that is politically unresponsive.

Relationship between Attribution of Freedom  
to Slides and Responses to  
"Non-Feminist" Items from the "Social Movement"  
Questionnaire

Pearson correlation coefficients ( $r$ ) were computed for each of the items from the "social movement" questionnaire which do not pertain to feminism or the role of women, with each of the eight slide categories, the seven charity scores, and the sum of perceived freedom response. Those relationships which were found to be significant, or

which approached significance at the .05 level, are discussed in the paragraphs below.

Family and social background items. It should first be noted that four of the family and social background items from the "social movement" questionnaire are noncontinuous variables. These items include #1 (S's major), #3 (parents' religion), #7 (indication of whether Ss is an oldest child), and #9 (family decisions). Because these four items are noncontinuous, correlation coefficients involving any of these items would be misleading. Therefore, chi-square coefficients were computed to determine whether there were significant relationships between these four items and the perceived freedom responses. None of the coefficients reached statistical significance.

Pearson correlation coefficients ( $r$ ) were computed for each of the remaining family and social background items with each of the perceived freedom measures. Only two of the relationships were statistically significant. The higher the percent of family income earned by the mother, the greater amount of freedom attributed to the female-to-male-negative and female-to-male-positive slide categories ( $r = .36, p < .003, r = .29, p < .017$ ).

Two relationships just missed significance at the .05 level. There was a trend toward significance for family income (high scores indicate lower income) with attribu-



tion of freedom toward the female-to-male-negative slide category ( $r = .24$ ,  $p < .055$ ). That is Ss who reported a lower family income tended to attribute more freedom when slides depicted a female performing a negative act toward a male, whereas Ss who reported a higher family income tended to attribute less freedom to such slides.

There was also a near significant relationship between Ss' political orientation and the total sum of perceived freedom scores ( $r = -.24$ ,  $p < .056$ ). That is, Ss of a more conservative orientation (higher scores indicate conservatism) tended to attribute less freedom to the eight slide categories, whereas Ss of a more liberal orientation tended to attribute more freedom.

Rank assigned to the plight of various kinds of people.

(Higher scores indicate that a group is believed to be "better off" than other groups). The rank Ss assigned to the plight of the elderly was found to correlate with two of the perceived freedom measures. Subjects who judged the elderly's plight to be less severe than that of other groups tended to attribute less freedom in slides in which a male performs a positive act towards a female ( $r = -.31$ ,  $p < .012$ ). Furthermore, Ss who rated the elderly's plight as less severe tended to be less charitable toward slides depicting a male actor and female target

( $r = -.26$ ,  $p < .036$ ). Ranks assigned to the other six kinds of people were not found to correlate with any of the perceived freedom measures.

Participation in behalf of various types of people.

(Higher scores indicate no participation). Participation in organizations that promote the freedom and welfare of blacks was found to correlate with the following slide categories and charitability scores:

1) Slide categories:

- a) Male to male positive ( $r = -.33$ ,  $p < .008$ )
- b) Male to female positive ( $r = -.24$ ,  $p < .058$ )
- c) Female to male positive ( $r = -.39$ ,  $p < .001$ )

2) Charitability scores when slides depict:

- a) Female actors, male or female targets ( $r = -.32$ ,  $p < .009$ )
- b) All actors, all targets ( $r = -.31$ ,  $p < .013$ )
- c) Male actors, male targets ( $r = -.26$ ,  $p < .033$ )
- d) Female actors, male targets ( $r = -.39$ ,  
 $p < .001$ )

These correlations indicate that Ss who reported no participation in organizations which promote the freedom and welfare of blacks tended to attribute less freedom to the slides, and to score lower on measures of charitability. Participation in behalf of the other six kinds of people did not correlate significantly with any of the perceived

freedom measure.

Familiarity with the problems of various kinds of people.

(Higher scores indicate little or no familiarity). Familiarity with the special problems of American Indians was significantly related to slides in which a male performs a positive act toward a female ( $r = .27$ ,  $p < .03$ ). In other words, Ss who reported little familiarity with the problems of American Indians tended to attribute more freedom to such slides.

Familiarity with the special problems of children was significantly correlated with charitability toward male actors, summed across male and female targets ( $r = -.28$ ,  $p < .022$ ). That is, Ss who reported little or no familiarity with the problems of children tended to be less charitable toward this slide combination.

Familiarity with the special problems of the elderly was found to correlate with three of the perceived freedom measures. Subjects who reported little or no familiarity with the problems of the elderly attributed little freedom to the following two slide categories: 1) male to female positive ( $r = -.32$ ,  $p < .009$ ) and 2) female to male positive ( $r = -.29$ ,  $p < .019$ ). Furthermore, Ss who indicated less familiarity with the problems of the elderly tended to be less charitable toward slides which depicted female actors and male targets ( $r = -.25$ ,

$p < .047$ ).

Familiarity with the special problems of migrant workers was found to correlate with the following slide combinations:

1) Slide category:

a) Male to male negative ( $r = -.39$ ,  $p < .001$ )

2) Charitability scores when slides depict:

a) Male actors, male or female targets ( $r = .33$ ,  $p < .008$ )

b) All actors, all targets ( $r = .29$ ,  $p < .02$ )

c) Male actors, male targets ( $r = .38$ ,  $p < .002$ )

These correlations indicate that Ss who reported less familiarity with the problems of migrant workers tended to attribute less freedom to slides in which a male performs a negative act toward another male. The correlations also indicate that, for at least three of the slide combinations, Ss who reported little familiarity with the problems of migrant workers tended to score high on measures of charitability.

Familiarity with the problems of the other four groups did not correlate significantly with any of the perceived freedom measures.

Relationships between Dispositional Traits and Responses  
to "Non-Feminist" Items from the "Social Movement"  
Questionnaire



Pearson correlation coefficients ( $r$ ) were computed for each of the dispositional traits with each of the items from the "social movement" questionnaire which do not pertain to feminism or the role of women. Those relationships which were statistically significant are reported in the following paragraphs. It should again be noted that correlation coefficients involving Items 1, 3, 7, and 9 from the "social movement" questionnaire would be misleading. Therefore chi-square coefficients were computed to determine whether there were significant relationships between each of these four items and each dispositional measure. None of the coefficients reached statistical significance.

B+M scores and "non-feminist" items. B+M scores were significantly correlated with two of the "non-feminist" items. Subjects who reported no participation in organizations which promote the welfare of the elderly, and Ss reporting no participation in organizations which promote the welfare of mental patients, tended to score higher on the B+M scale, with high scores indicating externality ( $r = .28, p < .019$ ;  $r = .36, p < .002$ ).

B/B+M scores and "non-feminist" items. B/B scores (i.e., "benevolence" scores) were significantly correlated with three of the family and social background items. Subjects



who spent most of their childhood in small towns (the higher the score, the smaller the town) tended to score lower on B/B+M, whereas Ss who spent most of their childhood in larger towns tended to score higher on B/B+M ( $r = -.35$ ,  $p < .002$ ). Subjects who reported their parents to be rather conservative tended to score higher on B/B+M, whereas Ss who reported their parents to be rather liberal tended to score lower on B/B+M ( $r = .34$ ,  $p < .003$ ). Percent of family income earned by the mother was also significantly related to B/B+M scores ( $r = -.39$ ,  $p < .001$ ). That is, the higher the percent of family income earned by a subject's mother, the lower his score on B/B+M.

There was a significant relationship of B/B+M scores with participation in organizations which promote the freedom and welfare of blacks ( $r = -.34$ ,  $p < .004$ ), elderly people ( $r = -.36$ ,  $p < .002$ ), and migrant workers ( $r = .32$ ,  $p < .002$ ). These correlations indicate that Ss who reported no participation in behalf of migrant workers tended to score higher on B/B+M. Ss who reported no participation in behalf of blacks or the elderly tended to score lower on B/B+M.

Familiarity with the special problems of American Indians and familiarity with the special problems of the elderly were also related to B/B+M scores. Subjects who reported less familiarity with the problems of American

Indians tended to score higher on B/B+M ( $r = .25, p < .03$ ). However, Ss reporting little or no familiarity with the problems of the elderly tended to score lower on B/B+M ( $r = -.25, p < .03$ ).

Rotter scores and "non-feminist" items. Rotter scores were significantly related to one of the "non-feminist" items. Subjects who indicated little or no familiarity with the problems of prisoners tended to score lower on the Rotter scale ( $r = -.37, p < .001$ ).

Collins' four factors and "non-feminist" items. Collins' Difficult World factor was significantly related to participation in organizations which promote the welfare of blacks ( $r = .26, p < .027$ ) and to participation in organizations which promote the welfare of migrant workers ( $r = .26, p < .027$ ). Thus, Ss who indicated no participation in behalf of blacks or migrant workers, tended to express belief in a world composed of difficult, unsolvable tasks. The Difficult World factor was also related to familiarity with the problems of prisoners ( $r = -.34, p < .003$ ). That is, Ss who indicated little or no familiarity with the problems of prisoners tended to express belief in a world that is not difficult.

Collins' Predictable World factor was significantly related to two of the family and social background items.

Subjects who spent most their childhood in small towns (the higher the score, the smaller the town) tended to express belief in a world governed by luck, whereas Ss who grew up in larger towns tended to express belief in a world that is more predictable ( $r = -.25$ ,  $p < .03$ ). There was also a tendency for Ss who reported a small family income (as indicated by high scores) to express belief in a world governed by luck, whereas, Ss whose family had a larger income tended to express belief in a world that is more predictable ( $r = -.26$ ,  $p < .028$ ).

Collins' Just World factor was significantly correlated with only one of the "non-feminist" items, familiarity with children's problems ( $r = .28$ ,  $p < .016$ ). That is, Ss who reported little or no familiarity with the problems of children tended to express strong belief in a just world.

Collins' Political Responsiveness factor was also significantly correlated with only one "non-feminist" item, rank of the elderly's plight ( $r = -.27$ ,  $p < .02$ ). The less severe the plight of the elderly was believed to be, the stronger the belief in a world that is politically unresponsive.

Mach scores and "non-feminist" items. Mach scores were significantly correlated with five of the "non-feminist"

items. There was a significant relationship of Mach scores with family income ( $r = -.26$ ,  $p < .044$ ). That is, Ss who reported a small family income (as indicated by higher scores) tended to score lower on the Mach scale, while Ss who reported a larger family income tended to score higher on the Mach scale. (It should be recalled that high scores on the Mach scale indicate a strong Machiavellian orientation).

There was also a significant relationship of Mach scores with reported participation in organizations that promote the welfare of migrant workers ( $r = -.28$ ,  $p < .03$ ). Subjects who reported no such participation tended to score lower on the Mach scale.

Mach scores were significantly related to familiarity with the problems of blacks ( $r = -.33$ ,  $p < .01$ ), mental patients ( $r = -.38$ ,  $p < .003$ ), and prisoners ( $r = -.49$ ,  $p < .0001$ ). In other words, Ss who reported little familiarity with the problems of blacks, mental patients, or prisoners, tended to score lower on the Mach scale.

Relationships between "Feminist" and  
"Non-Feminist" Items from the  
"Social Movement" Questionnaire

Pearson correlation coefficients ( $r$ ) were computed for each of the "feminist" items from the "social movement"



questionnaire with each of the "non-feminist" items. Those relationships which were statistically significant are reported in the following paragraphs. It should again be noted that chi-square coefficients were computed for relationships involving Items 1, 3, 7, and 9. However, none of the coefficients reached statistical significance.

Rank assigned to the plight of women. (Higher scores indicate that a group is believed to be "better off" than other groups). The rank Ss assigned to the plight of women was significantly related to the rank assigned to each of the other six kinds of people. This could have occurred because Ss used tied ranks (i.e., assigned the same rank to two or more types of people). The rank assigned to the plight of women was also significantly related to participation in behalf of mental patients ( $r = .22$ ,  $p < .048$ ). That is, Ss who reported no participation in behalf of mental patients tended to rank women's plight as less severe than that of other groups.

Participation in organizations which promote the welfare of women. (Higher scores indicate no participation).

Participation in organizations which promote the freedom and welfare of women was significantly related to: Ss' political orientation ( $r = .31$ ,  $p < .005$ ), participation in behalf of American Indians ( $r = .41$ ,  $p < .0001$ ), blacks



( $r = .35$ ,  $p < .001$ ), migrant workers ( $r = .34$ ,  $p < .002$ ), and the elderly ( $r = .29$ ,  $p < .007$ ), and familiarity with the special problems of blacks ( $r = .26$ ,  $p < .019$ ).

As might be expected, Ss of a more conservative political orientation reported no participation in organizations which promote the freedom and welfare of women. Subjects who reported no participation in behalf of American Indians, blacks, migrant workers, or the elderly, also reported no participation in organizations which promote the welfare of women. No participation in behalf of women was also reported by Ss who indicated little familiarity with the special problems of blacks.

Familiarity with the special problems of women. (High scores indicate little or no familiarity). Familiarity with the special problems of women was significantly related to: rank assigned to the plight of mental patients ( $r = .32$ ,  $p < .003$ ) and familiarity with special problems of blacks ( $r = .36$ ,  $p < .001$ ), children ( $r = .32$ ,  $p < .004$ ), the elderly ( $r = .26$ ,  $p < .02$ ), and mental patients ( $r = .27$ ,  $p < .013$ ). Subjects who ranked the plight of mental patients as less severe than that of other groups reported less familiarity with the special problems of women. Subjects who reported little familiarity with the special problems of blacks, children, mental patients, and the elderly also reported little familiarity with the special

problems of women.

Career-orientation subscale. The career-orientation subscale was significantly related to parents' political orientation ( $r = -.25$ ,  $p < .022$ ), participation in behalf of American Indians ( $r = -.24$ ,  $p < .03$ ), and familiarity with the special problems of mental patients ( $r = .25$ ,  $p < .018$ ). These correlations indicate that Ss who reported their parents as being rather conservative tended to agree with statements which suggest that women are less career-oriented than men. Subjects who reported no participation in behalf of American Indians also tended to agree with such statements. However, Ss who reported little familiarity with the problems of mental patients tended to disagree with statements suggesting that women are less career-oriented than men.

Exploitation, powerlessness subscale. The exploitation, powerlessness subscale was significantly related to Ss' political orientation ( $r = .24$ ,  $p < .027$ ), percent of family income earned by the mother ( $r = .28$ ,  $p < .009$ ), and participation in behalf of mental patients ( $r = .24$ ,  $p < .026$ ). These correlations indicate that the more conservative a subject's political orientation, the stronger is his disagreement with statements which suggest that women are victims of discrimination, exploited by men,

etc. Furthermore, the larger the percent of family income earned by a subject's mother, the greater is his disagreement with statements which suggest that women are the victims of discrimination, etc. Subjects who reported no participation in behalf of mental patients also tended to disagree with such statements.

Subscale pertaining to the goals and tactics of the feminist movement. The subscale pertaining to the goals and tactics of the feminist movement was significantly related to Ss' political orientation ( $r = .40, p < .0001$ ), rank assigned to the plight of mental patients ( $r = .24, p < .027$ ), and participation in behalf of American Indians ( $r = .23, p < .034$ ), and familiarity with the problems of mental patients ( $r = .31, p < .003$ ). Subjects of a more conservative political orientation tended to disagree with the goals and tactics of the feminist movement. Subjects who ranked the plight of mental patients as less severe than that of other groups, Ss who reported no participation in behalf of American Indians, and Ss who reported little familiarity with the problems of mental patients, also tended to express disagreement with the feminist's goals and tactics.

## APPENDIX H

## A P P E N D I X H

A SECOND STUDY OF THE IMPACT OF SEX COMPOSITION OF  
SLIDES ON SUBJECTS' ATTRIBUTIONS

It should be recalled that every subject in the previous study viewed all 24 of the cartoon-like slides. In an effort to maximize the independence of subjects' responses to the several slides, and to avoid the boredom that might otherwise have resulted, each slide was deliberately designed to differ from others with respect to several different characteristics. Thus, although all "positive" slides showed one person saying something helpful or supportive to someone else, the settings in which these positive acts occurred varied rather widely, and the acts themselves were never the same in two or more instances. Furthermore, the statements that anchored the seven-step scale on which a subject indicated his interpretation of a speaker's freedom were tailored to be appropriate to the situation and act depicted by the slide that was being judged. Consequently, each slide and its accompanying response scale was a somewhat unique test situation, and differed from others within its own category. Positive slides were alike with respect to the positive character of the depicted act, and the three slides within any one of the eight sex composition cate-



gories were alike with respect to sex composition and the "sign" of the act, but each slide was different from any other within its own category, or any slide in another category.

Because slides differed from one another in a variety of ways it was not clear whether subjects' tendencies to attribute greater freedom to one category of slides than to another reflected the difference in sex composition or "sign" that characterized the two categories of slides. Perhaps greater freedom was attributed to positive than to negative slides because there was something about the setting in which positive acts occurred that encouraged the attribution of freedom. Perhaps subjects' tendencies to attribute greater freedom when the target person was a female were prompted by subtle differences between the situations in which male and female targets were presented. Although care was taken to avoid any systematic confounding of background conditions with sex composition or "sign", confounding may, nevertheless, have occurred. While it seems somewhat unlikely that the sizable main effect of positive versus negative slides was due to such an artifact, it is easy to believe that differences between two clusters of only three slides may have been due to the background instead of the sex composition of the dyad.

### Procedures

In an effort to evaluate the impact of sex composition while "holding constant" the "sign" and background features of the cartoon-like scenes, a new set of slides was created. Twenty-three of the original 24 slides were redrawn to depict altered sex compositions but the same background conditions as had prevailed in the original versions. The 2nd slide (showing a ship's captain inviting a female passenger to dinner) did not seem amenable to sex reversal, so it was replaced by a scene in which a male (or female) tour guide was offering especially advantageous seating to a female (or male) passenger. Table 16 ( see p.157) reports the original sex compositions of the slides, as well as the compositions of the new, matching slides. In half of the cases only the sex of the target person was altered, whereas in the other half the sex of both the actor and target was reversed. In a few instances the words attributed to the actor in study one were modified slightly to make them more uniformly appropriate to the original and altered sex compositions. It should be noted that the "signs" of the slides were not changed, and that the background features of the new slides were as nearly identical to the original versions as our artistic ability permitted

Table 16

## Sex Composition of Two Series of Slides

Situation	Serial Position, First Study	Sex Composition and Sign	
		Series A	Series B
Cashier's counter	7	F + F*	F + M
Psychiatrist's office	9	F + F*	F + M
Flattering the teacher	17	F + F*	F + M
Restaurant	4	F + M*	M + F
Credit office	11	F + M*	M + F
Editor's office	19	F + M*	M + F
Ticket window	3	F - M	F - F*
Nurses' station	14	F - M	F - F*
Babysitting	22	F - M	F - F*
Crutches	6	M - F	F - M*
Secretary's office	16	M - F	F - M*
Beggar	24	M - F	F - M*
Border crossing	1	M - M*	M - F
Weekend pass	12	M - M*	M - F
Street sweeper	20	M - M*	M - F
Early promotion	5	M + F	M + M*
Elevator	15	M + F	M + M*
Jail cell	21	M + F	M + M*
Graduation	8	F - M	M - F*
Bus Driver	10	F - M	M - F*
Delivery	18	F - M	M - F*
Tour guide	#	M + F	F + M
Officer of the law	13	M + F*	F + M
Paper versus exam	23	M + F*	F + M

# This slide was not used in the first study.

\* Sex composition of the slide as it was used in the first study. F + F means that the slide depicted a female saying something positive to a female. M - F means that the slide depicted a male saying something negative to a female.

them to be.

Subjects were 30 male and 30 female undergraduate students recruited from the Departmental pool. They received research credit for their participation in the study. Each subject came twice to a laboratory room, a period of one week elapsing between sessions. From one to eight subjects were present during the experimental sessions.

During session one, half of the males and half of the females viewed the slides in series A and the other half of the subjects saw series B (see Table 16, p. 157). After indicating their reactions to the slides, all subjects responded to the Benevolence-Malevolence instrument and to Rotter's Internal-External Scale. During session two, subjects reacted to the series of slides they had not seen during the first session, and responded to a set of questions concerning their awareness of the ways in which the two series of slides had differed.

### Analysis and Results

As a first step in the analysis, data elicited by each of the eight clusters of slides listed in Table 16 (see p. 157) were analyzed separately. Thus a 2 X 2 X 2 analysis of variance (sex of subject X sex composition of slides X order of presentation) was run on subjects'



total scores on slides 7, 9, and 17; a parallel analysis was run on subjects' total scores on slides 4, 11, and 19, etc. Only a few significant effects were obtained:

- 1) F + F and F + M. Significant ( $p < .05$ ) interaction effect of sex composition and order of presentation; more freedom was attributed to whichever sex composition was presented second.
- 2) F + M and M + F. Significant ( $p < .05$ ) 3-way interaction.
- 3) F - M and F - F. Significant ( $p < .01$ ) interaction effect of sex composition and order of presentation; less freedom was attributed to whichever sex composition was presented second.
- 4) M - F and F - M. Significant ( $p < .01$ ) interaction effect of sex composition and order of presentation; less freedom was attributed to whichever sex composition was presented second.
- 5) M - M and M - F. Significant ( $p < .05$ ) interaction effect of sex of subject and sex composition; subjects of both sexes attributed more freedom when the target person was of their own sex than when the target person was of the opposite sex.
- 6) M + F and M + M. Significant ( $p < .05$ ) effect of sex of subject; females attributed more freedom



than did males.

- 7) F - M and M - F. No significant effects.
- 8) M + F and F + M. Significant ( $p < .01$ ) effect of sex of subject; females attributed more freedom than did males.

It is to be noted that there were no significant main effects of sex composition, but five of the eight analyses revealed significant interactions involving sex composition. Four of these interactions were with order of presentation, indicating that subjects' reactions to specific sex compositions depended upon which of two sex compositions (e.g., F + F or F + M) they saw first. A possible explanation of the pervasive role of order of presentation is suggested by subjects' responses to questions asked at the conclusion of the second experimental session. Eighty-two percent of all subjects correctly asserted that the slides they had seen during the second session differed from those of the first session with respect to the sex of the persons who were pictured. Virtually none of the subjects reported any other kind of difference. Thus subjects apparently became aware that their reactions to the sex of the actor and/or target were being assessed. Under these circumstances, their reactions during the second session may have been tailored to avoid revealing "sex bias". If such was the case, subjects'

responses should have revealed few, if any, main effects of sex composition, but interaction effects of sex composition and order of presentation might have been expected.

In an effort to circumvent the complications noted above, a second type of analysis was undertaken. Only the data elicited during the subjects' first sessions were assumed to be valid, and subjects who saw the A series of slides during the first session were compared with those who saw the B series. Although this procedure may be assumed to have eliminated the confounding effects of order of presentation, it also resulted in a fifty percent decrease in degrees of freedom. With a greatly reduced number of subject responses, analyses of variance computed for the eight clusters of slides produced few significant findings.

In responses to two clusters of slides (M + F and M + M, and F + F and F + M) females attributed significantly more freedom than did males. Females also were more inclined than males to attribute freedom in response to the M + F and F + M slides, but this difference reached only the .10 level of significance. Main effects of sex composition were suggested by two clusters of slides, but the obtained differences did not reach conventional levels of significance ( $p < .20$  in each case): greater freedom was

attributed to M - F than to M - M slides, and greater freedom was attributed to F + M than to F + F slides. The overall pattern of outcomes did not provide very substantial support for the contention that the sex of composition of slides affected subjects' attributions of freedom.

Although sex composition seems to have had little systematic impact on ratings, the sex of subject and the positive versus negative character of the depicted actions appear to have had rather consistent effects across all sex compositions. As a test of these impressions, two scores were derived from each subject's responses during his first session. Responses to the 12 slides in the four positive-action-clusters were summed, as were his responses to the 12 slides in the four negative-action clusters. These two derived scores were then treated as repeated measures within a 2 X 2 X 2 analysis of variance (positive versus negative slides X A versus B series X sex of subject). The means of the derived scores are reported in Table 17 (see p. 163).

Across all 24 slides, females attributed greater freedom than did males (means = 99.50 and 93.64;  $F = 5.72$ ,  $df = 1,56$ ). Significantly greater freedom was attributed to positive than to negative slides (means =

Table 17

Mean Ratings of Slides Viewed During First Session\*

	Male subjects		Female Subjects	
	Positive slides	Negative slides	Positive slides	Negative slides
Series A	50.53	43.47	56.73	45.20
Series	50.20	43.07	53.73	43.33

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\* The data in this table are the means of scores obtained by summing across 12 positive slides and by summing across 12 negative slides.

52.80 and 43.77;  $F = 54.24$ ,  $df = 1,55$ ). The main effect of series A versus B was not significant, and only one interaction effect approached significance: females were more inclined than males to attribute greater freedom to positive than to negative slides ( $p < .20$ ).

The foregoing analyses have ignored the possible effects of Benevolence-Malevolence on reactions to the cartoon-like slides. To explore such effects, Pearson and multiple correlation coefficients were computed linking each of the two scores derived from the Benevolence-Malevolence scale with reactions to positive slides, reactions to negative slides, and differences between subjects' reactions to the two kinds of slides. Reactions to positive and to negative slides were assessed by summing across the subject's 12 responses to each type of slide, as was done to obtain the data reported in Table 17 (see p. 163). A difference score was obtained by subtracting the sum of the subject's responses to negative slides from the sum of his responses to positive slides. Table 18 (see p. 165) reports the resulting correlation coefficients. As can be seen, none of the relationships were substantial or significant.

### Discussion

The data of this study offer little support for the contention that subjects' responses to slides depend upon



Table 18  
Correlations of Benevolence- Malevolence Scores  
with Reactions to Slides

	Reactions to positive slides	Reactions to negative slides	Difference: positive- negative
Pearson r's:			
B + M	.12	-.15	.19
B/B + M	.01	-.14	.00
Multiple Correlations:			
B + M and B/B + M	.13	.14	.19

the sex composition of the dyad that is pictured. As noted earlier, almost all subjects became aware that sex composition was being manipulated, and our failure to obtain significant findings may have reflected subjects unwillingness to reveal "sex prejudice". If such an inhibitory factor was indeed operating, it should have had far less impact when only the slides exposed during the first sessions were treated as sources of data. However, such an analysis reduced the number of subject responses by about one-half, and resulted in only a few weak and nonsignificant effects. Failure to obtain unambiguous outcomes suggests that the effects of sex composition noted in the previous study should be interpreted with great caution.

## Appendix I

## A P P E N D I X . I

## BRIEF DESCRIPTION OF STATISTICAL SYMBOLS

<u>Symbol</u>	<u>Description</u>
df	Degrees of freedom
F	Ratio of two sample variances
N	Number of subject responses in the sample
p	Probability that statistical results are chance occurrence
r	Pearson correlation coefficient. The measure of linear relationship between two parallel data sets.
t	The deviation of a sample mean (average) from a population mean, divided by the standard deviation of the sampling distribution of means.
<	Less than





