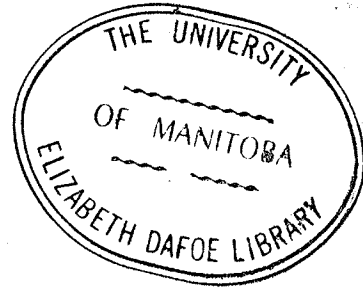


THE EVALUATION OF CONSCIOUS SELF,  
UNCONSCIOUS SELF AND OTHERS BY  
REPRESSORS, NEUTRALS AND SENSITIZERS



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A Thesis  
Presented to  
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by  
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## ABSTRACT

### THE EVALUATION OF CONSCIOUS SELF, UNCONSCIOUS SELF AND OTHERS BY REPRESSORS, NEUTRALS AND SENSITIZERS

Jean Mitchell

One hundred and twenty subjects from the Introductory Psychology course at the University of Manitoba were selected on the basis of Repression-Sensitization (R-S) and Self-Ideal discrepancy (S-I) scores. Of these, 62 were male, 58 female. They were subjected to a manipulation of self-esteem via a favorable or unfavorable personality and intelligence report. Ratings were obtained of the conscious self, unconscious self (using the Wolff technique and voice samples), and others, from each S on semantic differential type scales, before and after the treatment. Although the treatment did not have the predicted effect, the results supported the effectiveness of R-S as a personality dimension for the study of conscious and unconscious self reports.

Contrary to earlier findings, the conscious self received the highest rating from all groups and the unconscious self the next highest, when all groups were considered together. The variance was significantly higher for the unconscious self than for the other two objects, supporting Huntley's contention that unconscious self judgments tend to be more extreme than judgments of the conscious self or of others. A significant interaction occurred between R-S and Content (adjectival scales). One pattern seemed to appear on scales loading on the "potency" factor (strong, tenacious, aggressive) while another pattern seemed to appear on scales loading on the "evaluative" factor (good, honest, friendly, helpful).

It was concluded that (a) methodological differences determine whether conscious or unconscious self ratings will be more favorable; (b) methodological differences do not affect the unanimous result that unconscious self ratings are more extreme than conscious self ratings; and (c) the general notion of self-evaluation is inadequate and that the contents of such evaluation must be specified before definitive conclusions can be drawn.

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## INTRODUCTION

### Unconscious Self Evaluation

An extensive overview of research concerning measures of the self-concept reveals a wide-spread interest in this area (Wylie, 1961). Practically all of the studies reported relate to phenomenological theories which make reference to, or are based on, conscious self evaluations. Unconscious self-evaluations, which might be assumed to circumvent such variables as the desire for social and self approval, as well as some of the ego-defence mechanisms, have largely relied on projective measures, such as the T.A.T. Only two studies are reported in the review cited which utilize an alternative method that may be referred to as the "Wolff technique" (Diller, 1954; Epstein, 1955).

Werner Wolff, the inventor of this technique, began his experimental work at his Berlin laboratory in 1925 (Wolff, 1943, p. xiii) in which he attempted to establish a scientific basis for personality assessment, utilizing expressive behavior and self movements. According to Wolff and Precker (1951) expressive behavior is one's style of response. Its content stems from the experiences of the individual and the form is the measurable product. The



method consists of obtaining samples of expressive forms of behavior from Ss and later submitting them to the same Ss for judgment as to their attractiveness, etc., without their awareness that the samples are their own. Most of the investigators in this field (Wolff, 1943, Huntley, 1940, Diller, 1954, Rothstein and Epstein, 1963), have used small groups of four, five or seven Ss, and had each S judge the samples from the entire group. The samples are presented as the expressive movements of "others", in order to disguise the fact that one of them is their own. Unconscious self-judgments using this method are defined as S-judgments made when there is no reportable awareness of the S that he is judging his own forms of expression (Wolff, 1932, Huntley, 1940). Some of the forms of behavior studied by Wolff were outlines of the face, part and whole profiles, pictures of the hands, mirrored handwriting, retold stories, the voice, and the gait. Huntley (1940) tested Wolff's early findings by replicating his work with these forms.

One of the most remarkable findings by both of these experimenters was the failure of most Ss to recognize their own forms of expression. When recognition did occur, it was not for forms with which persons might be expected to be more familiar. For instance, in his series of experiments Wolff found that all of his Ss recognized moving pictures, in silhouette, of their own gait, something they would not be expected to have observed to any extent. On

the other hand, ninety per cent of Wolff's SS failed to recognize their own voice, and ninety-six per cent of Huntley's Ss failed to do so (Wolff and Precker, 1951, p. 478).

The second outstanding finding concerning S-judgments of expressive forms, made without reportable awareness by SS that they are judging their own, is that they tended to be extremely favorable or extremely unfavorable when compared with judgments made of or by others. They were seldom neutral.

In order to establish that the individual does discriminate his own forms of expression from those of others, even though there is no conscious awareness that they are his own, Huntley (1940) studied S-judgments made at different stages of awareness. He found that unconscious self-judgments were significantly more extreme than the S-judgments made when there was complete recognition. When there was a partial or dubious recognition, the S-judgments made a distinct upward shift in favorableness from those made with no recognition. When there was complete recognition the S-judgments were more favorable than the judgments of others or by others, but less favorable and less extreme than for the other stages of recognition. Huntley used two measures of extremeness of judgments: differences in means of S-judgments, with the average of Other-judgments taken to be zero for comparison, and the sigmas of the various means,

their relative size indicating extremeness in ratings. Unconscious S-judgments proved to have the largest sigmas, which Huntley interpreted as evidence to support that they were the most extreme.

Diller (1954) attempted experimentally to induce ego-involvement by manipulating self-esteem via a success or failure experience, based on what he deemed to be the cherished trait of intelligence. He then studied the effect on attitudes toward the conscious self, the unconscious self, and others. For ratings he used the traits of intelligence, honesty, sincerity, humor, friendliness, conscientiousness, helpfulness, sociability, tenacity, and aggression, each on a seven-point rating scale. Covert or unconscious attitudes toward the self were based on mirrored hand-writing samples. Three of the traits, those of aggression, tenacity, and honesty, were more sensitive to the effects of the success experience on the overt or conscious level than were the other traits, and were the only ones to show a statistically significant change after the success experience ( $p < .05$ ). On the covert scale the greatest changes occurred on the traits of helpfulness, humor, sincerity, and tenacity, after the failure experience, although they were only significant at the .10 level of probability. Intelligence proved to be the most resistant to change.

One of the criticisms of Wolff's early work was that he reported only qualitative results, that is "more favorable",

or "less favorable", rather than performing quantitative analyses. Huntley (1940) attempted to remedy this in his replications of Wolff's work, but he did not perform sophisticated statistical analyses in the forms employed in recent years, such as analysis of variance. Diller did employ these techniques, analysis of variance and t-tests, and also obtained S-judgments at the conscious and unconscious levels on the same scales. However, he used different bases for comparison at the "covert" and the "overt" levels. The conscious self ratings were compared with ratings of "others" based on personality judgments made of four close friends, four ordinary friends, and four casual acquaintances. The unconscious self ratings were compared with the judgments of "others" based on hand-writing samples, presented as those of strangers. There were four in all, and the third one was the S's own handwriting in each case.

It is difficult therefore to know how the conscious and unconscious self ratings compared initially. Although Diller states that in the precondition Ss did not rate themselves most favorably on the overt scales, while they did rate themselves most favorably on the covert scales, in the first instance the "others" for comparison purposes were persons supposedly held in some esteem by the raters, while the "others" of the hand-writing samples were assumed to be strangers. In light of these conditions it is also not surprising that little or no change occurred on the

ratings of "others" after the manipulation of self-esteem. In sum, none of the prior studies examined conscious self ratings, unconscious self ratings, and the ratings of unknown others on the same scales, in the same way, so that they might be compared and analyzed together.

### Preview and Purpose of Present Study

The present study was both deductive and inductive (or exploratory) in nature. It examined self-evaluation, a dependent variable, as a function of six possible determinants. These were, briefly:

- (1) induced esteem (positive and negative)
- (2) trials (before and after the esteem induction)
- (3) initial level of High, Medium or Low Esteem, response-defined.
- (4) level of Repression-Sensitization, (R-S) response-defined as High, Medium or Low. (A high score on the R-S scale denotes sensitization, a low score repression).
- (5) content of evaluation (twelve adjectival scales)
- (6) object of evaluation: conscious self, unconscious self, and others.

Deductive Aspect. The deductive aspect is based on certain assumptions and elaborations of those assumptions as inferred from Horney's (1950) speculation on the development and structure of what she called the "pride system". The pride system has been applied to create an interpretation of

data reported by Diller (1954), mentioned above and given in more detail below. A brief outline of Horney's pride system (as understood and with some minor elaboration by Professor G. Becker of the University of Manitoba, via lectures in his Personality course) and of Diller's findings are as follows:

1. Horney's Pride System. Horney postulates the existence of a pride system which results initially from a series of early negative experiences:

".....they (unfavorable conditions) all boil down to the fact that the people in the environment are too wrapped up in their own neuroses to be able to love the child or even to conceive of him as the particular individual he is; their attitudes toward him are determined by their own neurotic needs and responses. In simple words they may be dominating, overprotective, overindulgent, intimidating, irritable, overexacting, erratic, partial to other siblings, hypocritical, indifferent, etc. It is never a matter of just a single factor, but always the whole constellation that exerts the untoward influence on a child's growth." (Horney, 1950, p.18)

Such intolerable negative experiences lead to the feelings of self-contempt which in turn lead to the development of an idealized image in reaction thereto. The idealized image gradually and imperceptibly becomes an idealized self which becomes most real because it answers all the stringent needs of the individual. The greater the self-contempt, the greater the reaction formation, and the greater the pride system. This function is seen in Figure 1. "Pride and self-hate belong inseparably together; they are two expressions of one process." (Horney, 1950, p.109) Thus, according to Horney, the child's spontaneous development of his own potential is inhibited and he develops some pre-dominant way of reacting to others and to life situations to counteract

basic anxiety and to protect his self image. Because the discrepancies between the fantasied ideal self and the real self cannot be entirely ignored, the latter becomes an offensive stranger for whom he feels hate and contempt.

The new feelings of self hate reinforce the maintenance of the idealized self, and the falling short of realizing the idealized self reinforces the feelings of self-contempt. The pride system is seen, not in terms of a "repetition compulsion" determined once and for all in early childhood, but as a continuously, contemporaneously and circulatorily maintained system.

The very existence of the two conflicting evaluations that comprise the pride system necessitates a solution. Horney offers several solutions, one of which is referred to as "streamlining". "This is the attempt to suppress permanently and rigidly one self, and be exclusively the other." (Horney, 1950, p.190) In one type of streamlining the idealized self is uppermost, and the contemptible self is repressed and present only at the unconscious level. Dr. Becker refers to this as Type I streamlining. In the other type of streamlining the reverse is true, with the contemptible self image uppermost in consciousness. (Type II streamlining, according to Dr. Becker.) Type I streamlining is described by Horney as:

"...when looking superficially at the expansive types we get a picture of people who, in a streamlined way, are bent on self-glorification, on ambitious pursuits, on vindictive triumph, with the mastery of life through intelligence and will power as the means to actualize their idealized self. . . . The rigidity with which they hang on to the expansive trends is not only owing to the compulsive character of these trends but also to the necessity to eliminate from awareness all traces of self-effacing trends and all traces of self-accusations, self-doubts, self contempt." (Horney, 1950, p.192)

Type II streamlining is effected when S identifies at the symbolic level with this despised or contemptible self:

In the type veering in the direction of self-effacing solution we find a reverse emphasis. . . . In sharp contrast to the expansive types, he lives with a diffuse sense of failure (to measure up to his shoulds) and hence tends to feel guilty, inferior or contemptible. (Horney, 1950, p. 215)

Horney suggests that these two types of streamlining, within the structure of the pride system, correspond to Adler's well known concepts of the superiority complex and the inferiority complex, respectively. Adler, reflects Horney, did not realize that his two types reflected two modes of resolution of the very same conflicts, because of his predilection with surface phenomena.

According to Byrne (1964) the author of the 1961 Revision of the Repression-Sensitization (R-S) scale, the scale is a unidimensional categorization which encompasses many diverse defense mechanisms on a continuum. At one end of the scale are found the repressors, those whose responses involve avoidance of any anxiety-arousing stimulus and its consequents, such as threats to self-esteem. Repressors practice predominantly mechanisms of repression, denial, and many types of rationalization. At the other end of the continuum are found the sensitizers, who attempt to reduce anxiety by approaching or controlling the stimulus and its consequents. They tend to use mechanisms of intellectualization, isolation, and rumination. In view of these



descriptions, especially as they relate to the symbolized or conscious self-concept (Byrne, Barry and Nelson, 1963), it can be hypothesized that Type I streamliners tend to be repressors, and that Type II streamliners tend to be sensitizers. Figure 1 illustrates the development of Horney's pride system as understood in the present study. It demonstrates Type I streamlining, in which an individual identifies with his idealized self at the conscious level, but also indicates the ever present negative self concept at the unconscious level. Figure 1 also depicts Type II streamlining, in which an individual identifies consciously with his contemptible self while the corresponding idealized self-concept exists at the unconscious level.

2. Diller's Findings. Diller found that following success, S showed an increase in positive self evaluation measured at two levels: Conscious (self report) and Unconscious, utilizing the Wolff technique. Following failure, S lowered his positive self evaluation at the unconscious level but showed no change at all at the conscious level. These results are illustrated in Figure 2.

3. Interpretation of Diller's Findings. In comparing the three illustrations presented above, the structural similarities are readily apparent. One explanation in terms of the above analysis is that the lack of change in conscious self evaluation following failure resulted from two equal and opposing tendencies. The first tendency, to increase

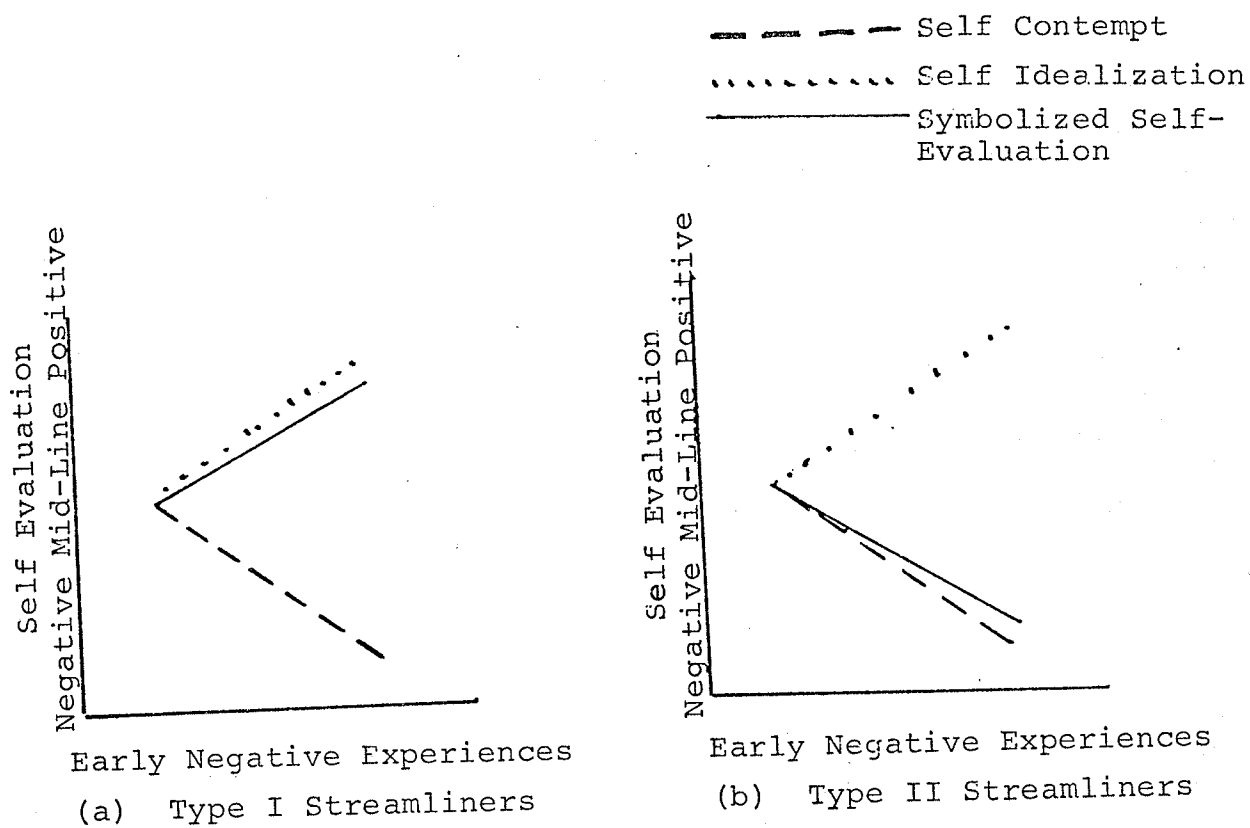


FIGURE 1. Streamlining Type I and II in which an individual identifies with his idealized self or contemptible self, respectively, at the conscious level.

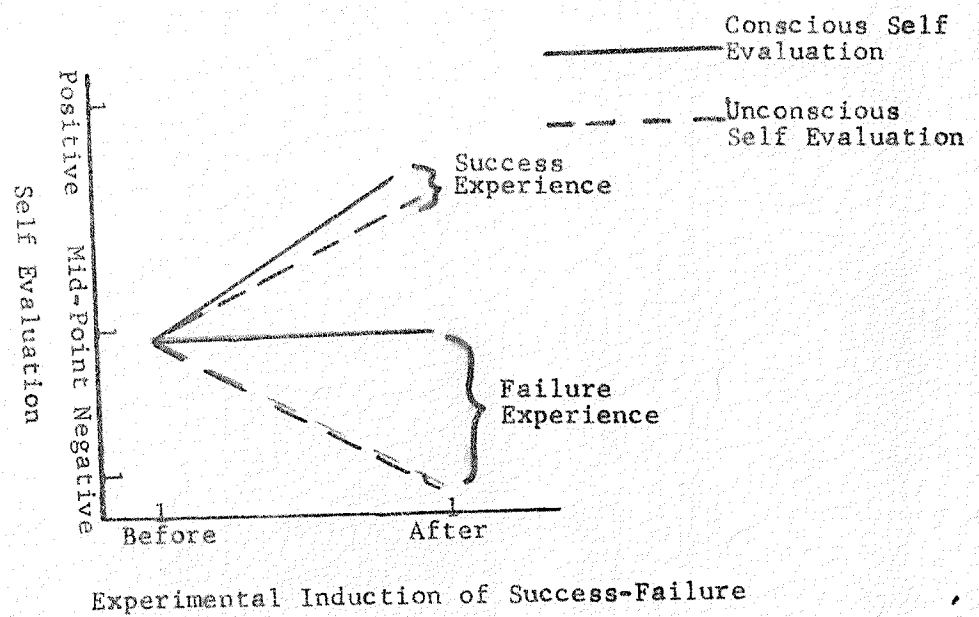


FIGURE 2. Induced positive and negative Self Esteem

conscious self-evaluation following failure, would be found in Type I streamliners. The second tendency, to decrease conscious self-evaluation following failure, would be found in Type II streamliners. In accord with the assumptions concerning identity between Type I streamliners and repressors, and Type II streamliners and sensitizers, the two counter balancing tendencies would be produced by repressors and sensitizers respectively.

In accord with the preceding speculations and in connection with Diller's findings, the following general statements are offered for test in the present research:

(i) As found by Diller, positive self-evaluation will increase (a) consciously and (b) unconsciously as a function of manipulated positive self-esteem.

(ii) As found by Diller, positive self-evaluation will (a) remain constant consciously, and (b) decrease unconsciously, as a function of manipulated negative self-esteem.

(iii) Via Horney's concept of two types of streamlining and the assumed correlation of this dichotomy with repression-sensitization, statement (ii)a is interpreted in terms of (a) repressors (Type I streamliners) increasing and (b) sensitizers (Type II streamliners) decreasing self-evaluation in such a way that the two opposite trends offset each other and in an unselected population remain non-differentiated. It is therefore hypothesized that repressors

will raise their conscious self-evaluation and sensitizers lower their conscious self-evaluation following lowered self-esteem.

Inductive Aspect. Since failure-success (or low-high esteem) and sex have been the only independent variables studied with respect to their influence on both conscious and unconscious self-evaluation. (Huntley, 1940, Diller, 1954) it behooves E to explore the domain further. In view of this, several variables outside the domain, defined in terms of the Horney-Diller interaction, have been included.

1. Initial Level of Conscious Self-Evaluation. One of these variables is the initial level of conscious self evaluation which is operationally defined here as the self-ideal (S-I) discrepancy score derived from Worchel's Self Activity Inventory (S.A.I.) (Worchel, 1957).

2. Connotative Meaning. A second variable is represented by the three levels of connotative meaning derived by Osgood, Tannenbaum and Suci (1957). Included in the twelve levels of content of evaluation are three levels representing the factors of evaluation, potency and activity. Some recent work has been done using the semantic differential for personality assessment (Hallworth, 1965), and in judging personality from voice quality (Markel and Meisels, 1964). The personality evaluations in these studies were made by selected judges and did not include the speakers themselves, while the present study utilized these scales

as marker scales for unconscious S-judgments, from a voice sample, in the service of identifying scale clusters, if such clusters should arise.

## METHOD

### Subjects

Ss were selected from 248 males and 323 females enrolled in three sections of the Introductory Psychology course at the University of Manitoba. These students had completed the R-S and S.A.I. scales in the fall term in a regular class period.

On the basis of their R-S scores, the total group, for each sex separately, was divided into equal thirds, representing High, Medium and Low scores. For females the median score was 36.16, for males 34.67. The groups were also divided into thirds on the basis of their S-I scores. This resulted in nine cross classification groups for each sex. From the eighteen groups thus identified up to sixteen Ss were selected at random and solicited for participation in the experiment. Because Ss who might have recognized their own voice would have had to be disqualified as not meeting the definition of S-judgment made without awareness, a margin of Ss had to be allowed in the initial stages of the experiment. The aim was to have a minimum of twelve Ss in each cell when the experiment was completed. Participation in the experiment earned the Ss three hours of credit

for a course requirement, which was five hours in all. Some students contacted had already earned their credits and some of the voice recordings were not audible enough for use in later stages of the experiment. The final composition of the experimental groups is presented in Table I. Treatment I was the favorable intelligence and personality report (see Appendix E-I), and Treatment II the unfavorable one (see Appendix E-II), which will be described in more detail later on.

#### Test Room and Apparatus

The experimental room was a small one from which most external noise was excluded. It contained a work counter running lengthwise against one wall and a rectangular table in the center of the room. The table was divided in the center by a two and one-half foot high wooden divider which rested on its own base. Each S sat at the outer side of the table facing the divider. The E was able to work unobserved behind the divider, both at the table and on the counter, which held the experimental records. Two Phillips AII Transistor portable tape recorders were used in the experiment as will be described below.

The R-S scale and its application for the present experiment is described above. The self-ideal discrepancy (S-I) score, derived from Worchel's (1957) Self Activity Inventory (SAI), was used to measure the tendency to present a positive personal image. The S-I score has been interpreted

TABLE 1

DISTRIBUTION OF SS IN EXPERIMENTAL GROUPS

R-S		Low			Medium			High			Total
		Male	Female	Total	Male	Female	Total	Male	Female	Total	
Low	Treatment I	4	3	7	4	4	8	3	3	6	21
	Treatment II	4	2	6	4	4	8	3	3	6	20
	Total	8	5	13	8	8	16	6	6	12	41
Medium	Treatment I	3	3	6	3	3	6	3	4	7	19
	Treatment II	3	3	6	3	3	6	4	4	8	20
	Total	6	6	12	6	6	12	7	8	15	39
High	Treatment I	3	4	7	4	3	7	4	2	6	20
	Treatment II	4	3	7	3	4	7	3	3	6	20
	Total	7	7	14	7	7	14	7	5	12	40



to mean that low S-I scorers tend to be insensitive to negative self-attributes and to repress or deny discrepancies from their stated ideal. (Worchel, 1957).

### Procedure

The procedure can be described as including three stages.

Stage I. The first stage was conducted in order to obtain samples of the Ss voices without their knowledge. The task was introduced as an intelligence test based on reading comprehension. Each S was given instructions which are included in Appendix A as Instructions I. The two passages which were read are included under Appendix B, passage A being read aloud by E, and passage B read aloud by each S. The passages were typed on separate index cards, 5 x 7, and were labelled A and B respectively. They were taken from the Vocational Aptitude Examination, Type E-A, Test 5 (Cleeton and Mason, 1946).

The microphone of a Phillips tape-recorder was concealed by resting it on a pile of papers in a cardboard carton which rested on a waste-basket at the end of the table, away from the door. The corner flaps of the carton rested loosely on top of it and the whole was partly under the end of the table. The voices were satisfactorily recorded in this manner. The recorder itself rested on the table behind the divider, unobserved by the S. The portable all-transistor Phillips was selected as it proved to have

the quietest switch mechanisms among those recorders on hand in the department. Electrical models have an accompanying hum when turned on, which might provide cues to the S that recording was taking place. While turning the switches on or off the E moved papers and equipment about to help mask any sudden sound.

The entire B passage was recorded as read by each S and, later, sentence two was edited out to serve as the voice sample of the S. This sentence reads: "Thus it comes to pass that they only look for knowledge of final causes of events, and when these are learned they are content, as having no cause for further doubt." Marking tape was used to identify each Ss voice and all of the samples were spliced together so that they provided the reel of tape for one machine. This could be set up prior to each experimental session later so that the Ss own voice could be played as the seventh voice in a series of eight without any tell-tale pause. The other machine was set up to play the sample voices for seven "others" obtained as described below. Two reels were made, one for female sample voices and one for male samples.

Ss appeared to be task-oriented and many expressed chagrin at being able to recall less of what they had read, that is passage B, than of passage A, which was read by E. Many remarked that they expected to be able to remember what they themselves read much better. Others commented that

they never listened when they were required to read aloud. Concentration on the task indicated that it was taken seriously and several Ss asked whether they would be given the test results.

Stage I-B. All Ss were given eight sample voices by which they were to judge their owner's personality in Stage II. In order to obtain seven sample voices of each sex, experimental volunteers were solicited for one hour of credit from Introductory Psychology excluding those who were participating in the entire experiment. The sample voices were obtained by running Ss exactly as in Stage I, so that they would be as like as possible in terms of stimulus value, effects of reading rather than speaking, reproduction effects, etc. Sixty seconds were allowed to summarize each passage read and the sound of a stopwatch switch served to further mask any significance to the recorder switch.

Stage II. Ss were instructed concerning the experimental task in Stage II, of judging personality from listening to a person's voice, as given under Appendix C, Instructions II. The voice samples, reading the sentence indicated, were played one at a time, with the Ss own voice always played as voice number seven.

Judgments were made on the sheets provided made up in booklet form, one sheet for each voice. Twelve adjectival scales were on each page, constructed in the form of the semantic differential, with colons dividing the seven spaces,

but with no numerical values supplied. The scales were the same for each page but their order was altered to counteract for possible position effects. The order was based on six different permutations of arrangements of three blocks of four scales each. For the seventh voice, Ss own, each S was assigned one of the six permutations according to their appearance for the experiment, by sex within the order. For judgment number eight the permutation was in reverse order to that of number seven. For judgment number nine, a conscious self evaluation using the same scales, the same order was presented as given for number seven, the "unconscious" S-judgment. The sheet for the conscious S-rating was colored blue to differentiate it from the others which were white. At the top of each of the blue pages was printed "As for myself I am a person who is:". For the latter, instructions were given as included in Appendix C. By stressing the judgment of "own" personality it was hoped to discourage any suspicion that one of the voices might have been their own.

The twelve polar-adjectival scales were selected from those used by Huntley (1940) and Diller (1954); three scales from the Semantic Differential scales were added. Each one of these loaded highly on one factor while loading close to zero on the other two.<sup>1</sup> Although "fast-slow" has the highest

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<sup>1</sup>According to Osgood and Succi (1955) "good-bad" loads .88 on the evaluation factor, .05 on the potency factor and -.09 on the activity factor. "Strong-weak" loads .62 on the

loading on the activity factor the alternate item "active-passive" was selected in order to encourage S to judge the personality of the speaker rather than the speaking rate of the voice itself. The scales were randomized as to polarity, those with the positive pole first as "friendly-unfriendly" referred to as A, those with the negative pole first, as "weak-strong"; referred to as B. With one of the semantic differential scales assigned to each block, the three blocks of four scales each were then randomized as to polarity in an arrangement of (1) ABBA (2) ABAB (3) BAAB. Using a table of random numbers the following order for the first six judgments by all Ss was compiled, the numbers referring to blocks of scales:

Judgment (1) . . . 231  
 (2) . . . 132  
 (3) . . . 213  
 (4) . . . 321  
 (5) . . . 123  
 (6) . . . 312

Permutation I is attached in Appendix D.

Of the remaining nine items, six were reported by Diller to be most sensitive to changes in self esteem in his study. These items, in noun form, were: aggression, tenacity,

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potency factor, .19 on evaluative and .20 on activity. Factor analysis for "active-passive" yielded loadings of .59 on activity, .14 on evaluative and .04 on potency.

honesty, helpfulness, humor and sincerity. A seventh item, "intelligent", was included because it was employed by both Diller and Huntley. The other two items "attractive" and "friendly" were selected because these terms were used by Wolff (1943) and Huntley (1940) to describe S-judgments of expressive forms of self and others.

Only one S recognized her own voice, without question, and she was a music student and teacher who said she had been studying her own recorded voice as a class project. One male S asked what the age range was of the persons whose voices he heard because one voice sounded just like a minister he used to know. He felt that he had judged that person as helpful, etc., as he had known the minister to be. The voice in question was the second last, his own. E replied truthfully that the age range wasn't known of the persons whose voices provided the samples because they were not asked. Since the Ss were solicited on a random basis, it happened that three of them were foreign students with quite distinctive accents. Surprisingly there was no suggestion of recognition of their own voices on their part, as also found by Wolff (1943, p. 63). Huntley (1940) comments on the finding that women tend to make more favorable judgments of their own unrecognized voices than do men, in spite of the fact that the reproduction of men's voices seems to be considerably better than that of women. In the present study several male Ss said at the conclusion of the task that all

the voices sounded the same to them. The women on the whole seemed to find the task more meaningful. Ss only judged the voice samples of their own sex. Amongst the first six male samples was one with quite a Slavic accent, as well as one who spoke in a monotone throughout. On the other hand, most of the female sample voices were very soft, and seemed to the E to have very similar stimulus value.

One male S became disturbed when the conscious self judgment task was presented. He threw down the pencil and said he thought the whole thing was unfair. Although it was the conscious self-judgment task which he appeared to reject, it was judging people's personality from their voice that he said no one should ever do, and that he was sure that most people wouldn't do such a thing. He was excused from the remainder of the experiment, but it suggested an interesting incident of the kind of emotional distress that Wolff describes as occurring in some of his Ss, when making unconscious self-judgments (Wolff, 1943, p. 143).

All remaining Ss were asked to make an appointment for Stage III of the experiment in 2-3 weeks time. Approximately four weeks elapsed between Stage II and Stage III.

Stage III. The final stage of the experiment was conducted for the purpose of inducing positive or negative self-esteem, and measuring the effects on the above scales. Ss were assigned to one of the two experimental conditions, according to the order of their appearance for this part of

the experiment, alternating within their particular cross-classification, there being nine of these in all, as designated by R-S and S-I scores.

Each S was told, when he or she appeared for Stage III:

You may remember that you filled in some questionnaire forms in class, early in the fall term. They were personality tests. They have been evaluated by an experienced psychologist from this department. This is your report as he compiled it, as well as your rating on the verbal comprehension test which you did in the first of these experiments.

This was followed by either a favorable (F) or unfavorable (U) report concerning personality functioning and intelligence. A copy of each form of report is attached under Appendix E. They were adapted from those used by Glass (1964).

After the report was given, each S was told that for the purpose of checking the reliability of the scores on some of the tests he had taken, two of them would be repeated at this time. The first was the task from Stage II, that of judging personality from listening to a person's voice, plus a conscious self judgment. The second was a repeat of the S-I test.

For the personality judgments each S was given a scoring booklet identical to the one he had used before, in terms of arrangement of the permutations on each page. Booklets for Stage II and Stage III were identified by having a small (a) or (b) in the upper left hand corner of



the cover page. Permutation orders were identified by having one of the letters of the word TOWARD printed at the bottom of each test page in small letters, representing permutation orders 1-6 respectively.

Stage III completed the experimental sessions. Because of the large number of Ss (120) being tested over a period of four weeks, it was deemed inadvisable to explain the purpose of the experiment at this time, as this might tend to affect the performance of subsequent Ss if they heard about it. Instead, the unfavorable report was counteracted by E giving a "neutral" report (see Appendix E-III) at the end of the session to those Ss who were given the unfavorable report. This was done under the guise of E having made a mistake in the name of the S when selecting his or her report. Each form of report was enclosed in a cardboard file folder to simulate a student record. It was apparent that for many Ss the unfavorable report had been effective in creating alarm, for they expressed much relief when told that it had been given in error. Some even remarked that they were afraid the effects would show up on their experimental tasks, as they had been quite upset. Three of the male Ss were quite belligerent about the unfavorable report and said that the examiner was in error. They evinced either relief or self-gratification when the "corrected" (neutral) report was given at the end.

Before leaving, each S was asked two questions:

(1) What do you believe was the purpose of the experiment?

(2) The voices you heard were those of Introductory Psychology students. Did you perhaps recognize any of the voices as belonging to friends of yours?

In response to the first question the answers fell into categories of (a) I have no idea; (b) just what you said they were for, an intelligence test, and then judging people from their own voices; or (c) some kind of a personality assessment. In answer to the second question, several males recognized the person whose voice was played in position number eight for the male samples. This person belonged to an entertainment group and apparently had a wide acquaintance amongst the students. One girl accurately recognized one of the six female sample voices which happened to belong to a close friend. Several Ss reported that they had suspected that one of the voices might be their own, but they couldn't identify its position in the series, and after doing the task the second time they said they decided it couldn't be. In order to maintain the necessary deception, any suggestion that their own voice was included was denied throughout the experiment, with the exception of the student who definitely recognized her own voice in Stage II, and therefore had to be excluded from the remainder of the study.

All Ss were told that they could come to the department

at an appointed time period, following completion of the entire experiment, and that an explanation would be given to them by E at that time. Fifteen Ss appeared and were given the correct explanation. All expressed surprise that their own voices were included and had no definite idea which one it might have been. One female S was insistent that none of the voices could have been her own. When offered to be shown the identification label and to hear her own voice again, she capitulated and said: "I have to believe you."

#### Treatment of Data

Numerical values graduated from one to seven were substituted for the spaces on the scales, a value of seven given to the space next to the positive pole (assumed) and a value of one to the last space before the negative pole of each scale. A preliminary examination of the means for Conscious Self indicated that the polarity of the scales was in the anticipated direction. The scale score for the judgment of Others for each S was the mean score on that adjective for the first six sample voices judged. The seventh set of judgments was the basis of the Unconscious Self score, as it was the S's own voice in each case. The eighth sample was included to absorb any possible series terminal effects and was not considered in the calculations. For each subject then there were two sets of judgment scores for each object of evaluation, (Conscious Self, Unconscious Self, Others) on

the twelve scales, one set made before the manipulation of self-esteem, and one made afterwards.

The values thus obtained were transformed to T-scores (via computer program) to provide standard distributions with means of fifty and standard deviations of ten, for each of the twelve scales (contents). A mixed analysis of variance was performed (via computer program) with corrections made for uneven n's using the harmonic mean method (Snedecor, 1956, par. 12.16). The design consists of R-S x S-I x TMT x B-A x Obj x Cont., yielding a 3 x 3 x 2 x 2 x 3 x 12 factorial. The first three variables, repression-sensitization, self-ideal discrepancy, and treatment, are between-subject variables. The latter three before-after (treatment), object, and content are within-subject variables.

## RESULTS

The results of the analysis of variance are presented in Table 2. The absence of an interaction between Treatment and Before-After judgments indicates that the manipulation of self-esteem was not effective in the manner predicted. However there is an important three-way interaction of R-S, Object and Content, significant at the .005 level of probability. It includes two statistically significant double interaction effects,

TABLE 2

ANALYSIS OF VARIANCE OF REPRESSION-SENSITIZATION  
X SELF-IDEAL DISCREPANCY X TREATMENT X  
BEFORE-AFTER X OBJECT X CONTENT

Source	S. S.	d. f.	M. S.	F	p values
Between	126,740.2	119			
Repression- Sensitization (R-S)	6,095.6	2	3,047.8	3.10	.05
Self-Ideal Discrepancy (S-I)	3,997.3	2	1,998.6	2.03	
Treatment	5,517.9	1	5,517.9	5.61	.025
(R-S) (S-I)	2,317.2	4	579.3	0.88	
(R-S) (Tmt.)	780.7	2	390.4	0.39	
(S-I) (Tmt.)	1,044.2	2	522.1	0.53	
(R-S) (S-I) (Tmt.)	6,617.6	4	1,654.4	1.68	
error <sub>b</sub>	100,369.7	102	984.0		
Within	730,841.6	8,520			
Before-After	87.5	1	87.5	0.55	
(R-S) (B-A)	16.6	2	8.3	0.05	
(S-I) (B-A)	95.9	2	47.9	0.03	
(Tmt.) (B-A)	42.8	1	42.8	0.27	
(R-S) (S-I) (B-A)	353.6	4	88.4	0.56	
(R-S) (Tmt.) (B-A)	375.0	2	187.5	1.17	
(S-I) (Tmt.) (B-A)	258.7	2	129.3	0.81	
(R-S) (S-I) (Tmt.) (B-A)	612.6	4	153.2	0.96	

TABLE 2 (Con't.)

Source	S. S.	d. f.	M. S.	F	p values
error <sub>W1</sub>	16,294.9	102	159.8		
Object (Obj.)	73,374.7	2	36,678.3	65.67	.0005
(R-S) (Obj.)	6,590.7	4	1,647.7	2.95	.025
(S-I) (Obj.)	3,310.8	4	827.7	1.48	
(Tmt.) (Obj.)	397.6	2	198.8	0.35	
(R-S) (S-I) (Obj.)	5,989.6	8	748.7	1.34	
(R-S) (Tmt.) (Obj.)	1,204.3	4	301.1	0.54	
(S-I) (Tmt.) (Obj.)	6,138.1	4	1,534.5	2.75	.05
(R-S) (S-I) (Tmt.) (Obj.)	4,792.1	8	599.0	1.07	
error <sub>W2</sub>	113,964.5	204	558.6		
Content (Con.)	30.8	11	2.8	.024	
(R-S) (Con.)	2,997.1	22	136.2	1.197	
(S-I) (Con.)	1,442.9	22	65.6	.576	
(Tmt.) (Con.)	1,498.2	11	136.2	1.197	
(R-S) (S-I) (Con.)	5,784.0	44	131.45	1.154	
(R-S) (Tmt.) (Con.)	2,494.46	22	113.4	.09	
(S-I) (Tmt.) (Con.)	3,151.3	22	143.2	1.257	
(R-S) (S-I) (Tmt.) (Con.)	4,359.5	44	99.1	.87	
error <sub>W3</sub>	127,824.59	1,122	113.9		
(B-A) (Obj.)	720.35	2	360.17	2.58	
(R-S) (B-A) (Obj.)	662.0	4	165.5	1.19	
(S-I) (B-A) (Obj.)	113.2	4	28.3	0.203	

TABLE 2 (Con't.)

Source	S. S.	d. f.	M. S.	F	p values
(Tmt.) (B-A) (Obj.)	408.2	2	204.1	1.46	
(R-S) (S-I) (B-A) (Obj.)	1,136.0	8	142.0	1.019	
(R-S) (Tmt.) (B-A) (Obj.)	251.7	4	62.9	0.45	
(S-I) (Tmt.) (B-A) (Obj.)	1,187.8	4	296.9	2.13	
(R-S) (S-I) (Tmt.) (B-A) (Obj.)	1,259.2	8	157.4	1.13	
error <sub>W4</sub>	28,428.5	204	139.3		
(B-A) (Con.)	1,177.8	11	107.1	2.64	.005
(R-S) (B-A) (Con.)	543.6	22	24.7	0.608	
(S-I) (B-A) (Con.)	603.2	22	27.4	0.675	
(Tmt.) (B-A) (Con.)	261.7	11	23.8	0.586	
(R-S) (S-I) (B-A) (Con.)	1,563.3	44	35.5	0.87	
(R-S) (Tmt.) (B-A) (Con.)	825.2	22	37.5	0.92	
(S-I) (Tmt.) (B-A) (Con.)	1,188.8	22	54.0	1.33	
(R-S) (S-I) (Tmt.) (B-A) (Con.)	1,642.9	44	37.3	0.919	
error <sub>W5</sub>	45,501.4	1,122	40.56		
(Obj.) (Con.)	11,396.8	22	518.0	8.14	.0005
(R-S) (Obj.) (Con)	4,631.2	44	105.3	1.65	.005
(S-I) (Obj.) (Con)	2,179.5	44	49.5	0.78	
(Tmt.) (Obj.) (Con.)	1,644.5	22	74.7	1.17	

TABLE 2 (Con't)

Source	S. S.	d. f.	M. S.	F	p values
(R-S) (S-I) (Obj.) (Con.)	7,716.6	88	87.7	1.38	
(R-S) (Tmt.) (Obj.) (Con.)	2,273.2	44	51.7	0.818	
(S-I) (Tmt.) (Obj.) (Con.)	3,419.8	44	77.7	1.22	
(R-S) (S-I) (Tmt.) (Obj.) (Con.)	5,090.0	88	57.8	0.91	
error <sub>W6</sub>	142,822.6	2,244	63.6		
(B-A) (Obj.) (Con.)	1,089.1	22	49.5	1.55	.05
(R-S) (B-A) (Obj.) (Con.)	1,188.4	44	27.0	0.84	
(S-I) (B-A) (Obj.) (Con.)	696.2	44	15.8	0.49	
(Tmt.) (B-A) (Obj.) (Con.)	719.8	22	32.7	1.02	
(R-S) (S-I) (B-A) (Obj.) (Con.)	2,449.9	88	27.8	0.87	
(R-S) (Tmt.) (B-A) (Obj.) (Con.)	1,068.8	44	24.3	0.76	
(S-I) (Tmt.) (B-A) (Obj.) (Con.)	2,104.4	44	47.8	1.49	.05
(R-S) (S-I) (Tmt.) (B-A) (Obj.) (Con.)	2,791.7	88	31.7	0.99	
error <sub>W7</sub> (Residual)	74,872.42	2,244	31.9		



R-S x Object ( $p < .025$ ) (see Figure 3) and Object x Content ( $p < .0005$ ) (see Figure 4), as well as two significant main effects, R-S ( $p < .05$ ) and Object ( $p < .0005$ ). Table 3 contains the data for the three-way interaction, and Figures 5, 6 and 7 illustrate graphically the results for each of the twelve adjectival scales.

Figure 3 depicts the two-way interaction between R-S and Object with Contents collapsed, and is presented for the purpose of obtaining a general picture of the two-way interaction across all the contents used here. Considered in this way the statistically significant differences which hold across all Contents are between Conscious Self and Unconscious Self for Repressors ( $t = 3.60, d.f. = 40, p < .001$ ) and for Neutrals (medium scorers on R-S) ( $t = 2.22, d.f. = 38, p < .05$ ), and for Repressors between Conscious Self and Others ( $t = 2.51, d.f. = 40, p < .02$ ) and for Neutrals between Conscious Self and Others ( $t = 3.31, d.f. = 38, p < .01$ ). For Sensitizers the only statistically significant difference, with all contents collapsed, is between Conscious Self and Others ( $t = 3.78, d.f. = 39, p < .001$ ).

Figure 4 shows the two-way interaction between Object and Content with R-S groups collapsed for the purpose of obtaining a general picture across all the Contents. The smallest differences between Contents occur on ratings for Others. It is interesting to note that on some adjectives the Conscious Self is rated relatively very high while the

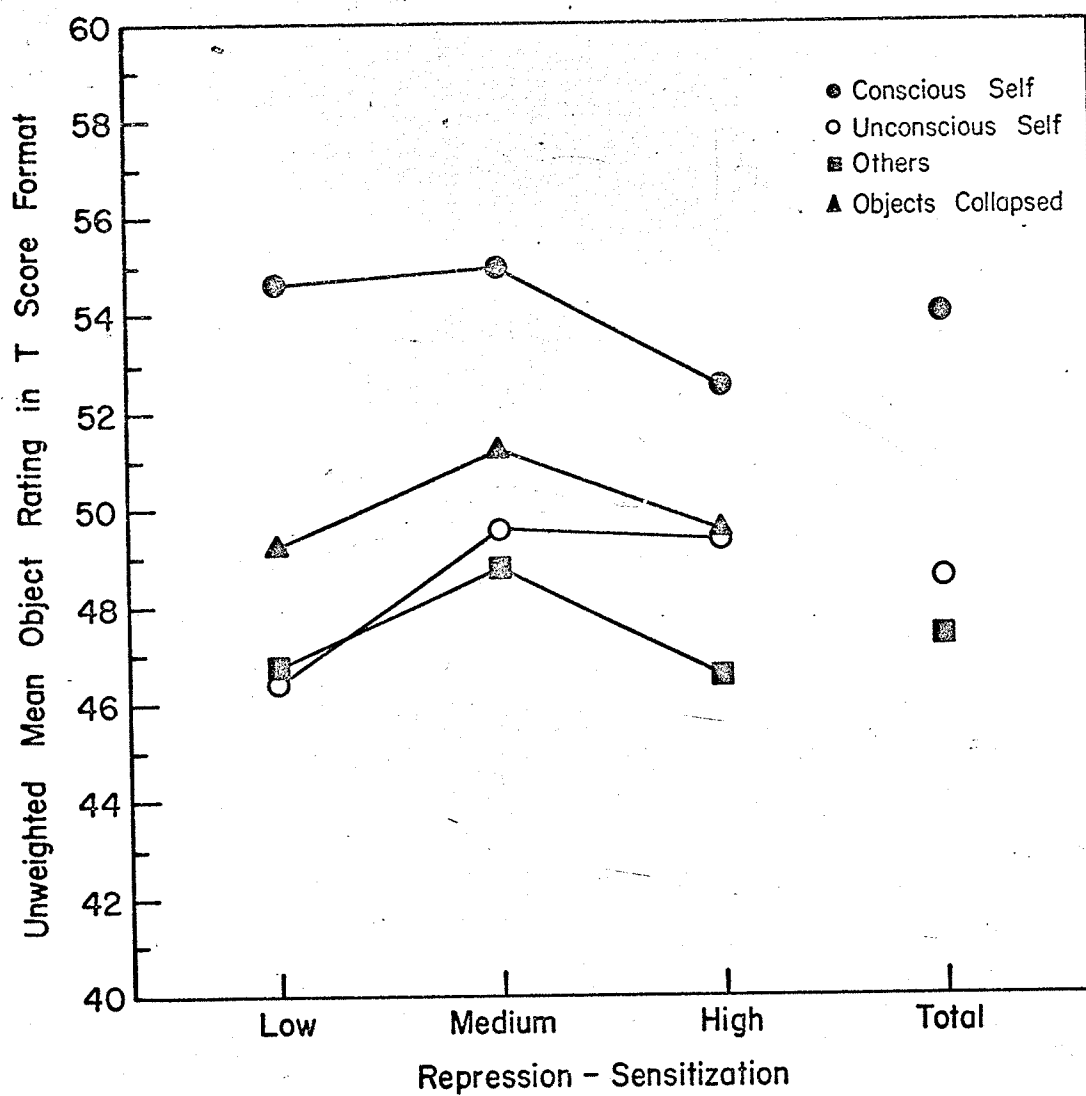


FIGURE 3. Two-way interaction Repression - Sensitization  
x Object

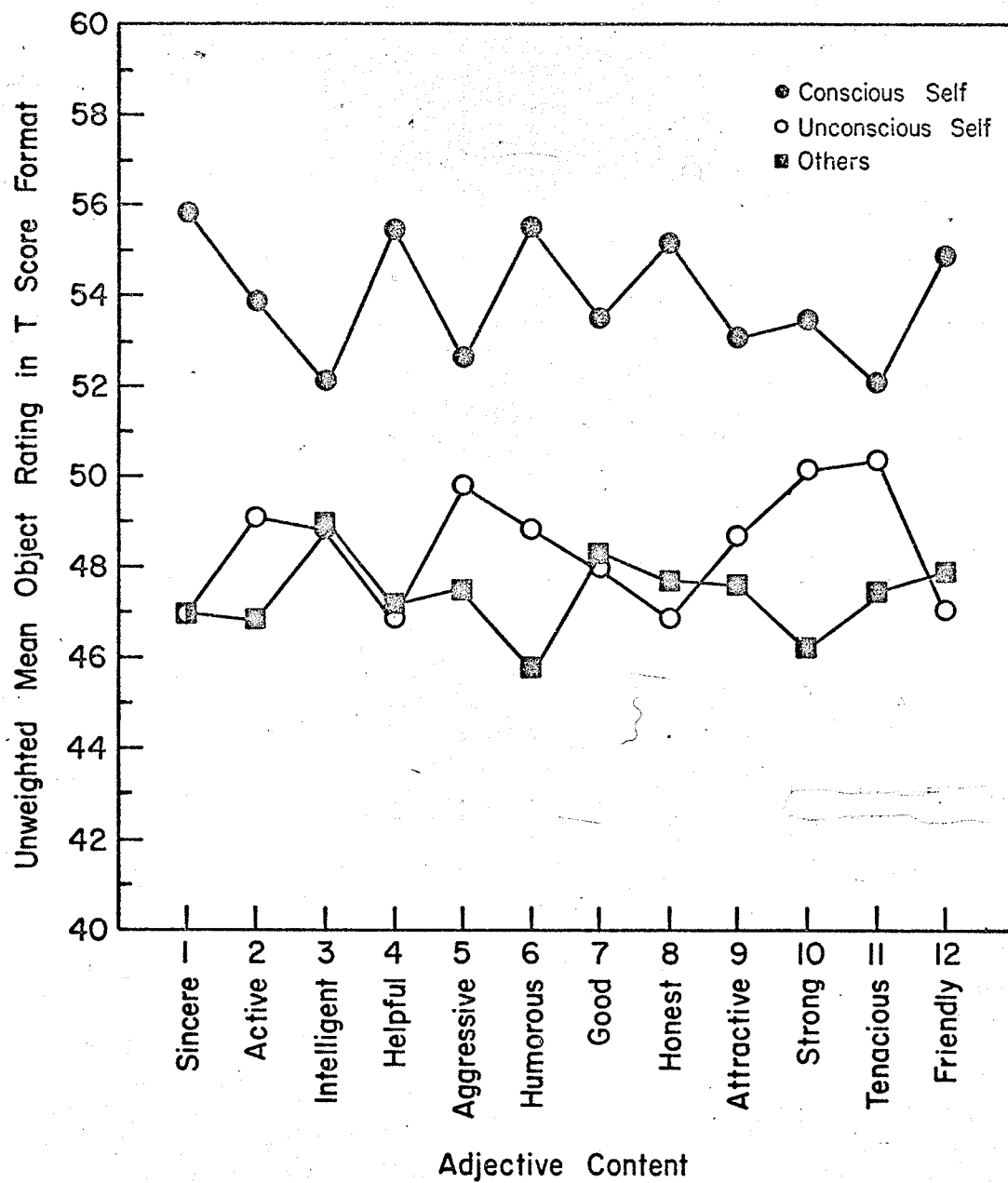


FIGURE 4. Two-way interaction Object x Content

TABLE 3

MEANS AND S. D.'S FOR R-S X OBJECT X CONTENT

Content		Sincere					
Object	Conscious Self		Unconscious Self		Others		Means
	M.	S.D.	M.	S.D.	M.	S.D.	M.
Repressors	54.4	7.25	45.2	12.42	45.8	5.48	48.5
Neutrals	56.7	6.66	47.4	11.98	49.0	5.80	51.0
Sensitizers	56.7	8.60	48.3	12.33	46.1	6.83	50.3
Means	55.9		47.0		47.0		
Content		Active					
Object	Conscious Self		Unconscious Self		Others		Means
	M	S.D.	M.	S.D.	M.	S.D.	M.
Repressors	55.1	9.48	48.7	10.82	47.1	3.97	50.3
Neutrals	54.8	10.34	49.8	12.31	47.3	5.66	50.3
Sensitizers	51.7	11.30	49.2	12.11	46.0	5.65	48.9
Means	53.8		49.2		46.8		
Content		Intelligent					
Object	Conscious Self		Unconscious Self		Others		Means
	M.	S.D.	M.	S.D.	M.	S.D.	M.
Repressors	51.6	7.44	46.0	13.61	47.3	6.34	48.3
Neutrals	51.7	8.86	50.5	13.33	51.0	6.23	51.0
Sensitizers	53.3	8.29	50.1	12.98	48.7	6.79	50.7
Means	52.2		48.8		49.0		

TABLE 3 (Con't.)

Content		Helpful					
Object	Conscious Self		Unconscious Self		Others		Means
	M.	S.D.	M.	S.D.	M.	S.D.	M.
Repressors	56.9	6.20	45.4	12.59	47.1	5.24	49.8
Neutrals	56.2	7.92	47.1	12.17	49.2	6.03	50.8
Sensitizers	53.5	10.05	48.0	11.33	45.7	7.13	49.0
Means	55.5		46.8		47.3		
Content		Aggressive					
Object	Conscious Self		Unconscious Self		Others		Means
	M.	S.D.	M.	S.D.	M.	S.D.	M.
Repressors	55.8	10.21	48.0	10.93	47.4	4.67	50.4
Neutrals	51.8	11.15	50.8	12.03	48.0	6.23	50.2
Sensitizers	50.4	11.11	50.6	12.45	46.9	4.40	49.3
Means	52.6		49.8		47.4		
Content		Humorous					
Object	Conscious Self		Unconscious Self		Others		Means
	M.	S.D.	M.	S.D.	M.	S.D.	M.
Repressors	55.3	10.33	48.7	9.36	45.3	4.98	49.7
Neutrals	57.4	9.38	49.6	10.34	46.5	5.75	51.1
Sensitizers	54.0	11.02	48.4	12.44	45.6	5.30	49.3
Means	55.5		48.9		45.8		
Content		Strong					
Object	Conscious Self		Unconscious Self		Others		Means
	M.	S.D.	M.	S.D.	M.	S.D.	M.
Repressors	55.8	8.11	47.2	11.96	46.5	4.75	49.8

TABLE 3 (Con't.)

Content		Strong					
Object	Conscious Self		Unconscious Self		Others		Means
	M.	S.D.	M.	S.D.	M.	S.D.	M
Neutrals	54.8	8.79	52.0	12.30	47.0	5.64	51.2
Sensitizers	49.9	11.11	51.3	12.6	45.4	4.90	48.8
Means	53.5		50.1		46.3		

Content		Tenacious					
Object	Conscious Self		Unconscious Self		Others		Means
	M.	S.D.	M.	S.D.	M.	S.D.	M.
Repressors	52.5	9.89	46.5	11.48	47.5	4.29	48.8
Neutrals	54.9	9.37	51.6	12.01	47.9	6.19	51.4
Sensitizers	49.0	12.06	53.2	12.13	47.1	5.61	49.7
Means	52.1		50.4		47.5		

Content		Friendly					
Object	Conscious Self		Unconscious Self		Others		Means
	M.	S.D.	M.	S.D.	M.	S.D.	M.
Repressors	55.7	7.65	45.5	11.49	46.8	5.13	49.3
Neutrals	55.8	7.89	48.0	11.20	49.8	6.96	51.2
Sensitizers	53.3	11.23	47.9	12.70	47.0	6.81	49.4
Means	54.9		47.1		47.8		

Content		Good					
Object	Conscious Self		Unconscious Self		Others		Means
	M.	S.D.	M.	S.D.	M.	S.D.	M.
Repressors	52.9	8.29	45.0	12.29	46.6	7.32	48.1
Neutrals	56.1	7.78	49.5	11.85	50.8	7.71	52.1

TABLE 3 (Con't.)

Content								Good							
Object		Conscious Self		Unconscious Self		Others		Means							
		M.	S.D.	M.	S.D.	M.	S.D.	M.							
Sensitizers		51.8	9.23	49.5	12.02	47.4	7.64	49.5							
Means		53.6		48.0		48.2									
Content								Honest							
Object		Conscious Self		Unconscious Self		Others		Means							
		M.	S.D.	M.	S.D.	M.	S.D.	M.							
Repressors		55.1	8.98	44.0	10.35	46.9	6.19	48.6							
Neutrals		57.4	6.27	48.5	9.76	49.6	7.55	51.8							
Sensitizers		53.2	12.11	48.0	11.69	46.6	7.12	49.2							
Means		55.2		46.8		47.7									
Content								Attractive							
Object		Conscious Self		Unconscious Self		Others		Means							
		M.	S.D.	M.	S.D.	M.	S.D.	M.							
Repressors		53.9	6.98	46.6	13.5	47.0	5.57	49.1							
Neutrals		52.8	8.40	50.7	12.35	49.3	6.91	50.9							
Sensitizers		53.2	8.06	48.7	14.72	46.5	6.23	49.4							
Means		53.3		48.6		47.6									

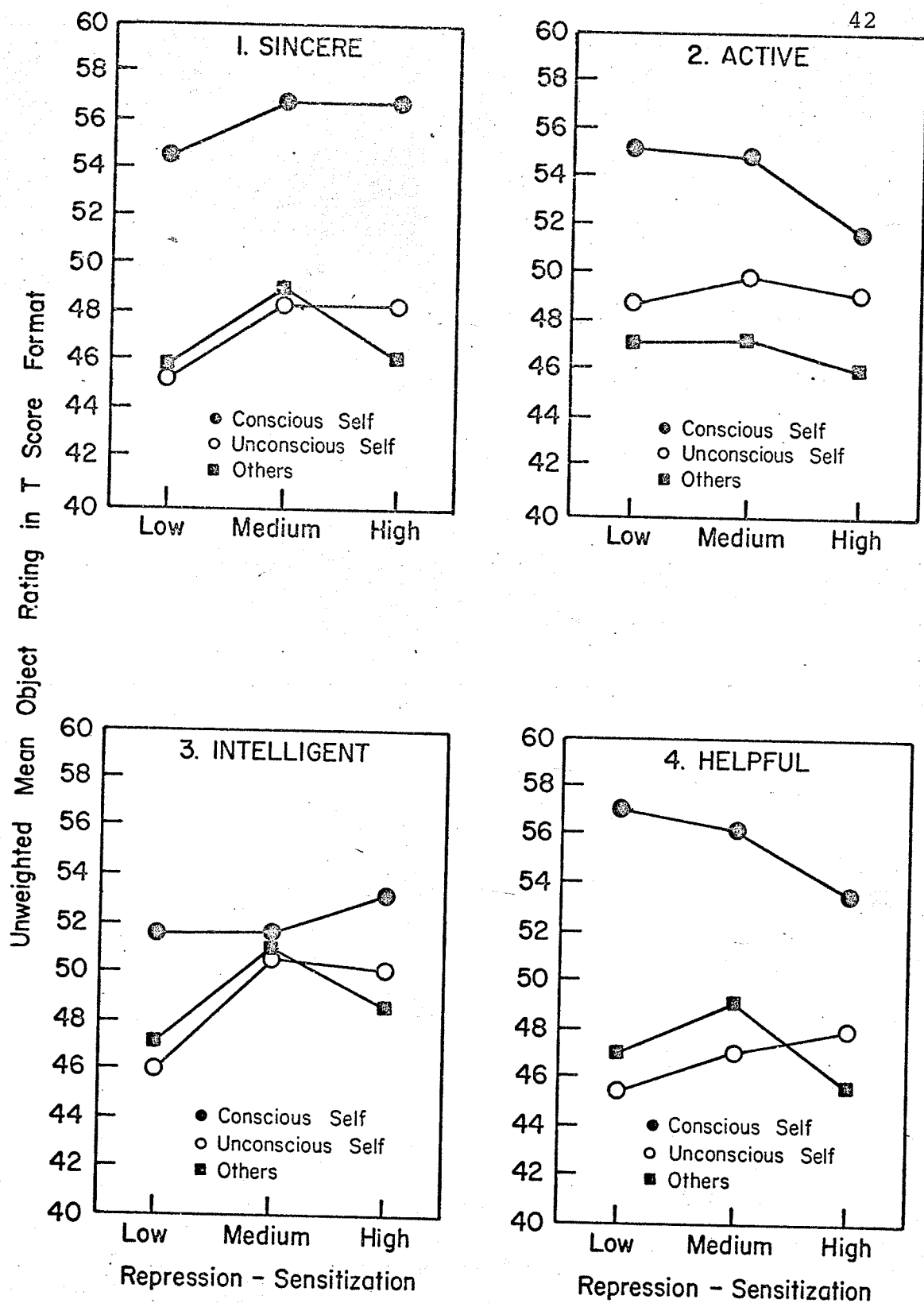
Unconscious Self is rated relatively very low. These are Sincere, Helpful, Honest and Friendly. The reverse tendency holds for ratings of these objects on Intelligent, Aggressive and Tenacious. The second highest rating for the Unconscious Self is on Strong, but the rating for Conscious Self on this scale is close to average (53.5).

Considering Figures 5-7, where each of the Contents are considered separately, were it not for the Sensitizer group, all of the interaction would appear to be between Unconscious Self and Others, with the Conscious Self in all cases being rated higher than the other two objects (see Figure 3). The sensitizers show consistency in rating the Unconscious Self higher than Others on all of the scales (as in Figure 3) and on three of them higher than the Conscious Self. The three scales are "aggressive", "strong", and "tenacious", terms which semantically load on the "potency" factor (Osgood, et al, 1957). Although for sensitizers the scale values even for "tenacious", the largest obtained difference between Unconscious Self and Conscious Self, is not significant ( $t = 1.55$ , d.f. = 38,  $p > .05$ )<sup>2</sup> nevertheless the direction of the difference contributes to the interaction between these two objects.

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<sup>2</sup>The two-tailed t-test for uncorrelated means was employed for all of these calculations so that any p value associated with differences between correlated means may be considered in some unknown degree a conservative estimate of the likelihood that such differences arose by chance.





**FIGURE 5.** Interaction of Object x Repression-Sensitization on Sincere, Active, Intelligent and Helpful.

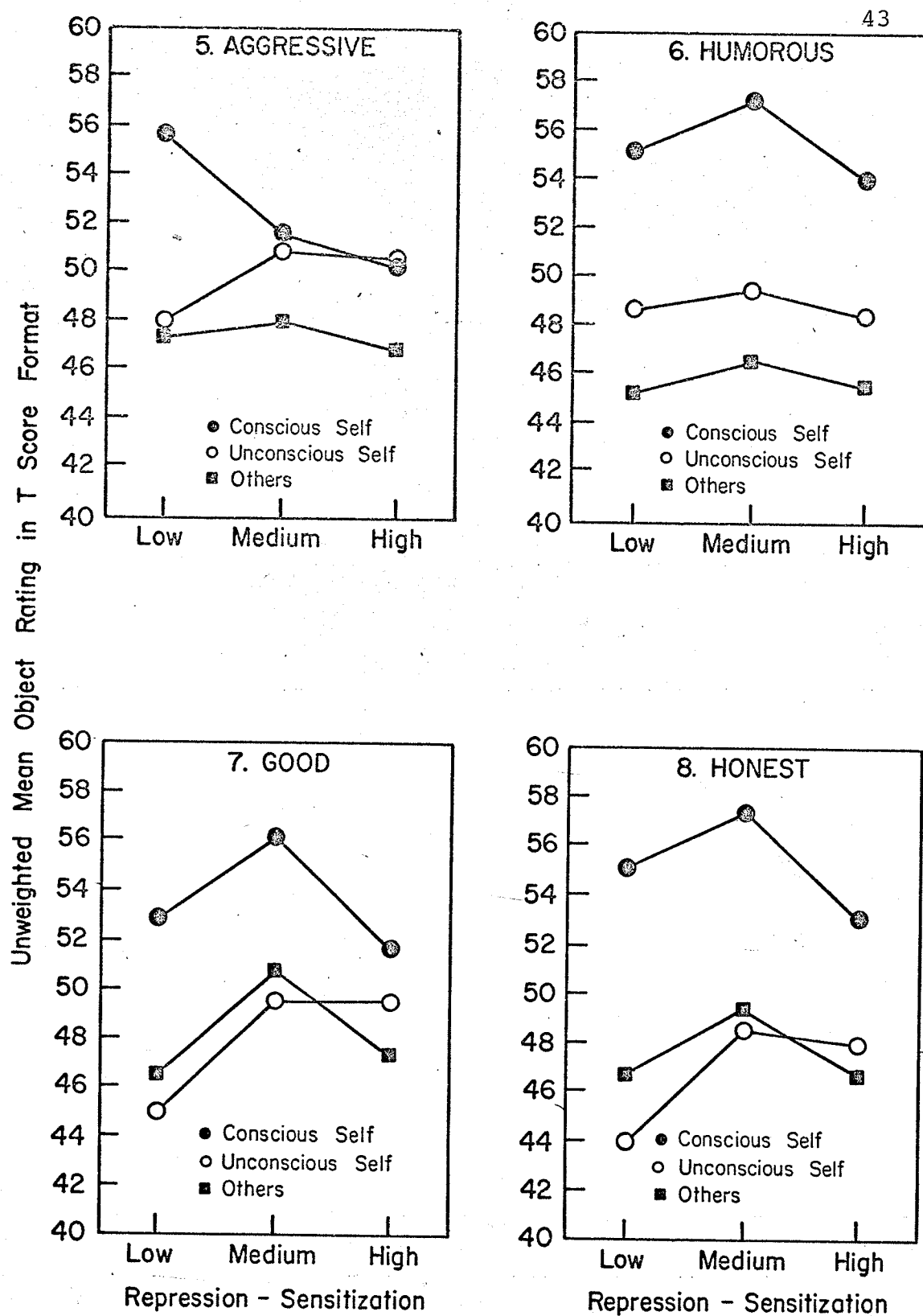
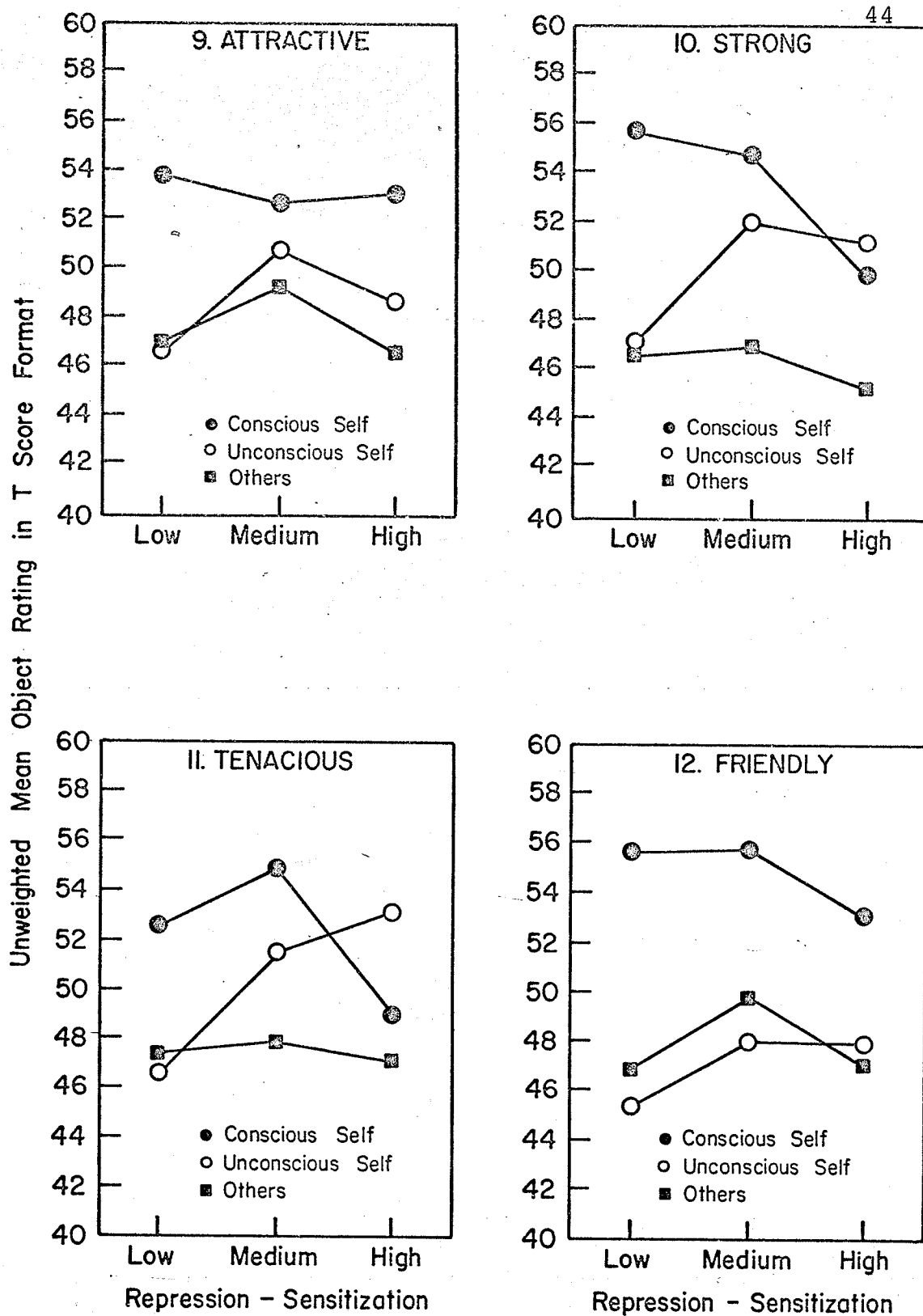


FIGURE 6. Interaction of Object x Repression-Sensitization on Aggressive, Humorous, Good and Honest.



**FIGURE 7.** Interaction of Object x Repression-Sensitization on Attractive, Strong, Tenacious and Friendly.

The difference between means for Unconscious Self and Others on "tenacious" for sensitizers is significant ( $t = 2.89$ ,  $d.f. = 78$ ,  $p < .01$ ). The obtained difference on the "strong" scale for sensitizers between Unconscious Self and Others is also significant ( $t = 2.86$ ,  $d.f. = 39$ ,  $p < .01$ ). The difference on the "aggressive" scale is not statistically significant ( $t = 1.68$ ,  $d.f. = 39$ ,  $p > .05$ ). All of these significance levels refer to two-tailed tests.

Repressors on these three scales rate the Conscious Self considerably higher than the other two objects. On "aggressive" Conscious vs. Unconscious Self has a  $p$  value of  $< .05$ , on "strong"  $p < .01$ , on "tenacious"  $p < .02$ . For Conscious Self vs. Others on all three scales,  $p < .01$ . The Unconscious Self is rated slightly higher than Others on Strong and Aggressive, slightly lower on Tenacious, but these differences are not statistically significant. They rate the Unconscious Self lower than Others on the scales of Sincere, Intelligent, Helpful, Good, Honest, Attractive, and Friendly, although the differences are not statistically significant. These scales all load on the semantic "evaluative" factor (Osgood and Suci, 1955). On the remaining two scales, Active and Humorous, Repressors rate the Unconscious Self higher than Others but only the difference on Humorous is significant ( $t = 2.07$ ,  $d.f. = 41$ ,  $p < .05$ ). These two scales load on the "activity" factor of the semantic differential (Hallworth, 1965).

The Neutral group (medium scorers on the R-S dimension) rates the Conscious Self much higher than the other two objects on all of the scales except Aggressive, Strong, Tenacious, Attractive and Intelligent, where the difference is smaller although in the same direction. The differences are smallest on Intelligent where the means are very similar: Conscious Self: 51.7, Unconscious Self: 50.5, Others: 51.0.

It will be remembered that Huntley considered the size of the sigma as indicative of "extremeness" in Unconscious Self judgments. A cursory examination of the data of Table 3 indicates that on most scales, for most R-S groups, the standard deviations are highest for the Unconscious Self. The variances, with R-S and Content collapsed, are: Conscious Self  $6^2 = 82.81$ ; Unconscious Self  $6^2 = 143.76$ ; Others  $6^2 = 32.38$ . When these variances are compared they are all significant (on a two-tailed test) at the .02 level of probability: Unconscious Self vs. Others,  $F = 4.44$ , d.f. = 119, 119; Conscious Self vs. Others,  $F = 2.55$ , d.f. = 119, 119; Unconscious Self vs. Conscious Self,  $F = 1.73$ , d.f. = 119, 119. These differences are not based on differences in extremeness of judgments between R-S groups, because when Content is collapsed, and Conscious Self is considered alone, the F tests between variances fail to reach significance at the .10 level on a two-tailed test: Repressors vs. Sensitizers  $F = 1.51$ , d.f. = 40, 39; Repressors vs. Neutrals  $F = 1.03$ , d.f. = 40, 38; Sensitizers vs.

Neutrals,  $F = 1.56$ , d.f. = 39, 38.

## DISCUSSION

Since there was no significant interaction between the Before-After and Treatment variables, the necessary conditions for testing the hypotheses based on Horney's theory are absent. The results must be considered without reference to that aspect of Horney's theory presented in the introduction. To the extent that the findings are significant and interesting, and have implications for further research, credit must still be given to Horney's notions for having generated these findings. Further other aspects of Horney's theory will be invoked below.

In the present study two forms of control, which serve as reference points, were included. In respect to the composition of the experimental groups, those groups composed of medium scorers on the R-S and S-I represent a neutral or reference group. For the experimental variables, the use of judgments of Others provides a within-subjects control and means of comparison. For those instances in which the Sensitizers judged their Unconscious Self significantly higher than Others, while the Repressors and Neutrals did not, two explanations are possible. Either (1) only Sensitizers are sensitive to their own voices, or (2) all of the groups are but the Sensitizers are the only ones who discriminate between their own voices and those of others.

They rated their own voices higher than those of Others on all of the scales, while the Repressors rated their own lower on a majority of the scales. At the conscious level the Repressors rated themselves higher in general than did the Sensitizers, as would be expected if they represent Streamliners Type I and Streamliners Type II, respectively. For both groups, Horney's "glorified self" seems to predominate at the conscious level with the "contemptible self" appearing in contrast at the unconscious level. This is particularly true for Repressors, whose highest judgments at the conscious level are offset by judgments lower than judgments of Others at the unconscious level (see Figure 4).

Under the experimental treatment of manipulation of self-esteem the predominant ego-defense mechanisms appear to have continued to function at both levels. Huntley (1940,p.427) adopted this as a premise to explain the favorableness or unfavorableness of unconscious self judgments:

We have assumed that the strivings for self esteem may operate automatically and below the level of conscious report. . . . Usually positive self justification results, although occasionally there are judgments indicative of dissatisfaction.

It is readily apparent that the objects were not rated equally on the various adjectival scales either within, or between, subjects. Wolff (1943, chp. XVI) recognized this phenomenon and pointed out that personality terminology is difficult to equate, since the value attaching to a particular trait is bound up in an individual's personal

value system. He analyzed "free" self-judgments and deduced a quality of "attractiveness" which he subsequently used for scaled judgments of expressive forms of self and others, as "most attractive" to "least attractive". Huntley (1940) and Diller (1954) also used this dimension for ratings. In the present study the term Attractive did not differentiate the mean group judgments nearly as well as some of the other adjectives.

It is interesting to note that Diller selected Intelligent as a major measure in his study, in the belief that it is a universally cherished trait. It proved to be most resistant to change in S-judgments at both the conscious and unconscious levels in his study. In the present study it shows the smallest differences between judgments of the three objects, particularly for Sensitizers.

In this experiment R-S levels were combined with three levels of S=I scores, so the R-S groups are mixed ones. Because R-S and S-I are positively correlated (Byrne et al, 1963) it is possible that the R-S groups showed differences which distorted, in either direction, the differences found. However, since S-I did not significantly interact with the triple interaction, such distortion was probably minimal. In light of the present findings, the R-S dimension is a meaningful one for research with unconscious self-ratings. In future work it seems advisable to use this dimension by itself in selecting Ss for various experimental groups.



A possible weakness of the present design is that the relative values attached to the various traits by individual Ss or groups of Ss is not known, unless their ratings of the Conscious Self on the scales gives some indication of this. The significant differences between the variances for the ratings of the three objects, with the smallest variance holding for judgments of Others, suggests that having the Ss rank order the adjectives to be used in future research, in terms of their desirability, would be strongly advisable. It appears possible that some of the differences in judgments on the various adjectives, found in the present study between Repressors and Sensitizers, reflect, in part, differences in the values these two groups place on the adjectives themselves.

Following from the above, there is strong support provided for use of the semantic differential factors in selecting adjectival rating scales for research in this area. With rank ordering of the traits it would be possible to assess how highly the Sensitizers value adjectives which load on the potency factor, that being the area in which they rated the Unconscious Self higher than the Conscious Self, and significantly higher than Others. The findings concerning the Repressors and ratings on adjectival scales containing the activity factor might also be clarified in this way, desirable since on this factor they rated the Unconscious Self higher than the Conscious Self.

The findings of Wolff and Huntley regarding non-recognition by Ss of their own voices was supported in the present study, since all but one out of 121 Ss failed to recognize their own voices, that is 99.18%.

The finding in the present study that Ss tended to rate their conscious self most favorably would seem to contradict previous findings, that the unconscious self was rated most favorably (or most unfavorably, in a few instances). However previous comparisons were usually made with judgments made of, or by, others, so that it is difficult to make conclusive observations in this area. It does suggest that the desire to present a favorable self image, at the conscious level, is a dominant one. The high variance for unconscious self judgments provides support for Wolff's contention that these are self judgments, in fact, and that they differ from judgments made of others, in quality at least.

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## APPENDIX A

### Instructions I

"This is a test of verbal comprehension, one of the special abilities that is an aid in learning. It has been found to be very valuable for predicting grades in college. The results from this experiment will be used to form a set of scoring norms on this test for students at this university.

First I will read a short passage to you. Then you will have 60 seconds to summarize its meaning in your own words, in exactly 2 sentences. Do this on the piece of paper in front of you labeled "A".

When you have finished I will give you a card with passage "B" on it. You are to read this one aloud, clearly, and then give it back to me. You will be allowed 60 seconds to summarize it in the same way that you did for passage "A", but on the sheet of paper labeled "B". Please put your name at the top of sheet "A".

Are there any questions?"

## APPENDIX B

### Passage A

"A written contract is one in which the provisions are written or printed and signed by the parties, or at least by the party to be charged. While the law requires only a few contracts to be written, it is essential that all important ones be in writing. If a contract having many terms is made orally, a misunderstanding in reference to some of them is likely. On the contrary if the agreement is in writing, any dispute may be immediately settled by consulting the instrument."

### Passage B

"Men do all things for an end, namely, for that which is useful to them, and which they seek. (Thus it comes to pass that they only look for knowledge of final causes of events, and when these are learned they are content, as having no cause for further doubt.) If they cannot learn such causes from external sources, they are compelled to turn to considering themselves, and reflecting what end would have induced them personally to bring about the given event, and thus they necessarily judge other natures by their own."

(Sentence two to be edited out as tape stimulus in Stage II and Stage III.)

## APPENDIX C

### Instructions II

"This is a test for judging personality from listening to a person's voice. Intuitively we often judge a person by the qualities of their voice rather than by what they say. I am going to play a number of voices for you from a tape recorder, each one reading the same passage. After each voice is played I will stop the recorder and you are to rate the person who spoke on the sheet in front of you. There is a separate sheet for each person.

Make the ratings on each characteristic quickly, according to your first impression of the person whose voice you have just heard. Be sure to mark each characteristic for each voice. Don't skip any.

Put an "X" in the space which represents to you the degree of each characteristic which you judge each person to have. If you will look at the example given on the cover sheet, the ends of the scales represents the extremes, and the spaces next to them "extremely . . .", "moderately . . .", and "slightly". (Demonstrate on the example given.)

I will play one voice and then wait until you have completed rating that person on the scales provided before playing the next one. Remember to make all judgments according to your first impression of the person, so work



quickly, but accurately, as we want your true impression of each person.

Are there any questions?"

Additional Instructions (for last sheet)

"On the last sheet, which is blue, you are to make similar ratings to those you have been doing, but this time you are to rate your own personality, rather than that of others."

## APPENDIX D

### Permutation I of Scales

THIS VOICE BELONGS TO A PERSON WHO IS:

[illegible]

## APPENDIX E-I

### Favorable Report

In general this person shows a high degree of personality maturity, signified by a successful integration on the various levels of functioning. He reveals himself to be well-equipped for a productive and conflict-free adjustment to most environmental circumstances in almost every respect, he represents a well-balanced and effective personality pattern, considerate and sympathetic and intellectually alert and flexible.

With this picture it is rather surprising that he generally underestimates his own attributes (as seen by his check-list responses) and fails to take full advantage of his capabilities. He stands above the average and presents one of the more favorable personality structures that has been analyzed by this staff.

### Intelligence

In regard to mental alertness and intellectual flexibility, his responses on the verbal comprehension test reveal a quick and imaginative mind. Although he is not impulsive and unthinking close analysis reveals a basic and prevailing quickness of intellect which colors his approach to problems of all kinds. His mental alertness occurs

basically on the analytic level where it appears that he has creative potential and is capable of breaking through rigidities which often block his peers' attempts to solve problems. There are indications that he is unaware of his intellectual alertness and this may explain his tendency not to exploit his ability as far as he might.

## APPENDIX E-II

### Failure Report

In general this person shows a low degree of personality maturity, signified by a failure to arrive at a really satisfactory integration of motivations on the conscious and unconscious levels. The pattern of his responses is generally poor, indicating a weak personality with evidence of inconsiderateness and a lack of intellectual alertness and flexibility.

His adoption of certain superficial appearances of maturity may enable him to make temporary adjustments to life situations but not without considerable expenditure of energy toward maintaining the concealment of his basically immature drives.

He stands below the average and presents one of the more unfavorable personality structures that has been analyzed by this staff.

### Intelligence

In regard to mental alertness and intellectual flexibility, his responses on the verbal comprehension test reveal a slow, constricted, and unimaginative mind. The lack of cognitive flexibility and the typicality of his responses suggest strongly that his approach to life problems

is neither analytic nor imaginative. There are, in addition, indications that his perception of formal problems lacks the spontaneity and astuteness required for success in the professions and in top-level business positions. His intellectual functioning seems to be influenced by a psychological rigidity and there are strong suggestions of a basic inability to grasp the requirements of the problem facing him.

## APPENDIX E-III

### Neutral Report

This person shows some degree of personality maturity and shows himself to be adequately equipped to meet most environmental situations. He relates fairly well to other people and has the potential for adequate adjustment to the challenges which circumstances may offer. He indicates sufficient flexibility and awareness to be able to make such adjustment. His scores represent the average on these tests, including the verbal comprehension test. He has grasped the meaning of the passages in a fundamental sense and his summary statements cover the essential approach as stated.