THIRD PERSON ATTRACTION TO ESTABLISHED HIGH AND LOW ATTRACTION DYADS

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by

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ABSTRACT

In order to assess the effects of attraction as it centers on the individual in a three person group, forty female university students were exposed individually to an artificially constructed social situation in which two other female students were deemed to be present in adjoining experimental rooms. Attraction was varied from the subject's point of view, between the subject and one of the student allies and between the student allies. The effect of these two variables as it led to consequences in subjects' attraction toward the other student ally were then observed. Results partially supporting the Heider-Newcomb balance theory were obtained. Discussion focused on further implications involving a learning theory as well as a coalition theory approach to attraction within the triad unit.

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CHAPTER 1

INTRODUCTION

The premise that liking or positive affect toward another person or group forms one of the most important aspects of our social life, has found widespread acceptance among both social scientists and laymen. Dislike has also commanded attention. However, for the social scientist negative affect or dislike, has not been the focus of a large body of research as the attention derived from positive affective liking (Secord and Backman, 1964). Moreno (1953), introduced an intellectual movement in the social sciences called sociometry. This movement has been completely concerned with the mapping of patterns of association brought about through the affective structure of groups. Tagiuri (1952), further introduced relational analysis, in which a subject not only makes choices within a group, but also guesses who will choose him. Theory and research in interpersonal attraction has flourished since the early days of sociometric analysis. The following study is concerned with the positive and negative affective structure of a three person group. Its focus is the individual social actor as that individual looks out into the social world, and as that world is perceived by him.

The initial attraction of one person (A) for another person (B) may be determined not simply by the characteristics of B as a separate individual, but rather by the total situation or context in which B is presented to A. Part of this context might be the presence of another person (C) who is with B at the time of meeting A. Therefore, A would base his attraction toward B, not on B alone, but rather as B is perceived in relation to C. If this were true, by varying the relationship between B and C a change might be expected in A's attraction for B. Similarly, by varying the relationship between A and C a change might be expected in A's attraction for B providing that B and C are seen by A as connected in some way. Folklore certainly provides support for this notion in aphorisms such as: "One's character can be judged by the company he keeps", and "Birds of a feather...". It also seems intuitively obvious that if an individual were to meet two strangers, one of whom he engages in conversation and to whom he becomes attracted, then this attraction should affect his attraction toward the other person with whom he has had little contact. Furthermore, the magnitude of this "other person" attraction may depend both on the magnitude of the initial attraction to the first stranger and also on the perceived attraction between the two strangers.

The proposed study was an attempt to investigate such a triadic situation experimentally. The attraction between A and

C, and the attraction between B and C was varied from person A's point of view. The effect of these two variables were observed as it led to consequences of A's attraction for B and A's perception of B's attraction for A.

In a recent book, Theodore Caplow (1968), explores the idea that all social interactions are essentially triangular rather than linear. Whenever two persons interact socially, their behavior is monitored by a third person or audience, either physically present or nearby. The audience interprets the behavior of the two social actors and in a very basic sense, maintains a link between social norms and the private relationship. Apart from the more general importance of the triad as basic to all higher order social organization, Caplow focuses discussion on power relationships and coalitions in three person groups. It is proposed that the most significant property of the triad is for two members to form a coalition against the third. Predictions are made concerning the nature of this coalition, depending upon the status relationships in the group. For instance, if person A perceives that B is more powerful than himself, whereas C has the same degree of power, then A will form a coalition with C in order to overcome B. There would be a low probability of A forming a coalition with B, since B could always control A. This, however, is simply one theoretical approach as to the nature of triadic

relations. Two other theories which will now be discussed, have further concentrated on the question of attraction or liking between group members rather than the perception of power and coalition.

Using a learning theory approach, Lott and Lott (1968), view attraction as a process of developing positive attitudes toward another person. Following Doob (1947), a positive attitude is the result of acquiring implicit anticipatory goal responses having both cue and drive properties (see Spence, 1956). To like a person is simply learning to anticipate positive reinforcement from that person; to dislike a person follows a similar process of developing anticipatory frustration responses (see Amsel, 1962), or of learning to anticipate punishment from that person. Other persons are therefore conceptualized as discriminable stimuli. If an individual receives some form of positive reinforcement from another individual, then this reward will elicit primary and anticipatory goal responses which according to the Hull-Spence theory (Spence, 1956), becomes conditioned to <u>all</u> discriminable stimuli present in the situation. For example, if person C provides positive reinforcement for A, then the positive attitude or anticipatory response of A for C, will also become conditioned to person B who may be standing next to C. Person B is a discriminable stimulus to A in that particular situation. Note that this theory does not necessitate an explicit relationship between B and C, other

than they are both discriminable stimuli to A in that particular situation. Note also, that the same theoretical relationship could be proposed for a situation in which C is negatively reinforcing and a negative attitude or dislike is formed by A to persons B and C.

A study by Lott and Lott (1968), demonstrated that the presence of a previously neutral person in a situation where an individual receives positive reinforcement is sufficient to elicit a positive attitude toward that person. Groups of elementary school children received a lecture on firstaid by an attractive, new female teacher. The teacher responded positively to a random half of each group during the lecture, and responded critically to the others. As predicted, rewarded children increased their liking for all the children, both rewarded and non-rewarded, significantly more than did the non-rewarded children. In terms of the triad relationship where the teacher acts as person C, it was therefore shown that A is attracted toward B (other Ss in the group) more when C rewards A, than when C does not reward A. By closer examination of the data obtained in this study, there are further implications involving the B-C relationship as well as the A-C relationship in effecting A's liking for B. In particular, non-rewarded Ss increased attraction ratings for other non-rewarded Ss more than for rewarded Ss. However, rewarded Ss increased their liking equally for both

rewarded and non-rewarded Ss. A different effect appears to operate in terms of A-B attraction depending upon whether the B-C as well as the A-C bond is positive or negative. Although the main hypothesis in this study was supported, the results appear to go beyond Lott and Lott's basic notion of the neutral third person acting simply as a discriminable stimulus.

Studies emanating from the cognitive consistency theory (Heider, 1946, 1958; Newcomb, 1953, 1956, 1959, 1960, 1961) may provide a closer examination of the process to be investigated in this study. Heider maintained that interpersonal attitudes arose from an individual's perception of a social situation which was determined by a simple cognitive configuration of that situation. These ideas are obvious extensions of some of the early Gestalt (Kohler, 1929) and the later field theory (Lewin, 1951) approaches. A large portion of the research stimulated by the cognitive consistency approach has been concerned with elements of the cognitive triadic unit consisting of two persons and an impersonal entity (X). Some of this more recent research has included studies by Taylor (1968), Brewer (1968), Rodrigues (1967) and Feather (1966). However, the concern here will be specifically with a situation in which another person (C) is substituted for the impersonal entity X, and with Heider's

sentiment bonds of like or dislike which forms the triad. Configurations consisting of three persons whose sentiment bonds are all positive in valence, or one positive and two negative, are said to be balanced. Those containing three negative, or one negative and two positive relations are said to be imbalanced. A basic assumption of the model is that imbalance creates tension within the individual who is perceiving the situation, and this tension will tend toward a balanced equilibrium by altering one or more of the perceived sentiment relations. For example, this state of tension under imbalanced cognitive units is demonstrated in a study by Festinger and Hutte (1954). It was found that:

> "...if persons in a group feel that those members of the group whom they like best dislike each other this tends to make them uncertain and unstable about their interpersonal relations in the group."

In further support of the cognitive consistency approach, Newcomb (1961), studied the effects of attraction over time with a group of male college students who lived in a "fraternity-like" setting. The study was not controlled in the strict laboratory sense, but rather Es acted as observers of the changing state of interpersonal ties and the subsequent maintenance of multiperson balance in the total group. Observations as to the nature of the basic triad unit are reported. For instance, there was a tendency for Ss to perceive perfectly balanced triads. According to Newcomb:

> "...if A's attraction toward B and toward C is high then he should perceive B's and C's attraction toward himself (A) and toward each other, as being high (p. 61)."

Furthermore, if A is highly attracted to B then he will attribute to B agreement as to attraction toward other members of the group that he (A) himself holds. These observations appear to be consistent with Heider's balance or Newcomb's "strain toward symmetry" notions.

Kogan and Tagiuri (1958), tested Heider's theory that people tend to seek balanced triadic relations and to avoid imbalanced ones. They examined two balanced and two imbalanced situations with five groups of naval enlisted personnel who had been living and working together. Each man made three positive and three negative sociometric choices as well as indicating the choices he thought the other members of the group would make. This data was compared with two baselines, one of chance expectancy, and the second of the actual level of balance present in the group structure. It was found that each S's perception of other Ss in the group tended toward a balanced configuration as compared with both baselines. Imbalanced cognitive units appeared significantly less than chance.

Often, the major concern to investigators has been with each S's perception of the balanced or imbalanced cognitive unit, and

not the actual degree of balance found by comparing the reports of each participant in the triad group. Davol (1959) found that when analyzing the actual relations in a natural setting of small groups living together, there was not complete support for the balance theory predictions as obtained by Kogan and Tagiuri. Newcomb (1961), also found a discrepancy between actual and perceived balance. In most cases, however, the balance theory predictions appear to be supported when the concern is with perceived balance.

The predictions in the current study, follow most simply from the cognitive consistency approach, even though similar predictions could have been derived from an extension of learning theory principles as discussed by Lott and Lott (1968). Specifically, the concern of this study is with balance as perceived by the individual S rather than actual group balance. Therefore, the concern is with manipulating the sentiment relations within the three person group, as these relations are perceived by person A.

The studies described above, have in most cases taken a post hoc method of investigation. For instance, Kogan and Taguiri simply ask Ss to indicate friendship choices rather than manipulating the group ties within the experimental setting. Also Ss have often been brought together within face-to-face interacting groups making it difficult for Es to maintain control on the

amount and type of information one S is likely to communicate to another S. If a tendency toward group balance is found, it is often difficult to specify exactly what variables underlie the effect. For instance, physical characteristics have been shown to have at least some consequences for interpersonal attraction (Berschied and Walster, 1969). The factors actually being measured and manipulated in these post hoc and field studies reported in the literature on three person groups are therefore uncertain. An attempt was made in this study to specifically vary attraction in the ABC triad. The A-C and B-C sentiment relations of like and dislike were varied from person A's point of view.

Since liking was both the independent and dependent variable of this study a problem remained as to how to establish or manipulate a liking bond within the three person group. Reviews of the literature in interpersonal attraction (Cartwright and Zander, 1960; Kelley and Thibaut, 1954; Lott and Lott 1965; and Bershied and Walster, 1969), report a number of studies which have varied S's perception of interpersonal relations within a small group by simply suggesting to S the nature of these relations. For example, Kelley and Shapiro (1954) and Dittes and Kelley (1956), found that if Ss were told that other members of a group rated them positively, there would be a significantly greater tendency to remain in the group and work with other members, than if negative ratings

were made. Other methods of leading S to like or dislike another individual in a group have been to lead that individual to evaluate S either positively or negatively, (Homans, 1961; Thibaut and Kelley, 1959; and Lott and Lott, 1968) or to have the individual agree or disagree with S's attitude choices (Byrne and Nelson, 1965; and Byrne and Clore, 1966).

After a successful manipulation of the A-C and B-C sentiment bonds as defined from the percepts of person A, the following predictions were made as being consistent with the balance theoretical position (See Figure 1).

1. When the A-C relation is positive or high in attraction or liking (A.1.C) and the B-C relation is positive (B.1.C) then A's liking for B will be high in comparison to both (a) the condition where the A-C relation is positive and the B-C relation is negative or low in liking (B.nl.C), and (b) the condition where the A-C relation is negative (A.nl.C) and the B-C relation is positive.
2. When the A-C relation is negative and the B-C relation is negative then A's liking for B will be high in comparison to both (a) the condition where the A-C relation is positive and the B-C relation is negative, and (b) the condition where the A-C relation is negative and the B-C relation is positive.

3. The above predictions will hold not only for A's attraction for B, but also for A's perception of B's attraction for A. For example, if the prediction states that A will be relatively highly attracted toward B, then similarly, A should see B as reciprocating this attraction.

	B. l. C	B. nl. C
A. l. C	High A-B Attraction	Low A-B Attraction
A. nl. C	Low A-B Attraction	High A-B Attraction

Figure 1. Predictions of A's liking for B and A's perception of B's liking for A under four independent conditions.

CHAPTER 2

METHOD

Subjects

To obtain a homogeneous population of Ss, both age and sex restrictions were imposed. Forty females between the ages of 17 and 23 were drawn from a first year psychology class at the University of Manitoba. All Ss volunteered for the study on the basis of the information that it was concerned with "person perception".

Experimental Design

Two experimental factors with two levels per factor were combined into a 2 x 2 factorial design with four independent groups of 10 Ss per group. The first factor, the sentiment relation between S and C was either high (A.1.C) or low (A.nl.C) in liking as perceived by S. The second factor, the sentiment relation between persons B and C was, similarly, either high (B.1.C) or low (B.nl.C) in liking as perceived by S. The arrangement of these two factors into four independent conditions is illustrated in Figure 1.

Apparatus and Scales

Two small experimental rooms located adjacent to one another

were used. In one room, a stereo tape recorder was set up such that both speakers led into the adjacent room. The two speakers were located on a table approximately four feet apart. One speaker was labelled "Person B", the other speaker was labelled "Person C". A chair was provided for S in this second room facing directly the two labelled speakers on the table. An evaluation tape consisted of two voices; Person B's voice recorded on one track and Person C's voice recorded on the other track of the stereo tape (See Appendix A).

Two scales were employed in obtaining the measure of liking. The first, consisted of 30 personality trait adjectives (see Appendix B) containing three relatively mutually exclusive categories of 10 like, 10 neutral, and 10 dislike words (Lott, Lott, and Crow, 1969). All words were arranged randomly within this Trait Scale. The second scale consisted of a 21 point straight line continuum ranging from -10 (dislike very much) to +10 (like very much) with a zero point labelled as neutral (See Appendix B). This second measure will be referred to as the Continuum Scale.

A "Cover List" used in the experimental procedure consisted of a random list of 72 personality trait words (see Appendix B) derived from the favourable end of a 543 word list reported by Anderson (1968).

Procedure

Each S was seen individually for approximately 15 minutes and was seated in the experimental room with the two speakers in direct view. Verbal instructions given by a male E, indicated that two other females the same age as S, persons B and C, who were either "really good friends" or "have known one another for quite awhile but are not very good friends at all", were seated in two separately adjoining rooms. It was further explained that persons B or C could talk to S (person A), through the appropriately labelled speaker, however, persons B and C could not talk to one another. The S was then instructed to complete the Cover List following the written instructions to check 10 - 15 words which give the "best indication of an ideal personality type" (see Appendix B). The E told S that persons B and C were filling out an identical list. Upon leaving the room, E further instructed S that "in order to save time, while you are filling out the list I will ask person B to introduce herself over the intercom." Within approximately two minutes, person B (tape recorded) introduced herself over the speaker labelled "Person B", and talked in a friendly manner for 15 seconds (see Appendix A). Upon returning, E took the completed check list informing S that "before you hear from person C, I'm going to give her your completed check list and

ask her to compare it with her own and give you some feedback." The E then left the room. Within approximately two minutes person C (tape recorded) introduced herself over the speaker labelled "Person C" and gave a negative or positive evaluation of S's personality trait choices for approximately one minute (see Appendix A). The E then returned and S was instructed to make five attraction ratings in this order:

(a) Liking for person B on the Continuum Scale.

(b) Ratings of person B on the Trait Scale.

(c) Liking for person C on the Continuum Scale.

(d) Perception of how person B would rate S on the Continuum Scale.

(e) Perception of how persons B and C would make a mutual rating of one another on the Continuum Scale.

After completing the ratings, every S was informed as to the nature of the experiment and requested to keep the information confidential.

CHAPTER 3

RESULTS

Data from the Continuum Scale were converted to positive scores from 1 to 21 by adding a constant of 11. Scores were derived from the Trait Scale by giving weights of 5 for "dislike" words, 10 for "neutral" words, and 15 for "like" words as these words were indicated in the "applies" category. The mean of the total word ratings for each S from 5 (dislike) to 15 (like).

In each of the five rating categories made by Ss at the termination of the experiment, data was subjected to a 2 x 2 analysis of variance for a fixed-effects model according to the completely randomized factorial design as indicated by Kirk (1968).

Analysis of the Independent Variables

A successful manipulation of attraction between S and C was substantiated from the Continuum Scale ratings made by S. Table 1 clearly shows a main effect ($F = 70.97$, $df = 1/36$, $p < .001$), indicating that when C evaluated S positively, then S liked C significantly more than when C evaluated S negatively. Furthermore, from Table 2 the sentiment relation between persons B and C appears to be clearly perceived by Ss. Under the B.1.C condition,

Ss rated the relationship between B and C to be significantly greater in liking than under the B.nl.C condition ($F = 27.97$, $df = 1/36$, $p < .001$). A main effect ($F = 3.43$, $df = 1/36$, $p < .10$) is also indicated in this same Continuum Scale measure which does not effect the substantiation of the independent variables, nevertheless, may be worthwhile to note. The Ss made slightly higher liking ratings of the B-C relationship under the A.1.C condition than under the A.nl.C condition.

The Dependent Measures

The first analysis of S's liking for B on the Continuum Scale failed to show any effects between the four experimental conditions. However, a significant A-C by B-C interaction ($F = 5.75$, $df = 1/36$, $p < .05$) on the Trait Scale was observed in S's liking for B (see Table 3). By a comparison among means for this case, two of the predicted effects were indicated. As hypothesized, under the A.1.C condition, S likes B significantly more under the B.1.C than the B.nl.C condition ($t = 3.34$, $df = 36$, $p < .005$). However, under the A.nl.C condition, there was no differential effect between B.1.C and B.nl.C. In further support of the hypothesis, under the B.nl.C condition S likes B more in the A.nl.C than the A.1.C condition ($t = -4.19$, $df = 36$, $p < .0005$). Again however, under the opposite B.1.C condition

no differential effect of A.nl.C and A.1.C was found. The above interaction is illustrated in Figure 2.

The Continuum Scale analysis of S's perception of B's liking for S (Table 4), demonstrates a relatively weak A-C by B-C interaction ($F = 2.94$, $df = 1/36$, $p < .10$). This interaction seems especially significant however, in that the comparison between means are in the same direction as the interaction observed above, using the Trait Scale measure of S's liking for B. By comparison between Figures 2 and 3 the similarity of the interaction effect for these two measures is apparent. Two of the hypothesized comparisons are again supported. Under the A.1.C condition, S perceives B liking S to a greater extent in the B.1.C than the B.nl.C condition as predicted ($t=2.35$, $df=36$, $p < .025$). However, no differential effect is indicated under the A.nl.C condition. Secondly, under the B.nl.C condition S perceives B liking S to a greater extent under the A.nl.C condition than the A.1.C condition as predicted ($t=-2.72$, $df=36$, $p < .01$). No differential effect is apparent under the opposite B.1.C condition.

Aside from the predicted effects, it is interesting to note that in both the Trait Scale measure of S's liking for B, and in the Continuum Scale measure of S's perception of B's liking for S, strong main effects of the A-C relationship are apparent

($F = 12.46$, $df = 1/36$, $p < .01$; $F = 4.54$, $df = 1/36$, $p < .05$ respectively). In both cases, A-B attraction from S's point of view, appears to be significantly greater when C evaluates S negatively rather than positively.

TABLE 1

Analysis of Variance Summary of the

Continuum Scale Measure of A's Liking for C

Source	Cell	Cell Means	df	MS	F
	B.1.C-A.1.C	15.70			
B-C relationship (M)			1	11.02	1.21
	B.1.C-A.nl.C	8,30			
	B.nl.C-A.1.C	17.40			
A-C relationship (N)			1	648.02	70.97 *
	B.nl.C-A.nl.C	8.70			
M x N			1	4.22	0.46
Error Within Cell			36	9.13	

* $p < .001$

TABLE 2

Analysis of Variance Summary of the

Continuum Scale Measure of A's Perception of

the B-C Relationship

Source	Cell	Cell Means	df	MS	F
	B.1.C-A.1.C	16.40			
B-C relationship (M)			1	342.23	27.97 *
	B.1.C-A.nl.C	14.80			
	B.nl.C-A.1.C	11.00			
A-C relationship (N)			1	42.02	3.43 **
	B.nl.C-A.nl.C	8.50			
M x N			1	2.02	0.17
Error Within Cell			36	12.24	

* $p < .001$

** $p < .10$

TABLE 3

Analysis of Variance Summary of the

Trait Scale Measure of A's Liking for B

Source	Cell	Cell Means	df	MS	F
	B.1.C-A.1.C	12.82			
B-C relationship (M)			1	13.32	5.41 *
	B.1.C-A.nl.C	13.38			
	B.nl.C-A.1.C	10.48			
A-C relationship (N)			1	30.70	12.46 **
	B.nl.C-A.nl.C	13.42			
M x N			1	14.16	5.75 *
Error Within Cell			36	2.46	

* $p < .05$

** $p < .01$

TABLE 4

Analysis of Variance Summary of the

Continuum Scale Measure of A's Perception of

B's Liking for A

Source	Cell	Cell Means	df	MS	F
	B.1.C-A.1.C	13.50			
B-C relationship (M)			1	24.02	2.59
	B.1.C-A.nl.C	13.90			
	B.nl.C-A.1.C	10.30			
A-C relationship (N)			1	42.02	4.54 **
	B.nl.C-A.nl.C	14.00			
M x N			1	27.23	2.94 *
Error Within Cell			36	9.26	

* $p < .10$

** $p < .05$

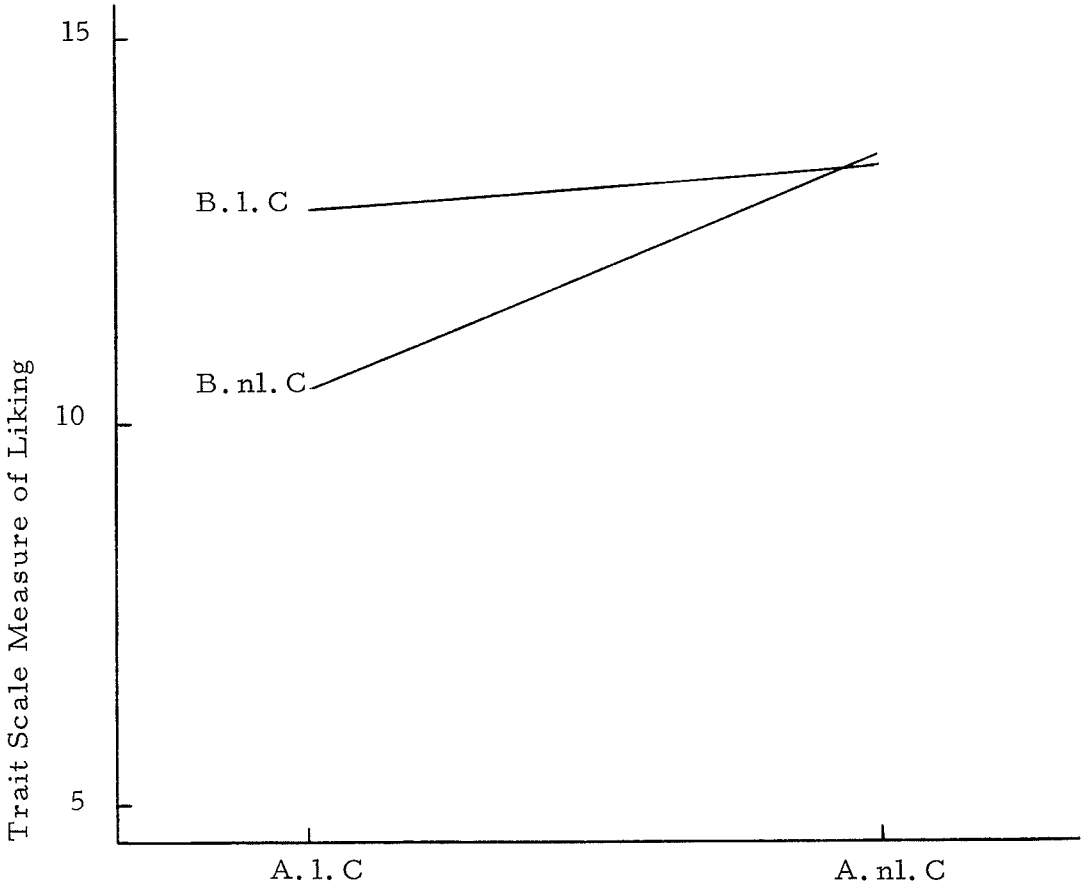

Figure 2. Effect of the A-C and B-C sentiment relations on the Trait Scale measure of A's liking for B

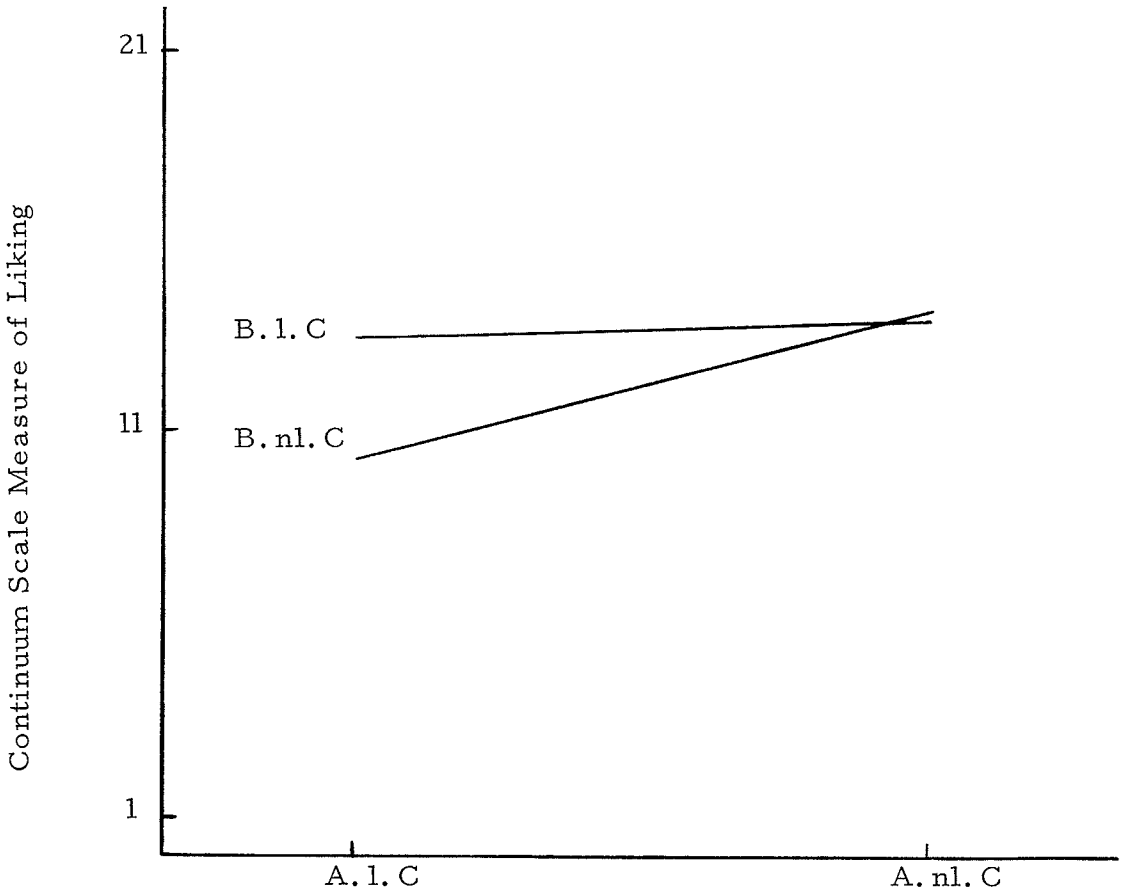

Figure 3. Effect of the A-C and B-C sentiment relations on the Continuum Scale measure of A's perception of B's liking for A

CHAPTER 4

DISCUSSION

The Independent Variables

The first concern of this study was with the independent manipulations of the A-C and B-C relations. In both cases, the manipulation appeared to be highly successful in changing S's (person A's) perception of the B-C and A-C relationships under the four experimental conditions. When C evaluated S's personality trait word choices positively, S tended to like C significantly more than when C evaluated S negatively. Similarly, when S was informed that B and C were friends, S tended to perceive the B-C relationship as significantly greater in liking than when S was told that B and C were not friends. The other main effect, that of the A-C relationship under this same measure, may be attributed both to a conditioning phenomenon as reported by Lott and Lott (1968), in combination with Heider's balance and Caplow's coalition theories. According to Lott and Lott, when S is evaluated positively by C the anticipatory goal response or positive attitude conditioned to C will be conditioned to B who is also a discriminable stimulus in the experimental setting. Therefore, by the fact that S receives a positive evaluation from C, S

will tend to like both B and C. However, according to Heider, if S likes both B and C, then S will also tend to see B and C as liking one another. This is supported by Festinger and Hutte (1954) and Newcomb (1961). Regardless of whether S is explicitly instructed that B and C are friends or not friends, there will be a tendency or "strain" under this positive evaluation condition for S to perceive B and C as liking one another. When S is evaluated negatively by C, however, and S develops a negative attitude toward both B and C, then the triad unit is likely to be imbalanced and unstable. According to balance theory, S may again tend toward perceiving B and C as liking one another regardless of the experimental instructions. According to Caplow's coalition theory however, if S did perceive a positive B-C bond, then that would put S in a precarious position since B and C could combine "forces" against their common "enemy", S The S may simply persist in viewing B and C as disliking one another in fear of being the focal enemy of B and C. Thus, S would try and preserve the unstable cognitive unit of three negative relations within the triad. In any case, it does appear that S will tend to make a higher liking rating of the B-C relationship when S is in a rewarding rather than a non-rewarding situation.

The Dependent Measures

On the Trait Scale measure of S's liking for B, Heider's balance theory predictions were substantiated in two of the four hypothesized comparisons. First, S tended to like person B more if S perceives that both of them have a mutual liking relationship with a third person (C), than if only S has a liking relationship with C (and B and C dislike one another). Second, when S perceives that two persons do not like one another, then if S has a positive relationship with one of the pair, S will tend to like the other person (B) less than if S has a negative relationship. In both of these comparisons, it is evident that S tended toward a balanced cognitive configuration of the sentiment relations in the triad unit. However, in the hypothesized comparisons made both under A.nl.C, between B.1.C and B.nl.C; and under B.1.C, between A.1.C and A.nl.C, no support for the balance theory predictions of S's liking for B was evident.

From the A-C by B-C interaction that was predicted, there should have been a completely symmetrical effect of the four comparisons, or a complete crossing of the type of trend lines as is illustrated in Figure 2. As is evident from this figure however, the B.1.C trend begins relatively high in S's liking for B under the A.1.C condition, but instead of decreasing in liking

for the A.nl.C conditions, proceeds almost parallel with the abscissa. In relation to this trend, the B.nl.C condition appears to be as predicted--starting low in liking under the A.1.C condition and increasing significantly for A.nl.C. Therefore, from a comparison with the other cells of the factorial design, the condition which appears to be causing the shift in the predicted interaction trend is the B.1.C - A.nl.C condition. In order to explain the unexpected rise in liking for this cell, which appears to contradict Heider's balance model, an extension of Caplow's coalition theory may provide some insight.

When C evaluates S negatively, in this type of experimental setting, then from S's point of view person C may be seen as higher in power and threatening to S. In order to gain an ally in this situation, S may tend to like B (and see B as liking S) regardless of whether B is friends or not friends with C. This assumption is further supported by the type of information that S receives from B in the experimental setting. For all Ss, person B has acted in a friendly or at least neutral manner, and therefore may be seen as a good coalition prospect in contrast to the negative tone of C's evaluation. In fact, S might perceive the friendly B-C relationship under the negative evaluation from C as a complimentary type of "master to slave" coalition. In order words, since S hears that B is friendly (or at least not unfriendly or

threatening) while C is a very negative and threatening type of person, then S might derive some cognitive hypothesis as to the nature of the B-C "friendly" relationship. If S perceives that B is the "slave" in this relationship, then S might also perceive that the weaker B would welcome an ally. This would lead S to like B under the B.1.C - A.nl.C condition - the exact opposite of Heider's prediction. In fact, a further and perhaps simpler explanation of S's liking for B under the B.1.C - A.nl.C condition could follow a similar argument as stated previously for S's perception of the B-C relation in the analysis of the independent manipulation. If, as Heider would predict, S tends to dislike B when B and C are friends and C and S dislike one another, then this would put S in a precarious position since B and C could form a coalition against S, their common "enemy". Note, that because of the experimental situation, S cannot escape the triad unit for new social relationships but must adjust to the situation given in the best manner possible. The possibility that S will react to the threat imposed by the situation by seeking a positive relationship with B seems a plausible alternative, even though it would create, according to Heider, an imbalanced cognitive unit.

Through informal post-experimental questioning a number of Ss in the B.1.C - A.nl.C condition expressed that even though it

was understood that B and C were friends, B seemed like a good type of person regardless of the company she kept. This rather unusual situation, at least intuitively, seems to point to an overall reaction against C's negative evaluation of S, by leading S to seek a positive relationship with the other person in the triad unit regardless of whether "cognitive balance" per se is achieved. Taylor (1968), found in his investigation of the POX balance model (or two persons discussing an impersonal entity X) that regardless of balance or unbalance in the POX unit, there appeared to be a "positivity effect" between the interpersonal relation PO. In other words, there was greater tension and less tension release in the focal person P, when the PO relation was one of disliking rather than liking. Although it is held in this study that the POX model is not completely analogous to a three person group (ABC) model, the findings obtained by Taylor may have implications for the results obtained here under the A-C dislike relation. In particular, when there is a dislike or negative relation between S and C then the tension created by this dislike in S, may override or "block" the effects of the tension created by the balanced - unbalanced ABC unit. This may lead S to respond to B regardless of balance effects yet in accordance with relieving the S-C tension of the dislike relation, by seeking a supportive liking relation with person B.

As well as indicating incomplete support for the balance predictions, the results of this study also appear to contradict the type of prediction made by Lott and Lott, in which a negative evaluation should become conditioned to all discriminable cues in the situation. According to these investigators, S should tend to dislike B when receiving a negative evaluation from C. Although interpretation of main effects tends to be non-representative due to the interaction obtained here, it is interesting to note the particularly strong main effect of S's higher liking for B, when C evaluates S negatively rather than positively. This is completely opposite to Lott and Lott's theory, and may suggest the need to consider a more cognitive type of logical decision making process when dealing with affective relations within a group.

Adding further support to the findings that were obtained in this study, is the measure of S's perception of B's liking for S. By comparing the trends illustrated in Figures 2 and 3, it should become evident that an almost exact correspondence exists between S's liking for B, and S's perception of B's liking for S under the four experimental conditions. It does appear that the factors which influence S's liking for person B, influences to an equal extent S's perception of the reciprocal relationship. That people tend to see others they like as in turn liking them has been noted by other investigators as an almost non-empirical principle

of human behavior. Certainly from the balance theoretical viewpoint, Newcomb (1961) established this finding in his field study of natural groups living together. In this study, by imposing stricter experimental controls on the liking variable per se, the reciprocity of liking notion seems to be clearly an important factor in interpersonal attraction. Also, the balance theory prediction that people will tend to like a friend of their friend more than a friend of their enemy seems to be clearly established when put to the strict controls of the laboratory setting provided in this study. Similarly, the finding that S's liked an enemy of their enemy more than an enemy of their friend adds further support to this theoretical position. On the other hand, the contradictory evidence that S's attributed no difference in liking to a friend of their enemy in contrast to an enemy of their enemy seems to indicate the need for further investigations in order to isolate the variables underlying this effect. Some measure of tension in the focal S under various conditions of dislike or negative affect in a balanced as versus an unbalanced group setting may provide some insight. Is there some cognitive bias against conditions of dislike, leading a person to seek an affiliation with another person regardless of opposing tension effects created by an unbalanced total group setting? Can a coalition theory sufficiently explain the findings obtained here, or, do both a cognitive bias notion along with the more logical

decision making process of the coalition notion combine in creating the discrepancy with the balance process? These questions can only be an indication of the direction for future research and certainly cannot be answered unequivocally from the results of this study alone. Further investigation into the effects of dislike on an individual in a social group appears to be the next step in understanding the often elusive variables underlying the attraction process.

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APPENDIX A

Tape Recorded Voice Segments

1. Person C's Positive Evaluation (approx. 1 minute in length):

Hi, my name is Joan...I really haven't had that much time to compare my ratings with yours...but sort of at a first glance they seem almost identical. I mean there is probably a couple we didn't rate the same...but overall I kind of agree with your choices. I think I would probably really like...well...even admire someone with these traits...because they don't seem... phony...if you know what I mean. I don't know...it's just like the whole general picture you get...it seems like a really good ideal.

2. Person C's Negative Evaluation (approx. 1 minute in length):

My name is Joan...I really haven't had that much time to compare my ratings with yours...but at first glance here they seem completely different. I mean there is probably a couple we rated the same...but, overall some of the ones I thought were really important you don't even mention. I don't know...it's not necessarily a particular trait that you checked...it's just the... well...sort of whole general picture I get...it seems...I don't know...rather phony. It's kind of hard to tell at a glance...I don't know...I guess I just don't like that kind of ideal.

3. Person B's Introduction (approx. 15 seconds in length):

Hi, my name is Marie...I guess I'm supposed to tell you about myself. Let's see...I'm in first year arts. ...and I volunteered for this experiment about a month ago...I guess that's all.

APPENDIX B

Experimental Scales and Cover List

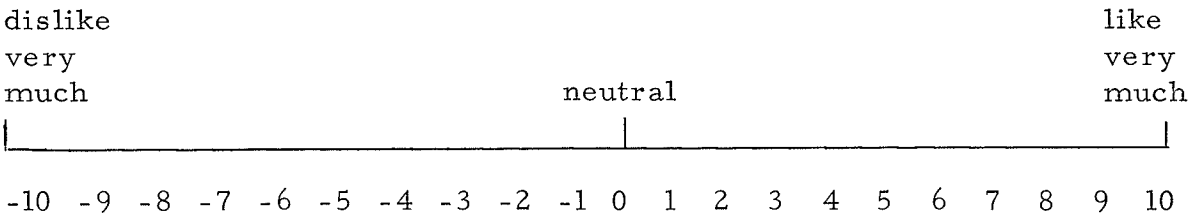
1. Trait Scale

It has been found that people develop fairly accurate "impressions" of other people, even after meeting them for a very short time. Please indicate for each word below whether it applies or does not apply to person B. Indicate your choices by a check mark (✓) in the appropriate column.

	Applies	Does Not Apply		Applies	Does Not Apply
* (N) gullible			(L) honest		
(L) trustworthy			(D) domineering		
(N) lonely			(L) observant		
(N) nervous			(D) narrow-minded		
(L) warm			(N) self-conscious		
(L) sincere			(D) quarrelsome		
(L) happy			(L) energetic		
(L) considerate			(D) fault-finding		
(L) intelligent			(N) quiet		
(D) insincere			(D) phoney		
(N) thrifty			(N) cautious		
(D) self-centered			(L) helpful		
(D) boring			(D) complaining		
(N) conformist			(N) moody		
(N) worrier			(D) envious		

* Key: L - like, N - neutral, D - dislike words. The key has been added to the scale for the purposes of this report only.

2. Continuum Scale



3. Cover List

From the following list of personality traits put a check mark (✓) beside approximately 10-15 traits which you feel are the best indication of an ideal personality type. Work quickly. Try not to ponder over any one word for too long a time.

tolerant	friendly	cooperative
loyal	logical	curious
truthful	witty	imaginative
persuasive	alert	obedient
humorous	amusing	thoughtful
kind	practical	patient
prompt	outgoing	creative
self-confident	daring	cheerful
idealistic	pleasant	proud
forgiving	self-reliant	tidy
modest	dependable	sensible
sociable	orderly	well-mannered
punctual	relaxed	courteous
careful	clever	attentive
understanding	polite	studious
frank	systematic	serious
self-critical	broad-minded	reliable
nonconforming	ambitious	efficient
unselfish	neat	confient
capable	trustful	competent
generous	enthusiastic	self-assured
talented	independent	talkative
calm	easygoing	excited
inquisitive	responsible	sentimental