THE PREDICTION OF DYADIC ADJUSTMENT ON THE BASIS OF AN ORDER FACTOR MODEL

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ABSTRACT

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This study examined the relative utilities of order factor and common factor models for circumplexes of interpersonal variables. Models of both types were considered, and it was argued that order factor models are preferable. One such model, the Ringex, was used to predict perceived dyadic adjustment on the basis of spouses' facet-profiled behavioral descriptions.

Fifty married couples participated, completing Foa's Role Behavior Test, Spanier's Dyadic Adjustment Scale, and demographic items. Spouses were asked to respond independently. It was hypothesized that emotionally accepting and rejecting behaviors, with the other (spouse) as object, would be the better predictors of dyadic adjustment. It was also hypothesized that similarity between spouses' Ringex variables would be predictive of dyadic adjustment.

These hypotheses were supported, although it was observed that the Ringex model did not adequately fit the husbands' data. Additionally, the scores of spouses on Spanier's Dyadic Adjustment Scale correlated rather modestly ($\underline{r}$ = .61).

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I wish also to acknowledge the input of the other members of my thesis committee, Professors Lucy R. Ferguson and David A. Gordon.

Special thanks is also willingly offered to one of my colleagues, Carl Chenkin, who collaborated with me during the earlier phases of the study. His very presence made the work more enjoyable.

I remain peculiarly grateful to those mentors I have not met: Sullivan, the complex interpersonal thinker, par excellence, and Louis Guttman, my idea of the truly psychologically sophisticated, truly enlightened mathematician. The written works of these two people have shaped me as a scientist more profoundly than any other discernible influence.

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INTRODUCTION

In large part, the introductory sections of this manuscript are devoted to an examination of what is popularly referred to as "the circumplex" (Carson, 1969, pp. 93-121), or circular, two-dimensional continuum of generic interpersonal themes (Leary, 1957, p. 64). Emphasis will be extended, in particular, to the developmental history of this conceptual schema. Additionally, discussion will be offered in the regard of clarifying the issue of precisely what, theoretically, mathematically, and methodologically, a circumplex might be.

As a qualifying comment perhaps worth considering before getting fully underway, the initial version of the notion, 'Circumplex' (Freedman, et al., 1951), became a part of the psychological literature some years before the formal presentation of the theoretical and mathematical derivation of the 'Circumplex', a special case of a larger, more general alternative to conventional factor analysis (Guttman, 1954a). Thus, the theoretical doctrine introduced and pursued by the Kaiser Foundation Group and associated others (Freedman, et al., 1951; LaForge, et al., 1954; LaForge and Suczek, 1955; Leary and Coffey, 1955) contains no mention of the theoretical/mathematical entity, 'Circumplex'. And, in point of fact, any similarities between the system as derived by the Kaiser Foundation Group and that proposed in a general (i.e., not necessarily interpersonal) context by Guttman (1954a, 1955, 1958), were purely coincidental. This is not to say that interpersonal modes of operation, as espoused by Freedman and the others, were (or are) not structurally organized as a circumplex. It now is clear that these early efforts culminated in the presentation of a paradigm which, technically, is adequately and accurately referred to as a circumplex (Foa, 1961, Carson, 1969, pp. 81-212). But at the time they were developing their model, there existed, formally, no definition of the 'Circumplex'.

These comments, as will be made clear later, are not intended as theoretical or intellectual hairsplitting. It is contended that the failure on the part of the majority of scientists pursuing the trend established by the Kaiser Foundation Group to fully consider what it was (and is) that Guttman (1954a) and his colleagues were (and are) about has generated confusion regarding the interpretation of the circumplex, and led to obvious limitations insofar as the extension of the theory of interpersonal psychology it concerned. As is happens, Radex Theory, of which the circumplex is one special case, is itself only a component of a much larger metatheoretic approach to psychological research (Guttman, 1954a, 1954b, 1954-1955, 1955, 1958, 1959, 1966, 1967, 1968; Foa, 1958, 1961, 1962, 1963, 1965; Levy and Guttman, 1975; Levy, 1976). Any content domain which can be structurally described as a circumplex can also be quite extensively treated in accordance with other, related, propositions in this metatheory. Much of this work has already been carried out, almost exclusively, again, by Guttman and others of his school. More will be said of these efforts at a later point, below.

Toward the end of the 1950's, and into the early part of the 1960's, Guttman's (1954a) approach acquired some popularity in this country, in the context of interpersonal psychology. Thus, Borgatta, Cottrell, and Mann (1958) present data concerning individual interaction characteristics both as simplexes and (although they neglect to emphasize it) as circumplexes. About a year later, Schaefer (1959) described a circumplex model for maternal behavior. In a subsequent extensive review of relevant literature (Schaefer, 1961), the circular schemata developed by Freedman and the others were included as examples of circumplexes. Since the time of this latter monograph, the name, 'circumplex', has apparently "stuck" (examine, for example, Carson, 1969, pp. 93-121).

It was in the interest of developing a "comprehensive schema for description of the 'total personality'" (Freedman, et al, 1951) that the first version of the interpersonal circle was formulated. In the tradition of H. S. Sullivan (1940, 1953), these investigators held, essentially, that: 1) the interpersonal domain of psychological functioning had previously been, to a large extent, ignored; and 2) in order to adequately comprehend even <u>intrapersonal</u> characteristics and operations, it is essential to examine, as well, the analogous interpersonal phenomena, and to relate these two domains to one another.

As a first step toward producing such a "comprehensive schema," the investigators generated classificational systems for interpersonal mechanisms (i.e., operations, behavioral strategies) and interpersonal traits (i.e., characteristics, action tendencies). In each case an array of 16 generic categories was presented. Each category included three subcategories of graded intensity (i.e., of mechanism or trait).

The categories within each system were organized circularly, so as to embody two principles. The first of these is that neighboring categories more closely resembled one another than non-neighboring categories. Implicit in this first presentation, although not particularly emphasized until later (LaForge and Suczek, 1955), was the hypothesis that distance around the circle's perimeter between categories is monotonically related to the similarity, or overlap, of the categories. The second principle stipulated that four nodal mechanisms or traits existed, labeled dominance, hostility, submission, and affiliation, and that the remaining twelve modes consisted of various blends of the basic four. It was hypothesized that the pairs, dominance-submission and affiliation-hostility, were sets of polar opposites, and that the dimensions formed by these pairs were relatively independent with regard to one another. The conceptual product of these principles is a circular arrangement. (The reader is encouraged to examine Figure 1, which is a reproduction of the original schema for interpersonal traits.)

The sectors of this circular schema were considered to be <u>both</u> categories and variables (Freedman, et al, 1951). That is to say, it was thought that not only could actions and action tendencies be classified according to this paradigm, but that they could also be assigned scores for all 16 sectors. Actually, two aspects of the system, even at this early stage in its development, lead quite naturally to the proposition that the sectors of the circle can be usefully considered as variables. First, each of the 16 generic sectors was further divided into ordered subcategories of varying

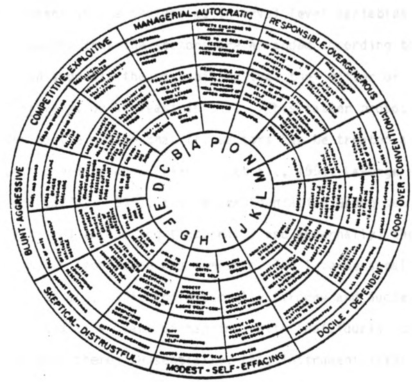


Figure 1

Early Variant of the Circumplex of the Kaiser Foundation Group intensity. This is already tantamount to asserting that each generic sector is a variable of ordinal status (Stevens, 1946). Assuming that this assertion is reasonable, minimal scaling work would lead to the establishment of the sectors as interval level variables. Second, the assumption that the sectors are arranged according to similarity or overlap suggests the possibility that they differ or are similar quantitatively, or at least in part. This latter proposition, too, contributes to the notion that the sectors can be treated as variables.

In succeeding work (LaForge, et al., 1954; LaForge and Suczek, 1955; Leary and Coffey, 1955), the Kaiser Foundation Group set about further clarifying and validating (internally and externally) their system. Of particular importance was a metric, The Interpersonal Check List (LaForge, et al., 1954; and especially LaForge and Suczek, 1955), that was developed as a means of tapping, with individuals, the 16 generic interpersonal themes (essentially, this instrument assesses interpersonal traits, or action tendencies). This test permitted the investigators to determine if their circular model was consistent with interpersonal phenomena. The circular arrangement was indeed upheld.

The final (fourth) version of The Interpersonal Check List (ICL), and that form which remains in use today, consists of 128 adjectives or short descriptive phrases.[1] Respondents are instructed to assign a value of true or false to the items, depending upon whether they feel the items do or do not, respectively, apply to an object (e.g., self, other, group of others, Father, Mother) which they have been asked to rate. Eight items represent each of the 16 generic categories (or variables). Careful and thorough scaling procedures have culminated, within each category, in one item being assigned intensity of 1 (i.e., lowest), one of intensity 4 (highest), and three items of intensity 2 and 3. Presumably, the eight items within each category form a perfect scale (Guttman, 1954a). The ICL, with items categorized and scaled according to intensity, has been reproducted in Table 1. In the current version of the ICL, items are not weighted by intensity during scoring; items assigned 'true' by respondents are merely summed within each category.[2]

With the ICL, it is possible to present summary data in a variety of ways (depending on which assumptions one is willing to make) for both individuals and groups of persons. The usual manner of presenting individual scores is as a profile, or circular "bar graph" (LaForge, et al., 1954; LaForge and Suczek, 1955). Within this format, quite often the 16 generic scores are collapsed into octant scores, since this operation doubles the number of items in each broadened category, resulting in more reliable scores.[3]

Sometimes individual data are presented as vectors in two-space, extending in 16 or 8 directions from an origin, rather than as filled sectors in a circular histogram (LaForge, et al., 1954). When this is practiced, it is then standard procedure to "extract" a centroid for the individual, and this mean vector is then interpreted as the individual's summary score. Here, it is crucial to insert a comment or two.

The treatment of data as a set of vectors in R^2 explicitly demands the assumption that the circular schema be conceptualized as an array in Euclidian space. Then, what one has, in essence, is a unit circle (at least potentially), and the usual trigonometric and analytic procedures, such as computing controids, can be applied. The investigaors'

Table 1

Form IV (Current Version) of the Interpersonal Check List

Sector A:	Sector B:
Intensity 1:	Intensity 1:
Able to give orders	Self-respecting
Intensity 2:	Intensity 2:
Forceful Good leader Likes responsibility	Independent Self-confident Self-reliant and assertive
Intensity 3:	Intensity 3:
Bossy Dominating Manages others	Boastful Proud and self-satisfied Somewhat snobbish
Intensity 4:	Intensity 4:
Dictatorial	Egotistical and conceited
Sector C:	Sector D:
Intensity 1:	Intensity 1:
Able to take care of self	Can be strict if necessary
Intensity 2:	Intensity 2:
Can be indifferent to others Businesslike Likes to compete with others	Firm but just Hard-boiled when necessary Stern but fair
Intensity 3:	Intensity 3:
Thinks only of himself Shrewd and calculating Selfish	Impatient with others' mistakes Self-seeking Sarcastic
Intensity 4:	Intensity 4:
Cold and unfeeling	Cruel and unkind

Table 1 (Continued)

Sector E:

Intensity 1:

Can be frank and honest

Intensity 2:

Critical of others
Irritable
Straightforward and direct

Intensity 3:

Outspoken
Often unfriendly
Frequently angry

Intensity 4:

Hard-hearted

Sector F:

Intensity 1:

Can complain if necessary

Intensity 2:

Often gloomy
Resents being bossed
Skeptical

Intensity 3:

Bitter
Complaining
Resentful

Intensity 4:

Rebels against everything

Sector G:

Intensity 1:

Able to doubt others

Intensity 2:

Frequently disappointed
Hard to impress
Touchy and easily hurt

Intensity 3:

Jealous
Slow to forgive a wrong
Stubborn

Intensity 4:

Distrusts everybody

Sector H:

Intensity 1:

Able to criticize self

Intensity 2:

Apologetic
Easily embarrassed
Lacks self-confidence

Intensity 3:

Self-punishing
Shy
Timid

Intensity 4:

Always ashamed of self

Table 1 (Continued)

Sector I:

Intensity 1:

Can be obedient

Intensity 2:

Usually gives in
Easily led
Modest

Intensity 3:

Passive and unaggressive
Meek
Obeys too willingly

Intensity 4:

Spineless

Sector J:

Intensity 1:

Grateful

Intensity 2:

Admires and imitates others
Often helped by others
Very respectful to authority

Intensity 3:

Dependent
Wants to be led
Hardly ever talks back

Intensity 4:

Clinging vine

Sector K:

Intensity 1:

Appreciative

Intensity 2:

Very anxious to be approved of
Accepts advice readily
Trusting and eager to please

Intensity 3:

Lets others make decisions
Easily fooled
Likes to be taken care of

Intensity 4:

Will believe anyone

Sector L:

Intensity 1:

Cooperative

Intensity 2:

Eager to get along with others
Always pleasant and agreeable
Wants everyone to like him

Intensity 3:

Too easily influenced by friends
Will confide in anyone
Wants everyone's love

Intensity 4:

Agrees with everyone

Table 1 (Continued)

Sector M:	Sector N:
Intensity 1:	Intensity 1:
Friendly	Considerate
Intensity 2:	Intensity 2:
Affectionate and understanding Sociable and neighborly Warm	Encouraging others Kind and reassuring Tender and soft-hearted
Intensity 3:	Intensity 3:
Fond of everyone Likes everybody Friendly all the time	Forgives anything Oversympathetic Too lenient with others
Intensity 4:	Intensity 4:
Loves everybody	Tries to comfort everyone
Sector O:	Sector P:
Intensity 1:	Intensity 1:
Helpful	Well thought of
Intensity 2:	Intensity 2:
Big-hearted and unselfish Enjoys taking care of others Gives freely of self	Makes a good impression Often admired Respected by others
Intensity 3:	Intensity 3:
Generous to a fault Overprotective of others Too willing to give to others	Always giving advice Acts important Tries to be too successful
Intensity 4:	Intensity 4:
Spoils people with kindness	Expects everyone to admire him

(From LaForge and Suczek, 1955, p. 100.)

decision to move in this direction (LaForge, et al, 1954, p. 139) departs from the mathematical treatment of the circumplex afforded by Guttman (1954a, 1955, 1968). Essentially, Guttman (1968) has chosen to operate in <u>nonmetric space</u>, and within his approach, Euclidian space occurs as a special case. For reasons that will be explicated later, the treatment of a circumplex as a two-dimensional plot in Euclidian space simply does not make sense. It is not that it is unfeasible, impossible, or even erroneous to do so, it is merely illogical, unnecessary, and in some circumstances, entirely misleading. For the moment, let it be sufficient to note that, as LaForge, et al asserted:

> We might think of the system as a purely ordinal array about which one specifies only that categories adjacent to a given one resemble it more than do nonadjacent categories. Or we might consider the circle to be a two-dimensional array in ordinary Euclidian space, in which case conventional trigonometric and analytic formulas relate the 16 variables (1954, p. 139).

Guttman adheres, albeit in somewhat greater depth and detail than is suggested by LaForge, et al, to the former of these two alternatives. Most of those who have worked with the circumplex have proceeded with the latter alternative.

Returning to the previous discussion, it became the accepted procedure to establish, as reference axes, the vectors extending in the directions AT (Dominating, Adoring) and LM (Loving, Cooperative), which represent the dimensions established by the nodal mechanisms, or traits.[4] Thus, in the simplest possible summary scoring, individual data were presented as vectors having two components, dominance and lovingness.

Subsequent, Related Efforts

Working independently of the Kaiser Foundation Group, Schaefer and his colleagues (Schaefer, et al., 1959; Schaefer, 1959, 1961) developed a conceptual model remarkably similar to the circular construct system discussed previously. The universe of content was "the social and emotional behavior of a mother toward an individual child" (Schaefer, 1959, p. 226). Schaefer (1961) reviewed several other, similar models, in addition to his own. One of these was that developed by those at the Kaiser Foundation. Schaefer, who had studied Guttman (1954a), concluded that all were circumplexes. All have been called circumplexes ever since.

In the earlier paper (Schaefer, 1959), variables were actually ordered according to Guttman's (1954a, pp. 324-336) criteria, and a good approximation to a circumplex emerged.[5] Schaefer also went to the trouble of factor-analyzing his data with the centroid technique. Two orthogonal factors quite adequately represented the matrix of correlations, and these were labeled Autonomy vs. Control and Love vs. Hostility. Their similarity to the findings of the Kaiser Foundation Group seemed remarkable. In his subsequent review, Schaefer (1961) demonstrated similar structures, both factorially and circumplex-wise, in data from many disparate contexts. His conclusions were that: 1) both social and emotional themes are appropriately organized as circumplexes; and 2) the important dimensions underlying these circumplexes are Love-Hostility and Autonomy-Control.

Succeeding research, almost regardless of context (so long as an interpersonal focus is maintained), has almost unequivocally supported these conclusions. Thus, Borgatta and Cottrell (1958), in studying individual interaction characteristics, were able to extract two major factors, which they labeled "Individual Assertiveness" and "Sociability." When they organized their variables about these orthogonal factors, a circular array emerged. Additionally, and interestingly, those authors also were able to order variables along (not about) these factors as simplexes (Guttman, 1954a, pp. 269-324, 1955).[6] Although this point has not been emphasized since, the existence of simplexes along these factors is reasonable, insofar as it has been assumed from the first that interpersonal features, be they mechanisms or traits, may occur in varying intensities. Demonstration that a set of variables identical in content can be ordered as a simplex explicitly permits the assertion that the variables differ only in intensity. More will be said of this later.

In a thorough review of the area, Carson (1969, pp. 93-121) has convincingly demonstrated the ubiquitous quality of the circumplex in interpersonal psychology, again, as a two-dimensional plot of ordered variables about the axes, Love-Hostility and Dominance-Submission. In this chapter, Carson has brought together many converging lines of evidence, all of which lead to versions of the same general model. On some occasions, slight differences exist with regard either to the specific variables included in the circumplex, or to the labeling of the axes, but in general, the systems are far more concordant than discordant. Carson's (1969) summary statement, which effectively captures all that has been discussed thus far, is reproduced below:

> On the whole, the conclusion seems justified that major portions of the domain of interpersonal behavior can

> profitably and reasonably accurately be conceived as involving variations on two independent, bipolar dimensions. One of these may be called a dominance-submission dimension; it includes dominant, assertive ascendant, leading, controlling (etc.) behaviors on the one hand, and submissive, retiring, obsequious, unassertive, following (etc.) behaviors on the other. The poles of the second principal dimension are perhaps best approximated by the terms hate versus love; the former includes hateful, aggressive, rejecting, punishing, attacking, disaffiliative (etc.) behaviors, while the latter includes accepting, loving, affectionate, affiliative, friendly (etc.) social actions (p. 102).

One of the investigators whose efforts have been summarized in Carson's review is Foa. As an introduction to Foa's (1958, 1961, 1962, 1963, 1964, 1965) important contributions toward the development of a coherent interpersonal theory, it is useful to further explicate a few issues implicit in the previous discussion.

Firstly, it has been stated repeatedly that interpersonal phenomena can be meaningfully represented by a circumplex, or a circular ordering of variables about a pair of major, orthogonal factors, typically labeled 'love-hate' and 'dominance-submission'. A further implication is that varibles not perfectly aligned with either of the two principal factors represent blends of these factors. And, in point of fact, brief examination of the ordering of variables in Figure 1 would seem to indicate, intuitively at least, that those variables which are not factorially univocal are legitimately deemed blends of the major factors. (That is, it seems perfectly reasonable to submit that the responsible individual, for example, is both loving and dominant.) The question may be posed, however: What, conceptually, is to be made of the notion, 'blends'?

One plausible answer for this question is summarized in Figure 2 and Table 2. First, let it be assumed that four factorially pure variables, 'love', 'hate', 'dominance', and 'submission', actually exist. Let it be further assumed that 'love' and 'hate' correlate perfectly and negatively with one another, and that the same is true of 'dominance' and 'submission'. Finally, the assumption is tendered that the two bipolar dimensions determined by 'love-hate' and 'dominance-submission' are orthogonal. All this being granted, a model is produced like the one proposed in Figure 2.A.

As indicated by the diagram, four <u>ideal</u> variables have been established in quite specific relationships with regard to one another. Using a variance component model (i.e., assuming standardization), and relying on the associated numerals rather than the variables' names, the assertions appearing in Equations 1 and 2 follow directly from the assumptions above, and from Figure 2.A.

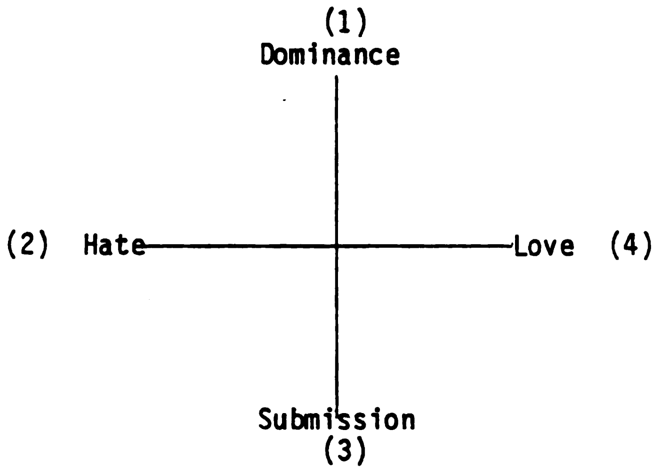
$$\sigma_1^2,\ \sigma_2^2,\ \sigma_3^2,\ \sigma_4^2 = 1.00 \qquad [1]$$

$$\begin{array}{ll} \sigma_{12} = 0.00 & \sigma_{23} = 0.00 \\ \sigma_{13} = -1.00 & \sigma_{24} = -1.00 \\ \sigma_{14} = 0.00 & \sigma_{34} = 0.00 \end{array} \qquad [2]$$

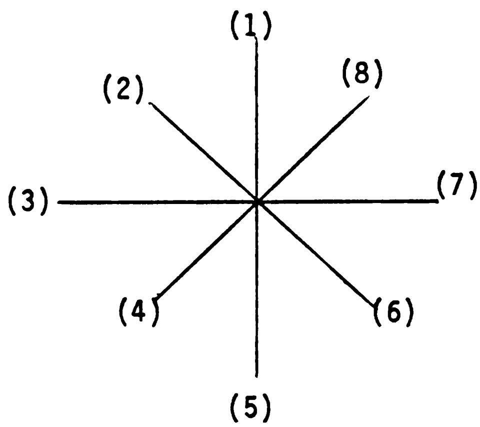
(Note: Equation 1 simply formalizes the standardization of the four ideal variables, an operation which will guarantee that they are all of variance, one.

Equation 2 stipulates the covariances among the four ideal variables. In this ideal paradigm, covariances are identical to correlations.)

From these mathematical stipulations, the covariance (or correlation, in this simple model) matrix presented in Table 2.A can be



2.A Two Factorially Pure Variables.



2.B Two Factorially Pure Variables Plus Blends.

Figure 2

Idealized Factor Model Underlying the Kaiser Group Circumplex directly generated. Based on Guttman's (1954a) criteria, this matrix represents, essentially, an extreme, or limited, case of a circumplex; i.e., a circumplex comprised of four ordered variables which are in turn made up of four ordered elementary components. Each variable, in the simplest case possible, must be comprised of exactly one such elementary component. (The reader is also directed to Note 5, and Guttman, 1955).

There is a solid reason for having established the matrix in Table 2.A as a covariance matrix, and for having discussed the entire schema in terms of a variance component model. Suppose that it is desired to introduce four additional variables, each of which is to be a perfect mixture of two of the original, ideal variables. The configuration resulting is illustrated in Figure 2.B. This sort of proposition is precisely what was being discussed previously concerning blends of factorially pure (i.e., ideal) variables.

The construction in Figure 2.B can be more formally defined, again, in terms of a variance component model, by applying the rule appearing in Equation 3. The mathematical consequences of applying this rule in the formation of the four new variables are summarized in Equation 4. For these variances (i.e., the variance of the new variables), the covariance terms will of necessity be zero, since in each case the linear combinations involve uncorrelated variables.

$$\sigma^2_{i+j} = \sigma^2_i + \sigma^2_j + 2\sigma_{ij} \qquad [3]$$

Table 2

Idealized Variance-Covariance and Correlation Matrices

Underlying the Circumplex of the Kaiser Group

2.A Correlation Matrix for Four Ordered Variables.

	(1)	(2)	(3)	(4)
(1)	1.00	0.00	-1.00	0.00
(2)	0.00	1.00	0.00	-1.00
(3)	-1.00	0.00	1.00	0.00
(4)	0.00	-1.00	0.00	1.00

2.B Variance-Covariance Matrix for Eight Ordered Variables.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	1.00	1.00	0.00	-1.00	-1.00	-1.00	0.00	1.00
(2)	1.00	2.00	1.00	0.00	-1.00	-2.00	-1.00	0.00
(3)	0.00	1.00	1.00	1.00	0.00	-1.00	-1.00	-1.00
(4)	-1.00	0.00	1.00	2.00	1.00	0.00	-1.00	-2.00
(5)	-1.00	-1.00	0.00	1.00	1.00	1.00	0.00	-1.00
(6)	-1.00	-2.00	-1.00	0.00	1.00	2.00	1.00	0.00
(7)	0.00	-1.00	-1.00	-1.00	0.00	1.00	1.00	1.00
(8)	1.00	0.00	-1.00	-2.00	-1.00	0.00	1.00	2.00

Table 2 (Continued)

2.C Correlation Matrix for Eight Ordered Variables.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	1.00	0.71	0.00	-0.71	-1.00	-0.71	0.00	0.71
(2)	0.71	1.00	0.71	0.00	-0.71	-1.00	-0.71	-1.00
(3)	0.00	0.71	1.00	0.71	0.00	-0.71	-1.00	-0.71
(4)	-0.71	0.00	0.71	1.00	0.71	0.00	-0.71	-1.00
(5)	-1.00	-0.71	0.00	0.71	1.00	0.71	0.00	-0.71
(6)	-0.71	-1.00	-0.71	0.00	0.71	1.00	0.71	0.00
(7)	0.00	-0.71	-1.00	-0.71	0.00	0.71	1.00	0.71
(8)	0.71	0.00	-0.71	-1.00	-0.71	0.00	0.71	1.00

2.D Factor Solution for Correlations Among Eight Ordered Variables.

	A	B	h^2
(1)	0.00	1.00	1.00
(2)	-0.71	0.71	1.00
(3)	-1.00	0.00	1.00
(4)	-0.71	-0.71	1.00
(5)	0.00	-1.00	1.00
(6)	0.71	-0.71	1.00
(7)	1.00	0.00	1.00
(8)	0.71	0.71	1.00
Attributable Variance	0.50	0.50	1.00

$$\sigma_5^2 = \sigma_1^2 + \sigma_2^2 + 2\sigma_{12} \qquad [4]$$

$$\sigma_6^2 = \sigma_2^2 + \sigma_3^2 + 2\sigma_{23}$$

$$\sigma_7^2 = \sigma_3^2 + \sigma_4^2 + 2\sigma_{34}$$

$$\sigma_8^2 = \sigma_4^2 + \sigma_1^2 + 2\sigma_{14}$$

(Note: For these quantities (i.e., σ_i^2, i = 5, 6, 7, 8), the covariance terms will of necessity be zero, since in each case the linear combinations are of explicitly uncorrelated variables.)

The covariance of the new variables with the original ones may be calculated by applying a second general rule, appearing in Equation 5. And, the consequences of applying this formula are summarized by Equation 6. Covariances of the new variables with one another can be similarly deduced, and statements describing this appear in Equation 7.

$$\sigma_{vw} = \sum_{i=1}^{n} \sum_{j=1}^{m} \sigma_{v_i w_j} \qquad [5]$$

(Here, v is a linear combination of n variables, i = 1, 2, . . ., n; and where w is a linear combination of m variables, j = 1, 2, . . ., m.)

$$\sigma_{51} = \sigma_{11} + \sigma_{12} = \sigma_1^2 \qquad \sigma_{61} = \sigma_{12} + \sigma_{13} = \sigma_{13} \qquad [6]$$

$$\sigma_{52} = \sigma_{12} + \sigma_{22} = \sigma_2^2 \qquad \sigma_{62} = \sigma_{22} + \sigma_{23} = \sigma_2^2$$

$$\sigma_{53} = \sigma_{13} + \sigma_{23} = \sigma_{13} \qquad \sigma_{63} = \sigma_{23} + \sigma_{33} = \sigma_3^2$$

$$\sigma_{54} = \sigma_{14} + \sigma_{24} = \sigma_{24} \qquad \sigma_{64} = \sigma_{24} + \sigma_{34} = \sigma_{24}$$

$$\sigma_{71} = \sigma_{13} + \sigma_{14} = \sigma_{13} \qquad \sigma_{81} = \sigma_{11} + \sigma_{14} = \sigma_1^2$$

$$\sigma_{72} = \sigma_{23} + \sigma_{24} = \sigma_{24} \qquad \sigma_{82} = \sigma_{12} + \sigma_{24} = \sigma_{24}$$

$$\sigma_{73} = \sigma_{33} + \sigma_{34} = \sigma_3^2 \qquad \sigma_{83} = \sigma_{13} + \sigma_{14} = \sigma_{13}$$

$$\sigma_{74} = \sigma_{34} + \sigma_{44} = \sigma_4^2 \qquad \sigma_{84} = \sigma_{14} + \sigma_{44} = \sigma_4^2$$

$$\begin{aligned} \sigma_{56} &= \sigma_{12} + \sigma_{13} \\ \sigma_{57} &= \sigma_{13} + \sigma_{24} \\ \sigma_{58} &= \sigma_{14} + \sigma_{12} \\ \sigma_{67} &= \sigma_{23} + \sigma_{34} \\ \sigma_{68} &= \sigma_{24} + \sigma_{31} \\ \sigma_{78} &= \sigma_{34} + \sigma_{14} \end{aligned} \tag{7}$$

The values resulting from an application of these rules are included in Tables 2.B and 2.C, the former being a variance-covariance matrix, and the latter being the associated correlation matrix. In both tables variables have been ordered as would be appropriate for a circumplex.

It is important to point out that in the variance-covariance matrix, the newer four variables have been treated as linear composites of the original variables, and have consequently not yet been standardized. For this reason, the characteristic circumplex pattern is not readily obvious. (The pattern would have been clearer had the newer variables been treated as weighted combinations of the original variables, but there exists no theoretical basis for preferring such an approach over the one employed here.)

In the correlation matrix, however, it is clear that the variables describe a perfect circumplex. In each row or column, the order has neither beginning nor end, and each succeeding row or column exhibits precisely the same patterning as its predecessor, the sole difference being that the values have "advanced" one step. Two additional comments will complete the current discussion.

The first comment concerns the results of factoring the correlation matrix in Table 2.C.[7] The results of a simple, centroid factor analysis with two orthogonal factors has been reproduced in Table 2.D. As can be readily seen, these two factors satisfactorily account for the matrix of correlations (which is to be expected, given that the matrix was built with ideal specifications in mind). The factors were rotated so as to guarantee that they would coincide with the dimensions defined by the pairs of variables, 'love-hate' and 'dominance-submission'.

As is very clearly indicated, each variable can be perfectly reproduced as a linear combination of the two underlying factors. Moreover, these factors meet the criteria for simple structure (i.e., "fit" the "data" nicely). Should it be considered desirable for one reason or another, the factors can very reasonably be labeled, 'lovingness' or 'love-hate' (A) and 'dominance' or 'dominance-submissiveness' (B). That is to say, since the originally paired, ideal variables load equally (perfectly) and inversely (with regard to one another) on the factors, it can be convincingly argued that bipolar dimensions exist.

As is also quite obvious, the remaining four variables can now legitimately be referred to and conceptualized as perfectly even, linear blends of the four ideal variables.

The final comment is that even more variables may be added to the eight-variable array in Figure 2.B. These also may be characterized as blends of already defined variables, although in this case it will be necessary to appeal to more complicated theoretical propositions concerning their composition. That is, they will require being defined as either blends of factorially pure and factorially complex variables already existing, or some reasonable strategy for weighting the factorially pure variables before combining them such that the weights are unequal will be needed to be derived. If the simple, unweighted (or equally weighted) variance component model is adhered to, then it could be argued that additional variables exist as linear combinations involving both primary, ideal and previously derived variables. Thus, for example, a variable '9' might consist of variables '1' and '5' combined, and so on. Expanding the array to the next logical order of complexity, there would exist a complement of 16 variables in the circumplex. The same two factors would, of course, adequately (indeed, completely) represent the array, since <u>all</u> variables so derived would necessarily remain in Euclidean two-space.[8]

The models presented in the various parts of Figure 2, Table 2, and the associated discussion fairly accurately and completely summarize most of the theoretical consideration which has been given the circumplex (e.g., LaForge, et al., 1954; Schaefer, 1959, 1961; Carson, 1969, pp. 93-121). 'Blends', in this conceptual representation, are thought of as simple linear combinations of more fundamental or "nodal" (Freedman and Leary, 1951, p. 150) variables.

Is all this an adequate or a sufficient answer to the question posed originally? Do there exist alternate answers that have not yet been considered? It is contended here that both of these latter questions may be answered affirmatively. That is, the model outlined and discussed above (and "bought into" by the majority of researchers and theorists) seems adequate. But, there exist alternate models that account for the circumplex. It will next be undertaken to examine one such alternate model and the thinking behind it, with the eventual intention of comparing it with the one summarized above. The model of interest here is that which has been proposed by Foa (1958, 1961, 1963, 1964, 1965, 1966), and summarized by Carson (1969, pp. 113-115).

An Alternate Model for the Circumplex

Before getting completely immersed in Foa's approach, it is noted that he actually developed two distinct circumplex models (Foa, 1961, 1962). Insofar as the earlier circumplex models (e.g., LaForge and Suczek, 1955) are concerned, Foa's disparate models pose no inconsistency. They are in fact, however, to a minor degree inconsistent with regard to one another. Moreover, the very fact that two alternate models, based on the same theoretic propositions, exist, tends to be somewhat confusing. To minimize this confusion, the general approach, independent of Foa's rather confusing specifics, will be discussed first. Following this, his two models will be outlined, compared, and related to the earlier versions of the circumplex.

Also, Foa's efforts were explicitly based on Guttman's (1954a) definition of, and tenets concerning, the circumplex. Thus, much of what is introduced next requires some understanding of the material concerning the mathematical treatment of the circumplex and facet theory.

I begin with the argument that there is interest in studying, in detail, the domain of dyadic interpersonal behavior (actually, interpersonal traits, attitudes, or beliefs will do just as well, but for the moment, the focus will be held on behavior). It is useful to stipulate those aspects or features of interpersonal behavior which appear necessary and sufficient for defining this domain, or rather, any events which occur or exist in this domain. With this in mind, it is posited that any act one individual emits in the presence of and <u>aimed to involve</u> the other will explicitly or implicitly establish the following: a) the status of the two individuals involved; b) the type of affiliation involved; c) the object of the action or behavior. By 'status', here, is meant, roughly, dominance or submission; by 'type of affiliation' is meant love or hostility; by 'object' is meant self or other. If each of these three features is permitted to remain dichotomized, they can be combined into what Foa (1961) has called "profiles." These are listed below (Foa, 1961, p. 348):

(1) Hostility expressed toward self;

(2) Submission expressed toward self;

(3) Dominance expressed toward other;

(4) Hostility expressed toward other;

(5) Love expressed toward self;

(6) Dominance expressed toward self;

(7) Submission expressed toward other;

(8) Love expressed toward other.

(Note: Foa does not include the term, 'expressed.' I believe this renders the profiles more comprehensible.)

Foa (1961) has rephrased these profiles, upon noting that: 1) in each case the self or other is either accepted or rejected; and 2) status and affiliation may be redefined as social and emotional, respectively. The profiles, thus altered, appear below:

(1) Rejection of self, emotional;

(2) Rejection of self, social;

(3) Rejection of other, social;

(4) Rejection of other, emotional;

(5) Acceptance of self, emotional;

(6) Acceptance of self, social;

(7) Acceptance of other, social;

(8) Acceptance of other, emotional.

This succinct notation is intended to convey the conceptualization of interpersonal behavior as consisting of the Cartesian product of three dichotomous facets, content (acceptance or rejection), object (self or other), and mode (social or emotional).[9]

Symbolically, the consequences of this facet analysis may be expressed as follows:

let A = Content, where a_1 = acceptance, and a_2 = rejection;

let B = object, where b_1 = self, and b_2 = other;

let C = mode, where c_1 = social, and c_2 = emotional.

And, the facets may consequently be symbolically represented as sets of elementary components:

$A = (a_1, a_2)$;

$B = (b_1, b_2)$;

$C = (c_1, c_2)$.

The Cartesian product set, ABC, of profiles, may be similarly defined as below;

(1) (a_2, b_1, c_2);

(2) (a_2, b_1, c_1);

(3) (a_2, b_2, c_1);

(4) (a_2, b_2, c_2);

(5) (a_1, b_1, c_2);

(6) (a_1, b_1, c_1);

(7) (a_1, b_2, c_1);

(8) (a_1, b_2, c_2).

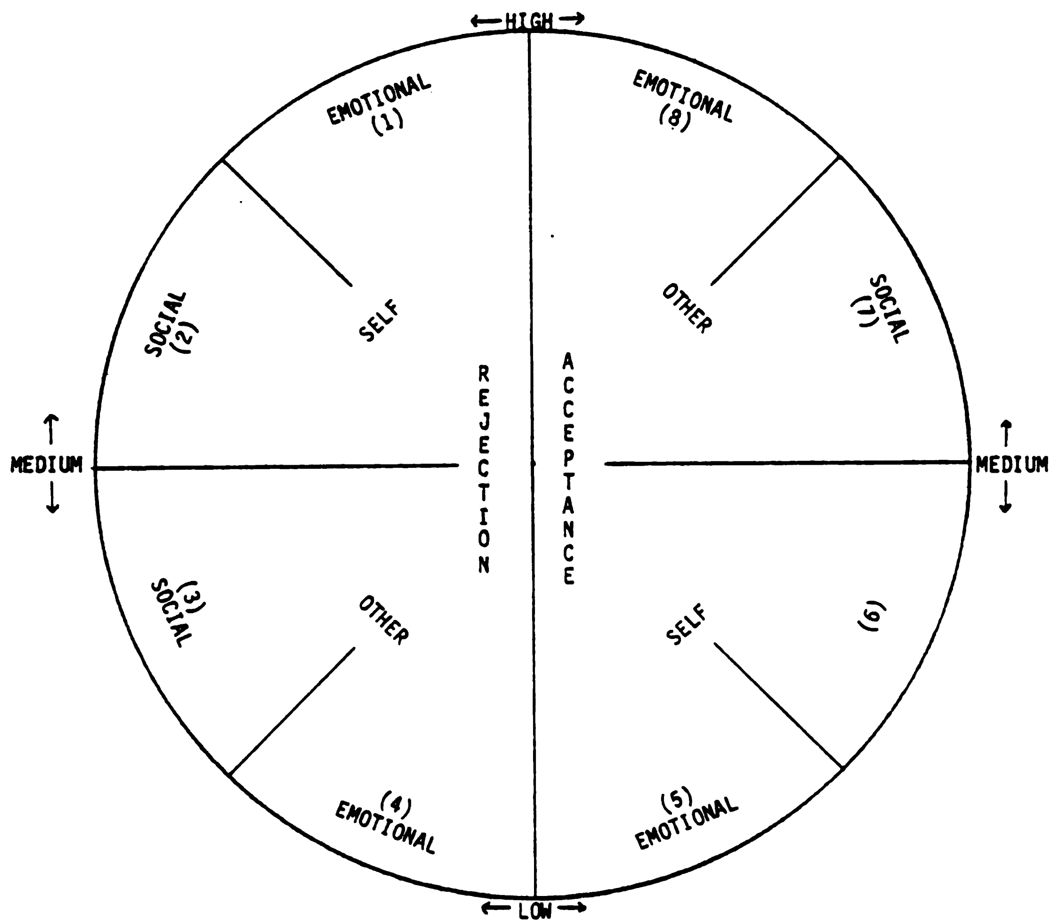
Technically (Guttman, 1954-1955, 1958), these eight profiles qualify as variables, and were so treated in Foa's (1962) later model. Here, they will be treated both as variables, and as sets of second-order elementary components.[10] The explanation for this differential consideration will be clarified later.

Given three dichotomous facets, the full Cartesian product set will specify 2^3, or eight variables. The next step in the facet analysis is to stipulate, from a theoretical perspective, what the structural arrangement of the variables might be. This, in turn, requires that certain assumptions be made regarding the facets. The type of structure hypothesized will depend on the nature of the assumptions one is willing to make.

In his model, Foa (1961) has assumed that all three are polarizing facets (see Levy and Guttman, 1975).[11] Additionally, primacy has been assigned to facet A, with facets B and C being secondary and tertiary, respectively. Essentially, the theoretical justification for establishing this ordering of facets is that facet A is least complex, facet C is most complex, and facet B lies somewhere in between.[12] This being the case, the facets will be nested: within the concepts of acceptance and rejection, self and other will appear, and within self and other, social and emotional will appear.

These assumptions have been adhered to in the foregoing presentation of the facets and profiles. Furthermore, the facets may be arranged as a diagram in conceptual space like the one in Figure 3.A.

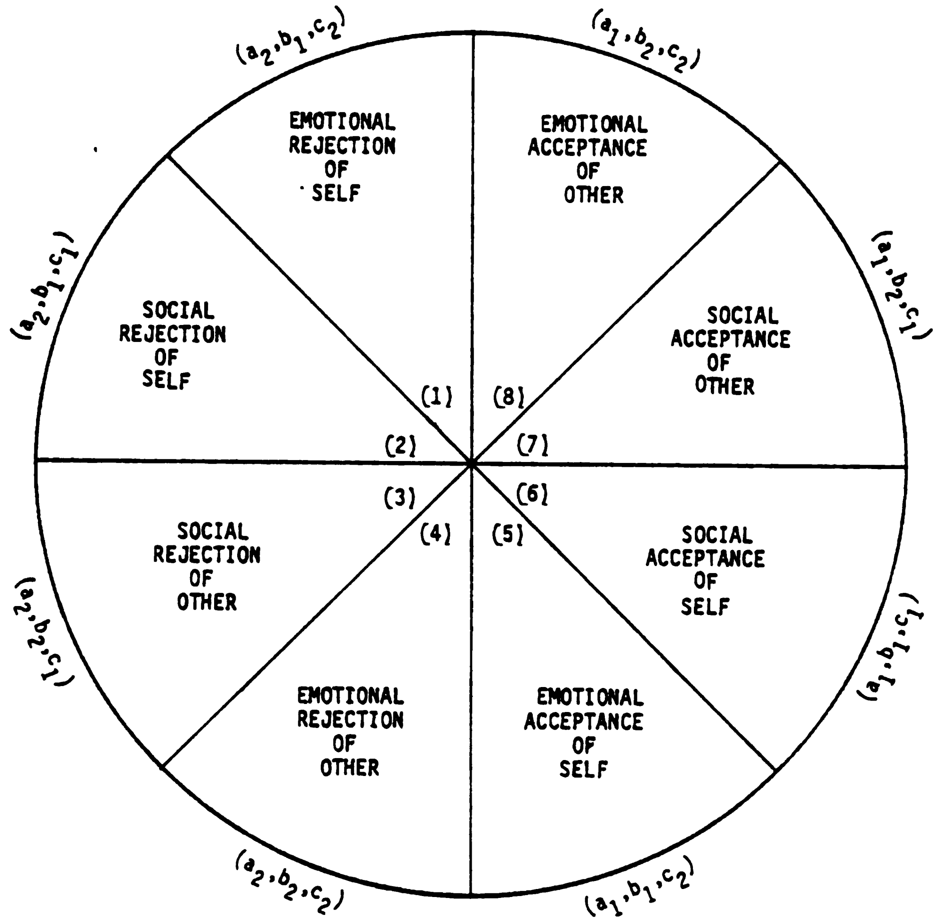
When considered by quadrant, ordering of the profiles differing with regard to facet C is of no importance. Likewise, when considered by semicircle, ordering with regard to facet B is of no importance. Ordering with regard to facet A will always be arbitrary so long as: 1) it is given primacy, and 2) it is construed as a polorizing facet (both constraints being congruent with the assumptions, above). When the whole circle is considered, then decisions concerning ordering of facets B and C within facet A are required. In his early model, Foa (1961) accomplishes this with the additional assumption that profiles are of varying intensity (i.e., as experienced within the individual). He contends that: 1) rejection of the self is stronger or more intense than rejection of the other, and acceptance of the other is more intense than acceptance of the self; 2) for the self, emotional rejection is more intense than social rejection, and social acceptance more intense than emotional acceptance; and 3) for the other, social rejection is more intense than emotional rejection, and emotional acceptance is more



3.A Presented as a Conceptual Diagram.

Figure 3

Conceptual Diagrams of Foa's Behavioral Circumplex



3.B Presented as a Circumplex.

Figure 3 (Continued)

intense than social acceptance (Foa, 1961, p. 349). He points out that this assumption may vary across cultures (i.e., the phenomenology may differ). In the diagram in Figure 3.A intensity has been indicated outside the circle. Another diagram appears in Figure 3.B, in which the profile names and facet compositions have been included. As can be easily seen, adjacent octants are contiguous along two of the three facets. A couple of comments may be fruitfully inserted here.

First of all, given Foa's assumptions, variables defined by the individual profiles ought to arrange themselves as a circumplex. That is, adjacent profiles are contiguous in two facets and are similar in terms of intensity, and as a consequence, variables defined on the basis of profile content ought to manifest a pattern of intercorrelations which determines a circumplex. Second, and more pertinent in light of what will be discussed immediately below, the ordered profiles may themselves be considered as elementary components of composite variables. As it happens, it is Foa's (1961, p. 351) contention that the original (i.e., Kaiser Group) circumplex is a concatenation of ordered variables which are composites of Foa's profiles, as outlined here.

A third important observation is that for variables which are composites of elementary components (i.e., profiles) to be assembled as a circumplex, certain criteria regarding their composition must be met. These criteria may be summarized as follows (Foa, 1961, pp. 346-347):

First, a progressive ordering of the elementary components which contribute to the variables must exist. This is exemplified in Table 3, where there are four variables and four dichotomous facets. Each variable is composed of level one of two facets and level two of two facets. The progressive nature of the ordering has been emphasized by placing lines parallel to one of the main diagonals (in this case, the southwest-northeast diagonal). Notice that the progressive ordering has no beginning and no end. Formally, all this requirement demands is that some variables be more similar in makeup with regard to one another than be others.[13]

Second, the contiguity principle (Foa, 1958) must hold. Quite simply stated, this means that the relationships among variables will be monotonely associated with their similarity in facet structure. Thus, variables highly similar in facet structure will correlate more substantially than will variables less similar.

The final criterion is perhaps the most obscure. It states that for variables which adhere to criteria 1 and 2 to manifest a circumplex ordering, it is necessary, too, that the facets be arranged as a circumplexes.[14]

Returning now to the discussion at hand, Foa (1961) garnered no empirical support for the notion that his ordered profiles formed a circumplex. What he did, instead, was to demonstrate how the profiles, construed as second-order elementary components, might function in producing the variables included in the circumplex presented by the Kaiser Group. The diagram used to summarize his arguments in this regard has been reproduced in Table 4.

It is clear that this matrix meets criteria 1 and 2 (above). For criterion 3, one cannot be certain, since at the time this model

Table 3

Facet Structure Required for a Circumplex to Exist

Variable	Facet			
	A	B	C	D
(1)	a_1	b_1	c_2	d_2
(2)	a_1	b_2	c_2	d_1
(3)	a_2	b_2	c_1	d_1
(4)	a_2	b_1	c_1	d_2

(From Foa, 1961, p. 346)

Table 4

Hypothetical Relationship Between Foa's Facet Structure
and the Kaiser Group's Circumplex

	EMOTIONAL REJECTION OF SELF	SOCIAL REJECTION OF SELF	SOCIAL REJECTION OF OTHER	EMOTIONAL REJECTION OF OTHER	EMOTIONAL ACCEPTANCE OF SELF	SOCIAL ACCEPTANCE OF SELF	SOCIAL ACCEPTANCE OF OTHER	EMOTIONAL ACCEPTANCE OF OTHER
MANAGERIAL-AUTOCRATIC			X	X	X	X		
COMPETITIVE-NARCISSISTIC		X	X	X	X			
AGGRESSIVE-SADISTIC	X	X	X	X				
REBELLIOUS-DISTRUSTFUL	X	X	X					X
SELF-EFFACING-MASOCHISTIC	X	X					X	X
DOCILE-DEPENDENT	X					X	X	X
COOPERATIVE-OVERCONVENTIONAL					X	X	X	X
RESPONSIBLE-HYPERNORMAL				X	X	X	X	

was developed, no empirical support existed for the hypothesis that the eight profiles, as ordered here, actually form a circumplex. Rather, Foa's reasoning would seem to have gained post hoc support, in that the variables defined and ordered by the Kaiser Group did produce a circumplex. Again, several comments are called for.

First, it is interesting to note that the variables organized by the Kaiser Group each contain components regarding <u>both</u> the self <u>and</u> the other. Thus, a rebellious-distrustful behavior, or the trait underlying it, contains emotional and social rejection of the self, social rejection of the other, and emotional acceptance of the other. The implication here is that <u>any</u> interpersonal behavior, or interpersonally expressible trait, impacts upon <u>both</u> persons who are in the relation (or interaction) with one another.

A second point pertains to the relationship between the factorial structure of the Kaiser Group circumplex and the structure proposed by Foa's ordering of profiles. To explicate this issue, the diagram in Figure 4 has been constructed to illustrate both the variables generated by the Kaiser Group and their proposed structure in terms of elementary components (or profiles).

In this diagram, variables have not been plotted as vectors with a common origin, but rather have been presented as components or sectors in pie-graph form. The associated set of vectors would occur, theoretically, as centroids within the eight sectors.

Recapitulating, since the discussion began with a set of ordered profiles in two-space, linear combinations of those profiles will of necessity remain in two-space. Or, linear combinations of variables

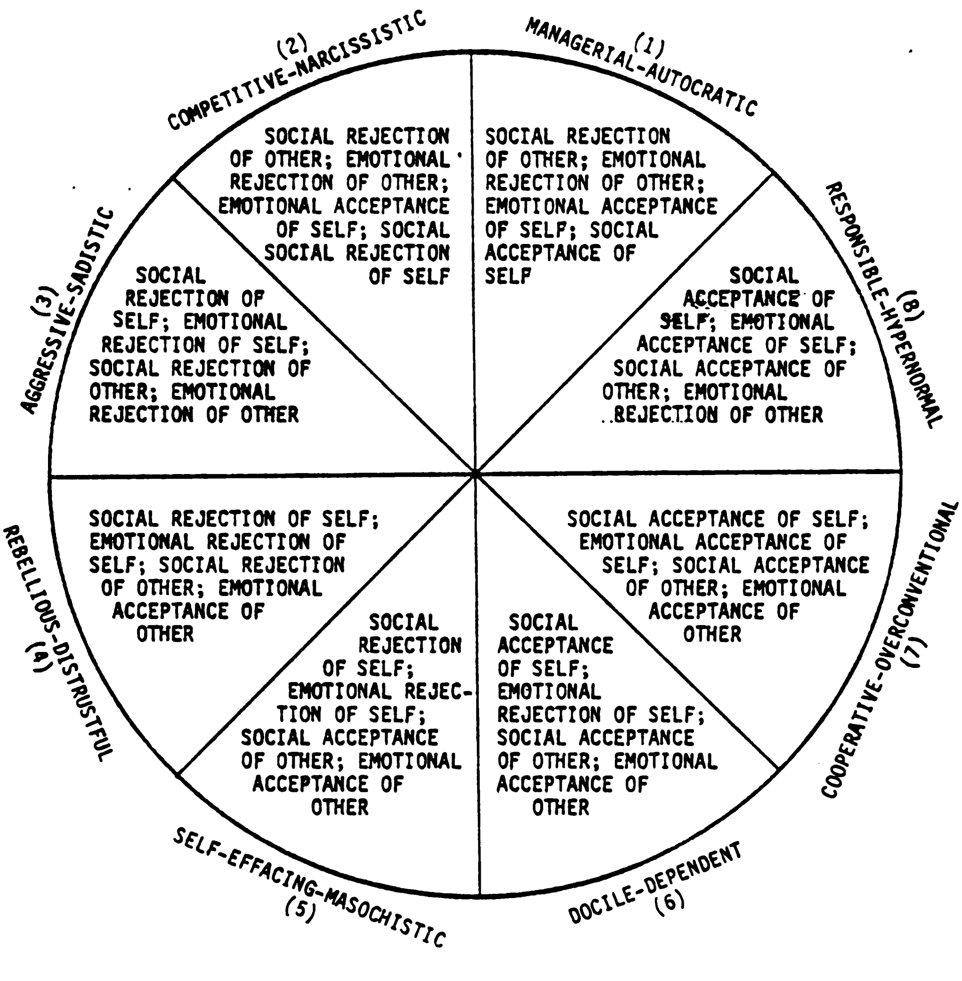


Figure 4

One Proposed Association Between the Circumplexes of the Kaiser Group and of Foa arranging themselves as a circumplex will, if the rules of combination outlined above are adhered to, result in the formation of other circumplexes.[15] And, given that a circumplex array of variables in two-space is retained, then it is guaranteed that two orthogonal factors (or axes) will quite adequately describe the array. Developing the circumplex of the Kaiser Group in this manner, however, leaves several problems concerning the selection and labeling of factors.

First, it is crucial to remember that this discussion explicitly began by stipulating those structural components which were thought theoretically relevant to the realm of interpersonal phenomena. I speak here of the original three facets. By lawfully combining the facets, the eight profiles were created, which in turn were (again, lawfully) combined to produce the current set of variables. Thus, the underlying structure of the variables is <u>already</u> clearly described. It can be argued that if the theoretical presentation is acceptable (or intuitively reasonable), and furthermore, if the current, second-order variables <u>empirically</u> arrange themselves as a circumplex, then it is unnecessary, redundant, and even theoretically misleading to attempt to redefine the underlying structure of the model with centroid or principal components factors.[16]

A second problem which obtains here is that given these theoretical underpinnings, it may prove exceedingly difficult to provide an intuitively appealing rotation and labeling of a pair of orthogonal factors, even if it was decided to proceed with conventional factoring. That is to say, in the current model, no variables or subclusters of variables would appear particularly more primary (or pure) than would others.

Again, the "problem" is that the underlying structure of the variables has already been described in a more elemental, or molecular, way than is possible with factor analysis.

The third and final difficulty which will be mentioned here is really best thought of as another way of commenting on the previous two problems. Factors may be understood as linear combinations of variables. Just as easily, variables may be defined as linear combinations of factors. In psychological research, the latter assertion is championed, the former ignored, letting, it may be supposed, the computing procedures "worry" about it. Now this is well-grounded so long as: 1) an acceptable theoretical account can be provided for the overlap or communality among clustered variables; and 2) a legitimate theoretical explanation can be produced, permitting "in-between" variables to be linear combinations of factors. The first model presented explicitly permits this, because the "escape clause" of the two underlying dimensions, 'love-hate' and 'dominance-submission' was designed into it. Then, additional variables could be conceptualized in a theoretically sound manner as being additive mixtures of these two pure dimensions. However, the second model contains no theoretically pure variables. All variables are posited to be comprised of several more elementary components, which cannot be fully _theoretically_ accounted for by any pair of simple, orthogonal factors. Moreover, it is overlap or commonness with regard to _facet_ structure, and not orthogonal _factor_ structure, which will provide a theoretical explanation for the ordering of the variables. There _are_ no variables more or less pure than any others; there _are_ no heterogeneous variables which can legitimately be interpreted as mixtures of orthogonal factors. For an adequate interpretation of the variables it is literally compulsory to resort to discussion of the profiles involved, and ultimately, discussion of the facets themselves.

At the root of the three theoretical problems posed and discussed here lies the philosophical issue of parsimony. Quite admittedly, in this particular situation, a facet-based decomposition (or, more accurately, composition) of variables is not as parsimonious as a factor-based decomposition. In general, this is characteristic of facet-designs; if a set of simple structural hypotheses is a desirable outcome of data analysis, there will usually exist a simpler such set than the set of facets. As will be shown in much greater clarity later, this is because some facets are more primary than are others, and the less primary, or less impactful, facets tend to get lost in the shuffle of factor analysis.[17] In the parlance of correlation, the less "important" facets tend to "account for less variance." Essentially, the decision is recumbent on the investigator as to whether parsimony is a more crucial goal than is a comprehensive theoretical understanding. The progenitors of Facet Theory contend that it is not (Guttman, 1954a), and hold, moreover, that the parsimonious account of a data set rendered possible vis-a-vis conventional factor analysis guarantees that: 1) a more subtle, complex model will be thus brutalized; and 2) valuable theoretic information will be plainly discarded. In briefest form, their agrument is that the simplification of data beyond the extent specified by a facet design is unreasonable and meaningless.[18]

It is my own observation that the vehemence with which this argument is presented begins to sound a little fervently religious. It is well to remember that neither conventional factor analysis nor facet analysis and design are <u>inherently</u> magical in nature. I emphasize 'inherently', because both can, in effect, be rendered magical by the thoughts and beliefs held about them. This, in turn, can lead to rather emotional and dogmatic assertions regarding them. In point of fact, these two techniques are merely alternate means of conceptualizing, presenting, and discussing one's data. They are theoretically and mathematically distinct, but not perfectly so. Orthogonal factors are linear combinations of variables, which are elements of product sets of facets. Assuming that linear relationships exist between facets and variables, then factors are linear combinations of facets. Moreover, if those facets chosen in a given design are reasonably impactful ones, then generally a subsequent factor analysis of data based on the design will not lead to contradictory results. Factors, that is, will tend to coincide with facets. In fact, the hypothesis can be generated, and evaluated via factor analysis, that a number of factors equal to the number of facets will be necessary and sufficient to represent the data. On the bottom line is the point that clear, solid data collected in accordance with a reasonable facet design, will not be distorted or made meaningless by factor analysis. If the facet structure is supported <u>at all</u> by the data, then even a "blind factor analysis" will show its existence.

This last point will not permit the investigator to excuse her or himself from conducting an a priori facet analysis of the content domain he or she is interested in. Phrased more penetratingly, the facet structure may indeed be supported by a "blind" factor analysis, but it is likely to be a rare occasion upon which a "blind" design, followed up with a "blind" factor analysis, will lead unerringly back to positing a useful facet structure. This argument is identical to contending that a coherent data analysis is always preceded by a theory-based content analysis of the phenomena of interest. And, a facet analysis is one possible approach to content-analyzing a domain of interest. In the absence of an a priori content, e.g., facet, analysis, a subsequent factor analysis will, at best, ambiguously summarize a carelessly selected array of variables. More subtle facets are highly likely to be lost or ignored in the results of such an approach. Too, more than a single facet are likely to be involved in a factor given only one label, especially if factors are rotated to simple structure.

To summarize then, it may be said that a conventional factor analysis is, at worst, an alternate means of examining one's data. At best, a conventional factor analysis may serve as a confirmation of structural hypotheses regarding one's data. Neither of these statements, however, is reasonable unless a theory-based content analysis of one's domain of interest precedes data collection and factor analysis.

At this point, a deeper consideration of Foa's (1961) account of the circumplex proposed by The Kaiser Group is in order. The underlying facet structure permits an observation of the effects of any interpersonal behavior, or interpersonally expressed trait, on both of the persons involved (assuming dyadic relationships). One of the consequences of this is that it is easy to hypothesize which interpersonal mechanisms will tend to complement, and which frustrate, one another. As an example, sector '1' behavior on the part of one person will tend to "pull" sector '5' behavior from the other. That is to say, if person A socially and emotionally rejects person B and socially and emotionally accepts person A, then person B, in order to validate the action of person A, will socially and emotionally accept person A, and socially and emotionally reject person B. To a greater or lesser extent, any other operation on the part of person B will invalidate person A's structuring of the interaction, or will at least tend to restructure the interaction. Should person B choose an interpersonal mechanism other than sector 5, then person A will be compelled either to react by validating person B, or by further restructuring the interaction.

It is noted that the arrangement of the sectors as they appear here suggests that were axes drawn coinciding with sectors 1 and 5, and sectors 3 and 7, then validation of interpersonal mechanisms could be considered a matter of inverse, complementary, or reciprocal operations relative to the 1-5 axis, and identical, or symmetric operations relative to the 3-5 axis. Indeed, this notion has been much commented upon (Carson, 1969, p. 112), although not unequivocally supported (Freedman, 1979, unpublished doctoral dissertation). A comment is germane in regard to this issue.

Typically the statement has been made that interpersonal operations which validate one another are complementary with regard to dominance-submission, and symmetric with regard to love-hate. And, if the current point was discussed about the framework of the first model presented, then indeed this would seem to be the case. Given a facet-based consideration, like that included in the second model, however, this point is somewhat simpler, and perhaps, more theoretically gratifying. To wit: interpersonal operations which validate one another differ <u>only</u> in terms of self and other (i.e., object), and remain identical in <u>every other regard</u>. That is, a validating interpersonal operation will shift along a self-other dimension, but the content (i.e., acceptance or rejection) and context (i.e., emotional or social) associated with <u>each person</u> in the system will remain unchanged. If person A rejects her or himself, but accepts person B, then to validate this operation, person B must reject person A and accept her or himself. The actor and object will change, but the sentiments affixed to the persons by the operations will not. In the present system, the previous two-axis interpretation involving complementarity (relative to dominance-submission) and symmetry (relative to love-hate) can be put aside in favor of a simpler system involving only consistency of expression across actors and observers. This discussion makes no assumptions regarding relationships between interpersonal consistency and affinity. Here it has been undertaken to demonstrate that Foa's model renders these principles somewhat more coherent than was previously true.

A second intriguing aspect of this model is that the behavioral "types" or mechanisms posited by The Kaiser Group can now be much more clearly interpreted with regard to their <u>interpersonal dynamics</u>. Thus, Foa's (1961) design permits an explicit statement about what is involved, interpersonally, in the mechanism, for example, of competitive-narcissistic behavior. Moreover, this mechanism cannot only be meaningfully contrasted with its complement, docile-dependent behavior, but can also be compared with other mechanisms. Foa's design also makes it quite obvious how the various sectors in the circumplex are ordered in accordance with their underlying structural similarity. Adjacent sectors differ in only a single component, opposing sectors differ in all components (i.e., actor and object are reversed), and so on.

As a third matter of importance in relating the Foa model to that of The Kaiser Group, it is essential to discuss what the facet structure of the dimensions 'dominance-submission' and 'love-hate' might be. To recapitulate, 'love-hate' exists as a dimension roughly coinciding with sectors 3 and 7, while 'dominance-submission' exists orthogonal to 'love-hate', or in sectors 1 and 5. Structurally, love is defined as the acceptance of both persons in both contexts; hate, the opposing pole, is defined as the rejection of both persons in both contexts. Dominance is structurally defined as self-acceptance and other-rejection, again in both contexts; submission is comprised of self-rejection and other-acceptance, in both contexts as well. The distinction between love and hate is straightforward, in that the facet of content varies perfectly (or entirely) across both other facets. If wished, this distinction could be referred to as the "main effect" for content, since the remaining two facets are effectively "held constant."

The distinction between dominance and submission is less clear than the previous one, and this has resulted in considerable disagreement among those who seek to label this dimension (Hurley, 1976a). Only one facet varies, but <u>both</u> levels of the facets, content and object, are present in either case (i.e., in sectors 1 and 5). Thus, depending upon how one chooses to conceptualize the matter, either the content or the object facet reverses, but the effect which emerges is an interaction of content and object.

As an aside, this latter distinction clearly underscores the difficulties inherent in attempting to treat a facet-determined structure as an array of variables designed for ordinary factor analysis. A simple bipolar factor, 'dominance-submission', obscures the niceties of the distinction between dominance and submission. Moreover, the situation tends to worsen when distinctions between even more "well-mixed" variables (e.g., competitive-narcissistic vs. docile-dependent or rebellious-distrustful) are considered. On the other hand, it is nonetheless plausible to <u>posit</u> and <u>extract</u> such a bipolar factor, and then to further interpret it in light of the facet structure which underlies it.

This completes the introductory discussion of the Foa (1961) model, essentially. There remain a few comments, however, which were paid insufficient attention at the time the model was developed, but without which it is difficult to continue. First of all, it will be recalled that Foa (1961, pp. 348-349) included 'intensity' as one of his original semantic principal components (see Figure 3.A). He reasoned that for the self, rejection, and particularly emotional rejection, would be stronger, or more intense, than would either rejection of the other or acceptance of the self. For the other, acceptance, and particularly emotional acceptance, would be stronger.[19] This point's importance lies in its implications for the integrated Foa-Kaiser Group model. That is, the profiles which are asserted in any given sector are of differential intensity, or salience. Thus, while sector 7 includes social and emotional acceptance of both self and other, the social and emotional acceptance of the other is more intense than is the social and emotional acceptance of the self. This would support the argument that this sector could be appropriately labeled, 'love'. In this model, sector 5 is of the highest intensity, and sector 1, of the lowest. Intensity decreases in a graded fashion from sector 5 to sector 1, around either side of the circumplex.

A final point is that the relationships proposed by Foa between his circumplex of profiles and the circumplex of The Kaiser Group have not been empirically established. It is my opinion that Foa's treatment has left the original circumplex more theoretically meaningful, but to date, it remains hypothetical. In looking over the adjectives contained in the ICL (LaForge and Suczek, 1955), it is plausible to argue that many of them manifest content like that posited by Foa. It remains necessary, however, to formally develop links between Foa's profiles and the variables proposed by The Kaiser Group. Foa's design and circumplex conceptualization of his profiles, however, <u>has</u> been experimentally examined. And it is to this material that I now turn.

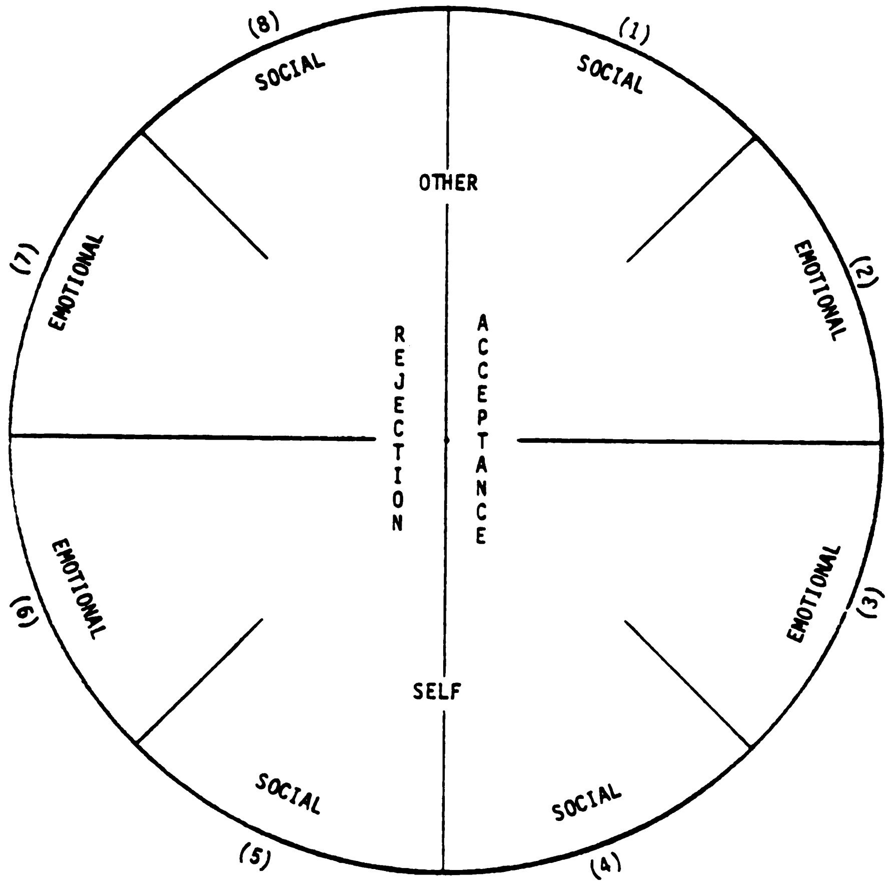
<u>Foa's Newer Model</u>

The order (not the profiles themselves) of Foa's profiles that emerged from analysis differs somewhat from the one presented earlier on (Foa, 1962, 1963, 1965, 1966). This is because in his later theoretical writings (i.e., after the presentation in Foa, 1961), Foa eliminated 'intensity' as a second semantic principal component (see Foa, 1961, p. 349), and emphasized a discussion of interpersonal facets from the perspective of developmental theory (e.g., Foa, 1966, pp. 4ff).[20]

Foa's newer ordered arrangement of profiles appears in Figure 5, both as a conceptual diagram and as a circumplex, in Figures 5.A and 5.B, respectively. By comparing these two diagrams with the similar two in Figure 3, the reader can quickly observe the differences.

These newer diagrams implicitly define 'content' as the first semantic principal component, 'object' as the second, and 'mode' as the third. This is the most parsimonious means of summarizing the differences between the two models. In the early (Foa, 1961) model, 'intensity' is "nested" within 'content', and 'object' and 'mode', ordinally, are "nested" within 'intensity'. In the later model, 'object" is "nested" within 'content', and 'mode' is "nested" within 'object.' The later model, having one less semantic principal component, is theoretically simpler than its precedessor. In both models, neighboring variables (i.e., profiles) differ along one and only one facet.

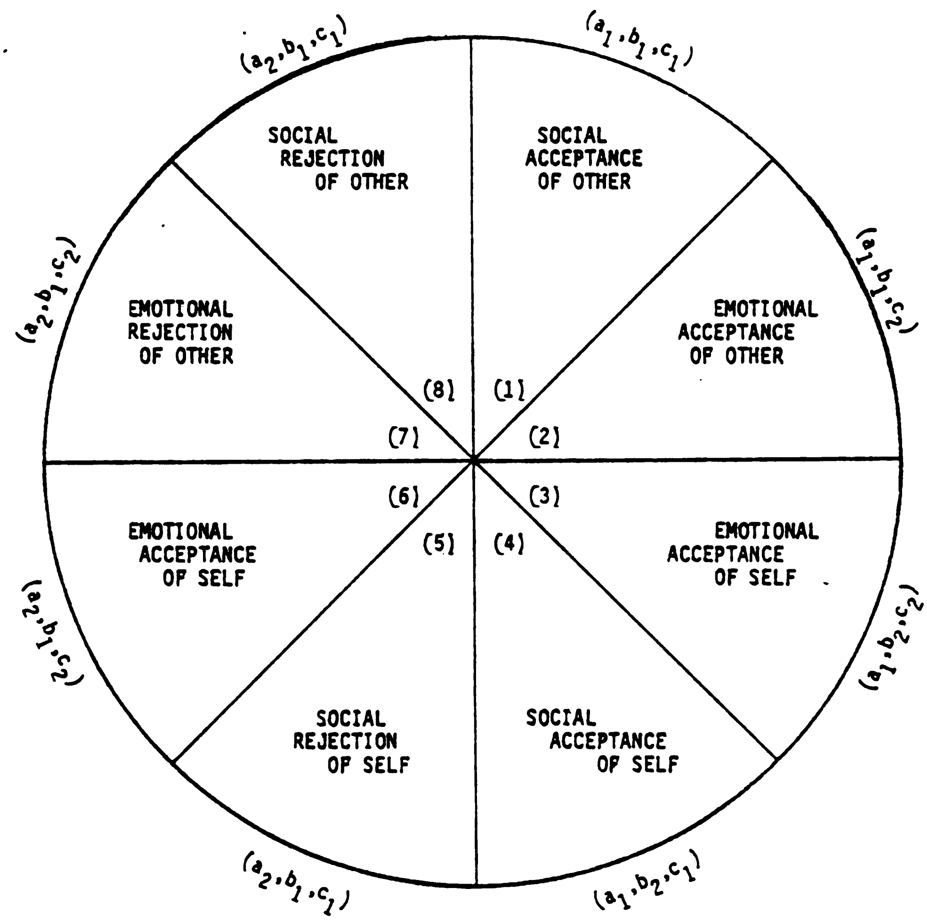
Foa's (1962, 1965, 1966) argument is that his facet structure represents the outcome of cognitive development or differentiation within the individual. Thus, he contends, the infant first acquires the capacity to differentiate between acceptance and rejection (i.e., taking in vs. eliminating or expulsing; being fed and held vs. being frustrated), and that the subsequent, more subtle and complex distinctions between self and other, and finally, between emotional and social, occur later in cognitive development. He holds that as a consequence of this sequence in cognitive development, emotional-social distinctions will occur <u>within</u> a self-other context; self-other distinctions, then, will occur <u>within</u> an acceptance-rejection context. Assuming that cognitive differentiation occurs as sequential,



5.A Presented as a Conceptual Diagram.

Figure 5

Foa's Newer Model



5.B Presented as a Circumplex.

Figure 5 (Continued)

conceptual distinctions or splits, this model has intuitive appeal. Regardless of the theoretical explanation preferred in accounting for the model, it has quite adequate empirical support (Foa, 1962, 1963, 1965, 1966). In comparing the two models, that is, the later one, from the point of view of the data, would seem to be the more tenable.

If it is accepted that the later model has been reasonably validated, one immediately encounters several rather irrating problems regarding the circumplex of The Kaiser Group. First, a circumplex, by definition, can be summarized very adequately with two orthogonal factors. For the circumplex of The Kaiser Group it was agreed, as is depicted in Figure 2 and elaborated on in the associated discussion, that the two major factors were love-hate and dominance-submission. The presentation of Foa's first (1961) model permitted an examination, in detail, of the components of these factors (i.e., their structure in terms of profiles). The issue was broached that conventional factor analysis rather brutalized the sophistication of the model, but it was pointed out that this danger could be minimized so long as the analyst was aware of the limitations of factor analysis. While not discussed in detail, it was made explicit that the ordered profiles in Foa's early model could be treated as variables independent of the circumplex of The Kaiser Group. If two factors were extracted from this array of variables (i.e., the ordered profiles), one would, theoretically end with Foa's (1961) first two semantic principal components: 'acceptance-rejection' and 'intensity'. If one rotated these factors to a content-determined, intuitively reasonable structure, one might interpret them as 'self acceptance-self rejection' and 'other acceptance-other rejection', as illustrated in Figure 6. If one chose, one could then logically contend that these factors actually exist as a theoretical (and mathematical) basis for the circumplex of The Kaiser Group. As it happens, this task has already been accomplished (Hurley, 1976a, 1976b). Hurley has labeled these factors 'SAR' (Self-Acceptance versus Rejection) and 'ARO' (Acceptance versus Rejection of Others), and has related this conceptualization to much of the previous work in this area. Based on Foa's hypotheses regarding the relationship between his early (1961) array of profiles and the circumplex of The Kaiser Group, 'ARO' would roughly coincide with 'love-hate' and 'SAR' would roughly coincide with 'dominance-submission'. Hurley (1976a, 1976b) has reached this conclusion as well. The problem is that Foa's early (1961) model was discounted by his data, which unequivocally favored his later (1962) model. Technically phrased, the disappearance of the second principal component, 'intensity', and the appearance, instead, of the principal component, 'object', effectively debunks the earlier, and establishes the later model. The best two-factor solution for the later model results in dimensions which may be labeled 'acceptance-rejection' and 'self-other'. I analyzed Foa's (1962) data, using <u>both</u> the complete centroid technique (Thurstone, 1947), <u>and</u> the principal components (unrotated, without iteration) technique (e.g., see Gorsuch, 1974).[21] Unrotated orthogonal factors could be readily labeled 'acceptance-rejection' and 'self-other'. Factors coincide, as it were, with facets, and variables (i.e., profiles) are appropriately

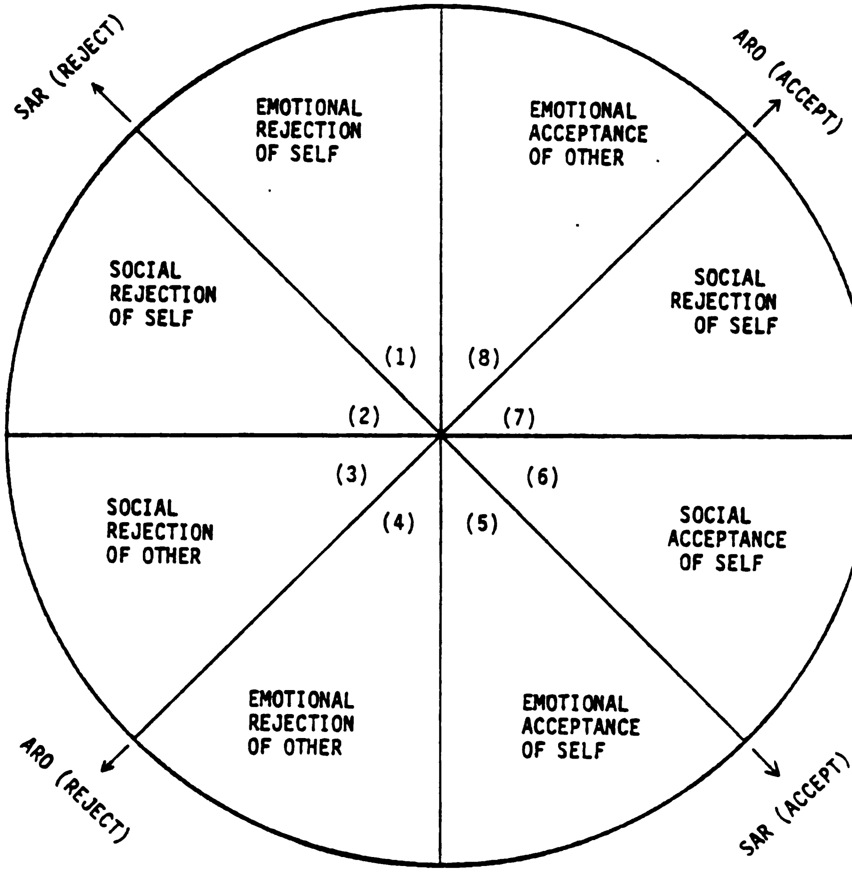


Figure 6

Two-Factor Solution for Foa's Early (1961)

Ordering of Profiles

interpreted as amalgams of principal components (i.e., mathematically specified facets).[22]

Important to the context of the previous discussion is that in this newer model, it is not possible to posit a basis for the circumplex involving the paired orthogonal dimensions: 'love-hate', 'dominance-submission' or 'ARO', 'SAR'. It simply doesn't wash.

Thus, an apparent contradiction arises. Even though much of the evidence is strongly (if a little equivocally) in favor of the conventional 'love-hate', 'dominance-submission', or the more elegant 'SAR', 'ARO' solution, there is an empirically established structure which is clearly incompatible. The question presents itself: is it possible to resolve this opposition of evidence?

By far, the most reasonable answer for this question is "it depends." It depends, that is to say, on what one is willing to assume and motivated to argue from the vantage point of theory. Let me try to clarify precisely what I mean by this.

As an initial assumption, it is supposed that interpersonal phenomena (attitudes, perceptual sets, cognitive activities, behaviors, and so on) can be meaningfully and legitimately conceptualized as a two-dimensional, regularly spaced array. There are then two important consequences of this assumption.

First, it follows that any collection of arbitrarily selected variables, so long as they faithfully represent (i.e., tap, evaluate, assess) interpersonal phenomena, will require, at most, two dimensions (plus error) for complete specification.[23]

Mathematically, there is a second, more explicitly formal consequence of this assumption, in that at most two arbitrarily specified reference vectors (factors) will account for the variance (within error) of any collection of such variables.

This second sequitor may appear identical to the first, or at most, a more formal or precise restatement of the first. Their identity exists, however, only in the realm of appearances; fundamentally they are radically distinct. The difference of importance is that the first consequence of the initial assumption contains no mention of reference vectors. The second consequence very clearly does, and moreover, literally demands the additional assumption that there exist two semantically interpretable reference vectors. Stated more lucidly, the second consequence forces the argument that the array of interpersonal phenomena are combinations of two pure and orthogonal variables or dimensions.[24] Yet, the initial assumption does not demand such an argument. Suppose that a pair of pure and independent dimensions really does exist as the foundation for interpersonal phenomena. Accurately specifying them is still fraught with interpretive error, since the reference vectors ultimately derived will, in every conceivable case, rely on arbitrarily chosen variables and arbitrary combinations of them. The matter of relating variables (as by correlation) is a process by which variables are permitted to dictate to researchers. The matter of choosing and labeling reference vectors, "pure" underlying dimensions, primary factors, or the like, is a process researchers undertake to dictate to their variables. Suppose, then, that interpersonal phenomena really do exist as a two-dimensional array without beginning and without end: without, that is to say, meaningful orthogonal reference vectors. This means that interpersonal phenomena may be comprised of several, many, or even infinitely many pure dimensions which happen, perhaps for good reason and perhaps not, to intercorrelate with one another. That is, each interpersonal event, of which there may exist several, many, or infinitely many, may be a factorially pure event. Alternately, there may exist no pure dimensions at all insofar as interpersonal phenomena are concerned. Each interpersonal event, that is to say, may well represent a complicated amalgam of more elementary components which can only be theoretically inferred or guessed at, but never isolated in pure form.[25]

Under either of these, or any intermediary, condition, any set of arbitrarily chosen variables that faithfully represents the interpersonal domain will be arranged as a two-dimensional array. In the event that the first condition obtains, the most that can be accomplished without serious error is the routine intercorrelation of variables in a heuristic context. In the event that the second condition obtains, it is possible to predict, on some theoretical basis, how certain arbitrarily chosen variables will arrange themselves in relation with one another, by appealing to an independently derived theoretical account of their elementary components. Analytical work in this case will extend to include both the heuristic and the inferential contexts. Theoretical schemata can be evaluated, changed, and evaluated anew. Given an intermediary condition, it is possible to sort out those phenomena which belong to either of the two conditions, and to proceed from there.

Note that even in the circumstance that one of these alternate (relative to the simple, two-factor theory) suppositions is valid, no mathematical constraint prevents the extraction and labeling of orthogonal reference vectors. Certainly they would be interpretively meaningless, but it can be submitted here that the semantic constraint hardly has served elsewhere to prevent such an operation from being undertaken. The point is that if there exist more than two pure interpersonal dimensions which are correlated but which cannot be meaningfully conceptualized in terms of two orthogonal factors, then the whole business of extracting a pair of perpendicular references vectors becomes misleading and patently erroneous.

There is a final point. If the structure underlying interpersonal phenomena is in actuality a system of elementary components (and this is required for the domain of interpersonal events to exist as a true circumplex) as was outlined above, that cannot be isolated in pure form, then certain consequences obtain at the level of arbitrarily chosen interpersonal variables. Prominent among these is that orthogonal factor solutions for arrays of arbitrarily specified variables will be highly dependent on which combinations of elementary components (which variables, that is) have been chosen. And this is especially so under the circumstance that interpersonal variables have not only been arbitrarily specified, but have also been labeled without first having considered their elementary components. Having reached this assertion, it perhaps is somewhat less startling that all two-factor solutions for arrays of interpersonal variables are not identical. In fact, it would be more surprising if they all were identical, since it is the case that very few researchers have set out to deliberately construct variables from elementary components by facet design and facet analysis. This is not to say, of course, that their variables have lacked a facet structure. The facet structure has merely been left unspecified and hence unclear. The results of orthogonal factor analysis will also, unfortunately, have been unclear.

The present research adheres to the principles of facet analysis and design. For the reasons discussed herein, the facet approach is believed to constitute a definite theoretical advantage relative to the approach emphasizing orthogonal factors. A fuller coverage of Foa's work in the interpersonal domain will more fully articulate the goals of the present project.

The Ringex Model

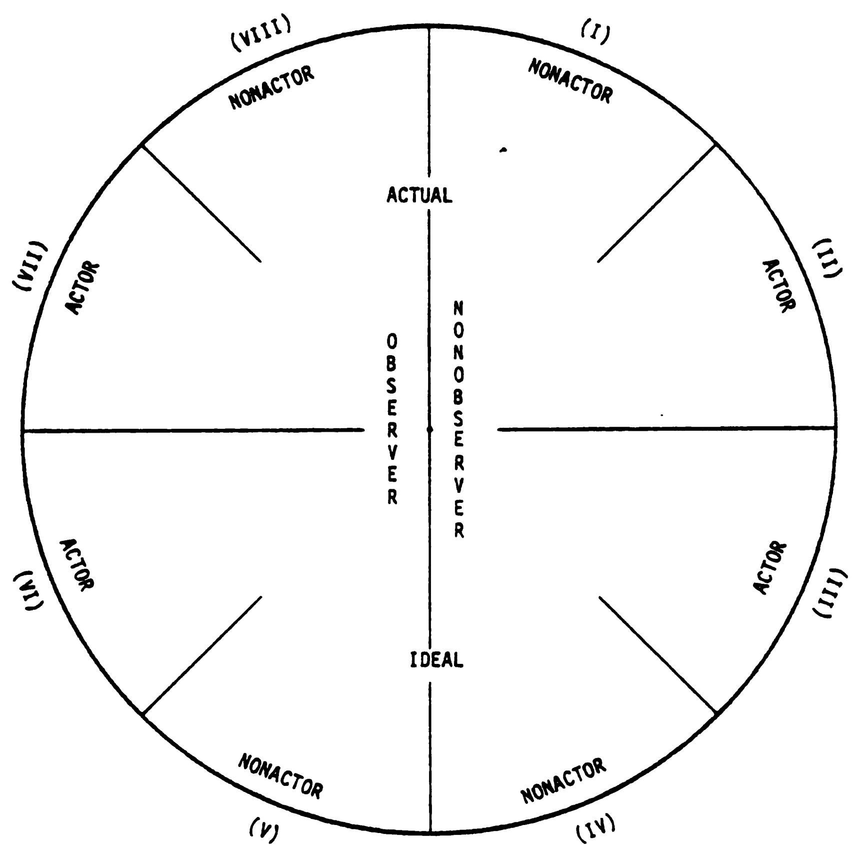
In his most recent publications regarding interpersonal events, Foa (1966, 1974) has developed a three dimensional structure called the "Ringex Model." This more elaborate structure can be most expediently described as an array of 64 structuples (or variables) composed of six dichotomous facets. Alternately, it is correct to view the structure as a Cartesian product of two circumplexes, one made up of interpersonal behavior (or attitudinal) orientations, and one made up of interpersonal perceptual orientations. Foa has labeled the former array "behavioral types," and the latter, "perceptual types."

The eight behavioral types are depicted in Figure 5.B, and account for what has been discussed above simply as "the circumplex." The newer array includes eight perceptual types defined by the Cartesian product set of three new facets, including: 1) actor (self or other); 2) level (ideal or actual); and 3) alias (self or other). This new facet structure is illustrated as a conceptual diagram in Figure 7.A, and as a circumplex in Figure 7.B.

Foa's (1966) theoretical treatment of his newer, perceptual circumplex closely parallels that of the earlier behavioral circumplex. His contention is that the three facets exist as cognitive templates in the individual after developing sequentially. Thus, the distinction between self as interpersonal actor and other as interpersonal actor obtains first, and is followed by a distinction between what is done and what ought to be done, and finally a distinction between one's own point of view and one's conceptualization of the other's point of view. The array of perceptual variables is ordered such that contiguous variables differ along a single facet, with greater distance between variables coinciding with greater structural disparity.

It is crucial to note that the composite of 64 variables provides that each possible behavior in the system can be viewed from all of the eight perceptual sets, and that from each perceptual set can be viewed all eight behaviors. This notion is intuitively pleasing because the paradigm provides an exhaustive set of perceptual contexts within which behavior may occur.[26] Moreover, the model clearly stipulates that the same class of behavior, when viewed from different perceptual sets, actually contains quite different behaviors, phenomenologically.

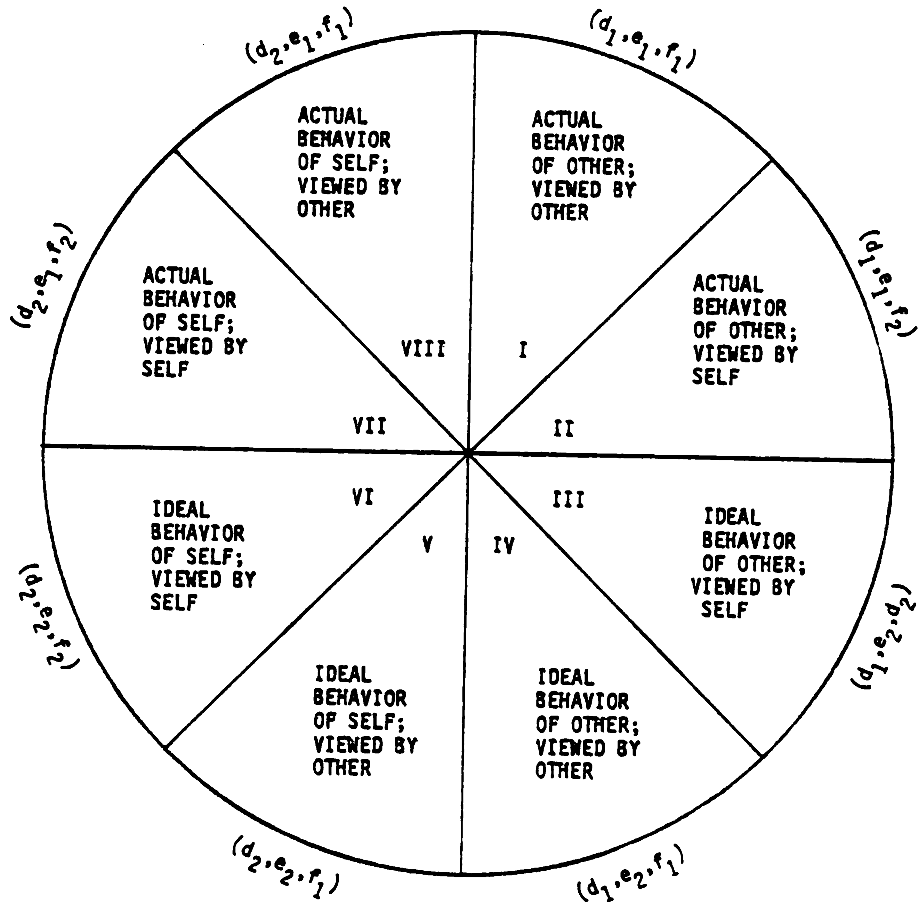
Foa has determined that when the full complement of 64 variables is subjected to a small space analysis (Guttman, 1968), the resulting configuration of points roughly resembles the surface of a torus or



7.A Presented as a Conceptual Diagram.

Figure 7

Facet Structure for Foa's Perceptual Types



7.B Presented as a Circumplex.

Figure 7 (Continued)

anchor ring (illustratively, a doughnut).[27] The model is reproduced in Figure 8. An expedient means of understanding the arrangement of variables in the Ringex is just to imagine the eight behavioral circumplexes (one for each perceptual type) as evenly spaced cross-sections of a torus. Alternately, the eight perceptual circumplexes (one for each behavioral type) can be viewed as longitudinal sections of the torus.

Each of the variables is a composite of six elementary components, or one level from each of the six distinct facets. As an example, the variable representing the behavioral type, 'social acceptance of the other', and the perceptual type, 'actual behavior of the other from the persepctive of the other', is described by the facet notation, 'a_1, b_1, c_1, d_1, e_1, f_1'. A somewhat more parsimonious, though less explicitly descriptive, notation is possible, since each variable represents a unique element in the cross-product set of the two circumplexes. Thus, the variable mentioned above can also be accurately designated 'I,1'.

There are several comments worth making about the form of the Ringex in Figure 8. First, it is obvious from the diagram that the perceptual circumplexes are uniformly of smaller circumference than are the behavioral circumplexes, indicating that different perceptions of the same sort of behavior are more closely related than are different behaviors from the same perspective.

Second, the behavioral circumplexes actually vary in circumference, while the perceptual circumplexes do not. Specifically, the behavioral circumplexes representing perceptions of actual behavior are smaller in circumference than those representing ideal behavior. The implication here is that under ideal (normatively desirable, that is) circumstances, interpersonal behaviors are seen as being more distinct than they are under actual conditions.[28] This admits of two interpretations. First, it is possible that people view as optimal (i.e., ideal) maximal distinctions between self and other, and between social and emotional contexts in their interpersonal dealings. At the actual level of interpersonal functioning, however, it is possible that these distinctions are somewhat less precise, or that conceptions of self and other, social and emotional, are less clearly defined. This issue will be taken up in greater detail subsequently. For the present, it can be observed that this notion dovetails nicely with arguments presented by many theorists of object relations (Fairbairn, 1954; Kernberg, 1966, 1975, 1977).

An alternate interpretation for this variance in circumference of the behavioral circumplexes is simply that the consideration of ideal circumstances is sufficiently departed from the directly observable to render it an imprecise operation. The larger circumference of the ideal level circumplexes, then, is attributable to perceptual unreliability, cognitive ambiguity, or reduced certainty.

Foa (1966, 1974) intercorrelated the 64 variables between husbands and wives, and discovered that a single dimension, labeled 'interpersonality', best described the array of coefficients. This single factor solution tends to fit intercorrelation matrices for perceptual circles better than those for behavioral circles, which in some cases approached circumplex patterning rather than the relatively "flat" configuration necessary for a unidimensional solution. Should a circumplex patterning obtain when correlating variables between husband wife, it seems reasonable to infer that the perceptions people attribute to others arise as a function of their own perceptions. Given a single underlying factor, however, it is more reasonable to argue that the perceptions attributed to others arise as a function of their behavior. Based on Foa's (1966) data, it would seem as though what people hypothesize as others' perceptions is dependent on both what they themselves perceive and how the other behaves. Phrased perhaps more meaningfully, in attributing another's perceptions, people use, as anchors, both their own perceptual predilections, and the lawlike behavior of the other to whom they are attributing.

What has been set out thus far is intended to present, discuss, and justify, a facet-oriented approach to comprehending interpersonal phenomena. The primary object of the current research, as well as the material discussed in the remainder of this proposal, is to extend the facet-designed circumplex and Ringex models Foa has developed. In particular, an evaluation of marital adjustment, as an attribute of the dyadic system, wife and husband, is proposed. Prior to dwelling on the niceties of the proposed research, it is first necessary to briefly attend to two other theoretical fronts. The first of these involves the previous contributions of interpersonal theory to an understanding of marriage and marital adjustment. The second involves the contributions of a few of those involved in the psychology of object relations.

Contributions of Interpersonal Psychology to an Understanding of Marital Functioning.

A difficulty which has long been shared by researchers in interpersonal psychology, person-perception, attribution, and in general, social psychology, is the problem of how to appropriately treat social perception scores. The problem is a natural outgrowth of any attempt whatsoever to compare an array of variables between persons, with the object of subsequently employing the results of these comparisons in further analysis.

Perhaps the most traditional approach when using social perception scores is that of computing difference (or distance) scores. In the simplest case, this approach involves taking the absolute difference or the squared difference between a pair of (or paired) scores and correlating this difference with one or several other variables, criteria, or combinations of variables and criteria. In a sequence of papers (Cronbach, 1953; Cronbach and Gleser, 1953; Cronbach, 1955; Cronbach, 1958), Cronbach has examined the use of difference scores and related techniques, and has listed the major problems associated with their use.[29] These include: 1) distance scores may be needlessly complex (i.e., umparsimonious), since the scores upon which they are based may adequately predict the criterion, 2) distance scores tend to be fraught with statistical artifacts, particularly when they are subsequently correlated with other distance scores or simple variables having common components (i.e., a common basis); 3) distance scores often discard information concerning the direction of distances;

4) distance scores treat regression effects (and other sources of unreliability) as though they are experimentally valid differences; 5) distance scores assume an interval level of measurement. When distance scores are uninsightfully combined to produce global measures of difference or similarity, additional problems obtain of combining disparate content areas (dimensions) into a meaningless hash of variables and of obfuscating perhaps important relations involving single distance measures (Cronbach, 1958).

While in his early work (e.g., Cronbach and Gleser, 1953) Cronbach favors the use of distance scores over correlation coefficients, he later (Cronbach, 1958) recanted this argument and endorsed either factor analytic or multiple regression approaches as superior to distance scores.[30] In fact, factor analytic and multiple linear regression approaches do adequately resolve the problems listed above, provided that careful examination of variable reliabilities is undertaken, and assuming that interpretation is cautiously approached. However, as has been made clear in previous sections of this paper, factor analysis may be, in many contexts, a less than optimal procedure for data analysis. And, it is also the case that incautious uses of multiple linear regression, especially when many variables are involved, tend to lead to spuriously large multiple correlations. The point, of course, is that by resolving some (admittedly egregious) problems, Cronbach has permitted the incorporation of others.

Alperson (1975), partly in response to Cronbach's (1958) diatribe, and partly for the sake of clarifying interpersonal methodology, has developed an alternate approach, relative to the traditional derivation of distance scores, for the study of interpersonal phenomenology. This approach involves the use of Boolean algebra in producing a set of decision rules concerning the combination of individual perception scores into composite, interpersonal scores. As an example, if two individuals respond identically to a question regarding some arbitrarily specified issue, then a score of '1' (or some other arbitrarily chosen value) is assigned to a new variable, 'agreement'. If they do not respond identically, then 'agreement' is given a score of zero. The variables Alperson derives in this manner are in some cases general to both members of a pair (e.g., 'agreement'), and in some cases, specific to one or the other member (e.g., 'understanding'). The system is in this sense intuitively gratifying, in that it permits a clear distinction between interpersonal and intrapersonal perceptions or states. With appropriate adjustments, Alperson's calculus can be directly extended to accommodate n-person systems (Alperson, 1975).

Much of what Alperson espouses is directly applicable, as a set of conceptual tools, to the variables of Foa's (1961) Ringex model. Prior, however, to describing such an application, it is essential to note and discuss several problems with Alperson's system.

A major difficulty is that Boolean algebra, like any other system of symbolic logic (as opposed to mathematics), is a dichotomous system. At the level of the derived variables, this implies that a given interpersonal phenomenon (e.g., agreement, understanding) is either present in a given instance or it is absent. Moreover, the intrapersonal responses which are combined to produce interpersonal, derived variables must <u>also</u> be dichotomous.[31] To those who would argue that agreement and understanding are graded phenomena, or that neutrality and ambivalence are valid psychological states, forced dichotomization is an unreasonable and untenable condition to woodenly apply to interpersonal data.

The difficulties with Alperson's schemata extend somewhat deeper than this. As Alperson (1975, p. 180) indicates, his system was in part designed to ameliorate the difficulties pointed out by Cronbach (1958). Thus, distance scores are conspicuously absent in Alperson's approach. However, his derived variables, it can be argued, fall somewhat short of an adequate resolution of the issues Cronbach (1958) raised. That is, scores (i.e., newly derived variables) produced by applying Boolean schemata are essentially of the same character as distance scores, the only major distinction being that the latter discard somewhat less information. Specifically, distance scores retain information concerning the magnitude and (if left unsquared) the direction of discrepancy, whereas Alperson's derived scores are actually nothing more than a sum of differences (or its inverse). It is the case that in general a fair portion of the information discarded is attributable to unreliability, and consequently apt to contribute to interpretive fallacy. It is, however, equally the case that a fair portion of the discarded information is likely to be systematic and pertinent.

In summary, then, Alperson's system results in the derivation of variables which are characterized by most of the flaws inherent in distance scores, which "improve" upon distance scores only in the regard of casting out some (unknown) portion of unreliability, and which systematically ignore potentially important information.

Despite these problems, there are two related features of Alperson's system that stand as clear improvements over its predecessors. First, because of the rigor involved in the derivation of new variables, the hazard of unthinkingly combining differences to produce a global estimate of similarity or dissimilarity is avoided. Indeed, this system carefully describes those derived variables which can be meaningfully combined, and those which cannot.

Second, the system provides general procedures for comparing specific sets of perceptual or interpersonal variables, and also for producing substantive interpretations for the combinations. These procedures are valuable whether or not the assumptions underlying Boolean algebra are adopted, and they can be directly applied to either discrete or continuous variables. As was indicated previously, these general principles of derivation can be applied, with only minor alternations, to the Ringex variables. Such an application has been carried out and is discussed in the second half of the section of this paper pertaining to the variables involved in this study. As specified therein, these derived variables make up a part of the total set which will be subjected to analysis.

Veenstra (1978a, 1978b) has developed an approach to the study of interpersonal phenomena called SAPIR (Systematic Analysis of Perceptions in Interpersonal Relationships), which draws upon both the conceptual efforts of Alperson and the circumplex as presented by The Kaiser Group. Phrased quite generally, SAPIR involves the collection of data across a variety of perceptual sets or orientations, and a comparison of responses between or among individuals who are related interpersonally (as by marriage or group membership) to one another. While SAPIR is a general approach, and applicable to a wide variety of interpersonal contexts, Veenstra has focused his research on dyadic functioning in marriage. Specifically, he has carried out the following operation: 1) the design of a questionnaire containing items from the behavioral content domains of lovingness and dominance; 2) the selection of a set of perceptual orientations or perspectives, which included those specified by Foa in his perceptual circumplex; 3) the systematic comparison, by derived indices, of the perspectives within and between behavioral content areas, in accordance with principles very much like Alperson's. The item pool from which the questionnaire was built consisted in large part of those contained in the ICL (LaForge and Suczek, 1955). Item phrasing was altered somewhat, so as to conform more clearly with a marital context, and the traditional ICL true-false format was discarded in favor of a five-point scale format. Veenstra was able to accomplish what amounts to a systematic decomposition of marital functioning in terms of perceptual orientations, and their interrelationships, in each of the two content areas, lovingness and dominance. The MPQ (i.e., Veenstra's questionnaire) and a criterion measure, the DAS (Dyadic Adjustment Scale; Spanier, 1976) were administered to a sample of young married couples, and both direct perspectives and derived indices were correlated with dyadic adjustment. The Dyadic Adjustment Scale is discussed in considerable detail below. Here, it will suffice to say that it is essentially a revised, improved version of the more widely known Locke-Wallace Scale (Locke and Wallace, 1959). Veenstra's analyses and conclusions were lengthy, and will not be reviewed in great detail here. There are, however, several aspects of his methodology and findings which will be briefly discussed.

Prior to drawing distance scores (i.e., derived variables) for the couples involved, Veenstra factor-analyzed the MPQ items and resolved the questionnaire into two oblique factors ($\underline{r}$ = -.52) or clusters, representing the two content areas mentioned previously. His decision to factor analyze the questionnaire items was partly based on Cronbach's (1958) argument to the effect that distance scores based on factorially defined scales are more reliable than those based on either items or content-defined scales. His decision was also partly based on tradition, since The Kaiser Group and the majority of workers following their School have favored the two-factor model for the circumplex.

Both factors were found relevant to dyadic adjustment, although by far the lovingness factor and the derived scores representing it were more important. Lovingness was directly related to dyadic adjustment, while dominance was inversely related.

By adopting the array of perspectives established by Foa in his Ringex model, Veenstra was able to systematically derive a more sophisticated arrangement of comparisons than Alperson has presented, because Foa's design separates husband and wife both as perceivers <u>and</u> as objects perceived. The current investigator has also chosen to adopt Foa's conventions, and consequently has applied a part of Veentra's (1978a) conceptual system of derived variables in addition to that specified by Alperson (1975). This matter, too, is taken up in part II of the section of this paper describing the variables involved in the current study.

Before moving to a new topic, it is interesting to point out that Veenstra's design involves the use of facet structure at the level of the perspective and the use of factor structure at the level of behavioral content. It is not understood precisely why Veenstra has assumed that perceptual orientations are best conceptualized in terms of their facet structure, while behavioral orientations are adequately specified according to their underlying factor structures. It is argued, however, that Veenstra's assumptions along these lines require more justification than he offered. It would seem more reasonable had he relied completely on factors or completely on facet profiles, rather than mixing these two quite distinct notions together. The current study relies throughout on a conceptual orientation directly based on facet analysis and facet design.

A Few Comments Concerning the Theory of Object Relations:

It is not intended here to provide a general survey of the voluminous literature concerning object relations, but rather to focus exclusively on the few aspects of it which are directly and materially relevant to the current study.

Many years ago, Fairbairn (1954) observed that common to all psychopathological conditions or states was evidence of splitting of the ego. From this assertion, he formulated a theory of personality development characterized by the gradual appearance and resolution of conceptual distinctions (i.e., splits) within the ego. This theory has been supplemented and elaborated on by others (Mahler, 1971; Klein, 1952; Kernberg, 1966, 1972) but without significant alteration to the basic underlying propositions. These will be briefly outlined.

The argument in its simplest form is that from near the time of birth the infant is capable of distinguishing between the qualitatively opposite states of pleasure, or gratification, and pain, or frustration. These emotional orientations gradually come to be associated with internal and external events; e.g., hunger and the absence of the mothering one are associated with frustration and pain, while satiation and the presence of the mothering one are associated with pleasure and gratification. It is held that the primary distinction the infant makes is between pleasure and pain, and thus, that all other psychological events (i.e., thoughts, experiences) are associated with one part or the other of this dichotomy. This assertion implies that there exist two mothering figures, one aligned with the negative side of this primary dichotomy, and one aligned with the positive side. Similarly, there exist two conceptions of the self (and two conceptions of the relationship between mothering one and self).

As time passes and the infant begins to function more autonomously (e.g., as walking develops), it is argued that the infant projectively identifies the negative constellation with the mothering one (Mahler, 1971). During this time, the developing child is normally ambivalent toward the mothering figure, and is learning to function independently of her. This projective identification is seen as an essential part of the infant's gradually emerging distinction between self and other. That is to say, the previously split conceptualization of mother and of self (i.e., into all good and all bad constellations) are being fused, and through this process the new distinction between self and other is being acquired. First the negative constellation and later the positive constellation are externalized and combined to produce a single image of the mothering one, comprised of both positive and negative aspects, and experienced as clearly distinct from the self.

It is the responsibility of the mothering figure to tolerate the wish of the child to separate, and consequently it is her task to sustain the projective identification of the negative constellation of thoughts and affects. If she cannot tolerate this for one reason or another (e.g., her own needs to merge with her infant), and retaliates by ignoring or reprimanding her child's wish to indivduate, then the child, out of fear of abandonment (and hence psychological nonbeing) will refrain from projectively identifying either constellation. Under this condition, it is believed that the split introjects (conceptualizations of the mother) and the split self-conceptualizations will remain, and consequently the major distinction will continue to exist between goodness and badness, rather than between self and other. In fact, conceptual and experiential distinctions or boundaries between self and other will be vague and poorly defined. Klein (1952) called this the schizoid orientation, but as Fairbairn (1954) pointed out, this state of affairs is likely common to all forms of psychopathology.

This formulation very clearly emphasizes the interpersonal nature of psychopathology: the poor articulation of a conceptual differentiation between self and other.

Foa's Ringex model, although developed from an entirely different theoretical perspective, is in keeping with these tenets of object relations theory. For example, at the behavioral level, Foa (1966) proposes that within the conceptual space of the individual the distinction between good and bad (i.e., acceptance and rejection) is primary, and is followed ordinally by the conceptual distinctions between self and other, and finally, between social and emotional contexts. Moreover, as is emphasized by the torus-like configuration of the Ringex, within each behavioral orientation the various perspectives are differentiated. That is to say, even at the perceptual level the original distinction between positive and negative states of affairs is primary.

Foa (1966) further argues that the facets underlying interpersonal behavior and perception develop ordinally within the individual. As was mentioned earlier, he holds that perception involved the distinctions, in order of their appearance, between self and other as actor, between what is done and what ought to be done, and finally, between one's own point of view and the point of view of another.

What Foa fails to consider is that the acquisition of successively more elaborate conceptual distinctions may depend heavily on a psychologically healthy development; i.e., on a lengthy sequence of auspicious contacts and transactions with significant others. Higher level distinctions may, then, be compromised or nearly absent in the event of serious defects in psychological adjustment. The current study has undertaken to examine this possibility in detail. Precisely the manner in which this will be carried out is discussed in the sections which follow.

Focus of the Current Study

From what has been discussed thus far, the following conclusions may be drawn: 1) The domain, 'interpersonal phenomena', can be validly conceptualized as an array of sentiments, attitudes, behaviors, or perceptual orientations, all of which can be organized, in relation to one another, in a circular pattern with no beginning and with no end. 2) The sets of interpersonal phenomena, 'attitudes' and 'behaviors', can be reasonably well-represented by the two bipolar orthogonal factors describing the dimensions, 'love-hate' and 'dominance-submissiveness'. While parsimonious, however, there exists strong evidence that this two-factor solution is arbitrary and, moreover, mathematically trivial, in the sense that a circular ordering can always be fully described in two-space. Independent researchers have derived discrepant two-factor solutions, and this very strongly suggests the existence of a more complex basis for the circular ordering of interpersonal variables or phenomena. 3) The independently derived theory of facets, and the mathematical treatment of the notion, 'circumplex', can be readily applied to the domain, 'interpersonal phenomena'. And when applied these principles not only can supply a basis of sufficient complexity to unify the various two-factor solutions, but also permit the extension of the attitudinal and behavioral circumplexes to include the circular ordering of interpersonal orientations. 4) The conceptualization of interpersonal events in terms of facets also conforms to the theoretic treatment of the development of interpersonal attitudes, behavior, and perceptual orientations as an unfolding process whereby interpersonal phenomena, in the individual, gradually increase in sophistication or complexity. In the simplest terms, this process is seen as involving the successive accumulation of distinctions, or dichotomies, beginning with the differentiation of pleasure and pain, which, at the interpersonal level, are analogous to acceptance and rejection.

5) The treatment of interpersonal events in terms of their underlying facet structures can consequently also be usefully employed as a tool by means of which to study the development and functioning of object relations in the individual. Fundamentally, object relations theory can be thought of as having as its principal concern the development of conceptual distinctions, or boundaries, within the individual's cognitive apparatus. It is evident that a study of interpersonal events, when approached from the perspective of facet theory, has the identical concern, although viewed from a slightly different frame of reference.

The present study is intended to serve two quite general purposes. First, it is believed that by applying Foa's conceptual schemata, in combination with principles similar to Alperson's, it will be possible to dismantle the global phenomenon, marital adjustment, and to reconceptualize it in terms of interpersonal behavior and interpersonal perceptions, construed as a network of variables underlying which exists a structure based on facets. Second, it is argued that to a very large extent, the relationships existing among Foa's Ringex variables can be usefully and appropriately interpreted in accordance with the principles of the theories of object relations. Indeed, Foa's work may well provide an opportunity for greatly extending the current limits of our understanding with regard to object relations, particularly those aspects pertaining to the existence, in the individual, of conceptual distinctions, or bounardies. The present efforts are intended to be partly confirmatory and partly exploratory in scope.

General Theoretical and Methodological Framework

The current study will begin with two arrays of variables, or two Ringex structures, one for husband and one for wife. The variables (Ringexes) will be evaluated with regard to their interrelationships between husband and wife. Various combinations of first level (i.e., regular Ringex) variables and interactions (i.e., relationships among variables between husbands and wives) will be used to predict marital satisfaction, or dyadic adjustment. The prediction models derived will be interpreted in light of facet theory and its substantive cognate, the aspect of object relations theory pertaining to interpersonal conceptual distinctions or boundaries. Several distinct hypotheses along these lines will be offered and evaluated.

The current section explicates the full complement of variables which will be included in this study. Once they have been completely specified, hypotheses will be presented and discussed regarding both the interrelationships among variables and the efficacy of the variables, and combinations thereof, insofar as predicting dyadic adjustment is concerned. Finally, several general guidelines to the interpretation of the results of the current study will be offered.

Specification and Derivation of Variables

Variables Specified by and Included in the Ringex Model

For each individual respondent, there are eight behavioral orientations fully crossed with eight perceptual orientations, resulting in a full complement of 64 variables. For each couple, this means that 128 variables exist (i.e., as 64 pairs of variables). Since the construction of variables has been based on the principles of facet design, the variables exist as unique structuples (Foa, 1965; Levy and Guttman, 1975). Below, the variables are exhaustively listed as structuples, and a simpler system of notation is introduced, for the purpose of conserving time and effort.

To reiterate, the complete array of facets and facet components includes:

(i) Behavioral Facets:

A = Content of behavior, where:

a_1 = acceptance or giving;

a_2 = rejection or taking away.

B = Object of behavior, where:

b_1 = the other;

b_2 = the self.

C = Mode (or Context) of behavior, where:

c_1 = social, or referring to status;

c_2 = emotional, or referring to love.

(ii) Perceptual Facets:

D = Actor, or the person engaged in a specific behavior, where:

d_1 = the other, or the nonobserver;

d_2 = the self, or the observer.

E = Level, where:

e_1 = actual, or what is done;

e_2 = ideal, or what ought to be done.

F = Alias, or the point of view from which the behavior is observed, where:

f_1 = the other, or the nonactor;

f_2 = the self, or the actor.

The elementary components within each set of facets (i.e., behavioral or perceptual) are exhaustively permuted to produce 2^3, or eight, types, orientations, or profiles. These types are listed, with a notation completely specifying their facet structure, in Tables 5.A (Behavioral Types) and 5.B (Perceptual Types). Each of these types exists as a separate case for each husband and each wife. When these structuples are referred to henceforth, the facet notation will be dropped, and their sole referent will be an Arabic numeral included in the set, one through eight (Behavioral Types), or a Roman numeral included in the set, I through VIII (Perceptual Types). This referential system is less descriptively lucid, but much more compact.

The two sets of types or orientations can be exhaustively permuted with regard to one another to produce 8^2, or 64 variables. These are listed in Table 5.C, with an appropriate notation.

As has been the case throughout, these variables exist as a separate set for each husband and each wife. The convention will be adopted henceforth that variables will be referred to by one of the ordered pairs of numerals of the set, (1,I) through (8,VIII). The rather cumbersome facet notation will thus be omitted in subsequent references to these variables, here and elsewhere, except in cases where it aids in clarifying theoretical or mathematical points.

Table 5

The Ringex Variables

5.A The Behavioral Types.

(1) (a_1, b_1, c_1): Social acceptance of the other;

(2) (a_1, b_1, c_2): Emotional acceptance of the other;

(3) (a_1, b_2, c_2): Emotional acceptance of the self;

(4) (a_1, b_2, c_1): Social acceptance of the self;

(5) (a_2, b_2, c_1): Social rejection of the self;

(6) (a_2, b_2, c_2): Emotional rejection of the self;

(7) (a_2, b_1, c_2): Emotional rejection of the other;

(8) (a_2, b_1, c_1): Social rejection of the other.

5.B The Perceptual Types.

(I) (d_1, e_1, f_1): Other's actual behavior, from self's point of view;

(II) (d_1, e_1, f_2): Other's actual behavior, from other's point of view;

(III) (d_1, e_2, f_2): Other's ideal behavior, from other's point of view;

(IV) (d_1, e_2, f_1): Other's ideal behavior, from self's point of view;

(V) (d_2, e_2, f_1): Self's ideal behavior, from other's point of view;

(VI) (d_2, e_2, f_2): Self's ideal behavior, from self's point of view;

(VII) (d_2, e_1, f_2): Self's actual behavior, from self's point of view;

(VIII) (d_2, e_1, f_1): Self's actual behavior, from other's point of view.

Table 5 (Continued)

5.C The Primary Ringex Variables.			
(1)	(1,I):	$(a_1,b_1,c_1,d_1,e_1,f_1)$:	Social acceptance of other, viewed as actual behavior of other, from the self's point of view;
(2)	(1,II):	$(a_1,b_1,c_1,d_1,e_1,f_2)$:	Social acceptance of other, viewed as actual behavior of other, from the other's point of view;
(3)	(1,III):	$(a_1,b_1,c_1,d_1,e_2,f_2)$:	Social acceptance of other, viewed as ideal behavior of other, from the other's point of view;
(4)	(1,IV):	$(a_1,b_1,c_1,d_1,e_2,f_1)$:	Social acceptance of other, viewed as ideal behavior of other, from the self's point of view;
(5)	(1,V):	$(a_1,b_1,c_1,d_2,e_2,f_1)$:	Social acceptance of other, viewed as ideal behavior of self, from the other's point of view;
(6)	(1,VI):	$(a_1,b_1,c_1,d_2,e_2,f_2)$:	Social acceptance of other, viewed as ideal behavior of self, from the self's point of view;
(7)	(1,VII):	$(a_1,b_1,c_1,d_2,e_1,f_2)$:	Social acceptance of other, viewed as actual behavior of self, from the self's point of view;
(8)	(1,VIII):	$(a_1,b_1,c_1,d_2,e_1,f_1)$:	Social acceptance of other, viewed as actual behavior of self, from the other's point of view;
(9)	(2,I):	$(a_1,b_1,c_2,d_1,e_1,f_1)$:	Emotional acceptance of other, viewed as actual behavior of other, from the self's point of view;
(10)	(2,II):	$(a_1,b_1,c_2,d_1,e_1,f_2)$:	Emotional acceptance of other, viewed as actual behavior of other, from the other's point of view;
(11)	(2,III):	$(a_1,b_1,c_2,d_1,e_2,f_2)$:	Emotional acceptance of other, viewed as ideal behavior of other, from the other's point of view;
(12)	(2,IV):	$(a_1,b_1,c_2,d_1,e_2,f_1)$:	Emotional acceptance of other, viewed as ideal behavior of other, from the self's point of view;

Table 5 (Continued)

(13) (2,V):	$(a_1,b_1,c_2,d_2,e_2,f_1)$;	Emotional acceptance of other, viewed as ideal behavior of self, from the other's point of view;
(14) (2,VI):	$(a_1,b_1,c_2,d_2,e_2,f_2)$:	Emotional acceptance of other, viewed as ideal behavior of self, from the self's point of view;
(15) (2,VII):	$(a_1,b_1,c_2,d_2,e_1,f_2)$:	Emotional acceptance of other, viewed as actual behavior of self, from the self's point of view;
(16) (2,VIII):	$(a_1,b_1,c_2,d_2,e_1,f_1)$:	Emotional acceptance of other, viewed as actual behavior of self, from the other's point of view;
(17) (3,I):	$(a_1,b_2,c_2,d_1,e_1,f_1)$:	Emotional acceptance of self, viewed as actual behavior of other, from the self's point of view;
(18) (3,II):	$(a_1,b_2,c_2,d_1,e_1,f_2)$:	Emotional acceptance of self, viewed as actual behavior of other, from the other's point of view;
(19) (3,III):	$(a_1,b_2,c_2,d_1,e_2,f_2)$:	Emotional acceptance of self, viewed as ideal behavior of other, from the other's point of view;
(20) (3,IV):	$(a_1,b_2,c_2,d_1,e_2,f_1)$:	Emotional acceptance of self, viewed as ideal behavior of other, from the self's point of view;
(21) (3,V):	$(a_1,b_2,c_2,d_2,e_2,f_1)$:	Emotional acceptance of self, viewed as ideal behavior of self, from the other's point of view;
(22) (3,VI):	$(a_1,b_2,c_2,d_2,e_2,f_2)$:	Emotional acceptance of self, viewed as ideal behavior of self, from the self's point of view;
(23) (3,VII):	$(a_1,b_2,c_2,d_2,e_1,f_2)$:	Emotional acceptance of self, viewed as actual behavior of self, from the self's point of view;
(24) (3,VIII):	$(a_1,b_2,c_2,d_2,e_1,f_1)$:	Emotional acceptance of self, viewed as actual behavior of self, from the other's point of view;

Table 5 (Continued)

(25) (4,I):	$(a_1,b_2,c_1,d_1,e_1,f_1)$:	Social acceptance of self, viewed as actual behavior of other, from the self's point of view;
(26) (4,II):	$(a_1,b_2,c_1,d_1,e_1,f_2)$:	Social acceptance of self, viewed as actual behavior of other, from the other's point of view;
(27) (4,III):	$(a_1,b_2,c_1,d_1,e_2,f_2)$:	Social acceptance of self, viewed as ideal behavior of other, from the other's point of view;
(28) (4,IV):	$(a_1,b_2,c_1,d_1,e_2,f_1)$:	Social acceptance of self, viewed as ideal behavior of other, from the self's point of view;
(29) (4,V):	$(a_1,b_2,c_1,d_2,e_2,f_1)$:	Social acceptance of self, viewed as ideal behavior of self, from the other's point of view;
(30) (4,VI):	$(a_1,b_2,c_1,d_2,e_2,f_2)$:	Social acceptance of self, viewed as ideal behavior of self, from the self's point of view;
(31) (4,VII):	$(a_1,b_2,c_1,d_2,e_1,f_2)$:	Social acceptance of self, viewed as actual behavior of self, from the self's point of view;
(32) (4,VIII):	$(a_1,b_2,c_1,d_2,e_1,f_1)$:	Social acceptance of self, viewed as actual behavior of self, from the other's point of view;
(33) (5,I):	$(a_2,b_2,c_1,d_1,e_1,f_1)$:	Social rejection of self, viewed as actual behavior of other, from the self's point of view;
(34) (5,II):	$(a_2,b_2,c_1,d_1,e_1,f_2)$:	Social rejection of self, viewed as actual behavior of other, from the other's point of view;
(35) (5,III):	$(a_2,b_2,c_1,d_1,e_2,f_2)$:	Social rejection of self, viewed as ideal behavior of other, from the other's point of view;
(36) (5,IV):	$(a_2,b_2,c_1,d_1,e_2,f_1)$:	Social rejection of self, viewed as ideal behavior of other, from the self's point of view;

Table 5 (Continued)

(37) (5,V):	$(a_2,b_2,c_1,d_2,e_2,f_1)$:	Social rejection of self, viewed as ideal behavior of self, from the other's point of view;
(38) (5,VI):	$(a_2,b_2,c_1,d_2,e_2,f_2)$:	Social rejection of self, viewed as ideal behavior of self, from the self's point of view;
(39) (5,VII):	$(a_2,b_2,c_1,d_2,e_1,f_2)$:	Social rejection of self, viewed as actual behavior of self, from the self's point of view;
(40) (5,VIII):	$(a_2,b_2,c_1,d_2,e_1,f_1)$:	Social rejection of self, viewed as actual behavior of self, from the other's point of view;
(41) (6,I):	$(a_2,b_2,c_2,d_1,e_1,f_1)$:	Emotional rejection of self, viewed as actual behavior of other, from the self's point of view;
(42) (6,II):	$(a_2,b_2,c_2,d_1,e_1,f_2)$:	Emotional rejection of self, viewed as actual behavior of other, from the other's point of view;
(43) (6,III):	$(a_2,b_2,c_2,d_1,e_2,f_2)$:	Emotional rejection of self, viewed as ideal behavior of other, from the other's point of view;
(44) (6,IV):	$(a_2,b_2,c_2,d_1,e_2,f_1)$:	Emotional rejection of self, viewed as ideal behavior of other, from the self's point of view;
(45) (6,V):	$(a_2,b_2,c_2,d_2,e_2,f_1)$:	Emotional rejection of self, viewed as ideal behavior of self, from the other's point of view;
(46) (6,VI):	$(a_2,b_2,c_2,d_2,e_2,f_2)$:	Emotional rejection of self, viewed as ideal behavior of self, from the self's point of view;
(47) (6,VII):	$(a_2,b_2,c_2,d_2,e_1,f_2)$:	Emotional rejection of self, viewed as actual behavior of self, from the self's point of view;
(48) (6,VIII):	$(a_2,b_2,c_2,d_2,e_1,f_1)$:	Emotional rejection of self, viewed as actual behavior of self, from the other's point of view;

Table 5 (Continued)

(49)	(7,I):	$(a_2,b_1,c_2,d_1,e_1,f_1)$:	Emotional rejection of other, viewed as actual behavior of other, from the self's point of view;
(50)	(7,II):	$(a_2,b_1,c_2,d_1,e_1,f_2)$:	Emotional rejection of other, viewed as actual behavior of other, from the other's point of view;
(51)	(7,III):	$(a_2,b_1,c_2,d_1,e_2,f_2)$:	Emotional rejection of other, viewed as ideal behavior of other, from the other's point of view;
(52)	(7,IV):	$(a_2,b_1,c_2,d_1,e_2,f_1)$:	Emotional rejection of other, viewed as ideal behavior of other, from the self's point of view;
(53)	(7,V):	$(a_2,b_1,c_2,d_2,e_2,f_1)$:	Emotional rejection of other, viewed as ideal behavior of self, from the other's point of view;
(54)	(7,VI):	$(a_2,b_1,c_2,d_2,e_2,f_2)$:	Emotional rejection of other, viewed as ideal behavior of self, from the self's point of view;
(55)	(7,VII):	$(a_2,b_1,c_2,d_2,e_1,f_2)$:	Emotional rejection of other, viewed as actual behavior of self, from the self's point of view;
(56)	(7,VIII):	$(a_2,b_1,c_2,d_2,e_1,f_1)$:	Emotional rejection of other, viewed as actual behavior of self, from the other's point of view;
(57)	(8,I):	$(a_2,b_1,c_1,d_1,e_1,f_1)$:	Social rejection of other, viewed as actual behavior of other, from the self's point of view;
(58)	(8,II):	$(a_2,b_1,c_1,d_1,e_1,f_2)$:	Social rejection of other, viewed as actual behavior of other, from the other's point of view;
(59)	(8,III):	$(a_2,b_1,c_1,d_1,e_2,f_2)$:	Social rejection of other, viewed as ideal behavior of other, from the other's point of view;
(60)	(8,IV):	$(a_2,b_1,c_1,d_1,e_2,f_1)$:	Social rejection of other, viewed as ideal behavior of other, from the self's point of view;

Table 5 (Continued)

(61) (8,V):	$(a_2,b_1,c_1,d_2,e_2,f_1)$:	Social rejection of the other, viewed as ideal behavior of self, from the other's point of view;
(62) (8,VI):	$(a_2,b_1,c_1,d_2,e_2,f_2)$:	Social rejection of other, viewed as ideal behavior of self, from the self's point of view;
(63) (8,VII):	$(a_2,b_1,c_1,d_2,e_1,f_2)$:	Social rejection of other, viewed as actual behavior of self, from the self's point of view;
(64) (8,VIII):	$(a_2,b_1,c_1,d_2,e_1,f_1)$:	Social rejection of other, viewed as actual behavior of self, from the other's point of view.

To permit a distinction between variables representing husband and wife, a capital letter, 'H' or 'W', will be affixed to the labels, as appropriate. A few examples of the full system of notation may serve to clarify its use. These examples are contained in Table 6.

As is apparent, the variables acquire a much more vivid substantive interpretation when respondents are members of dyads. It should be clear that within each dyad, a complement of 128 variables exists, as matched sets of Ringex structuples, for husband and for wife.

Derived Variables, Specified by the Application of Alperson's Conceptual Principles

Foa's facet-based approach serves as an excellent means by which to exhaustively generate a set of variables, given an a priori underlying structure (i.e., an array of facets and a corpus of assumptions regarding their levels, interrelationships, etc.). However, Foa's work stops short of providing clear rules for the combination or comparison of variables between disparate individuals (e.g., spouses). Alperson's schemata offer conceptual tools by means of which Foa's variables can be more extensively interpreted according to the perceptual profile characteristics of their structure, and by means of which certain combinations of variables, between husband and wife, can be assigned substantive meaning.

Before continuing with the application of Alperson's conventions to Foa's variables, a general comment, and two of its implications, are important to consider.

The general point is that combinations of variables, between spouses, when conceptualized as predictors, e.g., of marital or dyadic adjustment,

Table 6

Examples of Variables in Notational System

(i)	H(1,I):	The husband's evaluation of the extent to which his wife actually accepts him socially.
(ii)	H(3,V):	The husband's evaluation of the extent to which his wife will say that he ideally wishes to accept himself emotionally.
(iii)	W(6,VI):	The wife's evaluation of the extent to which she ideally seeks to emotionally reject herself.

is nothing more than an assertion that the variables combined can be meaningfully and pertinently understood to interact (Cronbach, 1958). The first implication of this point is that combining variables between spouses, as a systematic operation, amounts to a logically consistent extension of the facet design underlying Foa's Ringex model. That is to say, the structuples which exist as Foa's variables are, in effect, already interactive combinations of the elementary components comprising the individual facets (Guttman, 1954-55, 1958). Another way of stating this implication is that combining variables between spouses is tantamount to positing an additional facet, 'person' or 'spouse', the elements of which include 'husband' and 'wife'. Once the additional facet is posited, then the entire arrays of variables for husband and wife can be directly construed as a single organization of interrelated variables, the relations being interpretable as interactions.

The second implication is that the mathematically defined entity, 'interaction between variables' can, as is conventional in both Analysis of Variance and Multiple Regression models, be assigned a substantive interpretation. When so interpreted, the interaction may be treated theoretically as a new, unique variable (in a very formal way, in the regression model). The combinations of, or comparisons between, variables discussed below should be understood in this sense.

Alperson (1975, p. 181) distinguishes among perspectives, or perceptual orientations, according to what amounts to a conceptual dimension extending from direct self-observation to higher levels of abstraction and inference. Thus, he defines the "direct perspective" as a respondent's view of her or his <u>own</u> behavior, the "metaperspective" as a respondent's inference regarding the <u>other's</u> behavior, and the "metametaperspective" as a respondent's inference concerning the <u>other's inference</u> regarding the respondent's behavior. To apply this framework to Foa's variables, it is necessary additionally to distinguish between the respondent's view of <u>self</u> and the respondent's view of <u>other</u> at the level of Alperson's "direct perspective." Alperson fails to make this distinction, and consequently, his organization of perspectives lacks the characteristic of being an exhaustive combination of perceptual facets levels (actually, Alperson did not deal with variables, defined as logical structuples, in the first place). When this additional distinction is taken into consideration, Foa's variables, in terms of their perceptual structure, can be clearly ordered along a dimension of theoretical complexity. The ordering, for husband and for wife, is presented in Table 7.A.

As can be seen, zero-order perspectives are restricted to self-observation, and of the Ringex variables, require the least inference. They are thus viewed as being minimally complex. First-order perspectives demand the drawing of a distinction between self and other, but remain at the level of direct observation. Second-order perspectives not only invoke the conceptual distinction between self and other, but also require inference regarding the other's perceptions of self. Third-order perspectives involve the formulation of two conceptual distinctions between self and other, the first being that between one's own and the other's perspective, and the second being that between one's own and the other's perception of oneself. A

Table 7

Perspectives Ordered as a Function of Conceptual Complexity

7.A Actual Level Perspectives.

(A) Zero-order Perspectives:

(i) H(VII): Actual behavior of the husband, from the point of view of the husband.

(ii) W(VII): Actual behavior of the wife, from the point of view of the wife.

(B) First-order Perspectives:

(i) H(II): Actual behavior of the wife, from the point of view of the husband.

(ii) W(II): Actual behavior of the husband, from the point of view of the wife.

(C) Second-order Perspectives:

(i) H(I): Actual behavior of the wife, from the point of view of the wife.

(ii) W(I): Actual behavior of the husband, from the point of view of the husband.

(D) Third-order Perspectives:

(i) H(VIII): Actual behavior of the husband, from the point of view of the wife.

(ii) W(VIII): Actual behavior of the wife, from the point of view of the husband.

Table 7 (Continued)

7.B Ideal Level Perspectives.	
	(E) <u>Zero-order Perspectives</u>:
(i) H(VI):	Ideal behavior of the husband, from the point of view of the husband.
(ii) W(VI):	Ideal behavior of the wife, from the point of view of the wife.
	(F) <u>First-order Perspectives</u>:
(i) H(III):	Ideal behavior of the wife, from the point of view of the husband.
(ii) W(III):	Ideal behavior of the husband, from the point of view of the wife.
	(G) <u>Second-order Perspectives</u>:
(i) H(IV):	Ideal behavior of the wife, from the point of view of the wife.
(ii) W(IV):	Ideal behavior of the husband, from the point of view of the husband.
	(H) <u>Third-order Perspectives</u>:
(i) H(V):	Ideal behavior of the husband, from the point of view of the wife.
(ii) W(V):	Ideal behavior of the wife, from the point of view of the husband.

degree of inference regarding the perception of the other is also required. As such, the third-order perspective may be considered the most complex and abstract. As specified here, these perspectives are not variables, but rather are categories or sets of variables. That is, for each of these perspectives there exist eight behavioral orientations, and consequently, each is a class of eight variables. At the ideal level, a similar ordinal arrangement of perspectives is possible, thus completely specifying the perceptual types. Ordered perspectives at the ideal level appear in Table 7.B. As before, these perspectives are really classes of variables. Variables within each class differ with regard to behavioral orientation, and variables between classes differ with regard to perceptual orientation.

The ordered perspectives have themselves been separated according to the facet, 'Level' (i.e., actual vs. ideal). This might at first appear to be an arbitrary decision, particularly if facets are considered to be equally important. However, the facet, 'Level', while theorized to exist within the individual as an important conceptual distinction (i.e., between actual and ideal) is clearly not an interpersonal distinction in the sense of involving a dichotomy between self and other. Phrased differently, it is believed that the activity of inferring the ideal (e.g., regarding one's behavior or the behavior of another), rather than the actual, demands a higher order of abstraction or complexity, but it remains difficult to provide an optimal, single ordering of the total complement of eight perspectives for husband and for wife. Consequently, the perspectives have been "split" along the 'Level' facet into two analogous ordered clusters, according to the complexity or degree of abstraction of self-other distinctions.

Having categorized the perceptual orientations, or perspectives, with respect to the level of abstraction or complexity involved, it is plausible to derive a set of indices which exist as composite statements regarding husband and wife as a pair, or in relation to one another. Mathematically, there are two general approaches to such a derivation. Relevant variables can be correlated, and the coefficients resulting can be interpreted as summary measures of dyadic attributes. Or, the relevant variables can be lawfully combined to produce single values, and these values can themselves be interpreted as variables, or predictors, concerning dyadic functioning. For a variety of reasons, all of which will become obvious further along, both general mathematical approaches are of utility with respect to the current study, and both will consequently be employed.

For the sake of promoting theoretical clarity, some additions to the notation system are called for. Henceforth, perspectives will be identified according to their order, in addition to their Level (i.e., actual or ideal) and their respondent (i.e., husband or wife). Thus, the zero-order perspectives for actual behavior, previously labeled H(VII) and W(VII), will now appear, respectively, as H_0A and W_0A. The third-order perspectives for ideal behavior, previously labeled H(V) and W(V), will now be designated, respectively, by H_3I and W_3I. The remaining perspectives will, of course, appear with similarly transformed labels. In every case, the first letter indicates respondent (husband or wife), the subscript indicates the perspective order involved (per the earlier discussion regarding this), and the second letter refers to the Level (actual or ideal) involved.

The derived variables can be separated into general categories specified by the orders of the perspectives from which they are derived. That is to say, different combinations of orders of perspectives lead to very different substantive interpretations. Perhaps the best means of illustrating what is meant by this is just to present examples of derived variables. Those summarizing the phenomena, 'Interspouse Agreement or Disagreement', are included in Table 8.

It should be apparent that the derived indices are presented here as conceptual formulations. Computational procedures for their mathematical definitions will be described elsewhere (see the section concerning proposed analyses).

Following from these remarks concerning notation, perspectives are represented by labels indicating respondent, order of perspective, and Level of perception. Perspectives parenthesized are those which will be correlated or combined (e.g., distanced with regard to one another). The application of the letter, 'A' indicates that this set of derived indices is concerned with 'Agreement'.

The numeric referent representing the order of the perspectives in each comparison is particularly important, because in every case the lower order perspective is to be understood as the perceptual "anchor" or baseline with which the other, higher order perspective, is compared. Hence, the derived variable, $A(H_0A, W_1A)$, indicates the extent to which the wife's perception of the husband's behavior (i.e., W_1A) conforms to the husbands percpetion of his own behavior (i.e., H_0A). This

Table 8

Interspouse Agreement or Disagreement

(i)	$A(H_0A,\ W_1A)$:	Interspouse agreement regarding the actual behavior of the husband.
(ii)	$A(W_0A,\ H_1A)$:	Interspouse agreement regarding the actual behavior of the wife.
(iii)	$A(H_0I,\ W_1I)$:	Interspouse agreement regarding the ideal behavior of the husband.
(iv)	$A(W_0I,\ H_1I)$:	Interspouse agreement regarding the ideal behavior of the wife.

convention is adhered to throughout the derivations. Notable exceptions, of course, are those instances comparing perspectives of the same order. In these cases, either the husband and wife are being contrasted as actor-perceivers, or perspectives are being compared within husband and wife, but <u>between</u> actual and ideal levels. For the former of these two possibilities, there really is no clear ordering to apply to the compared perspectives; for the latter possibility, it is reasonable to order the compared perspectives in a way which assigns primacy or priority to the perspective characterized by the actual level, since, as was discussed previously, this level of perception is held to be less abstract or complex than the ideal level.

The second category of derived variables contains those involving 'Interpersonal Understanding or Misunderstanding'. These variables are presented in Table 9.

It is important to point out that there are two qualitatively distinct classes of understanding specified by the variables in Table 9. The distinction can perhaps best be clarified by considering an example from each class. First, $U(H_0A, W_2A)$ refers to the comparison of what a wife believes (or infers) that her husband will say regarding it. On the other hand, $U'(H_1A, W_3A)$ refers to the comparison of what a wife believes her husband will say regarding <u>her</u> actual behavior with what her husband actually does say regarding it. The first four variables, designated, 'U', belong to the class illustrated by the first example. The second four variables, designated, 'U'', belong to the class illustrated by the second example. What merits emphasis is that the second four variables involve an additional invocation of the

Table 9

Interpersonal Understanding or Misunderstanding

(i)	$U(H_0A, W_2A)$:	Wife's understanding regarding the husband's view of his own actual behavior.
(ii)	$U(W_0A, H_2A)$:	Husband's understanding regarding the wife's view of her own actual behavior.
(iii)	$U(H_0I, W_2I)$:	Wife's understanding regarding the husband's view of his own ideal behavior.
(iv)	$U(W_0I, H_2I)$:	Husband's understanding regarding the wife's view of her own ideal behavior.
(v)	$U'(W_1A, H_3A)$:	Husband's understanding regarding the wife's view of his actual behavior.
(vi)	$U'(H_1A, W_3A)$:	Wife's understanding regarding the husband's view of her actual behavior.
(vii)	$U'(W_1I, H_3I)$:	Husband's understanding regarding the wife's view of his ideal behavior.
(viii)	$U'(H_1I, W_3I)$:	Wife's understanding regarding the husband's view of her ideal behavior.

conceptual boundary between self and other, relative to the first four variables. Thus, the second type of understanding is more sophisticated, interpersonally complex, or removed from direct observation.

Alperson (1975, p. 182), following Laing, Phillipson, and Lee (1966), has labeled this second, more complex order of understanding, 'realization'. The current investigator agrees with Alperson and the others that the phenomena are distinct, but believes that both are appropriately considered members of the class, 'understanding'. Veenstra (1978a) argues similarly.

The next class of variables to be derived are referred to here as the 'Expectation of Interpersonal Understanding or Misunderstanding'. These have been listed in Table 10. This set of variables is more difficult than the others to provide a clear substantive interpretation for. Alperson (1975, p. 181) refers to them as the 'feeling of being understood', and Veenstra (1978a) clusters them together with the set which will next be specified, and labels the entire group, 'perceived disagreement comparisons'. Alperson's label appears to suggest too much in the way of attribution, and Veenstra, perhaps seeking to avoid attribution completely, apparently opted for imprecision. Within each comparison, if the two perspectives are highly related, then it is reasonable to argue that the respondent (i.e., the husband or the wife) would expect that her or his spouse is capable of predicting the respondent's behavior. It follows that the respondent expects to be understood. If the two variables within a comparison are differenced, then the magnitude of the difference serves nicely as an index of expected misunderstanding. The label, 'Expectation of Interpersonal Understanding or Misunderstanding', consequently appears substantively justifiable.

The next category of derived variables has been named 'Expectation of Interspouse Agreement or Disagreement'. These variables appear in Table 11. The definition of these variables follows the precedent established by both Alperson and Veenstra. As was mentioned above, Veenstra includes this set of variables with the preceding one, and labels them all 'perceived disagreement comparisons'. Alperson distinguished between the two sets, but his category of variables, 'expectation of agreement', included not only the four variables in Table 11, but also, implicitly, an analogous set of variables regarding the self. (The additional set of variables is included because Alperson's derivations are not based on a complete crossing of facets. That is, the two sets were not distinct in Alperson's schemata.)

The differing substantive definitions for the two sets here (i.e., Tables 10 and 11) amounts to a compromise between the formulations of Alperson and of Veenstra. The current investigator is unwilling to lump the variables together under the rubric, 'perceived disagreement comparisons' because the phenomena involved are so clearly different. It is admitted that the result of splitting them is conceptually inelegant, but it is argued that it is more precise. As a logical justification, it is asserted that when we speak of the comparison of our predictions regarding our own behavior with our estimates of what another would predict, then we are concerned with the extent to which the other understands us. When, however, the comparison is of our

Table 10

Expectation of Interpersonal Understanding or Misunderstanding

(i)	$EU(H_0A, H_3A)$:	Husband's expectation regarding his wife's understanding of his actual behavior.
(ii)	$EU(W_0A, W_3A)$:	Wife's expectation regarding her husband's understanding of her actual behavior.
(iii)	$EU(H_0I, H_3I)$:	Husband's expectation regarding his wife's understanding of his ideal behavior.
(iv)	$EU(W_0I, W_3I)$:	Wife's expectation regarding her husband's understanding of her ideal behavior.

Table 11

Expectation of Interspouse Agreement or Disagreement Regarding the Other

(i)	$EA(H_1A, H_2A)$:	Husband's expectation of interspouse agreement regarding the actual behavior of the wife.
(ii)	$EA(W_1A, W_2A)$:	Wife's expectation of interspouse agreement regarding the actual behavior of the husband.
(iii)	$EA(H_1I, H_2I)$:	Husband's expectation of interspouse agreement regarding the ideal behavior of the wife.
(iv)	$EA(W_1I, W_2I)$:	Wife's expectation of interspouse agreement regarding the ideal behavior of the husband.

predictions regarding another's behavior with our estimates of what the other would predict, then we are instead concerned with agreement or disagreement. Phrased as abstractly as possible, when the conceptual object is self, then understanding is at issue; when the conceptual object is other, than agreement is at issue.

Alperson's framework provides for the derivation of four more, general classes of variables. Three of these are more complex in form than are those derived thus far, and involve combinations of more than two perceptual orientations, or perspectives. For instance, 'agreement' and 'expectation of agreement', in Alperson's system, can be combined in the derivation of the variable, 'veridicality of expectations of agreement' (Alperson, 1975, p. 183). While it is believed that these "second level" derivations are of theoretic interest, they will nonetheless be omitted in the current study because of rather recalcitrant mathematical problems. Specifically, successive derivations imply that third and fourth order interactions exist among the simple (underived) predictors. While this condition certainly is logically possible, it is highly likely that simpler interactions (i.e., two variable interactions such as those derived above) and primary predictors will in most cases be sufficient, for most criteria. Moreover, the inclusion of many complex interactions as predictors in regression statements tends to spuriously elevate multiple correlations. Complex interactions tend to be rather difficult to meaningfully interpret, as well.

The fourth additional derivation Alperson presents is really best understood as a class of derivations when applied to Foa's Ringex variables, and calls for the comparison, from a variety of perspectives.

of husband and wife as perceptual objects. All the derivations above pertain to contrasts between one or more levels of perception, given a constant perceptual object (i.e., either husband or wife). Veenstra (1978a, 1978b) has rather extensively considered the category of comparison in which husband and wife, as perceptual objects, are contrasted. This was made possible by virtue of his decision to employ a design manifesting fully crossed perceptual (although not behavioral) facets, a characteristic which is lacking in Alperson's formulations. The variables derived below, while hinted at by Alperson, will consequently draw more heavily upon Veenstra's conceptual spade work.

Derived Variables, Specified by the Application of Veenstra's Conceptual Precedents

Veenstra (1978, pp. 54-59) has labeled those comparisons (or derivations) in which husband and wife, as perceptual objects, are constrasted, 'perceived role differentiation comparisons'. These derived variables are closely akin to what Alperson (1975, p. 183) calls 'perception of partner's expectation of agreement'. The disparity between these two interpretations obtains as a consequence of Foa's dichotomization of respondents (husbands and wives) as 'actors' and as 'perceivers', and of Foa's choice to fully cross these two facets in constructing the primary (i.e., Ringex) variables. Veenstra's work follows Foa's, while Alperson did not formulate this double dichotomy, and hence in his system it is impossible to compare husband and wife, behaviorally, or as actors. Thus, rather than 'role differentiation', Alperson merely derives another type of 'agreement comparison'. The current investigator follows both Foa and Veenstra insofar as primary variables and derivations are concerned, and consequently, a class of derived variables like those of Veenstra's is made possible. However, it is argued that the term, 'behavioral differentiation', rather than 'role differentiation', is more accurately descriptive of what is being evaluated with the derivations.

As with 'interpersonal understanding or misunderstanding', 'perceived interspouse behavioral differentiation' can also be assessed at two levels: (1) the respondents' own views of differentiation; (2) the respondents' inference of their spouses' views of differentiation. To distinguish between the two levels of perceived behavioral differentiation, the higher level (i.e., inferred) variables are assigned a prime. The classes of variables derived as indices of 'Perceived Interspouse Behavioral Differentiation' are included in Table 12.

There remains one final class of derivations which is possible to formulate at this level of comparisons. These are defined by contrasting perspectives which are identical along the facets, 'Actor' and 'Alias', but which differ along the facet, 'Level'. In each case, then, the actual is compared with the ideal for the various combinations of 'Actor' and 'Alias'. Veenstra (1978a, p. 61) has labeled these derivations, 'perceived dissatisfaction comparisons'. The current investigator agrees with Veenstra in this instance, both with regard to derivation and with regard to substantive interpretation.

The generic class of variables, 'Perceived Behavioral Dissatisfaction', can be divided to form four subcategories of derivations, each of which represents one of the orders of perspectives. Thus, there

Table 12

Perceived Interspouse Behavioral Differentiation

(i)	$B(H_0A, H_1A)$:	Husband's perception of interspouse differentiation with regard to actual behavior.
(ii)	$B(W_0A, W_1A)$:	Wife's perception of interspouse differentiation with regard to actual behavior.
(iii)	$B(H_0I, H_1I)$:	Husband's perception of interspouse differentiation with regard to ideal behavior.
(iv)	$B(W_0I, W_1I)$:	Wife's perception of interspouse differentiation with regard to ideal behavior.
(v)	$B'(H_2A, H_3A)$:	Husband's expectation regarding his wife's perception of interspouse differentiation with regard to actual behavior.
(vi)	$B'(W_2A, W_3A)$:	Wife's expectation regarding her husband's perception of interspouse differentiation with regard to actual behavior.
(vii)	$B'(H_2I, H_3I)$:	Husband's expectation regarding his wife's perception of interspouse differentiation with regard to ideal behavior.
(viii)	$B'(W_2I, W_3I)$:	Wife's expectation regarding her husband's perception of interspouse differentiation with regard to ideal behavior.

exists a zero-order dissatisfaction, a first-order dissatisfaction, and so on, with higher orders indicating, as before, greater complexity and more inference (i.e., greater departure from the level of direct observation). The derived variables have been assigned numerals indicating this ordering. They appear in Table 13.

This completes the derivation of first level (i.e., two-variable) comparisons or interactions for the perceptual orientations or types. As was previously asserted, the variables derived clearly do not constitute an exhaustive set of combinations. This is true in two regards. First, there exist many two-variable combinations which were not presented because of their relative interpretive obscurity. Thus, for example, the relationship between a wife's view of an ideal husband (i.e., W_1I) and the husband's actual view of himself (i.e., H_0A) are not compared. Many other, analogous comparisons are ignored as well, Again, the explanation for these omissions is that it is exceedingly difficult to meaningfully interpret them, much less to provide hypotheses concerning their relationships to dyadic functioning. In general, only those perceptual variables differing along a single facet, or differing along one facet and with regard to respondent (i.e. husband or wife) were included above.

The second category of variables which has not been derived here is that containing interactions among more than two variables. For many such interactions, there do exist relatively straightforward interpretations. As an example, it would be possible to compare (or relate) $D_1(W_1A,W_1I)$, or 'wife's dissatisfaction with her husband's

Table 13

Perceived Behavioral Dissatisfaction

(i)	$D_0(H_0A, H_0I)$:	Husband's dissatisfaction with his own behavior.
(ii)	$D_0(W_0A, W_0I)$:	Wife's dissatisfaction with her own behavior.
(iii)	$D_1(H_1A, H_1I)$:	Husband's dissatisfaction with his wife's behavior.
(iv)	$D_1(W_1A, W_1I)$:	Wife's dissatisfaction with her husband's behavior.
(v)	$D_2(H_2A, H_2I)$:	Husband's expectation regarding his wife's dissatisfaction with her own behavior.
(vi)	$D_2(W_2A, W_2I)$:	Wife's expectation regarding her husband's dissatisfaction with his own behavior.
(vii)	$D_3(H_3A, H_3I)$:	Husband's expectation regarding his wife's dissatisfaction with his behavior.
(viii)	$D_3(W_3A, W_3I)$:	Wife's expectation regarding her husband's dissatisfaction with her behavior.

behavior', with $D_3(H_3A,H_3I)$, or 'husband's expectation regarding his wife's dissatisfaction with his behavior'. An estimate would thus be derived concerning the veridicality of the husband's expectations in this context. Many other analogous derivations are possible, some of which are even more complex. With a structural organization of variables as complex as the Ringex, the problem of how to meaningfully relate them becomes less salient than the issue of where to stop! Without denying the possibility that several or many higher order interactions among variables are theoretically relevant, the current investigator admits to being enamored of the principle that the more conservative an approach, the more valid and appropriate conclusions based on it are likely to be. Consequently, higher order combinations of variables will be omitted from consideration at this time.

A Word Concerning the Behavioral Orientations

It should be clear that none of the derivations presented and discussed above carry any information at all regarding the behavioral "half" of the Ringex variables. More specifically, it follows from what has been discussed that each comparison or derivation above exists as a category of eight variables, one representing each distinct behavioral orientation. Now, the Ringex model is sufficiently general that it would have been logically appropriate to derive comparisons between behavioral orientations, with the attendant, implicit argument being that each such comparison existed as eight distinct variables, one representing each of the perceptual orientations.

From the theoretic vantage point of the investigator, the former conceptual structure, which assigns hegemony to the perceptual orientations, is vastly superior to the latter, which assigns conceptual primacy to the behavioral orientations. There are several reasonable justifications for this preference. First, there is no ordering available for the behavioral orientations that is as clear as the one described above for the perceptual orientations. That is, it is difficult to establish one of the behavioral orientations as being more primary than the others. It follows from this that the derivation of comparisons or interactions is left more uncertain and ambiguous with respect to clear substantive interpretation. A second, more theoretically-oriented argument is that specific behaviors (e.g., 'emotional rejection of the other', 'social acceptance of the self') can be meaningfully interpreted as conceptual objects, or experienced events, which can be apperceived or appreciated from various cognitive (i.e., perceptual) sets. The reverse is no where near as intuitively appealing.

In a very fundamental sense, it is posited here that observable behavior is evaluated, cognitively, according to its substance (i.e., its underlying facet structure), but the context within which it is evaluated is the cognitive, or perceptual, set that one currently occupies. And unless the evaluative context, the perceptual or cognitive set, is taken into consideration, the behavior is essentially substantively meaningless.

The arguments here are not theoretically unassailable, and somewhat a matter of personal orientation or bias. Nonetheless, the current investigator has not yet heard convincing opposition. Consequently, the simple Ringex variables, and as well, the interactions derived and interpreted above, have been organized for analysis with conceptual primacy given to perceptual orientation.

The Structure of Dyadic Adjustment

The specific measure of dyadic adjustment, the Dyadic Adjustment Scale (Spanier, 1976), used in this study, is described in detail in the Method section. The results of a factor analysis of that instrument, conducted by Spanier (1976), are discussed here, as dependent variables for the current study.

The factor analysis was conducted for a set of items collected from a wide variety of existing measures of marital satisfaction, marital adjustment, and so on. Based on the analysis, Spanier devised a set of items characterized by an optimal oblique solution with four factors.[33] Factors were labeled as follows, in order of the magnitude of their communalities, from largest to smallest: (1) Dyadic Consensus, or agreement in matters of importance to dyadic functioning; (2) Dyadic Satisfaction, or satisfaction with one's mate and one's marriage; (3) Dyadic Cohesion, or the extent of personal contact and involvement between spouses; and (4) Affectional Expression, or the extent to which one's spouse is affectionately demonstrative. The average intercorrelation between scales based on the factor analysis was .68. (For additional specifics regarding the subscales and the overall measure, consult the appropriate portion of the Method section.) It can be concluded that dyadic adjustment, as evaluated by the Dyadic Adjustment Scale, is predominantly attributable to a single, general factor, and secondarily, to four smaller common factors. The current study employed, as dependent variables, or criteria, both the four correlated subscales of the Dyadic Adjustment Scale, and the overall scale, as defined by the simple linear combinations of relevant items. This follows common usage of the measure. Items will thus be assigned unit weights, and merely summed to produce both subscales and the overall scale. These variables will be labeled, in accordance with Spanier's precedent, as they appear above. (When subscales are combined, the resulting score is labeled 'Dyadic Adjustment'.)

The DAS is administered separately to husband and to wife, thus permitting spouses the opportunity of independently, and from their own frame of reference, recording their satisfaction with and adjustment to their marriage. As a consequence of this characteristic, it is possible to predict, independently, dyadic adjustment for a wife and for a husband.[34] It is also possible to sum the two scores for spouses, providing an estimate of <u>marital</u> adjustment which can be compared between dyads (couples). Finally, the scores for husband and for wife can be differenced, and consequently an estimate of disagreement regarding dyadic adjustment (or just systematic difference between wives and husbands) can be derived.

The full complement of variables based on the Dyadic Adjustment Scale is presented in Table 14.

Of these 15 variables, the current study places principal emphasis on the first five. That is, the components of dyadic adjustment are treated individually, and as a block (i.e., as variable 'v' of this first category). Secondarily, variables 'vi' through 'x' are examined to determine whether or not systematic differences exist between husbands and wives. The remaining variables are not examined at this time, although certain post hoc considerations are being planned which involve them. In part, this limitation in focus is due to the large redundance among the dependent variables listed above. As well, the modest size of the sample of married couples (dyads) which will be drawn militates harshly against the "overuse" of the data.

Theoretical Prediction, Focal Hypotheses, Directions for Exploration

To a considerable extent, the current study permits a replication both of Foa's efforts with the Ringex model, and of Veenstra's development of SAPIR. Two new possibilities of importance are involved as well, including: (1) the incorporation, in a single study, of Foa's and Veenstra's conceptual schemata; (2) the interpretation of the variables and results in terms of a theory of cognitive, conceptual distinctions, or boundaries. These two novel extensions of previous work are related, since, as was argued above, cognitive, conceptual distinctions, and facets coincide theoretically.

Table 14

Dyadic Adjustment Scale Variables

(A) Variables Existing as Separate Cases for Husband and for Wife:

(i) Dyadic Consensus (Subacale).

(ii) Dyadic Satisfaction (Subscale).

(iii) Dyadic Cohesion (Subscale).

(iv) Affectional Expression (Subscale).

(v) Dyadic Adjustment (Summed Subscales).

(B) Variables Existing as Single Cases for Dyads:

(i) Summed Dyadic Consensus (Subscales).

(ii) Summed Dyadic Satisfaction (Subscales).

(iii) Summed Dyadic Cohesion (Subscales).

(iv) Summed Affectional Expression (Subscales).

(v) Summed Dyadic Adjustment (Summed Subscales).

(vi) Differenced Dyadic Consensus (Subscales).

(vii) Differenced Dyadic Satisfaction (Subscales).

(viii) Differenced Dyadic Cohesion (Subscales).

(ix) Differenced Affectional Expression (Subscales).

(x) Differenced Dyadic Adjustment (Summed Subscales).

Ringex Hypothesis

The fit of the primary independent variables to the Ringex model (Foa, 1966) is expected by the current investigator. In particular, it is hypothesized that the independent variables, when organized with respect either to perceptual profile or to behavioral profile, will display patterns of intercorrelation consistent with those mathematically prescribed for circumplexes. Moreover, when the complete array of variables is treated as a unitary composite, the pattern of intercorrelations obtaining will be consistent with that mathematically prescribed for the Ringex. It is predicted that this will be true for both husbands and wives.

This general hypothesis can be made more focal and explicit in character, by means of the following theoretic propositions. To begin with, it will be argued here that it is reasonable to assume that perceptual orientations can be ordered, as they were, in fact, ordered above, according to their complexity, their degree of abstraction, or their departure relative to what is directly observable concerning the self. Another means of readily presenting the same assertion is to say that although each of us maintains many distinct cognitive conceptions regarding the interpersonal world, that which is central, which serves as an anchor about which the remainder of conceptions orient themselves, is the conception we maintain regarding ourselves. For each of us, the predominant, or primary cognitive conception is that of ourselves as we believe we actually are.

If this is assumed for the moment, then it becomes possible to consider how the remainder of conceptions we hold regarding the domain of interpersonal events will be arranged. That is, once the centrality of the conception of the actual self is established (if assumptively), then it serves as a frame of reference, or as a theoretic anchor, and other conceptions can be evaluated with respect to their <u>distance</u>, conceptually, from the central conception.

Within the perceptual circumplex of the Ringex model, the actual self conception is defined by H_0A, or, in facet notation, by (d_2, e_1, f_2).[35] The question is posed: Which other conception, or conceptions, will be most radically distinct from this one? Alternately phrased, which other conceptions can be <u>most clearly contrasted, in the mind of the respondent</u>, with this one? The reasonable answer to this question is the conceptions held by this respondent of the behavior of the other. The explanation for this answer is that conceptions regarding the other are the easiest to distinguish from conceptions regarding the self, at the level of direct observation concerning the self and the other. In the perceptual circumplex, the perspective representing a direct view, or conception, of the other, is denoted by H_1A, or by (d_1, e_1, f_1). In the ordering of the profiles in the perceptual circumplex, this perspective is maximally distant from H_0A, relative to the other perspectives occurring at the actual level.

Again, all of this is by way of saying that the major cognitive distinction, at the perceptual level, occurs between direct conception of self, and direct conception of other. And it is asserted as well that this distinction is not only the most fundamental in cognitive operations, it is also acquired earliest, developmentally. What of the remaining perceptual orientations?

As can be readily inferred from glancing at the perceptual circumplex, they exist at lesser distances with regard to the central conception. This makes sense, when it is considered that the remaining conceptions, at the actual level, are <u>more complex</u>, or more abstract, than either the conception of self or of other, directly. Moreover, the more complex, the less the distance with regard to the central conception. Thus, relative to H_0A, the remaining perspectives at the actual level are ordered with regard to distance, from greatest to least, as: H_1A, H_2A, and H_3A. At the ideal level, the same is true. The principle underlying the ordering of distances appears to involve the following: As conceptions become more highly inferential, the self-conception is relied upon more heavily. Or, in the event of uncertainty, the anchor in the self conception is relied upon more heavily, and increasingly so as a direct function of increasing uncertainty. Consequently, as more, and more subtle, conceptual operations are forced upon the individual, she or he tends to fall back upon her or his perceptual anchor, and this compromises somewhat her or his capacity to formulate or articulate clear distinctions. When a fairly direct contrast (as between self and other on the basis of direct observation) is not possible, it becomes increasingly difficult for the individual to distinuish between what is self and what is not self, what is inside and what is outside.

The matter remaining is how to arrange the orderings of actual and ideal conceptions with regard to one another. The solution to this problem is relatively straightforward. In the perceptual circumplex, the ideal conceptions for self and for other are most closely aligned with the _objects_ of these conceptions (i.e., the _actual_ conceptions of self and of other). And, in all other cases, it can be seen that actual and ideal conceptions are as close to one another as they _can_ be. That is, ideal conceptions of the behavior of the other as the other would view it, are closer to their _actual_ counterparts than is the ideal conception of immediately greater sophistication or complexity. The issue is again that the distinction between actual and ideal surrenders primacy to the distinction between self and other. Given this, the actual and ideal conceptions of the same objects (i.e., self or other) are as proximate, cognitively, as is possible in a system which actually lays differential emphasis on various cognitive distinctions. Perhaps this point can be made a bit clearer.

The perceptual circumplex is made up of eight perspectives, or conceptions, which in turn are functions of the rules of combination regarding the facets, or conceptual distinctions. Now in a system which was based upon an equal weighting of conceptual distinctions (or facets), the circumplex would be more appropriately called a _cubex_. That is, the eight conceptions would exist as the vertices of a cube, one dimension of which would represent each of the facets, or conceptual distinctions. The human psyche apparently appreciates such distinctions, but either codes them more parsimoniously (i.e., in a circular rather than a cubical arrangement), or is just patently incapable of accurately maintaining maximal conceptual disparity when higher levels of abstract cognition must be invoked. As a consequence, different conceptual distinctions receive different weights. And the upshot is that as distinctions become more involved or complex, the conceptions collapse back upon the dominant reference points, the conceptions of the self. This is as true of ideal conceptions as it is of actual conceptions.

In any event, the perceptual, or conceptual, orientations can thus be unambiguously ordered with regard to their distance from the self conception, according to the principles (however purely theoretical they may be) discussed here. And it is hypothesized that this ordering will be upheld. The precise ordering is, of course, that posited by Foa, although his explanation for the ordering, as has also been discussed, is somewhat different than that proposed here.

The same is actually true of the behavioral orientations. In this case, however, the conceptual distinction between acceptance and rejection is primary, and consequently, it is not feasible to order the behavioral types about some anchor or system of anchors. That is to say, the notion of distinguishing between what belongs to self, and what belongs to other, is simply not pertinent, when _only_ behavior is being discussed (i.e., irrespective of perceptual orientation). Nonetheless, the whole can directly be understood as a system in which conceptual distinctions are differentially weighted, with that between acceptance and rejection receiving maximal weight, followed by that between self and other, and finally, that between the emotional and social contexts, or modes. The ordering hypothesized is identical to that posited by Foa (1966) in his newer behavioral circumplex.

A final comment will completely flesh out the current set of hypotheses. It was argued that the primacy of conceptual distinctions exists as a function of the order in which the individual acquires or develops them. Within the perceptual circumplex, this ordering is thus: (1) actor, or person who is the conceptual object; (2) level, or actual-ideal; and (3) alias, or the person whose point of view is adopted. For the behavioral circumplex, the ordering is: (1) content, or acceptance-rejection; (2) object, or the target of the behavior in terms of self or other; and (3) mode, or emotional vs. social impact of the behavior. Now, in Foa's Ringex, the perceptual orientations are far more closely related than are the behavioral orientations. This is necessary, in fact, for the arrangement of variables to resemble a torus. If both perceptual and behavioral circumplexes were equally coherent, the variables would exist as points on the surface of a spherex. The relevant substantive interpretation for this condition of differential relatedness among variables for perceptual and behavioral circumplexes is that the conceptual distinctions at the behavioral level developmentally antedate those at the perceptual level, and consequently, they are more conceptually distinct, or more clearly articulated. An alternate, and perhaps equally plausible interpretation is that conceptual distinctions at the behavioral level are more open to confirmation by observation, and thus are at once easier to learn and easier to formulate. The current investigation does not permit a selection between these interpretations. However, it is hypothesized that the behavioral circumplexes will indeed manifest lower intercorrelations among variables (i.e., will be more "loosely" related) than the perceptual circumplexes.

The Prediction of the General Patterning of Relationships Between Husband's and Wife's Ringexes

Here again, predictions follow the empirical precedent established by Foa (1966, pp. 17-18). When behavioral circumplexes for husbands and wives are associated with one another, the pattern of intercorrelations is expected to conform to the mathematical criteria for circumplexes. In general, this is tantamount to asserting that the full complement of 16 behavioral circumplexes will arrange themselves spatially as a stack of dinner plates. The order of the stacking, beginning either with the "top" or "bottom" circumplex, will be husband, wife, husband, wife, and so on. It is irrelevant which circumplex (i.e., husbands' or wives') is assigned hegemony.

When perceptual circumplexes for husbands and for wives are related with one another, a similar structural arrangement will appear, but with two differences. First, the "stacked" circumplexes will in this case be very clearly circular; i.e., as cross-sections of a torus. Second, the ordering of variables within perceptual circumplexes matched on behavior for husband and wife, will be <u>reversed with regard to one another</u>. Thus, variable I for wives will be contiguous with variable VIII for husbands, variable II for wives will be contiguous with

Variable VII for husbands, and so forth. This reversal is essentially trivial, since all that is accomplished by it is that perceptual variables between spouses will then coincide with regard to Level (i.e., actual or ideal), Perceiver (i.e., husband or wife), and perceptual object (i.e., husband and wife). Thus, for example, the variable representing the wife's view of her husband's view of his own actual behavior will be contiguous with the husband's view of his own actual behavior. The patterning of intercorrelations for spouse's perceptual circumplexes will be somewhat like that of an array of variables underlying which is a single, general factor. That is, the matrix of correlations will depart somewhat from the successively increasing and decreasing patterning of values predicted for circumplexes, and will approach a pattern characterized by relatively large values at the corners, and relatively smaller values toward the center. There is a substantive and a mathematical explanation for this prediction. Substantively, this means that correlations between variables representing directly observable behavior will be substantially larger than will correlations between variables representing inferred behavior. Mathematically, the departure toward single factor patterning is a consequence of the circular "stacking" of the perceptual circumplexes. That is, variables existing on the inside surface of the tours will naturally be more proximate, spatially, with regard to one another, than will variables existing on the outside surface of the torus.

<u>The Prediction of Dyadic Adjustment</u>

There are two general categories of variables which will operate in the prediction of dyadic adjustment. These are: (1) the primary Ringex variables; (2) the derived variables, or the relationship or interactions between the primary Ringex variables. These two arrays of variables will be discussed separately.

<u>Primary Ringex Variables and the Prediction of Dyadic Adjustment</u>

As has already, to some extent, been discussed, at the level of the primary Ringex variables the prediction of dyadic adjustment is seen as an operation culminating in the definition, or reconceptualization, of dyadic adjustment in terms of its facet construction.

In reviewing previous research, Veenstra (1978a) concluded that of the two <u>factors</u> (i.e., love-hate; dominance-submission) usually derived for circumplexes of behavioral orientations, the love-hate factor is by far the more salient of the two for predicting dyadic adjustment, martial satisfaction, and so forth. His own findings were consistent with this proposition: loving behavior, regardless of the associated perceptual orientation, was directly and postively related to, and was the best predictor of, dyadic adjustment. Dominant behavior, regardless of perspective, was inversely related to, and was also an effective predictor of, dyadic adjustment. (It will be recalled that Veenstra (1978a) also discovered a substantial, negative correlation between the two factors, in his study).

From the vantage point of facet theory, and consequently, from the point of view of Foa's conceptual framework, there are really no such entities as love-hate and dominance-submission, per se. What exist instead are three dichotomous facets, the levels of which appear in various combinations with each other. From this theoretic frame of reference, Veenstra's findings, and the previous, similar findings, can be translated somewhat, as follows. For the behavioral circumplexes to exist as Foa has defined them (and indeed, as Foa has empirically established them), two principles, at the level of cognitive, or intrapsychic, conceptualization, must obtain. First, the three behavioral facets, or conceptual distinctions, must be susceptible to arrangement, in order of cognitive (or interpersonal) salience, as follows: (1) Content (i.e., acceptance-rejection); (2) Object (i.e., self-other); (3) Mode (i.e., social-emotional). Here, Content is most salient, and Mode, least salient. This ordering is consistent with the formulations of the object relations theorists (Kernberg, 1966). Second, the three facets must behave in a manner consistent with propositions regarding the first three semantic principal components for an array of variables. (This is really the same as asserting that successive conceptual distinctions are nested within one another, and are arranged cognitively such that distance is an inverse function of conceptual similarity.) Assuming that these two general conditions are valid, then the only possible arrangement of variables is that which Foa has derived for his behavioral circumplex.

Within this circumplex, and consistent with these conditions, the two variables, 'emotional acceptance of self' (number three in the ordering) and 'emotional acceptance of the other' (number two in the ordering) are contiguous, and oppose the two other contiguous variables, 'emotional rejection of the self' (number six) and 'emotional rejection of the other' (number seven). This pair of two variable clusters essentially would define the bipolar dimension (factor), love-hate. It would be a coherent factor, in that the paired variables are contiguous (i.e., closely clustered, spatially), and the pairs clearly oppose one another.

The same <u>cannot</u> be said with regard to the four remaining variables, representing social acceptance and rejection of self and other. In this case, contiguous variables are similar in terms of the facets, 'Object' and 'Mode', but contrast in terms of 'Content'. If they <u>were</u> clustered, perforce, to produce a dimension such that social acceptance of self and social rejection of other appeared at one pole, and social rejection of self and social acceptance of other appeared at the opposite pole, then assuming that acceptance-rejection is primary, the clusters would exist at the poles of a dimension oblique with regard to the one based on the clustering of the variables representing <u>emotional</u> acceptance and rejection. But the dimension so defined would be far less coherent than the previously mentioned one, due to the greater complexity of its makeup. While it remains to be empirically established, it is here argued that this is precisely why previous findings repeatedly emphasize that of two bipolar factors, the one representing love-hate has been the more coherent or predominant.

With regard to specific predictions concerning the relationships between primary behavioral variables and dyadic adjustment, the following hypotheses, which are consistent with previous work, but which are more specific, are pertinent. It should be emphasized that these hypotheses are proposed <u>regardless</u> of perceptual orientation. Each hypothesis is followed by a brief theoretic explanation concerning its derivation.

First, variables '1', '2', '3', and '4' will be positively correlated with dyadic adjustment. Respectively, these include, 'social acceptance of the other', 'emotional acceptance of the other', 'emotional acceptance of the self', and 'social acceptance of the self.' Variables '5', '6', '7', and '8' will be negatively correlated with dyadic adjustment. These include, respectively, 'social rejection of the self', 'emotional rejection of the self', 'emotional rejection of the other', and 'social rejection of the other'. This general hypothesis predicts merely that the facet, 'Content', is the most important predictor of dyadic adjustment, and in effect, that <u>acceptance</u> is essential for an adequate dyadic relationship. This part of the hypothesis simply implies that dyadic adjustment is construed to be a salient interpersonal phenomenon.

Moreover, the variables within the classes, 'acceptance', and 'rejection', can be ordered with respect to their correlations with dyadic adjustment. For variables characterized by acceptance, variable '2' will correlate most with dyadic adjustment, and ordered according to their importance, the remaining variables will arrange themselves as follows: '3', '1', and '4'. For those variables characterized by rejection, the ordering, according to importance, will be: '7', '6', '8', and '5'. In effect, this part of the hypothesis predicts that the Mode, 'emotional' is more relevant than the Mode, 'social', and that within each mode, the Object, 'other', is more relevant than the Object, 'self'.

It will be noted that this second pair of predictions appears to reverse the salience of the second and third facets. Actually, this is true only in appearance. The current investigator places dyadic adjustment, conceptually, somewhere between 'emotional acceptance of the other' and 'emotional acceptance of the self', but a little closer to 'emotional acceptance of the other'. The inverse of dyadic adjustment is placed analogously, and a little closer to 'emotional rejection of the other'. Thus, in each case, primacy is assigned to 'other', rather than to 'self'.[36]

It should be abundantly clear that what is being predicted here is concerned exclusively with the facet makeup of dyadic adjustment, and not with its factor structure or composition. Dyadic adjustment, and indeed <u>all</u> interpersonally relevant phenomena or events, are believed more comprehensible when construed in terms of their composition insofar as Content, Object, and Mode are concerned. Or, the "amount" of love or dominance (or hate or submissiveness) are (perhaps appropriately) metaphorical means of understanding or describing or conceputalizing interpersonal phenomena (e.g., dyadic adjustment), but they are neither theoretically lucid nor adequately specific for the purpose of reaching a clear appreciation of what constitutes the interpersonal field or domain of content. Indeed, it is manifest in the remarks above that the term, 'love', can be more adequately understood in terms of its own facet structure. 'Love', itself, is purely metaphorical; the variable, 'love', can be more clearly understood when it is thought of as a lawful (in the sense that human experience is lawful) combination of 'emotional acceptance of the self', and 'emotional acceptance of the other'. The experience of loving another can be similarly accounted for by construing it as the operation, in a clear way, of the distinctions between acceptance and rejection, between self and other, and between social and emotional.

To reiterate, these hypotheses are proposed for the behavioral orientations, and <u>without</u> regard to the perceptual types involved. They are proposed to obtain for <u>both</u> husbands and wives. Finally, they are considered general to all four aspects of dyadic adjustment, and to the general attribute, 'dyadic adjustment', itself.

It is now appropriate to consider that subset of the hypotheses which pertains explicitly to the perceptual orientations. The problem of deriving specific, substantively reasonable hypotheses is more difficult within this context, largely because the perceptual orientations are actually schemata from which <u>behavior</u> is experienced. Consequently, it becomes difficult to formulate hypotheses regarding the general predictive efficacy of the perceptual orientations without taking behavioral types into consideration.

In general, it is believed that the perceptual orientations function as modulators with regard to the behavioral types. As much is clear from the Ringex model. Regardless of behavioral type, perceptual orientations intercorrelate very similarly. <u>Depending on</u> perceptual type, however, behavioral types vary in overall coherence with respect to one another. In other words, the perceptual circumplexes are all of about equal circumference or diffuseness, but the behavioral circumplexes vary quite widely in circumference or diffuseness.

Veenstra (1978a) discovered that for lovingness, the perceptual variables ordered themselves, from most to least predictive of dyadic adjustment, as follows: 'VIII', 'II', 'VII', 'I', at the level of actual behavior, for both wife and husband. For ideal behavior, and for both ideal and actual behavior, when dominance was being considered, the correlations did not seem to follow any consistent ordering. The current investigator believes that Veenstra's findings are theoretically meaningful, and that, moreover, a fairly clear ordering exists for the perceptual orientations with regard to the strength of their relationships with dyadic adjustment. What has to be emphasized is that dyadic adjustment, as evaluated by the DAS, is a matter of the individual respondent's evaluation of her or his own sense of the marriage. Once this is appreciated, then the perceptual orientations can be considered with regard to their salience in this context. And, the two perceptual orientations which are most relevant to this context are very clearly 'VIII' and 'I', or 'actual behavior of the self, viewed by the other', and 'actual behavior of the other, viewed by the self'. That is to say, dyadic adjustment is a function of how one _thinks_ one is viewed by one's spouse, and how one views one's spouse. Pertinent, but less relevant, are variables 'VII' and 'II', or, in essence, how one views oneself, and how one believes the other views him or herself. Again it is worth asserting that dyadic adjustment is thus maximally interpersonal, as opposed to maximally intrapersonal.

The general organization of the Ringex variables is such that spatially, by localizing dyadic adjustment nearby the perspectives representing actual behavior, it follows that perspectives representing ideal behavior will be substantially less important with regard to predicting dyadic adjustment. That is, in the perceptual circumplex, the variables are organized into two semicircles, each of which contains only actual, or only ideal, perceptual orientations. Thus, it is hypothesized that within each perceptual circumplex, individual variables characterized by the Level, 'actual', will correlate more solidly with dyadic adjustment than will variables characterized by the Level, 'ideal'.

More specific hypotheses are derived as follows. First, and consistent with Veenstra's findings, variables representing actual behavior will correlate, in order of magnitude, with dyadic adjustment, as listed: 'VIII', 'I', 'VII', and 'II'. Again, the rationale for this ordering is that variables 'VIII' and 'I' are more clearly aligned with interpersonal functioning, while variables 'VII' and 'II' are more obviously intrapersonal in focus. Dyadic adjustment is presumed to emphasize interpersonal operations. Within each of these pairs of variables, the one with self as perceptual object assumes hegemony. (Variables 'VII' and 'II' are listed here only because they are a part of the whole array. They are not in and of themselves crucial for an understanding of dyadic adjustment, insofar as positing its facet structure is concerned. It is expected that they will correlate with dyadic adjustment simply because they are closely aligned, structurally and substantively, with variables

'VII' and 'I', a matter which has received abundant discussion previously in this paper.)

Second, the variables representing ideal behavior will correlate, in order of magnitude, with dyadic adjustment, as listed: 'VI', 'IV', 'V', 'III'. In words, at the ideal level, 'ideal behavior of the self, viewed by the self', is expected to be the best predictor of dyadic adjustment, followed, respectively, by 'ideal behavior of the other, viewed by the self', 'ideal behavior of the self, viewed by the other', and 'ideal behavior of the other, viewed by the other'. Mathematically, or spatially, these predictions follow directly from the analogous set described above, for the actual level variables. That is, variable 'VI' lies closest to variable 'VIII', of the variables characterized by the level, ideal. Consequently, it is expected to correlate most substantially with dyadic adjustment, when compared with the other ideal level variables. Variable 'IV' lies closest, spatially, to variable 'I', the variable at the actual level expected to be the second best predictor of dyadic adjustment. The rationale for the ordering of the remaining two variables at the ideal level (i.e., 'V' and 'III') is self-evident. It merits emphasis here that as a whole, ideal level variables are expected to be far less important in predicting dyadic adjustment than are actual level variables. The predictions above, consequently, are offered in large part for the sake of completeness. As was the case when behavioral circumplexes were being discussed, the current set of predictions is expected to hold for both husband and wife, and regardless of which aspect of dyadic adjustment is being predicted.

While implied by these remarks concerning the anticipated "modulating" impact of the perceptual orientations on the behavioral orientations, it nonetheless deserves emphasis that perceptual orientation is expected to influence the magnitude of correlations between primary Ringex variables and dyadic adjustment, but not the valence of these correlations. In effect, the valence of the correlations is anticipated to depend only on the Content (acceptance or rejection) of the variables involved.

It is now possible to unify the two sets of hypotheses by placing the perceptual and behavioral circumplexes back, as it were, into the overall Ringex model. Actually, no new predictions need be made, since the remarks here are carried implicitly in the hypotheses as offered above. Even so, some expansion on these implications is useful and desirable.

It is possible to locate, hypothetically, dyadic adjustment within the Ringex model. Conceptually, or spatially, the current investigator places dyadic adjustment closest to the point, '(2, VIII)', or the variable, 'emotional acceptance of the other, viewed as actual behavior of the self, from the point of view of the other'. The facet notation is '(a_1, b_1, c_2, d_2, e_1, f_1)'. It is believed that dyadic adjustment will not coincide with this point, but, rather, will be "pulled", so to speak, in the direction of the points, '(3, VIII)', '(2, I)', and '(3, I)'. Respectively, the extended labels for these variables are 'emotional acceptance of the self, viewed as actual behavior of the self, from the point of view of the other', 'emotional acceptance of the other, viewed as actual behavior of the other, from the point of view of the self', and 'emotional acceptance of the self, viewed as actual behavior of the other, from the point of view of the self'. Ordered according to proximity to dyadic adjustment, these four Ringex variables are expected to arrange themselves as follows: '(2, VIII)', '(3, VIII)', '(2, I)', and '(3, I)'. This ordering extends primacy to behavioral circumplex variable '2', and with constant behavioral orientation, to perceptual circumplex variable 'VIII'.

The inverse of dyadic adjustment is expected to exist most closely with regard to the point, '(7, VIII)', or the variable, 'emotional rejection of the other, viewed as actual behavior of the self, from the point of view of the other'. The facet notation is '(a_2, b_1, c_2, d_2, e_1, f_1)'. In a manner similar to that discussed immediately above, it is expected that the point defining the inverse of dyadic adjustment will be "pulled" slightly away from '(7, VIII)' toward the points defined by the variables, '(6, VIII)', '(7, I)', and '(6, I)'. The extended labels for these variables are, respectively, 'emotional rejection of the self, viewed as actual behavior of the self, from the point of view of the other', 'emotional rejection of the other, viewed as actual behavior of the other, from the point of view of the self', and 'emotional rejection of the self, viewed as actual behavior of the other, from the point of view of the self'. As before, the behavioral orientation is given primacy, and the perceptual orientation is assigned a secondary weighting. In this case, variable '7' is the more important, and within '7', the perceptual variable, 'VIII', as before, is the more important. Dyadic adjustment is thus hypothesized to correlate positively with the first group of variables mentioned, and negatively with the second. These two clusters of four variables each are expected to correlate most substantially with dyadic adjustment, and it is predicted that dyadic adjustment will correlate less and less with variables increasingly distant from these two clusters. With those variables characterized by acceptance (i.e., in Content), it is expected that dyadic adjustment will correlate positively. With those variables characterized by rejection (i.e., in Content), it is expected that dyadic adjustment will correlate negatively. Within either form of content, it is expected that correlations will be larger for the emotional Mode, relative to the social Mode. And variables characterized by the Object, other, are expected to correlate more substantially with dyadic adjustment than variables manifesting the Object, self. Perceptual orientation is never expected to reverse the valence of correlation coefficients between dyadic adjustment and the Ringex variables. Rather, it is anticipated that dyadic adjustment will correlate with the Ringex variables in such a way that the patterning of values will be similar, regardless of behavioral orientation. In simple language, this implies that dyadic adjustment is nearly univocal with regard to the perceptual structuples. Altering the structure of the perceptual set given the respondents is expected to result in a modulation of the relationship between Ringex and dyadic adjustment variables in a graded fashion.

Derived Variables and the Prediction of Dyadic Adjustment

Derived variables will be considered class by class, in the order in which they were originally derived. For the purpose of discussion, they will be conceptualized as interactions between their component, primary Ringex variables, in the sense that what is relevant is the relationship existing between primary variables. It should be clear that what was discussed above regarding the relative importance of the behavioral orientations with respect to dyadic adjustment is assumed to be as true of the derived variables as it was of the primary Ringex variables. Thus, interactions involving emotional acceptance are hypothesized to be more relevant than interactions involving social acceptance, and so on.

The same consideration is extended to perceptual orientation; that is, derivations involving variables more relevant to dyadic adjustment are themselves hypothesized to be more relevant.

All of the derivations posited have been previously formulated and tested, in a slightly different context, by Veenstra (1978a). His findings, with almost no exceptions, were that the greater the disparity (i.e., the greater the negative covariance) between compared perceptual orientations, the greater the negative impact on dyadic adjustment. Alternately phrased, his findings very clearly support the notion that dyadic adjustment is predicted by similarity between spouses, rather than complementarity. The current investigator is in agreement with the hypothesis that similarity, and not complementarity, is the relevant predictor of dyadic adjustment. The reason for this is actually implied by the structural arrangement of variables in Foa's (e.g., 1966) behavioral circumplex. For an explanation of this, it is necessary to digress briefly, in order to recapture some of what has been discussed previously.

First of all, and as has been discussed abundantly by the progenitors of the complementarity hypothesis, the entity, 'complementarity', has generally been thought to exist as a relevant predictor of dyadic stability, happiness, adjustment, etc., only insofar as the dimension, 'dominance-submission', is concerned. With regard to the 'love-hate' dimension, similarity has been argued to be the relevant predictor of dyadic adjustment (and its cognates).

An interesting and rather puzzling problem has been noted repeatedly with regard to the dimension, 'dominance-submission'. In brief, this dimension has proved to be somewhat unstable and difficult to label in an unambiguous way (Hurley, 1976). This has complicated somewhat the testing of the complementarity hypothesis, since empirically establishing such a prediction implies the necessity for the dimension to exist clearly and reliably.

What is argued here is that the previous theoretical discussions of dominance implicitly assert that to occupy a position of dominance with regard to some other person is to: (1) assume power with regard to the other; and (2) negate the power of the other, or ignore it. Complementarity, then, requires that the other involved permit the occupation of the position of power, while negating or ignoring their own power. In Foa's (1966) behavioral circumplex, to manifest dominance is just to exhibit, behaviorally, the social acceptance of the self and the social rejection of the other, at the same time. (That is to say, this is Foa's substantive interpretation of the traditionally held view of dominance.) The problem with this, however, is that Foa has empirically established an ordering of behavioral types which patently fails to correspond to anything like this! That is, 'social acceptance of the self' and 'social rejection of the other' exist at vastly discrepant points with regard to one another, in their positions in the behavioral circumplex. Phrased a bit more lucidly, 'social acceptance of the self' and 'social rejection of the other' simply do not correlate substantially in Foa's model. One does not predict the other, in the sense of a both-present or both-absent relationship. Now it is indeed possible to combine, as by force, the behavioral orientations of 'social acceptance of self' and 'social rejection of the other' into a single variable. However, to do so would not only efface the actual structural arrangement of the component variables, but would also tend to weaken (i.e., make "hash" of) whatever predictive links one wished to forge between the combination and criterion variables (e.g., dyadic adjustment).

In simplest form, this argument distills to the statement: there is no univocal dimension, 'dominance-submission', which involves the lawful combination of the components, 'social acceptance of the self' and 'social rejection of the other'. Indeed, when speaking from the vantage point of Foa's model, it becomes somewhat specious to discuss dominance or submission (and love or hate) as though they exist as specifiable points in cognitive space. What is much more sensible from this theoretic persuasion is to comment upon the cognitive distinctions obtaining between acceptance and rejection, self and other, and emotional and social. Viewing the behavioral circumplex, then, what emerges is the assertion that for emotional acceptance and emotional rejection, it is exceedingly difficult to distinguish between self and other. (To accept oneself in an emotional way in relation to another is to accept the other as well. To reject the other in the same context is to reject oneself as well. Personal fates are somewhat merged at the emotional plane of interrelationships.) Again, viewing the behavioral circumplex, it can be argued that for a social conception of self and other, it is exceedingly difficult to distinguish between acceptance and rejection. (To accept oneself socially is closely akin to rejecting oneself socially. Personal fates are very distinct socially, but in the social Mode of interpersonal functioning, ambivalence is the rule.) In simplest form: in an emotional relationship, the cognitive distinction between self and other is blurred; in a social relationship, the cognitive distinction between self and other is pronounced; in an emotional relationship, the cognitive distinction between acceptance and rejection is pronounced; in a social relationship, the cognitive distinction between acceptance and rejection is blurred.

It would seem to follow that to speak of complementarity in this system is to derogate and negate the principles discussed above. (In fact, the current investigator is of the mind that to speak of similarity is only slightly less meaningless; what would appear to be most appropriate is to speak of mutuality or reciprocity.) It is here argued that the response implicitly requested by behavior of any specific type manifested by one individual is a manifestation, by the other individual in the relationship, of the identical type of behavior. Herein, this theoretical assertion is deemed the mutuality or reciprocity hypothesis. In language more readily descriptive of the phenomenology involved in interpersonal relationships, what is demanded from both parties in emotional relationships is a dissolution of the cognitive and experiential boundaries between self and other, and mutual acceptance; what is demanded from both parties in social relationships is a set of gestures which alternately assert and efface the self and a set of gestures which acknowledge this same orientation in the other. In this latter form of relationship, the self is politely (politically appropriately, discreetly, etc.) and maximally kept distinct from the other. And it is argued that failure to reciprocate, in essence, is tantamount to violating culturally (and perhaps even biologically) mediated contracts. It is anticipated that violations will operate to establish stress and conflict, and if systematic (i.e., consistent in any two-person field), they will operate to decrease dyadic adjustment. (Here, the causal link can be alternately conceptualized in terms of exchange theory, object relations theory, frustration of needs for closeness, etc.)

It is hypothesized, then, that differences (i.e., significant negative covariances) between interspouse Ringex variables, or between certain pairs of intraspouse Ringex variables, as derived above, will be negatively related to dyadic adjustment. These hypotheses are spelled out below.

Based on Alperson's formulation, the following variables are relevant. 'Interspouse agreement or disagreement', the two varieties of 'interpersonal understanding or misunderstanding', 'expectation of interpersonal understanding or misunderstanding', and 'expectation of interspouse agreement of disagreement regarding the other' will be negatively correlated with all four aspects of dyadic adjustment, for husband and for wife. Substantively phrased, the more disagreement between spouses regarding their perceptions of one another's behavior, the poorer their dyadic adjustment will be. Similarly, the less they are capable of understanding one another, the lower their dyadic adjustment scores. The greater their expectations of interpersonal misunderstanding, the lower will their dyadic adjustment scores be. Finally, the greater their expectation of disagreement regarding the other, the poorer their dyadic adjustment will be.

Concerning those derivations for which Veenstra established a precedent, the same is argued true. Specifically, 'perceived interspouse behavioral differentiation', and 'perceived behavioral dissatisfaction' will both correlate negatively with dyadic adjustment.

Again, each set of comparisons is expected to confirm with the previously stated hypotheses regarding the relative contributions of the specific behavioral orientations. This means that certain combinations (or differences) are hypothesized to be more relevant than others. Derivations representing actual behaviors are also expected to be more relevant than those restricted to ideal behavior, with the exception of that class of derivations which <u>contrasts</u> actual and ideal perspectives.

A note can be inserted here regarding the <u>overall</u> relevance of the derivations. They are expected to add relatively little to the predictive efficacy of the primary Ringex variables. Actually, this assertion may be viewed as a hypothesis. It was felt advisable to include these variables as a means of formalizing the reciprocality of interpersonal relations inherent in the Ringex model. As well, testing these hypotheses will permit a replication of the work of Veenstra in a more behaviorally specific context (i.e., with eight varieties of explicitly facet-defined behavior, rather than with two amgibuous, factorially stipulated groups of behavioral orientations). This completes the presentation of the hypotheses for the current study.

Method

Subjects

The voluntary participation of 50 married couples was solicited. Participants belonged to one of two general categories. The first category of participants contained individuals currently residing in married housing at Michigan State University. A leaflet describing the study and requesting participation was distributed to all residents of married housing, and all couples indicating a desire to involve themselves as subjects in the study were accepted. The second category of participants were residents of a city of population about 50,000, in southern Michigan. These persons were contacted by an associate of the investigator's. In general, these persons were affiliated with a community college in this city, as faculty members. The first group of respondents were young, and by and large recently married, while the second group were mainly of middle age, and many of them had been married for longer periods of time.

Participation, again, occurred on an entirely voluntary basis. This biased the sample at least somewhat, and in ways which are subject neither to control by, nor explicit understanding by, the investigator.

Instruments

Independent measures included Foa's (1962) Role Behavior Test (RBT), and a questionnaire concerning various simple demographic data which was designed by the investigator. Both measures are simple to complete, and are suited for self-administration.

The RBT permits an examination of the 64 Ringex variables. It consists of 48 brief stories about which respondents answer questions. Twenty-four of the stories concern the behavior of a husband when with his wife, and 24 concern the behavior of a wife when with her husband. Three stories in each of these two categories pertain to each of the eight behavioral types appearing in Foa's behavioral circumplex. After reading a story, respondents answer four questions, each of which represents one of the perceptual types. The questions are identical for all 24 vignettes of constant actor and object. Consequently, there are two sets of four questions. To clarify this rather complex organization of stories and questions, a few examples may be helpful.

For the husband, as respondent, the four questions pertaining to stories describing a husband's behavior, include: (1) Do you act this way when you are with your wife? (2) When he's with his wife, do you think a husband should act the way the husband in the story does?

(3) Would your wife say you act this way with her? (4) Would your wife say that a husband should act as the husband in the story does? In terms of the notation introduced above, these questions represent, respectively, the perspectives: (1) H_0A; (2) H_0I; (3) H_3A; (4) H_3I. Again, for the husband as respondent, but for those stories regarding the behavior of a wife when with her husband, the following four questions are answered:. (1) Does your wife act this way when she is with you? (2) When she is with her husband, do you think a wife should act the way the wife in the story does? (3) Would your wife say that she acts this way with you? (4) Would your wife say that a wife should act as the wife in the story does? The perspectives here, respectively, are: (1) H_1A; (2) H_1I; (3) H_2A; (4) H_2I.

In all, 4 x 48, or 192 responses are collected, three of which represent each of the 64 Ringex variables. Responses to the questions are of two types, depending on the level (i.e., actual or ideal) of the perspective assessed by the questions. For questions representing actual behavior, possible responses include: (1) almost never; (2) seldom; (3) sometimes; (4) often; (5) almost always. For questions focusing on ideal behavior, possible responses include: (1) definitely not; (2) perhaps not; (3) perhaps yes; (4) yes; (5) absolutely yes. Thus, in either case, a five-point range of response scores exists. When content-specific items are combined, a theoretical 15-point range exists for each of the 64 Ringex variables.

The RBT has two forms, one for husbands, and one for wives. The stories are identical, but the two sets of questions are reversed for actor and object with regard to behavior. Both forms are included in Appendix D.

The RBT was selected as the measure of choice with regard to the Ringex variables not only because it was used in the original derivation of the Ringex model, but also because it is the most elegant and direct means of evaluating the various Ringex perceptual and behavioral orientations the investigator has found.

The demographic information sheet was intended to provide data concerning the characteristics of the respondents. It is the intention of the investigator to examine, on a post hoc basis, the relevance of demographic variables with regard to dyadic functioning. As well, the collection of basic demographic information will permit a more precise description of the sample's characteristics. The demographic information sheet appears in Appendix C.

As was described previously the Dyadic Adjustment Scale (DAS) was used as a dependent measure, or criterion measure. This short measure is essentially a revision and extension of the traditional Locke-Wallace Scale (Locke and Wallace, 1959). It contains 32 items of varying format and type and range of possible responses. In general, this instrument was chosen for inclusion in the current study because of its careful, content-oriented design, and because of its relatively acceptable internal consistency (i.e., not only are the four scales substantially correlated, but also, reliabilities for scales, and for the measure as a whole, are uniformly large).[37] Moreover, its criterion-related validity has been reasonably well established; i.e., by demonstrating the measure's utility in discriminating between intact and divorced couples (Spanier, 1976). The DAS is included in Appendix E.

Procedures

Married couples indicating a desire to participate were contacted by telephone, by the investigator or an associate. In the course of this communication, a time was arranged at which the investigator, or an associate, met with the couple at their place of residence. At that meeting, participants were requested to read a set of general instructions, and were then asked to sign a declaration of informed consent. The measures, in packet form, were left with the participants, with the expectation that they would be self-administered. Couples were recontacted periodically for the purpose of checking on their progress, and eventually, to arrange a second meeting time, again at their residence, when the materials were collected. All couples were given the option of selecting to be recontacted and given feedback regarding their own responses to the measures and brief discussion concerning overall findings (this latter, at the close of the study). The information and consent forms appear in Appendices A and B, respectively.

Analyses

There were two general phases of operation in the data analyses: (1) the preliminary phase; (2) the confirmatory phase. These phases were carried out in the order specified here.

Preliminary Phase

The preliminary phase had as its objective the computation of a variety of summary statistical characteristics of the variables involved. Quantities estimated included means, variances, and reliabilities.

For the DAS, summary values were computed concerning the four subscales, as well as the measure as a unit. Subscales were intercorrelated (i.e., the measure was conceptualized as four distinct, oblique controids), and the resulting values are reported. Item-total correlations, both raw and adjusted, were computed and reported. Various estimates of reliability, but chiefly those pertaining to internal consistency (i.e., especially Cronbach's Coefficient Alpha) were computed and reported.

For the RBT, the three-item clusters for each of the 64 variables were examined for internal and external consistency.[38] This part of the operations was particularly curcial, since the Ringex model essentially relies on the proposition that its 64 variables can be viewed as being coherent, distinct entities. Item and cluster (sum) means and variances were routinely computed and reported, as were item-cluster correlations, both raw and adjusted.

Preliminary analyses for the DAS and RBT measures were conducted separately for husbands and for wives, for the purpose of reporting systematic distinctions existing between sexes.

The demographic information was summarized for the two parts of the total sample, and for the total sample itself. These summaries are reported.

Confirmatory Phase

Confirmatory analyses were carried out for each of the focal hypotheses discussed above. This phase of the operations was considerably more complex than the preliminary phase, and hence requires a more detailed description.

First, the Ringex variables were assembled and examined with the purpose of determining whether or not Foa's theoretical model was supported by the current study. Analyses in this context were largely restricted to the computation of correlation matrices for the various perceptual and behavioral circumplex arrays of variables. This involved the production and inspection of 16 matrices for husbands and 16 for wives. All such matrices of correlations are reported, as are the results of a systematic examination of them regarding the extent to which they conform to, or take exception with, the mathematically prescribed circumplex form. Following this examination, differing perceptual profiles and differing behavioral profiles were correlated so as to determine if the circumplexes arranged themselves as a torus, or Ringex.

Next, Ringexes were intercorrelated between husbands and wives, for the purpose of confirming or disconfirming the structural interrelationships hypothesized above. In this case, it was necessary to correlate each Ringex variable for one spouse with all of the Ringex variables for the other spouse. From this large, 64 x 64 matrix of interspouse correlations, smaller submatrices were focused upon, and the hypotheses evaluated by the patterning of values which obtain, both within such submatrices, and between them. For example, between identical perceptual circumplexes for husband and wife, it was hypothesized that correlations should pattern themselves more or less as though determined by a single factor, with systematic deviations attributable to the organization of perceptual circumplexes as cross-sections of a torus. Nonidentical perceptual circumplexes (i.e., with regard to behavioral type) would also exhibit single-factor patterning, but here not only would correlations be of less magnitude, but also, systematic deviations would tend to be somewhat more pronounced. Results are reported and examined in detail.

For the hypotheses concerning the prediction of dyadic adjustment on the basis of the primary Ringex variables, the analytical approaches were even more complex. First, correlations between the four subscales, and the total scale, for dyadic adjustment and each of the Ringex variables were computed. This operation was undertaken separately for husbands and for wives. These values are reported and compared with one another (i.e., within husbands and within wives). Correlations were rank-ordered by perceptual type, behavioral type, and perceptual <u>and</u> behavioral types, and based on these orderings, it was possible to determine the extent to which the hypotheses concerning the facet structure of dyadic adjustment were supported or refuted. As was actually implied by the discussion of these hypotheses, the ordering of the correlations was carried out separately for each of the subscales of the DAS, for the full combination of the DAS subscales, and for husbands and wives as separate groups. Thus, the general hypotheses regarding the orderings of coefficients were actually examined several times in slightly differing ways.

It merits emphasizing that at this point in the analyses, the discussion of findings is, by and large, of a clearly intrapersonal character. That is to say, the focus of substantive interpretations is on the facet structure of dyadic adjustment, but for husbands and for wives, as separate groups. In the analyses which are next to be discussed, the emphasis shifts somewhat toward a more obviously interpersonal, or interspouse, context.

Derived Variables

The hypotheses concerning the relationships between derived and criterion variables were examined by means of a variant of a general analytic strategy proposed by Cronbach (1958) for the treatment of social perception scores or variables. In essence, this approach involves an application of discriminant, or multiple regression, analysis, the goal of which is to maximally distinguish groups of cases according to an optimal function of the variables involved. For dyadic, or a priori paired, scores, with a separate set of continuous criteria, the general appraoch of Cronbach's requires some modification. The strategy which will be employed, including the relevant modifications, is discussed below. What was undertaken was the correlation of variously defined quantities, representing the derived variables, with the five criterion variables comprising dyadic adjustment. Niceties of the alternate mathematical definitions for the derived variables are discussed further along, while a few general conventions and brief explanatory comments appear immediately below.

Two types, or variants, of derived variables were computed. These included: (1) directional distance scores; (2) absolute distance scores. Of necessity, then, two alternate cases exist for each of the derived variables mentioned above. As will be made manifest below, these types of variables rely on differing mathematical formulae, and, it follows, require differing substantive considerations. The relationship between derived variables and the criteria were, in the final analysis, interpreted on the basis of both of the formulaic definitions for the derived variables.

When appropriate, the lower order perspective was assigned hegemony relative to the higher order perspective with which it was compared or contrasted. The lower order perspective, it will be recalled, was to be understood in general as the baseline, or perceptual anchor. (This point is actually relevant only insofar as the directional distance scores are concerned, since the remaining variant of the derived variables fails to encode information concerning the relative juxtaposition of compared or combined primary Ringex variables.)

Each generic derived variable actually exists as two variant categories, or sets, of eight (each) analogous derived variables; one, that is, for each of the behavioral profiles. The derived variables, within each category, were numbered from one through eight, in accordance with the numbering schema Foa has applied to his behavioral circumplex of variables.

Additionally, and as outlined below, each of the variants for every derived variable will be assigned a distinct notation, so as to permit distinctions to be made between them.

Directional Distance Scores

Mathematically, directional distance scores are defined as the simple difference between paired perspectives, as laid out above in the section covering the derived variables. Whenever appropriate, the higher order perspective was subtracted from the lower order perspective. In effect, there are two distinct components contributing to a given directional distance score: (1) the absolute difference between compared perspective scores; (2) the relative standing of the perspectives with regard to one another. The mathematical definition, and some examples of derived variables defined as directional distance scores, are included in Table 15.

In the table, $A_1(H_0A, W_1A)$ refers to the derived variable in the behavioral respect, 'social acceptance of the other'. And, $A_2(H_0A, W_1A)$ refers to the same derived variable, but in the behavioral respect, 'emotional acceptance of the other'. The last member of the set, $A_8(H_0A, W_1A)$, designates the variables in the behavioral respect, 'social rejection of the other'.

The principal value of the directional distance scores is that information concerning the relative juxtaposition of compared perspectives is encoded, and appears as the valence of the derived scores. That is, negative values always indicate that the baseline score, or

Table 15

Directional Distance Scores[a]

For the derived variable, 'interspouse agreement regarding the actual behavior of the husband':

$$A_1(H_0A,\ W_1A) = H(1,\ VII) - W(1,\ II);$$

$$A_2(H_0A,\ W_1A) = H(2,\ VII) - W(2,\ II);$$

$$\vdots \qquad\qquad \vdots$$

$$A_8(H_0A,\ W_1A) = H(8,\ VII) - W(8,\ II).$$

[a]Here, and in Tables 16 and in text, the label, 'distance', can be thought to coincide in meaning with 'difference', or any other cognate.

perceptual anchor, is lower in magnitude than is the perspective with which it is compared. Positive values for directional distance scores, of course, indicate the reverse situation.

Including information regarding the relative magnitudes of the compared perspectives leads to the derived variables, as directional distance scores, being conceptualized as a continuum of values, with a theoretical midpoint of zero, with large negative values at one end, and with large positive values at the other end. If an array of such scores is linearly related to dyadic adjustment, the conclusion is warranted that the direction (i.e., valence) of the distance, or difference, between compared perspectives is the relevant feature. There are two reasons for this.

First, as was mentioned above, directional distance scores actually exist as a function both of the juxtaposition of perspectives, and of the absolute magnitude of the difference between perspectives. It would have been possible to construct a directional scoring procedure which did not encode absolute magnitude, simply by assigning an arbitrary value (e.g., '0') for negative distances, and a different arbitrary value (e.g., '1') for positive distances. (A more elegant procedure would involve the semipartialing of absolute distance from directional distance scores but not from criterion variables.) The investigator experimented with both of these procedures, and discovered that, with very few exceptions, the following principles hold: (1) in situations in which direction or valence of distance varies, direction-distance and "pure-distance" indices correlate on the order of .90 or above, and direction-distance and absolute-distance indices correlate on the order of zero; (2) in situations in which the valence of distance does not vary, all three indices correlate on the order of .90 or above. Consequently, the investigator believes that it is justifiable to argue that to adopt a schema relying on "pure-distance" indices is just to discard information needlessly, and to use a semipartialing approach is, in the first situation mentioned above, pointless (i.e., quantities would not be altered), and in the second situation, irrelevant from the outset. (The empirical point here is that in directional distance scores, the direction is by far the more important thing, and in absolute distance scores, magnitude is by far the more important thing.)

The second reason is actually the mathematical counterpart (or elaboration) of the first reason. If direction of difference is related to a criterion or the criteria, then absolute difference scores either will not be related, or will be only slightly related, to the criterion or the criteria. This is because when absolute difference is taken, those differences which occur in a negative direction are mathematically reflected. And, the operation of reflection will lead to an accumulation of points arranged as a horizontal ellipse spanning Quadrants I and II, where previously an elliptical array spanning Quadrants I and III (again, assuming linearity between directional distance and criterion scores) had existed. Horizontal lines of best fit imply correlation coefficients of zero-order. The obverse situation is equally valid. That is, given linearity between absolute difference and criterion, when directional distance scores are plotted against the criterion, the scatterplot will alter from a first Quadrant ellipse to a first and fourth Quadrants parabola (i.e., with horizontal axis). Clearly, the relationship between criterion and directional distance scores will, in this case, be zero-order.

The exceptional case, of course, is a situation in which all differences are either positive or negative, in which instance both absolute distance and directional distance will correlate equally well (if at all) with a given criterion variable. This circumstance will obtain in the event that a systematic difference exists between compared perspectives. When the systematic difference is a negative one, it is considered unnecessary and inappropriate to interpret absolute distance scores, since they will obscure the nature (i.e., the valence) of the sytematicity in differences. When the difference is systematic and positive, directional distance and absolute distance scores will simply coincide. And, in either of these cases, the correspondence will be perfect between the directional distance scores and the absolute distance scores, save that in the first case, directional distance scores will in effect be reflected to produce absolute distance scores.

Absolute Distance Scores

Mathematically, an absolute distance score is defined as the absolute value of its counterpart, directional distance score. Conceptually, these are somewhat easier to interpret than the directional distance scores, in that they are comprised of a single component: the absolute difference between compared perspectives. Following the example previously outlined in the derivation of directional distance scores, the mathematical definition for absolute distance scores may be treated as appears in Table 16.

Interpretive comments follow directly from those pertaining to the analogous directional distance formulations. Due to the nearly perfect symmetry existing between them, these remarks will not be repeated here. Several comments concerning the use and value of these two varieties of distance scores, in the analytic context, are needed here, however.

First of all, and as was perhaps implied by the previous discussion comparing these two aspects of perspective similarity, both types of distance score were computed for each of the derived variables. Both types were also correlated with the various criterion measures, and were thus compared with regard to predictive efficacy. Such a comparison permitted the formulation of conclusions regarding the specific character of the relationship of combined perspectives with the criteria.

A second comment worth offering here is that the comparison of these alternate derivations permitted an evaluation of the extent to which similarity vs. complementarity vs. systematicity of complementarity are relevant characteristics in the context of marital satisfaction or adjustment. This point deserves additional clarification.

If absolute distance is a better predictor than directional distance (i.e., of dyadic adjustment) then with positive correlation

Table 16

Absolute Distance Scores

For the derived variable, 'interspouse agreement regarding the actual behavior of the husband':

$$|A_1(H_0A,\ W_1A)| = |H(1,\ VII) - W(1,\ II)|;$$

$$|A_2(H_0A,\ W_1A)| = |H(2,\ VII) - W(2,\ II)|;$$

$$\vdots \qquad\qquad \vdots$$

$$|A_8(H_0A,\ W_1A)| = |H(8,\ VII) - W(8,\ II)|.$$

between distance and adjustment, it can be concluded that complementarity is instrumental; with negative correlation, similarity is instrumental. If, on the other hand, directional distance is the better predictor, then neither complementarity nor similarity can be said to be relevant. Rather, it will be the case that unidirectional, or systematic complementarity can be said to be relevant, since whether directional distance correlates negatively or positively with dyadic adjustment, the important thing will be a combination of direction and distance; i.e., distances of one variety will be associated with dyadic adjustment, while distances of the other variety will be associated with its inverse. Mathematically, there exists no definition for systematic similarity, since similarity directly implies zero-order differences between compared perspectives will be associated with dyadic adjustment, while differences of either valence will be associated with its inverse. That is to say, similarity is completely assessed by the use of absolute distance scores in predicting dyadic adjustment.

In accordance with the hypotheses for the current study, it was expected that similarity would be the important (i.e., relevant) aspect of compared perspectives. Thus, it was anticipated that absolute distance scores would correlate negatively and substantially with dyadic adjustment in every case. Moreover, it was argued that they would correlate more substantially than would the analogous directional distance scores. The inclusion of directional distance scores was intended to permit both a more "dangerous" test of the hypotheses regarding the derived variables, and a more complete interpretation of the relationships between compared perspectives and dyadic adjustment.

A final point requiring elucidation concerns the use of directional distance and absolute distance scores in regression statements. A rather significant problem emerges in that if the perspectives from which directional distance scores are derived are themselves entered into the usual, stepwise prediction model, it then is theoretically appropriate to enter them first, and consequently, to successively partial them from other predictors which may be subsequently added to the model. However, distance scores of the directional variety are simple (or direct) linear composites of the perspectives which they have been derived from, and consequently, they will vanish upon partialing. Another way of looking at the same problem is that no new information is added to a prediction argument by deriving linear composites of already existing predictors. The most which is gained by means of this sort of operation is a strictly interpretive advantage. For this reason, directional distance scores will in no case be entered in prediction (i.e., regression) statements. Their use will be restricted to the contexts of hypothesis testing and of the interpretation of the relationships between derived variables (i.e., the abstract entities) and the criterion variables. (Note: this is not to say that directional distance scores cannot or will not be compared with the primary Ringex variables from which they have been derived with regard to predictive efficacy; they will not, however, be entered into models with the primary variables.)

Absolute distance scores will be entered into prediction statements, as they are not simple linear transformations of primary variables, and consequently, will not vanish upon partialing. That is to say, absolute distance derivations accomplish the effect of adding new information not already contained in the primary variables from which they have been derived. There exists, of course, another means of including derived variables in prediction models. To accomplish this, they need only be defined (in the precise, mathematical sense) as interactions between compared perspectives. Since this sort of interaction is explicitly not a linear composite of involved variables, but is, rather, a multiplicative (or geometric) composite, it will consequently include information (perhaps germane to the prediction of the criterion variables) not conveyed by the involved variables. It follows that interactive regression components will not vanish upon partialing the involved variables.

Interaction Scores

As a preliminary comment, it deserves mention here that interaction scores actually figure nowhere in the context of the confirmatory analyses, and will be used exclusively for the purpose of facilitating exploratory efforts. As will become clear below, interaction scores offer the opportunity of interpreting the relationships between primary variables involved in derived variables in still another way. Consequently, augmenting the derived variables with a set of interaction scores may well lead (in all possibility) to a fuller understanding of dyadic adjustment.

Mathematically, interaction scores are quite simply defined as the products of compared perspectives. Strictly speaking, they are not comparable to directional and absolute distance scores, because in addition to incorporating information concerning differences between compared perspectives, they also directly take into consideration the impact (in a predictive sense, and relative to criterion variables) of the relationship (in terms both of magnitude and of valence) between compared perspectives. Distance scores lack this feature. Examples of, and the notation for, interaction scores are included in Table 17.

In the table, the 'X' is taken to mean, 'the interaction involving'. In some ways, the interpretation of interactions will necessarily differ in character from the analogous interpretations at the level of directional or absolute distance scores, and in some ways, the two sets of interpretations will be very similar. To clarify these interpretive issues, the similarities will be discussed before the differences.

In a very general sense, all three variants of derived variables imply (and this is actually a testable implication) the possibility that combinations of primary Ringex variables operate as useful predictors of dyadic adjustment. Another means of describing this implication is just to say that the predictive efficacy of the primary variables depends in some sense on their relationships with one another. This possibility is essentially tantamount to arguing that the primary variables are not independent (or orthogonal) with regard to

Table 17

Interaction Scores[a]

For the derived variable, 'interspouse agreement regarding the actual behavior of the husband':

$$X\{A_1(H_0A,\ W_1A)\} = \{H(1,\ VII)\}\{W(1,\ II)\};$$

$$X\{A_2(H_0A,\ W_1A)\} = \{H(2,\ VII)\}\{W(2,\ II)\};$$

$$\vdots \qquad\qquad \vdots$$

$$X\{A_8(H_0A,\ W_1A)\} = \{H(8,\ VII)\}\{W(8,\ II)\}.$$

[a]Here, 'interaction' may be taken to mean 'the product of' compared perspectives. There exist, of course, other means of legitimately defining the term.

one another, and hence, that they _interact_ with one another. It is the case, then, that at this very general level of understanding, _each_ of the derivation operations discussed here is in keeping with the notion that primary variables interact in some way with one another.

What is _different_ about the three classes of derivation operations is that _each_ of them proposes (or assumes) a very _distinct_ sort of interactive relationship between combined variables. Moreover, there is no hard and fast dictum to the effect that any one of the three kinds of interactive relationships will operate to predict the existence of any other of the three. (Something of an exception to this point occurs, in that a strong relationship between either directional or absolute distance derivations and a criterion indicates, of mathematical necessity, that at most a weak relationship will obtain between the other of these drivations and the same criterion.) That is to say, the kind of information encoded by any one of the three types of interactive relationships discussed here will manifest only a very imperfect relationship to information encoded by either of the remaining two kinds.

The directional and absolute distance derivations have already been discussed in the context of the above remarks. The more traditional, multiplicative interactive derivation has not. Specifically, in order for a type III interaction to function as a relevant predictor of dyadic adjustment, three conditions must be met: (1) the primary predictors involved must correlate with one another; (2) the primary predictors involved must each be somewhat curvilinearly related to the criterion; (3) the nature of the relational curvilinearity between either of the primary predictors and the cirterion must be dependent on the other primary predictor. Given these conditions, then an interactive relationship can be said to exist between the primary predictors. The importance, relevance, or significance of such an interaction will depend explicitly upon the amount of curvilinearity (i.e., the inadequacy of a linear approximation) obtaining in the relationship between primary predictor and criterion, and the extent to which the curvilinearity is dependent on or conditional with regard to the other primary predictor involved. In the parlance of variance analysis, this is all by way of stating that: (1) "more" of one variable and "more" of a second variable are associated with "much more" of a third, while "less" of one and "less" of another are associated with "much less" of a third; or (2) "more" and "more" are associated with "much Less" of a third, and "less" and "less" are associated with "much more." The first of these instances may be understood as a positive interaction; the second may be called a negative interaction (where the valences refer to the signs of the correlation coefficients summarizing the relationships between interactive derivations, or variables, and criteria).

As was mentioned previously, it is the case that interactive variables can be evaluated in a regression framework with regard to their <u>unique</u> contributions to the prediction of criteria. That is to say, they can be correlated with criteria after having partialed primary variables both from them and from the criteria. They will not vanish upon partialing, because they are not linear functions of primary variables. The treatment of interactive variables here is intended for completeness. These variables were not used analytically in the current project, largely because no clear theoretical justification exists for their having been included in analyses. They may be used on a post hoc basis, for exploratory purposes.

Results

Preliminary Analytic Phase and Data Description

At the time that data collection was terminated, a total sample of 50 married couples, 100 individuals, had been accumulated. Of these couples, 17 belonged to a subsample of data collected in another city, and 33 belonged to a local subsample. In Table 18, pertinent demographic characteristics have been summarized, both for the two subsamples, separately, and for the sample as a whole. In general, the smaller of the two subsamples (i.e., the non-local group) contained couples who had been married longer, had more children, and made more money annually. This is to be expected, as the larger subsample was comprised of people who were studying at this university, and who consequently were generally younger, newly married, and not yet working professionally.

The Dyadic Adjustment Scale, as a measure for this sample, has been summarized in various ways in the three subtables included in Table 19. The summary information regarding the DAS has been provided separately for husbands and wives, because the measure is not

Table 18

Characteristics of Samples

	Mean			Standard Deviation		
Age	Distant[a]	Local[b]	Whole[c]	Distant	Local	Whole
Husbands	46.00	26.67	33.24	6.42	5.40	10.87
Wives	43.77	25.06	31.42	7.61	5.11	10.77
Length of Marriage (Years)						
Husbands	18.69	3.16	8.44	9.14	4.66	9.83
Wives	18.73	3.16	8.46	9.24	4.68	9.88
Number of Previous Marriages						
Husbands	.18	.12	.14	.39	.33	.35
Wives	.29	.06	.14	.47	.24	.35
Number of Children[d]						
Husbands	2.53	.76	1.36	1.07	1.30	1.48
Wives	2.53	.61	1.26	1.01	1.06	1.38
Number of Children in Home						
Husbands	1.65	.58	.94	1.37	1.03	1.25
Wives	1.65	.58	.94	1.37	1.03	1.25
Ages of Children						
First Child						
Husbands[e]	19.41	8.18	15.00	6.77	6.66	8.65
Wives[f]	20.50	7.00	15.00	7.48	6.45	9.70
Second Child						
Husbands[g]	17.38	7.50	14.08	6.33	6.68	7.90
Wives[h]	17.94	8.00	15.57	7.34	7.87	8.47

Table 18 (Continued)

	Mean			Standard Deviation		
Third Child	Distant	Local	Whole	Distant	Local	Whole
Husbands[i]	14.75	6.67	12.55	6.02	4.04	6.55
Wives[j]	15.75	6.67	13.27	7.80	4.04	7.99
Fourth Child						
Husbands[k]	12.75	6.50	10.67	6.90	.71	6.25
Wives[l]	11.67	7.00	10.50	8.02	0.00	6.95
Fifth Child						
Husbands[m]		4.00	4.00		0.00	0.00
Wives[n]						
Years of Education[o]						
Husbands	16.81	16.52	16.62	2.59	2.03	2.22
Wives	16.35	15.07	15.52	2.03	2.10	2.14
Income (Thousands of Dollars)						
Husbands	30.25	5.24	12.70	17.19	5.19	15.36
Wives	12.37	6.42	8.44	8.87	5.25	7.20
Family Status[p]						
Husbands	.12	.06	.08	.33	.24	.27
Wives	.12	.06	.08	.33	.24	.27

[a]$\underline{n}$ = 17.

[b]$\underline{n}$ = 33.

[c]$\underline{n}$ = 50.

[d]In some cases (i.e., reconstituted families), this number differed for husbands and wives, as these entries refer to biologically related children.

[e]$\underline{n}$ = 28.

Table 18 (Continued)

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[f] $\underline{n}$ = 27.

[g] $\underline{n}$ = 24.

[h] $\underline{n}$ = 21.

[i] $\underline{n}$ = 11.

[j] $\underline{n}$ = 11.

[k] $\underline{n}$ = 6.

[l] $\underline{n}$ = 4.

[m] $\underline{n}$ = 1.

[n] $\underline{n}$ = 0.

[o] For years of education, 12 is taken to indicate completion of high school, 16, completion of bachelor's degree, 18, completion of master's degree, and 20, completion of doctoral degree.

[p] Family status was scored as follows: '1' indicates a reconstituted family; '0' indicates a non-reconstituted family.

comparable across sexes. As the summary values are discussed, this point will become increasingly obvious.

Subtable 19.A contains means, variances, and standard deviations for the subscales and the full scale (i.e., combined subscales) of the DAS. By and large, the values are comparable with those Spanier (1976) reported for his married subsample. The exception is that dyadic consensus scores for the current sample are considerably lower than for the Spanier sample. The remaining scale and full scale means are slightly higher than are those reported by Spanier.

The current sample manifests very nearly identical subscale and full scale means for husbands and wives, with wives tending (and in the case of dyadic consensus, significantly so) to score slightly higher than husbands. Spanier failed to present summary values for husbands and wives separately, and consequently, it is difficult to determine whether the current finding replicates a reliable distinction between husbands and wives or not. More importantly, variances tend to be about half the size for wives as for husbands, with the exception that dyadic cohesion variances are nearly identical. Taken in conjunction with the previous comment regarding mean differences, this indicates that although wives rate the various aspects of their dyadic adjustment in a more positive direction than do their husbands, the highest values collected were attributable to husbands. Again, Spanier either did not detect this, or failed to consider or to mention it.

Subtable 19.B contains internal consistency estimates for the DAS scales for husbands and wives. These values are acceptable in most

Table 19

Summary of Dyadic Adjustment Scale

19.A Scale Means, Variances, and Standard Deviations.

Scale	Husbands Mean	Husbands Variance	Husbands S.D.	Wives Mean	Wives Variance	Wives S.D.
Dyadic Consensus[a]	49.52	40.13	6.34	51.95	27.42	5.24
Affectional Expression[b]	9.26	4.52	2.13	9.66	2.23	1.49
Dyadic Satisfaction[c]	41.74	24.20	4.92	42.84	13.02	3.61
Dyadic Cohesion[d]	16.51	8.33	2.89	17.10	8.95	2.99
Dyadic Adjustment[e]	117.03	185.93	13.64	121.54	112.66	10.61

19.B Reliabilities[f] and Item Statistics[g].

Scale	Reliability Husbands	Reliability Wives
Dyadic Consensus	.8799	.8325
Affectional Expression	.7323	.4927
Dyadic Satisfaction	.8449	.7965
Dyadic Cohesion	.6550	.6668
Dyadic Adjustment	.9249	.8892

Table 19 (Continued)

Scale	Husbands		Wives	
	Item-Total r	Alpha W/O Item	Item-Total r	Alpha W/O Item
Dyadic Consensus				
Item 01	.6533	.8246	.7740	.7411
Item 02	.5731	.8708	.2532	.8341
Item 03	.2045	.8891	.3129	.8329
Item 05	.4935	.8746	.3451	.8310
Item 07	.5102	.8739	.5910	.8125
Item 08	.5950	.8698	.5320	.8167
Item 09	.4337	.8797	.4451	.8239
Item 10	.7422	.8619	.5171	.8181
Item 11	.5712	.8707	.5463	.8158
Item 12	.6569	.8674	.4932	.8200
Item 13	.5833	.8701	.5641	.8142
Item 14	.6462	.8666	.6196	.8100
Item 15	.6981	.8637	.5303	.8181
Affectional Expression				
Item 04	.5073	.6936	.2999	.4554
Item 06	.3760	.7466	.2317	.4773
Item 29	.5144	.6779	.3666	.3876
Item 30	.7603	.5552	.3869	.3852
Dyadic Satisfaction				
Item 16	.6533	.8246	.7740	.7411
Item 17	.5896	.8301	.3787	.7888
Item 18	.6014	.8249	.5694	.7676

Table 19 (Continued)

Scale	Husbands		Wives	
	Item-Total r	Alpha W/O Item	Item-Total r	Alpha W/O Item
Item 19	.2941	.8553	.4104	.7853
Item 20	.7145	.8191	.6545	.7608
Item 21	.5157	.8332	.4039	.7874
Item 22	.5515	.8301	.4121	.7860
Item 23	.5333	.8321	.1797	.8080
Item 31	.6570	.8238	.6802	.7487
Item 32	.5575	.8294	.2868	.7996
Dyadic Cohesion				
Item 24	.1123	.7085	.3352	.6514
Item 25	.4563	.5805	.5070	.5714
Item 26	.5109	.5632	.5996	.5498
Item 27	.4578	.5793	.4305	.6107
Item 28	.5215	.5420	.3102	.6847
Dyadic Adjustment				
Item 01	.7080	.9203	.4529	.8855
Item 02	.5824	.9219	.2430	.8889
Item 03	.1909	.9265	.2230	.8899
Item 05	.5882	.9218	.4413	.8856
Item 07	.5103	.9227	.5743	.8830
Item 08	.6080	.9216	.5058	.8842
Item 09	.4421	.9237	.4222	.8861
Item 10	.6885	.9205	.4987	.8845
Item 11	.5422	.9222	.6082	.8821

Table 19 (Continued)

Scale	Husbands		Wives	
	Item-Total r	Alpha W/O Item	Item-Total r	Alpha W/O Item
Item 12	.6231	.9216	.4949	.8847
Item 13	.6700	.9204	.6353	.8811
Item 14	.5992	.9214	.5576	.8832
Item 15	.7224	.9199	.5188	.8845
Item 04	.7415	.9194	.4717	.8850
Item 06	.4014	.9239	.2566	.8889
Item 29	.2395	.9259	.0941	.8904
Item 30	.4530	.9234	.4084	.8870
Item 16	.5393	.9226	.5537	.8838
Item 17	.4054	.9239	.3512	.8874
Item 18	.6886	.9201	.5093	.8847
Item 19	.3477	.9249	.5301	.8847
Item 20	.5721	.9222	.4756	.8855
Item 21	.5269	.9225	.4273	.8859
Item 22	.6443	.9212	.4394	.8857
Item 23	.5675	.9222	.3349	.8875
Item 31	.5470	.9228	.7089	.8792
Item 32	.4680	.9232	.2740	.8885
Item 24	.2001	.9261	.2417	.8894
Item 25	.4530	.9235	.4340	.8867
Item 26	.5814	.9217	.5221	.8839
Item 27	.3747	.9253	.4226	.8863
Item 28	.3633	.9254	.1456	.8961

Table 19 (Continued)

19.C Scale Intercorrelations for The Dyadic Adjustment Scale.

Husbands

	(1)	(2)	(3)	(4)	(5)	Corrected[h]
(1)	1.0000	.7072	.7235	.5227	.9454	.8278
(2)	.7072	1.0000	.3558	.3204	.6775	.5784
(3)	.7235	.3558	1.0000	.5033	.8589	.6973
(4)	.5227	.3204	.5033	1.0000	.6861	.5462
(5)	.9454	.6775	.8589	.6861	1.0000	

Wives

	(1)	(2)	(3)	(4)	(5)	Corrected
(1)	1.0000	.5832	.6851	.3738	.9136	.7187
(2)	.5832	1.0000	.3606	.0900	.5763	.4704
(3)	.6851	.3606	1.0000	.4462	.8544	.7035
(4)	.3738	.0900	.4462	1.0000	.6306	.4099
(5)	.9136	.5763	.8544	.6306	1.0000	

Table 19 (Continued)

Husbands by Wives					
	Wives				
Husbands	(1)	(2)	(3)	(4)	(5)
(1)	<u>.5512</u>	.3082	.4633	.2093	.5318
(2)	.5889	<u>.4783</u>	.3534	.2396	.5455
(3)	.4183	.2823	<u>.5125</u>	.1072	.4505
(4)	.4490	.1856	.4286	<u>.4821</u>	.5292
(5)	.5939	.3589	.5460	.2754	<u>.6067</u>

<u>Note</u>. The variable numbers in the three preceding correlation matrices are to be interpreted as follows: (1) Dyadic Consensus Subscale; (2) Affectional Expression Subscale; (3) Dyadic Satisfaction Subscale; (4) Dyadic Cohesion Subscale; (5) Dyadic Adjustment Scale. The underlined entries in the third matrix refer to monoscale coefficients, between spouses.

[a] $\underline{m}$ (number of items) = 13.

[b] $\underline{m}$ = 4.

[c] $\underline{m}$ = 10.

[d] $\underline{m}$ = 5.

[e] $\underline{m}$ = 32.

[f] Estimates of reliability are alpha coefficients (Cronbach, 1951), designed to summarize internal consistency.

[g] Item-total correlations have been adjusted to account for inclusion of the items in the various scales.

[h] The term, 'corrected', here means that scale-full-scale correlations have been adjusted for inclusion of the subscales in the full scale. The correction formula used here,

Table 19 (Continued)

and borrowed from Magnusson (1967, pp. 209-211), is as follows:

$$r_{i(t - i)} = r_{it}s_t - s_i \;/\; (s_t^2 + s_i^2 - 2r_{it}s_is_t)^{1/2};$$

where:

r_{it} = the item-total or subscale-full-scale correlation;

s_t^2 = the total test or full scale variance;

s_i^2 = the item or scale variance.

The use of the formula for correction is general to both item-total and subscale-full-scale adjustments.

cases, with the exceptions that for wives, affectional expression is too scattered as a cluster, and for both husbands and wives, dyadic cohesion clusters poorly. By far, the poorest performance is affectional expression, for wives (r_{tt} = .4927).

Here again a systematic distinction arises between sexes: reliabilities are poorer for wives in each case except for dyadic cohesion. This distinction is a mathematical consequence of the smaller variance of wives' scale responses relative to husbands' scale responses. That is to say, both the attenuated reliabilities and the deflated variances associated with the wives' DAS scales are due to a common feature: small item covariances. Statistically, then, the response patterns of wives, insofar as the DAS scales are concerned, are more complex (less coherent) than are the analogous patterns for husbands.

In all cases, the reliability estimates Spanier (1976) reports are larger than those characterizing the current sample, and particularly with regard to the wives. Discrepancies between Spanier's results and those presented here are slight for those scales including many items (i.e., dyadic consensus and satisfaction, and full scale dyadic adjustment), but are substantial for the smaller scales (i.e., affectional expression and dyadic cohesion).

Also included in Subtable 19.B are corrected item-total correlations and estimates of internal consistency contingent upon item removal for the various scales. In scanning these values, it is obvious that the clusters comprising scales for husbands are by and large remarkably more coherent than clusters comprising scales for wives.

This is to be anticipated given the comment above regarding reduced item covariances for wives.

Subtable 19.C summarizes the DAS subscale intercorrelations within husbands and wives, and between husbands and wives. The within sex correlation matrices manifest very similar patterning with regard to one another, the main distinction between sexes being that husbands' correlations are in almost every case larger than the wives' correlations. As was indicated by the scale reliabilities, those scales with few items are the weakest of the lot (i.e., fit least well into the total scale), even after correction is made for inclusion. Again, this is just to say that the smaller scales are least internally consistent. As was Spanier's (1976) finding, the scales correlate positively with one another, and in most cases, substantially so, indicating the existence of a potent general factor.

Prior to mentioning the between spouses scale intercorrelations, it is appropriate to comment, statistically, regarding the weaknesses of the smaller scales (i.e., affectional expression and dyadic cohesion). That these scales are of diminished coherence (i.e., internal consistency) is perhaps not surprising, in that each of them contains only a few items. That is to say, they were really "leftovers" from Spanier's original efforts, in the sense that the items probably appeared relevant on the basis of content considerations, but failed to integrate smoothly with the larger clusters, extracted on the basis of his principal components factor analysis. Such items often can be collected to form secondary clusters, again, on the basis more of exclusion from primary clusters than for any other reason. The problem with centroids, or cluster sums, formed in this manner is that they are highly likely to be sample specific, and their apparent internal consistency is likely to vanish upon successive sampling (i.e., upon cross-validation). In the opinion of the current investigator, this is precisely what has occurred. It is posited here, then, that for these two clusters, what seemed to Spanier to be spatial proximity was in reality nothing more than the usual, ephemeral, sample specific overlap among items.

It is important to note that these smaller, weaker clusters do indeed articulate well with the full scale. Actually, this is in support of the notion that a large, general factor, 'dyadic adjustment', probably adequately represents the entire array of items.

To sum up this purely statistical commentary, it would indeed appear most reasonable and appropriate to conceptualize dyadic adjustment as a single, relatively coherent attribute comprised of one large general factor plus two or more (i.e., at least dyadic consensus and dyadic satisfaction) highly oblique group factors. Having reached this conclusion, it hardly makes sense to proceed as though the dyadic adjustment subscales are distinct with regard to one another. In general, this would be to engage in the presentation and discussion of redundant information, and in the cases of the weaker two subscales, this operation would clearly invite the reporting of patently uninterpretable results. It seems most sensible, then, to adopt the full scale measure of dyadic adjustment as the sole criterion variable for predictive efforts.[39]

The following observations can be made regarding the between spouses DAS scale correlations. First, it is generally the case that the same scales for husbands and wives correlate more highly, although generally only very slightly so, than do different scales. This finding tends to support Spanier's belief that the DAS scales are distinct entities with respect to one another, and additionally implies that husbands and wives distinguish between the aspects of dyadic adjustment in similar ways. It is informative and interesting, however, to examine the between spouse scale by full scale correlations. Those scales manifesting poor internal consistency do not predict full scale dyadic adjustment well. Since reliability, either in predictor or criterion, functions to establish an upper limit for validity, this finding is to be anticipated. This condition, consequently, is particularly noticeable with the affectional expression and dyadic cohesion scales for wives. Off-diagonal correlations involving these scales are quite low.

A third point of interest is that the full scale between spouse correlation is the largest of any, and that the between spouse prediction of the full scale by the subscales is different for husbands and wives. Thus, the second best predictor of wives full scale dyadic adjustment (the best predictor being husband's dyadic adjustment) is husband's affectional expression, followed, in order of importance, by dyadic consensus, dyadic cohesion, and finally, dyadic satisfaction. For wives, in the prediction of their husband's dyadic adjustment, the second best scale is dyadic consensus, followed by dyadic satisfaction, affectional expression, and dyadic cohension. Even ignoring the two incoherent subscales for wives, this clearly indicates that spouses conceptualize and weight the various aspects of dyadic adjustment somewhat differently. (Indeed, the relatively poor overlap, $r_{hw} = .6067$, between full scale dyadic adjustment emphasizes this difference.) Spanier, regrettably, failed to report between spouses scale correlations, and consequently, it is difficult to determine whether the current findings replicate his data in this regard.[40] In support of the decision to consider only full scale dyadic adjustment for purposes of prediction is this result, that between spouses, full scale dyadic adjustment is the variable most strongly related. The subscales are clearly less comparable between spouses. Having examined the between spouses patterning of scale correlations, however, may well prove of value further along when discrepant (i.e., between spouses) predictions obtain.

The Role Behavior Test has been summarized in Table 20. Subtable 20.A contains the means, variances, and standard deviations of the primary Ringex variables. Subtable 20.B contains the reliability estimates for the primary Ringex variables. The first table note presents a key with which specific Ringex variables may be identified.

Each of the primary Ringex variables, or RBT scales, is made up of three RBT items. Scales are formed by summing these items. Maximum item scores, in all cases, are four; consequently, maximum

Table 20

Summary of Role Behavior Test

20.A Scale Means, Variances, and Standard Deviations.[a]

Behavior Type	Perspective	Husbands			Wives		
		Mean	Variance	S.D.	Mean	Variance	S.D.
Social Acceptance of Other	(1)	9.00	5.14	2.27	8.34	8.64	2.94
	(2)	8.86	5.14	2.27	8.64	7.13	2.67
	(3)	9.02	4.27	2.07	8.78	5.07	2.25
	(4)	8.80	4.78	2.19	8.78	4.87	2.21
	(5)	9.18	3.38	1.84	7.98	4.63	2.15
	(6)	9.12	3.74	1.93	7.90	4.26	2.06
	(7)	8.18	4.80	2.19	8.64	4.68	2.16
	(8)	8.02	5.12	2.26	8.28	5.19	2.28
Emotional Acceptance of Other	(1)	10.26	3.14	1.77	10.20	5.10	2.26
	(2)	10.18	3.13	1.77	10.20	3.67	1.92
	(3)	10.28	2.49	1.58	10.24	2.64	1.62
	(4)	10.24	2.43	1.56	10.22	2.38	1.54
	(5)	10.32	1.98	1.41	9.66	2.15	1.47
	(6)	10.14	1.84	1.36	9.68	2.22	1.49
	(7)	9.84	2.91	1.71	10.22	2.87	1.69
	(8)	9.22	4.83	2.20	9.66	4.19	2.05

Table 20 (Continued)

Behavior Type	Perspective	Husbands Mean	Husbands Variance	Husbands S.D.	Wives Mean	Wives Variance	Wives S.D.
Emotional Acceptance of Self	(1)	9.46	3.23	1.80	9.94	4.75	2.18
	(2)	9.22	2.67	1.63	9.82	4.56	2.14
	(3)	9.64	2.68	1.64	9.74	4.36	2.09
	(4)	9.84	3.04	1.74	9.80	3.80	1.95
	(5)	9.90	2.26	1.50	9.64	3.42	1.85
	(6)	9.92	2.52	1.59	9.56	3.27	1.81
	(7)	9.38	3.38	1.84	9.22	4.46	2.11
	(8)	9.18	4.60	2.15	9.18	4.31	2.08
Social Acceptance of Self	(1)	8.28	4.53	2.13	9.09	4.60	2.14
	(2)	8.08	4.16	2.04	8.84	5.03	2.24
	(3)	8.88	3.09	1.76	9.27	3.97	1.99
	(4)	9.02	3.37	1.84	9.21	3.66	1.91
	(5)	8.16	4.95	2.23	8.94	2.83	1.68
	(6)	8.02	4.88	2.21	8.80	2.74	1.65
	(7)	7.82	4.11	2.03	8.12	3.74	1.93
	(8)	7.78	4.34	2.08	8.10	4.09	2.02
Social Rejection of Self	(1)	.86	3.02	1.74	1.06	4.55	2.13
	(2)	1.10	3.40	1.84	1.02	3.65	1.91
	(3)	.24	.43	.66	.70	1.72	1.31
	(4)	.26	.56	.75	.64	1.62	1.27
	(5)	.36	.64	.80	.32	.59	.77
	(6)	.40	1.14	1.07	.52	.74	.86
	(7)	1.20	3.59	1.90	1.52	3.23	1.80
	(8)	1.24	4.43	2.11	1.60	4.16	2.04

Table 20 (Continued)

Behavior Type	Perspective	Husbands Mean	Husbands Variance	Husbands S.D.	Wives Mean	Wives Variance	Wives S.D.
Emotional Rejection of Self	(1)	1.24	2.88	1.70	.94	2.67	1.63
	(2)	1.28	2.70	1.64	.92	2.65	1.63
	(3)	.70	1.07	1.04	.74	1.38	1.18
	(4)	.68	1.04	1.02	.86	1.64	1.28
	(5)	.54	.95	.97	.88	1.94	1.39
	(6)	.58	1.07	1.03	1.00	1.88	1.37
	(7)	1.32	3.98	2.00	1.78	3.64	1.91
	(8)	1.46	4.70	2.17	1.72	3.27	1.81
Emotional Rejection of Other	(1)	.18	.19	.44	.44	2.50	1.58
	(2)	.12	.23	.48	.40	2.65	1.63
	(3)	.12	.27	.52	.34	2.19	1.48
	(4)	.18	.36	.60	.30	2.13	1.46
	(5)	.06	.06	.24	.32	.71	.84
	(6)	.14	.16	.41	.40	.78	.88
	(7)	.32	.88	.94	.32	.92	.96
	(8)	.62	2.04	1.43	.52	1.60	1.27
Social Rejection of Other	(1)	.34	.84	.92	.46	.99	.99
	(2)	.32	.51	.71	.30	.70	.84
	(3)	.20	.29	.54	.18	.40	.63
	(4)	.28	.49	.70	.20	.41	.64
	(5)	.16	.42	.65	.18	.64	.80
	(6)	.30	.62	.79	.30	.75	.86
	(7)	.94	1.98	1.41	.50	1.07	1.04
	(8)	1.46	3.56	1.89	.60	1.51	1.23

Table 20 (Continued)

20.B Scale Reliabilities.[b]

Behavior Type	Perspective	Reliability: Husbands	Reliability: Wives
Social Acceptance of Other	(1)	.83	.86
	(2)	.84	.81
	(3)	.84	.77
	(4)	.84	.73
	(5)	.70	.63*
	(6)	.73	.60*
	(7)	.80	.71
	(8)	.81	.65*
Emotional Acceptance of Other	(1)	.81	.87
	(2)	.80	.76
	(3)	.82	.62*
	(4)	.84	.67*
	(5)	.73	.40*
	(6)	.76	.34*
	(7)	.55*	.54*
	(8)	.85	.70

Table 20 (Continued)

Behavior Type	Perspective	Reliability Husbands	Reliability Wives
Emotional Acceptance of Self	(1)	.80	.88
	(2)	.76	.84
	(3)	.83	.82
	(4)	.85	.81
	(5)	.71	.70
	(6)	.76	.65*
	(7)	.76	.75
	(8)	.82	.74
Social Acceptance of Self	(1)	.72	.80
	(2)	.65*	.78
	(3)	.66*	.75
	(4)	.64*	.72
	(5)	.78	.27*
	(6)	.78	.18*
	(7)	.70	.42*
	(8)	.71	.48*
Social Rejection of Self	(1)	.91	.90
	(2)	.90	.89
	(3)	.73	.70
	(4)	.88	.78
	(5)	.64*	.55*
	(6)	.91	.44*
	(7)	.82	.77
	(8)	.88	.85

Table 20 (Continued)

Behavior Type	Perspective	Reliability	
		Husbands	Wives
Emotional Rejection of Self	(1)	.81	.81
	(2)	.79	.81
	(3)	.43*	.67*
	(4)	.55*	.74
	(5)	.56*	.42*
	(6)	.56*	.42*
	(7)	.86	.63*
	(8)	.88	.55*
Emotional Rejection of Other	(1)	-.15*	.98
	(2)	.78	.99
	(3)	.87	.96
	(4)	.80	.97
	(5)	---	.50*
	(6)	.43*	.48*
	(7)	.59*	.67*
	(8)	.78	.78
Social Rejection of Other	(1)	.78	.57*
	(2)	.51*	.66*
	(3)	.64*	-.11*
	(4)	.48*	.52*
	(5)	---	---
	(6)	.46*	.28*
	(7)	.72	.39*
	(8)	.74	.63*

Table 20 (Continued)

Note. Throughout the presentation of the Role Behavior Test, variables will be arranged, first, within spouse, and second, within type of behavior. Consequently, variables will be reported in groups of eight, where each member of a given group refers to one perspective, and where all eight refer to the same type of behavior. The order of the perspectives will be that adopted by Foa (1966) for his perceptual circumplexes. These variable labels, in the correct order, and with associated numerals, are listed below. Within the tables themselves (as above), only the numerals will appear:

(1) Self's view of the other's actual behavior;

(2) Other's view of the other's actual behavior;

(3) Other's view of the other's ideal behavior;

(4) Self's view of the other's ideal behavior;

(5) Other's view of the self's ideal behavior;

(6) Self's view of the self's ideal behavior;

(7) Self's view of the self's actual behavior;

(8) Other's view of the self's actual behavior.

As guidelines, the following examples may be useful: (1) variable one, for the husband, refers to his view of his wife's senseof her own actual behavior; for the wife, this variable refers to her view of her husband's sense of his own actual behavior; (2) variable three, for the husband, refers to his view of his wife's ideal behavior; for the wife, this variable refers to her view of her husband's ideal behavior.

From the text, and from Foa (1966), a scale consists of the three RBT items representing a specific ringex variable. To form scale scores, the three items, naturally, are summed.

[b]Reliability estimates are, as was the case regarding the DAS, coefficients of internal consistency. In this case, however, the values are standard score coefficient alphas, meaning that the alphas have been computed on the basis of standardized

Table 20 (Continued)

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covariances (i.e., correlation coefficients) rather than on the basis of raw covariances. To the extent that item variances are unequal, this procedure will tend to inflate reliabilities by a few percent. The procedure is, however, much easier to accomplish than any of those required to calculate raw covariance estimates of reliability. Moreover, given that the scales are comprised of but three items apiece, differences in variance of items within scales are highly likely to be inconsequential.

Item-total correlation have not been computed, but item, within scale, communalities have, and are available upon request. They are not reported, since reliability is, in this case, a reasonable, if informal, estimate of average within-scale item communalities.

*reliability is less than the lower limit of .70. This cutoff has been adopted as suggested by Nunnally (1978, pp. 245-246). Since the alpha coefficient is a measure of internal consistency, low values (i.e., in this case, below .70) indicate that a poor sampling of content has occurred. That is to say, items are more heterogeneous in content than is desirable. The main consequences of low internal consistency, in the context of predictive validity, are: (1) validities will be attenuated by low reliability in the predictor, the criterion, or both; (2) validities, when different from zero, will be more complicated to interpret when internal consistency is low, since, as was mentioned previously, the content of the low reliability variable(s) is likely to be heterogeneous.

scale scores are 12. Minimums for items and scales alike are zero.

Means for husbands and wives are essentially very similar to analogous variables. While not a general rule, however, wives' scale variances tend to be systematically larger than husbands'. The between sexes differences in variance are not, however, so marked as was the case with the DAS.

From highest to lowest scales, means can be ranked for behavior type (irrespective of perceptual type involved). The ordering for husbands is: (1) emotional acceptance of the other; (2) emotional acceptance of the self; (3) social acceptance of the other; (4) social acceptance of the self; (5) emotional rejection of the self; (6) social rejection of the self; (7) social rejection of the other; (8) emotional rejection of the other. The ordering for wives is identical, save that the positions of social acceptance of the other and social acceptance of the self are reversed. For both husbands and wives, means are quite large for variables characterized by acceptance, and quite small for variables characterized by rejection. Within acceptance or rejection, as categories of variables, differences are smaller, but systematic across perspectives.

As might be expected, both husbands and wives rate ideal behavior higher than actual behavior for variables characterized by acceptance, and both rate ideal lower than actual for variables characterized by rejection.

When considered by sex (or spouse type), some interesting systematic differences emerge. For variables concerned with accepting behavior, husbands tend to view their wives as more accepting than themselves, insofar as actual behavior is concerned. Ideally, husbands rate themselves higher than their wives for these variables, with the exception that wives are rated higher, ideally, with regard to social acceptance of the self. Consequently, concerning emotional acceptance of the self and other, and social acceptance of the other, husbands report more dissatisfaction with themselves than with their wives. And concerning social acceptance of the self, husbands report more dissatisfaction with their wives. For those variables characterized by rejection, husbands rate themselves higher than their wives in every case, at the actual level. At the ideal level, wives are rated higher by husbands for emotional rejection of self and other, husbands rate themselves higher for social rejection of the self, and both spouses are rated about the same by husbands for social rejection of the other. Consequently, for rejecting sorts of behavior, husbands are more dissatisfied with themselves concerning emotional rejection of self and other, and more dissatisfied with their wives concerning social rejection of the self.

The wives' variables would seem to attest to the same general picture, but from a complementary point of view. For social and emotional acceptance of the other, wives rated themselves and their husbands about equally for actual behavior, and rated their husbands higher than themselves, ideally. Little dissatisfaction was expressed by wives concerning their own behavior, and in fact, wives assert that they accept the other, socially, more than they ought. Some dissatisfaction was noted concerning the behavior of their husbands. For emotional and social acceptance of the self, wives rated their husbands higher than themselves, at the actual level. For the ideal level of both of these behavior types, wives rated themselves higher than at the actual level, indicating some dissatisfaction with their own behavior. For both variables, too, husbands, ideally, are rated higher than wives. Interestingly, for emotional acceptance of the self, husbands are rated lower ideally than actually. Wives, that is to say, would prefer it if their husbands accepted themselves emotionally a little less than they appear to.

For those behaviors characterized by rejection, wives rated themselves higher, actually, than their husbands. For social and emotional rejection of the self, wives rated both themselves and their husbands lower ideally than actually, again, indicating dissatisfaction with both themselves and their husbands. However, for social rejection of the self, wives reported more dissatisfaction with themselves, while for emotional rejection of the self they reported more dissatisfaction with their husbands. For social and emotional rejection of the other, wives rated both themselves and their husbands lower ideally than actually, by about the same margin, indicating equal dissatisfaction.

In general, these values indicate that both partners tend to adopt a slightly self-effacing stance, rating their spouses a little more favorably at the actual level, than themselves. Husbands, however, clearly feel that their wives ought to be more socially accepting of themselves than they are. Wives agree with this, and additionally hold that their husbands ought to be a little less accepting of themselves, particularly emotionally, than they are, and, simultaneously, a little more giving of acceptance than they actually are. (The current investigator is moved to suggest that here is clearly seen the nub of the feminist argument, mapped onto the Ringex model. Here, also, is clearly seen the benign, supportive attitude of the male members of couples, in this regard.)

Estimates of internal consistency vary widely for the primary Ringex variables, with a low of -.15, and a high of .99. As a group, husbands' reliabilities are higher than wives', and in general, reliabilities are larger for accepting behaviors than for rejecting behaviors. There is a slight tendency, for husbands, for reliabilities to be larger when considering the wives' behavior than when considering their own. This tendency is magnified for wives. When these trends are juxtaposed, the values for wives' conceptions of their own rejecting behaviors are quite drastically reduced. A part of this variability in magnitude of reliability can be readily accounted for, in that: (1) item variances are small for rejecting behaviors, and means for these variables are uniformly low (i.e., the range is restricted, across items); (2) respondents are likely to view their own behavior in a more finely-grained, complex way than they are the behavior of the other (who is more subject to stereotyping). Each of these factors can be expected to attenuate estimates of internal consistency.

Given the cutoff value of .70 adopted here, 16 of the 64 scales for husbands, and fully 29 of the 64 scales for wives were untenably low. Possible strategies for reparation of this problem are outlined and discussed in the appropriate section. For the moment, it is desirable to focus on what steps can be taken in an immediate context. To begin with, it is generally the case that poor internal consistency arises as a direct consequence of poorly sampled item content. Yet the RBT has been carefully pieced together, and the stories do indeed appear, on a rational basis, to represent the variables they were designed to. The sole problem the current author can think of to point out in this regard is that in many cases, items are too saturated for content intensity. That is to say, for example, that items pertaining to rejection are uniformly so severely worded that people fail to endorse them at all. And with a restriction in range of content comes a restriction in range of data points; therefore, internal consistency is attenuated. Assuming that this is the case, and that the rival possibility, that items vary in content as opposed to intensity, is not operating, then the appropriate immediate strategy is to correct predictions mathematically for unreliability (Nunnally, 1978, pp. 237-239). This was done, whenever reasonable and possible (i.e., it made no sense to bolster predictions in this manner when reliability was a negative quantity.) The formulae designed for this correction appear in Table 21. Corrections were applied only to those variables, whether predictor or criterion, whose reliabilities fall below acceptable values (less than .70). When both predictor and criterion were corrected, the two were also corrected separately so as to present all values. Uncorrected values were reported in all cases. A final comment is pertinent here, in that correction for unreliability is not here, and should not be, viewed as an authentic amelioration of the difficulties existing with the primary Ringex variables. But, as a strategy to deal with the problem in an immediate sense, it is an appropriate and reasonable choice. Longer term strategies will be introduced presently.

Confirmatory Analytic Phase and Data Description

The first step in this phase of the analyses, as proposed, is to establish whether or not, for the current data, the Ringex model, as designed by Foa, provides an adequate conceptual representation for the variables of the Role Behavior Test. At best, this is a somewhat complicated task, and consequently is better approached in steps.

The current investigator lacked access to a local version of Small Space Analysis (Guttman, 1968), which was the technique applied by Foa (e.g., 1966) to his original RBT data so as to verify his Ringex model. The technique is, however, merely a mechanical extension (though of vast proportion) of what can be accomplished by scrutinizing correlation matrices in a systematic way. Very little mathematical sophistication is added, and the data analyst simply expands her or his storage capacity by relying on a computing machine.

The current investigator had the advantage, too, in this case, of being in a position of attempting to replicate Foa's work, as opposed

Table 21

Correction Formulae for Unreliability[a]

21.A Adjustment for Unreliability in Predictor.
$\bar{r}_{12} = r_{12} / (r_{11})^{\frac{1}{2}}.$

21.B Adjustment for Unreliability in Criterion.
$\bar{r}_{12} = r_{12} / (r_{22})^{\frac{1}{2}}.$

21.C Adjustment for Unreliability in both Predictor and Criterion.
$\bar{r}_{12} = r_{12} / (r_{11}r_{22})^{\frac{1}{2}}.$

[a]Formulae have been adopted from Magnusson (1976, pp. 147-149). In the formulae,

r_{12} = the raw correlation between: (1) predictor and (2) criterion;

$\bar{r}_{12}$ = the adjusted correlation;

r_{11} = the reliability of the predictor;

r_{22} = the reliability of the criterion.

to trying to derive a spatial configuration of some coherence from 64 quasi-randomly ordered variables. Essentially, in order for the Ringex model to fit the RBT variables, the following conditions must be met: (1) percpetual variables, given constant behavioral type, must arrange themselves as circumplexes, in the order posited by Foa, and adhered to throughout this manuscript; (2) behavioral variables, given constant perceptual type, must arrange themselves as circumplexes according to Foa's schema; (3) perceptual circumplexes must be approximately equally coherent, and about as coherent as the most coherent behavioral circumplex; (4) behavioral circumplexes must vary in coherence as a function of their position on the surface of the Ringex. If all of these conditions are upheld by the data, then it can be inferred that the Ringex model provides an adequate fit.

Table 22 summarizes the perceptual and behavioral circumplexes, as well as their spatial juxtaposition. Within this table, Subtables 22.A and 22.B contain perceptual circumplexes for husbands and wives, respectively; Subtables 22.C and 22.D contain, similarly, the behavioral circumplexes for husbands and wives.

The perceptual variables (i.e., when ordered as suggested by Foa, with the behavioral type held constant) do indeed, with surprisingly few exceptions, arrange themselves as circumplexes. Correlations, that is to say, reach a maximum along and adjacent to the main diagonal, and taper off toward the upper right and lower left corners. The exceptional cases are invariably those involving variables of low reliability (high scatter), indicating difficulties at the level of

Table 22

Spatial Organization of the Primary Ringex Variables

22.A Husbands' Perceptual Circumplexes.[a]

Behavior Type: Social Acceptance of the Other

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	.83	.95	.86	.84	.48	.58	.55	.52
(2)	.95	.84	.87	.85	.49	.55	.51	.47
(3)	.86	.87	.84	.96	.60	.69	.55	.45
(4)	.84	.85	.96	.84	.58	.71	.63	.52
(5)	.48	.49	.60	.58	.70	.85	.61	.46
(6)	.58	.55	.69	.71	.85	.73	.76	.61
(7)	.55	.51	.55	.63	.61	.76	.80	.85
(8)	.52	.47	.45	.52	.46	.61	.85	.81

Behavior Type: Emotional Acceptance of the Other

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	.81	.92	.75	.72	.59	.68	.61	.67
(2)	.92	.80	.71	.66	.56	.61	.53	.58
(3)	.75	.71	.82	.96	.51	.77	.56	.48
(4)	.72	.66	.96	.84	.49	.76	.57	.45
(5)	.59	.56	.51	.49	.73	.70	.51	.47
(6)	.68	.61	.77	.76	.70	.76	.71	.63
(7)	.61	.53	.56	.57	.51	.71	.55	.89
(8)	.67	.58	.48	.45	.47	.63	.89	.85

Table 22 (Continued)

Behavior Type: Emotional Acceptance of the Self								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	.80	.89	.71	.62	.43	.41	.62	.56
(2)	.89	.76	.72	.56	.34	.37	.52	.48
(3)	.71	.72	.83	.93	.67	.65	.55	.54
(4)	.62	.56	.93	.85	.70	.64	.60	.58
(5)	.43	.34	.67	.70	.71	.85	.58	.61
(6)	.41	.37	.65	.64	.85	.76	.53	.49
(7)	.62	.52	.55	.60	.58	.53	.76	.90
(8)	.56	.48	.54	.58	.61	.49	.90	.82

Behavior Type: Social Acceptance of the Self								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	.72	.90	.70	.59	.51	.55	.53	.49
(2)	.90	.65	.61	.50	.42	.48	.42	.38
(3)	.70	.61	.66	.91	.71	.71	.65	.65
(4)	.59	.50	.91	.64	.70	.72	.69	.68
(5)	.51	.42	.71	.70	.78	.95	.78	.80
(6)	.55	.48	.71	.72	.95	.78	.80	.80
(7)	.53	.42	.65	.69	.78	.80	.70	.96
(8)	.49	.38	.65	.68	.80	.80	.96	.71

Table 22 (Continued)

Behavior Type: Social Rejection of the Self

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	.91	.93	.37	.44	.07	.02	.36	.40
(2)	.93	.90	.52	.56	.18	.11	.40	.43
(3)	.37	.52	.73	.86	.38	.50	.42	.43
(4)	.44	.56	.86	.88	.25	.40	.55	.54
(5)	.07	.18	.38	.25	.64	.69	.46	.43
(6)	.02	.11	.50	.40	.69	.91	.51	.46
(7)	.36	.40	.42	.55	.46	.51	.82	.96
(8)	.40	.43	.43	.54	.43	.46	.96	.88

Behavior Type: Emotional Rejection of the Self

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	.81	.96	.52	.54	-.09	-.08	.40	.45
(2)	.96	.79	.58	.60	-.03	-.03	.45	.48
(3)	.52	.58	.43	.91	.29	.24	.42	.46
(4)	.54	.60	.91	.55	.16	.16	.45	.50
(5)	-.09	-.03	.29	.16	.56	.90	.29	.30
(6)	-.08	-.03	.24	.16	.90	.56	.38	.37
(7)	.40	.45	.42	.45	.29	.38	.86	.95
(8)	.45	.48	.46	.50	.30	.37	.95	.88

Table 22 (Continued)

Behavior Type: Emotional Rejection of the Other								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	-.15	.19	.17	.19	.09	.32	.70	.80
(2)	.19	.78	.76	.64	.65	-.09	-.04	.16
(3)	.17	.76	.87	.85	.43	.11	.30	.20
(4)	.19	.64	.85	.80	.35	.15	.33	.20
(5)	.09	.65	.43	.35	---	.13	-.08	.13
(6)	.32	-.09	.11	.15	.13	.43	.58	.34
(7)	.70	-.04	.30	.33	-.08	.58	.59	.81
(8)	.80	.16	.20	.20	.13	.34	.81	.78

Behavior Type: Social Rejection of the Other								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	.78	.36	.40	.36	-.09	.03	.40	.44
(2)	.36	.61	.69	.72	-.02	.08	.26	.33
(3)	.40	.69	.64	.83	-.09	-.05	.02	.13
(4)	.36	.72	.83	.48	-.10	-.01	.14	.16
(5)	-.09	-.02	-.09	-.10	---	.86	.55	.42
(6)	.03	.08	-.05	-.01	.86	.46	.73	.67
(7)	.40	.26	.02	.14	.55	.73	.72	.88
(8)	.44	.33	.13	.16	.42	.67	.88	.74

Table 22 (Continued)

22.B Wives' Perceptual Circumplexes.

Behavior Type: Social Acceptance of the Other

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	.86	.91	.70	.69	.57	.55	.64	.60
(2)	.91	.81	.77	.76	.58	.58	.68	.63
(3)	.70	.77	.77	.87	.74	.70	.72	.62
(4)	.69	.76	.87	.73	.69	.69	.74	.66
(5)	.57	.58	.74	.69	.63	.85	.78	.71
(6)	.55	.58	.70	.69	.85	.60	.84	.79
(7)	.64	.68	.72	74	.78	.84	.71	.92
(8)	.60	.63	.62	.66	.71	.79	.92	.65

Behavior Type: Emotional Acceptance of the Other

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	.87	.94	.75	.65	.53	.50	.72	.77
(2)	.94	.76	.73	.61	.57	.51	.65	.72
(3)	.75	.73	.62	.87	.64	.66	.58	.58
(4)	.65	.61	.87	.67	.58	.63	.59	.53
(5)	.53	.57	.64	.58	.40	.78	.52	.52
(6)	.50	.51	.66	.63	.78	.34	.64	.88
(7)	.72	.65	.58	.59	.52	.64	.54	.88
(8)	.77	.72	.58	.53	.52	.56	.88	.70

Table 22 (Continued)

Behavior Type: Emotional Acceptance of the Self								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	.88	.94	.70	.65	.58	.53	.73	.80
(2)	.94	.84	.75	.66	.59	.54	.79	.85
(3)	.70	.75	.82	.91	.79	.75	.72	.69
(4)	.65	.66	.91	.81	.71	.77	.67	.58
(5)	.58	.59	.79	.71	.70	.87	.53	.57
(6)	.53	.54	.75	.77	.87	.65	.62	.56
(7)	.73	.79	.72	.67	.53	.62	.75	.94
(8)	.80	.85	.69	.58	.57	.56	.94	.74

Behavior Type: Social Acceptance of the Self								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	.80	.96	.82	.79	.48	.48	.67	.68
(2)	.96	.78	.77	.74	.41	.44	.65	.65
(3)	.82	.77	.75	.96	.57	.60	.56	.61
(4)	.79	.74	.96	.72	.56	.57	.54	.58
(5)	.48	.41	.57	.56	.27	.92	.59	.66
(6)	.48	.44	.60	.57	.92	.18	.64	.70
(7)	.67	.65	.56	.54	.59	.64	.42	.95
(8)	.68	.65	.61	.58	.66	.70	.95	.48

Table 22 (Continued)

Behavior Type: Social Rejection of the Self								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	.90	.92	.68	.45	.11	.17	.34	.29
(2)	.92	.89	.77	.56	.15	.18	.37	.27
(3)	.68	.77	.70	.82	.54	.45	.40	.35
(4)	.45	.56	.82	.78	.66	.53	.43	.35
(5)	.11	.15	.54	.66	.55	.73	.39	.36
(6)	.17	.18	.45	.53	.73	.44	.55	.56
(7)	.34	.37	.40	.43	.39	.55	.77	.95
(8)	.29	.27	.35	.35	.36	.56	.95	.85

Behavior Type: Emotional Rejection of the Self								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	.81	.95	.61	.66	.10	.09	.47	.48
(2)	.95	.81	.63	.64	.04	.05	.46	.44
(3)	.61	.63	.67	.93	.30	.35	.26	.26
(4)	.66	.64	.93	.74	.36	.40	.25	.34
(5)	.10	.04	.30	.36	.42	.91	.45	.48
(6)	.09	.05	.35	.40	.91	.42	.54	.56
(7)	.47	.46	.26	.25	.45	.54	.63	.93
(8)	.48	.44	.26	.34	.48	.56	.93	.55

Table 22 (Continued)

Behavior Type: Emotional Rejection of the Other

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	.98	.95	.90	.86	.64	.72	.88	.89
(2)	.95	.99	.93	.88	.72	.77	.94	.83
(3)	.90	.93	.96	.99	.79	.80	.82	.70
(4)	.86	.88	.99	.97	.80	.79	.75	.63
(5)	.64	.72	.79	.80	.50	.95	.65	.47
(6)	.72	.77	.80	.79	.95	.48	.72	.60
(7)	.88	.94	.82	.75	.65	.72	.67	.87
(8)	.89	.83	.70	.63	.47	.60	.87	.78

Behavior Type: Social Rejection of the Other

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	.57	.86	.58	.75	.30	.53	.57	.64
(2)	.86	.66	.55	.84	.28	.55	.62	.63
(3)	.58	.55	-.11	.82	.58	.61	.42	.49
(4)	.75	.84	.82	.52	.41	.59	.52	.57
(5)	.30	.28	.58	.41	---	.90	.58	.55
(6)	.53	.55	.61	.59	.90	.28	.77	.75
(7)	.57	.62	.42	.52	.58	.77	.39	.90
(8)	.64	.63	.49	.57	.55	.75	.90	.63

Table 22 (Continued)

22.C Husbands' Behavioral Circumplexes.[b]

Perceptual Type: Husband's View of Wife's Actual Behavior

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	.83	.72	.49	.46	-.02	-.11	-.39	-.35
(2)	.72	.81	.56	.35	.07	-.04	-.33	-.23
(3)	.49	.56	.80	.60	-.36	-.41	-.31	-.25
(4)	.46	.35	.60	.72	-.62	-.54	-.27	-.25
(5)	-.02	.07	-.36	-.62	.91	.70	.19	.17
(6)	-.11	-.04	-.41	-.54	.70	.81	.24	.26
(7)	-.39	-.33	-.31	-.27	.19	.24	-.15	.71
(8)	-.35	-.23	-.25	-.25	.17	.26	.71	.78

Perceptual Type: Wife's View of Wife's Actual Behavior

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	.84	.68	.49	.48	-.08	-.10	-.13	-.34
(2)	.68	.80	.59	.38	-.06	-.15	-.27	-.42
(3)	.49	.59	.76	.54	-.35	-.50	-.37	-.40
(4)	.48	.38	.54	.65	-.62	-.54	-.11	-.23
(5)	-.08	-.06	-.35	-.62	.90	.71	.22	.30
(6)	-.10	-.15	-.50	-.54	.71	.79	.14	.36
(7)	-.13	-.27	-.37	-.11	.22	.14	.78	.60
(8)	-.34	-.42	-.40	-.23	.30	.36	.60	.61

Table 22 (Continued)

Perceptual Type: Wife's View of Wife's Ideal Behavior

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	.84	.74	.65	.62	-.23	-.13	-.29	-.28
(2)	.74	.82	.64	.53	-.36	-.21	-.34	-.38
(3)	.65	.64	.83	.46	-.41	-.51	-.52	-.41
(4)	.62	.53	.46	.66	-.45	-.11	-.18	-.32
(5)	-.23	-.36	-.41	-.45	.73	.53	.63	.67
(6)	-.13	-.21	-.51	-.11	.53	.43	.45	.37
(7)	-.29	-.34	-.52	-.18	.53	.45	.87	.65
(8)	-.28	-.38	-.41	-.32	.67	.37	.65	.64

Perceptual Type: Husband's View of Wife's Ideal Behavior

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	.84	.81	.64	.60	-.28	-.22	-.33	-.34
(2)	.81	.84	.68	.58	-.44	-.31	-.42	-.42
(3)	.64	.68	.85	.51	-.47	-.54	-.42	-.38
(4)	.60	.58	.51	.64	-.34	-.23	-.23	-.37
(5)	-.28	-.44	-.47	-.34	.88	.72	.58	.60
(6)	-.22	-.31	-.54	-.23	.72	.55	.50	.41
(7)	-.33	-.42	-.42	-.23	.58	.50	.80	.61
(8)	-.34	-.42	-.38	-.37	.60	.41	.61	.48

Table 22 (Continued)

Perceptual Type: Wife's View of Husband's Ideal Behavior

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	.70	.38	.59	.30	-.29	-.08	-.26	.15
(2)	.38	.73	.39	.19	-.18	-.04	-.24	.14
(3)	.59	.39	.71	.51	-.27	-.16	-.15	.18
(4)	.30	.19	.51	.78	-.12	.14	-.17	-.10
(5)	-.29	-.18	-.27	-.12	.64	.50	.52	.12
(6)	-.08	-.04	-.16	.14	.50	.56	.21	-.04
(7)	-.26	-.24	-.15	-.17	.52	.21	---	.20
(8)	.15	.14	.18	-.10	.12	-.04	.20	---

Perceptual Type: Husband's View of Husband's Ideal Behavior

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	.73	.53	.53	.33	-.04	-.04	-.26	-.05
(2)	.53	.76	.52	.33	-.29	-.09	-.33	.02
(3)	.53	.52	.76	.37	-.47	-.37	-.17	-.01
(4)	.33	.33	.37	.78	-.15	.10	.16	-.12
(5)	-.04	-.29	-.47	-.15	.91	.67	.25	.05
(6)	-.07	-.09	-.37	.10	.67	.56	.24	-.07
(7)	-.26	-.33	-.17	.16	.25	.24	.43	.19
(8)	-.05	.02	-.01	-.12	.05	-.07	.19	.46

Table 22 (Continued)

Perceptual Type: Husband's View of Husband's Actual Behavior

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	.80	.59	.58	.34	-.12	-.10	-.43	-.14
(2)	.59	.55	.61	.25	-.19	-.24	-.26	-.08
(3)	.58	.61	.76	.63	-.48	-.47	-.56	-.16
(4)	.34	.25	.63	.70	-.19	-.13	-.31	-.03
(5)	-.12	-.19	-.48	-.19	.82	.83	.53	.15
(6)	-.10	-.24	-.47	-.13	.83	.86	.61	.22
(7)	-.43	-.26	-.56	-.31	.53	.61	.59	.46
(8)	-.14	-.08	-.16	-.03	.15	.22	.46	.72

Perceptual Type: Wife's View of Husband's Actual Behavior

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	.81	.67	.72	.38	-.19	-.29	-.55	-.30
(2)	.67	.85	.60	.23	-.21	-.25	-.44	-.41
(3)	.72	.60	.82	.56	-.44	-.52	-.64	-.27
(4)	.38	.23	.56	.71	-.22	-.23	-.39	-.11
(5)	-.19	-.21	-.44	-.22	.88	.86	.55	.23
(6)	-.29	-.25	-.52	-.23	.86	.88	.62	.27
(7)	-.55	-.44	-.64	-.39	.55	.62	.78	.63
(8)	-.30	-.41	-.27	-.11	.23	.27	.63	.74

Table 22 (Continued)

22.D Wives' Behavioral Circumplexes.

Perceptual Type: Wife's View of Husband's Actual Behavior

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	.86	.71	.59	.68	-.27	-.26	-.47	-.61
(2)	.71	.87	.70	.47	-.28	-.32	-.59	-.69
(3)	.59	.70	.88	.67	-.55	-.38	-.63	-.63
(4)	.68	.47	.67	.80	-.42	-.46	-.29	-.37
(5)	-.27	-.28	-.55	-.42	.90	.67	.46	.45
(6)	-.26	-.32	-.38	-.46	.67	.81	.14	.26
(7)	-.47	-.59	-.63	-.29	.46	.14	.98	.77
(8)	-.61	-.69	-.63	-.37	.45	.26	.77	.57

Perceptual Type: Husband's View of Husband's Actual Behavior

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	.81	.68	.67	.76	-.37	-.24	-.45	-.52
(2)	.68	.76	.71	.53	-.29	-.19	-.48	-.51
(3)	.67	.71	.84	.71	-.53	-.36	-.55	-.56
(4)	.76	.53	.71	.78	-.48	-.43	-.30	-.38
(5)	-.37	-.29	-.53	-.48	.89	.75	.55	.56
(6)	-.24	-.19	-.36	-.43	.75	.81	.10	.24
(7)	-.45	-.48	-.55	-.30	.55	.10	.99	.79
(8)	-.52	-.51	-.56	-.38	.56	.24	.79	.66

Table 22 (Continued)

Perceptual Type: Husband's View of Husband's Ideal Behavior

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	.77	.65	.75	.65	-.46	-.38	-.42	-.46
(2)	.65	.62	.63	.38	-.31	-.17	-.48	-.44
(3)	.75	.63	.82	.76	-.59	-.34	-.52	-.52
(4)	.65	.38	.76	.75	-.48	-.29	-.27	-.32
(5)	-.46	-.31	-.59	-.48	.70	.45	.64	.66
(6)	-.38	-.17	-.34	-.29	.45	.67	.00	.26
(7)	-.42	-.48	-.52	-.27	.64	.00	.96	.90
(8)	-.46	-.44	-.52	-.32	.66	.26	.90	-.11

Perceptual Type: Wife's View of Husband's Ideal Behavior

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	.73	.60	.64	.64	-.46	-.47	-.43	-.42
(2)	.60	.67	.65	.43	-.22	-.23	-.47	-.42
(3)	.64	.65	.81	.69	-.44	-.28	-56	-.41
(4)	.64	.43	.69	.72	-.36	-.32	-.27	-.32
(5)	-.46	-.22	-.44	-.36	.78	.44	.60	.47
(6)	-.47	-.23	-.28	-.32	.44	.74	-.04	.28
(7)	-.43	-.47	-.56	-.27	.60	-.04	.97	.70
(8)	-.42	-.42	-.41	-.29	.47	.28	.70	.52

Table 22 (Continued)

Perceptual Type: Husband's View of Wife's Ideal Behavior								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	.63	.72	.54	.32	-.08	-.18	-.42	-.13
(2)	.72	.40	.53	.21	-.12	-.21	-.42	-.19
(3)	.54	.53	.70	.51	-.28	-.40	-.60	-.34
(4)	.32	.21	.51	.27	.02	.01	-.09	.05
(5)	-.08	-.12	-.28	.02	.55	.70	.22	.17
(6)	-.18	-.21	-.40	.01	.70	.42	.55	.42
(7)	-.42	-.42	-.60	-.09	.22	.55	.50	.58
(8)	-.13	-.19	-.34	.05	.17	.42	.58	---

Perceptual Type: Wife's View of Wife's Ideal Behavior								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	.60	.62	.52	.25	-.05	-.19	-.52	-.25
(2)	.62	.34	.42	.12	-.03	-.17	-.46	-.18
(3)	.52	.42	.65	.43	-.14	-.36	-.62	-.42
(4)	.25	.12	.43	.18	.17	.09	-.10	.00
(5)	-.05	-.03	-.14	.17	.44	.62	.10	.03
(6)	-.19	-.17	-.36	.09	.62	.42	.49	.36
(7)	-.52	-.46	-.62	-.10	.10	.49	.48	.59
(8)	-.25	-.18	-.42	.00	.03	.36	.59	.28

Table 22 (Continued)

Perceptual Type: Wife's View of Wife's Actual Behavior

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	.71	.70	.60	.41	-.06	-.21	-.29	-:31
(2)	.70	.54	.53	.28	.10	-.24	-.40	-.27
(3)	.60	.53	.75	.57	-.28	-.53	-.45	-.29
(4)	.41	.28	.57	.42	-.31	-.26	-.13	-.09
(5)	-.06	.10	-.28	-.31	.77	.52	.01	.04
(6)	-.21	-.24	-.53	-.26	.52	.63	.30	.25
(7)	-.29	-.40	-.45	-.13	.01	.30	.67	.58
(8)	-.31	-.27	-.29	-.09	.04	.25	.58	.39

Perceptual Type: Husband's View of Wife's Actual Behavior

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	.65	.75	.60	.38	.00	-.20	-.33	-.37
(2)	.75	.70	.68	.43	.05	-.26	-.58	-.44
(3)	.60	.68	.74	.52	-.19	-.45	-.55	-.43
(4)	.38	.43	.52	.48	-.27	-.20	-.19	-.11
(5)	.00	.05	-.19	-.27	.85	.58	-.04	-.04
(6)	-.20	-.26	-.45	-.20	.58	.55	.41	.30
(7)	-.33	-.58	-.55	-.19	-.04	.41	.78	.71
(8)	-.37	-.44	-.43	-.11	-.04	.30	.71	.63

Table 22 (Continued)

22.E Single Centroid Communality Estimates for Husbands' Perceptual Circumplexes.[c]

	Behavioral Type							
Perceptual Type	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	.76	.81	.65	.58	.38	.54	.46	.28
(2)	.74	.71	.56	.46	.50	.62	.40	.36
(3)	.82	.76	.80	.77	.61	.67	.57	.21
(4)	.85	.72	.77	.75	.66	.67	.55	.25
(5)	.56	.51	.64	.78	.32	.13	.22	.30
(6)	.73	.78	.58	.82	.39	.15	.20	.52
(7)	.65	.64	.66	.77	.68	.61	.51	.73
(8)	.51	.60	.63	.76	.68	.67	.51	.74
Proportion of Variance	.70	.69	.66	.71	.53	.51	.43	.42

Table 22 (Continued)

22.F Single Centroid Communality Estimates for Wives' Perceptual Circumplexes.

	Behavioral Type							
Perceptual Type	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	.66	.78	.74	.78	.45	.61	.90	.65
(2)	.73	.75	.80	.71	.52	.57	.94	.68
(3)	.78	.76	.84	.78	.75	.58	.92	.60
(4)	.78	.67	.74	.74	.69	.64	.86	.72
(5)	.73	.58	.66	.58	.45	.34	.69	.49
(6)	.76	.62	.66	.62	.49	.40	.76	.76
(7)	.83	.70	.76	.69	.55	.55	.83	.69
(8)	.73	.70	.76	.75	.47	.59	.68	.73
Proportion of Variance	.75	.70	.75	.71	.55	.53	.82	.66

Table 22 (Continued)

22.G Single Centroid Communality Estimates for Husbands' Behavioral Circumplexes.[d]

Behavioral Type	Perceptual Type (1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	.47	.40	.49	.53	.55	.43	.39	.55
(2)	.37	.45	.56	.66	.34	.55	.37	.46
(3)	.61	.66	.67	.65	.60	.69	.77	.74
(4)	.63	.57	.42	.43	.27	.18	.30	.29
(5)	.31	.39	.56	.57	.42	.44	.48	.43
(6)	.38	.44	.32	.45	.13	.27	.51	.53
(7)	.41	.24	.51	.49	.33	.20	.64	.74
(8)	.35	.44	.52	.49	.00	.01	.13	.30
Proportion of Variance	.44	.45	.51	.53	.33	.35	.45	.51

Table 22 (Continued)

22.H Single Centroid Communality Estimates for Wives' Behavioral Circumplexes.

	Perceptual Type							
Behavioral Type	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	.61	.65	.67	.68	.47	.53	.57	.54
(2)	.67	.57	.49	.52	.48	.42	.51	.71
(3)	.76	.76	.78	.70	.70	.66	.75	.74
(4)	.53	.60	.50	.51	.12	.07	.35	.31
(5)	.43	.54	.61	.47	.22	.07	.10	.04
(6)	.29	.26	.19	.23	.45	.36	.37	.31
(7)	.55	.51	.55	.52	.64	.72	.39	.57
(8)	.66	.59	.62	.48	.30	.38	.29	.44
Proportion of Variance	.56	.56	.55	.51	.42	.40	.42	.46

Table 22 (Continued)

22.I Juxtapositioning of Husbands' and Wives' Perceptual Circumplexes.[a]

Behavior Type: Social Acceptance of the Other

Husband	Wife (8)	(7)	(6)	(5)	(4)	(3)	(2)	(1)
(1)	.47	.39	.40	.32	.38	.34	.42	.53
(2)	.46	.38	.36	.28	.32	.26	.34	.45
(3)	.49	.41	.42	.41	.37	.37	.36	.45
(4)	.56	.49	.49	.48	.44	.41	.41	.48
(5)	.41	.44	.35	.40	.37	.51	.46	.48
(6)	.44	.45	.43	.43	.43	.48	.53	.57
(7)	.41	.42	.41	.35	.48	.46	.59	.59
(8)	.43	.41	.43	.29	.40	.33	.52	.57

Table 22 (Continued)

Behavior Type: Emotional Acceptance of the Other								
	Wife							
Husband	(8)	(7)	(6)	(5)	(4)	(3)	(2)	(1)
(1)	.58	.61	.43	.33	.41	.49	.46	.60
(2)	.47	.54	.42	.29	.40	.50	.39	.49
(3)	.40	.43	.38	.32	.36	.41	.41	.48
(4)	.38	.41	.40	.31	.36	.41	.40	.45
(5)	.39	.45	.34	.37	.29	.34	.32	.35
(6)	.50	.54	.37	.29	.44	.47	.48	.56
(7)	.53	.53	.36	.29	.43	.47	.56	.60
(8)	.55	.55	.26	.23	.40	.47	.56	.63

Behavior Type: Emotional Acceptance of the Self								
	Wife							
Husband	(8)	(7)	(6)	(5)	(4)	(3)	(2)	(1)
(1)	.50	.44	.23	.24	.34	.39	.39	.40
(2)	.48	.42	.16	.16	.27	.31	.32	.30
(3)	.34	.27	.31	.27	.38	.39	.24	.27
(4)	.31	.22	.33	.28	.33	.37	.25	.28
(5)	.22	.11	.18	.24	.17	.25	.16	.19
(6)	.07	-.06	.05	.11	.03	.10	.02	-.01
(7)	.43	.28	.14	.21	.15	.24	.38	.43
(8)	.49	.33	.14	.20	.12	.22	.40	.46

Table 22 (Continued)

Behavior Type: Social Acceptance of the Self

	Wife							
Husband	(8)	(7)	(6)	(5)	(4)	(3)	(2)	(1)
(1)	.45	.37	.21	.25	.36	.39	.46	.48
(2)	.39	.35	.15	.16	.25	.29	.37	.38
(3)	.22	.12	.15	.12	.22	.24	.29	.30
(4)	.23	.15	.16	.17	.21	.19	.29	.30
(5)	.23	.18	.18	.18	.28	.33	.35	.33
(6)	.17	.11	.12	.15	.23	.28	.29	.29
(7)	.14	.10	.08	.09	.18	.24	.34	.32
(8)	.14	.11	.03	.03	.17	.23	.35	.32

Behavior Type: Social Rejection of the Self

	Wife							
Husband	(8)	(7)	(6)	(5)	(4)	(3)	(2)	(1)
(1)	.70	.70	.27	.27	.41	.45	.42	.32
(2)	.59	.60	.21	.22	.35	.43	.40	.29
(3)	.15	.19	.10	.13	.18	.30	.45	.34
(4)	.11	.15	.07	.21	.21	.29	.45	.36
(5)	-.03	-.06	-.01	.04	.03	.16	.09	-.01
(6)	-.06	-.06	.01	.09	.03	.09	.11	.05
(7)	.20	.23	.03	.14	.12	.12	.40	.55
(8)	.25	.30	.05	.13	.11	.38	.57	.49

Table 22 (Continued)

Behavior Type: Emotional Rejection of the Self								
	Wife							
Husband	(8)	(7)	(6)	(5)	(4)	(3)	(2)	(1)
(1)	.50	.49	.04	.06	.27	.28	.54	.55
(2)	.48	.48	.04	.08	.32	.30	.57	.60
(3)	.07	.12	-.01	.02	.31	.35	.47	.48
(4)	.11	.18	.01	.02	.39	.42	.60	.61
(5)	-.32	-.28	-.11	-.03	.01	.01	-.09	-.07
(6)	-.27	-.22	-.16	-.08	-.01	-.06	-.07	-.03
(7)	.14	.19	-.14	-.04	.23	.25	.52	.56
(8)	.21	.22	-.14	-.06	.27	.27	.59	.62

Behavior Type: Emotional Rejection of the Other								
	Wife							
Husband	(8)	(7)	(6)	(5)	(4)	(3)	(2)	(1)
(1)	.56	.44	.18	.06	.11	.19	.33	.39
(2)	-.07	-.04	-.07	-.05	-.05	-.06	-.06	-.04
(3)	-.10	-.08	.03	.05	.06	.05	-.06	-.07
(4)	-.10	-.10	-.02	.01	.03	.02	-.08	-.09
(5)	-.11	-.09	-.02	.01	-.05	-.06	-.06	-.02
(6)	.13	.09	-.05	-.01	-.01	.06	.10	.09
(7)	.37	.38	.16	.10	.11	.20	.30	.25
(8)	.45	.45	.16	.05	.07	.16	.34	.32

Table 22 (Continued)

Behavior Type: Social Rejection of the Other

	Wife							
Husband	(8)	(7)	(6)	(5)	(4)	(3)	(2)	(1)
(1)	.43	.44	.20	-.09	.54	.14	.63	.47
(2)	.03	.08	-.06	-.10	-.01	-.04	.08	.10
(3)	.19	.18	.09	-.09	.12	.01	.27	.21
(4)	.13	.17	-.01	-.09	.01	-.02	.13	.05
(5)	-.12	-.12	-.09	-.06	-.08	-.07	-.09	-.05
(6)	-.08	-.06	-.10	-.09	.00	-.03	.05	.11
(7)	.17	.25	-.02	-.08	.13	-.03	.26	.20
(8)	.23	.27	-.01	-.12	.18	-.02	.35	.39

Note. Diagonal elements in the within-spouse correlation matrices have been replaced by estimates of reliability.

[a]For the perceptual circumplexes, the ordering of variables is in agreement with the key appearing in the first, general note to Table 20. The ordering is:

(1) Self's view of the other's actual behavior;

(2) Other's view of the other's actual behavior;

(3) Other's view of the other's ideal behavior;

(4) Self's view of the other's ideal behavior;

(5) Other's view of the self's ideal behavior;

(6) Self's view of the self's ideal behavior;

(7) Self's view of the self's actual behavior;

(8) Other's view of the self's actual behavior.

As before, the variables must be interpreted in light of self and other as actor

Table 22 (Continued)

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and as observer. For the behavioral circumplexes, the ordering of variables is as follows:

(1) Social acceptance of the other;
(2) Emotional acceptance of the other;
(3) Emotional acceptance of the self;
(4) Social acceptance of the self;
(5) Social rejection of the self;
(6) Emotional rejection of the self;
(7) Emotional rejection of the other;
(8) Social rejection of the other.

[b]It merits pointing out here that variables characterized by rejection have not been reflected. Foa (e.g., 1966) did reflect these variables, so as to generate only positive correlations for behavioral circumplexes. The current author can see no wisdom in doing so, as it obscures anc complicates an otherwise reasonably straightforward interpretation of the behavioral circumplexes. As is pointed out in text, the decision not to reflect alters the ordering of variables in these circumplexes. Specifically, not reflecting prevents the variables from all pointing (i.e., as vectors), in the same direction, fanning outward from a single dimension, acceptance. The operation of reflection merely folds variables exactly 180 degrees, thus changing their relative positioning.

[c]Computations began with unities in the diagonal positions. Communality estimates are based on the extraction, in each case, of a single centroid. This means that the working assumption was that each perceptual circumplex could be conceptualized as a single, reasonably internally consistent, cluster. To have communality estimates on more than one centroud would be tantamount to assuming that subclustering exists as well. In the case of the perceptual circumplexes, the first centroid, if labeled, would be behavioral type (e.g., 'social acceptance of the other'). Successive

Table 22 (Continued)

centroids would be expected to coincide with the facets comprising perceptual orientations. As it happens, this means of assessing coherence is indeed a reasonable one: the design of the Ringex implies clearly that the "unifying" principle operating for each circumplex for each perceptual or behavioral orientation is the constant perceptual or behavioral type by means of which it is characterized. In the case of the behavioral circumplexes, the first centroid can not be labeled in accordance with their constant perceptual orientations, simply because the major axes of the Ringex, regardless of the analytic model which is applied, must, by definition, be acceptance- rejection. Even so, however, the first centroids can be expected to account for more variance in these circumplexes when they are more coherent.

[d]In this case, the communalities actually are based on the first behavioral facet, acceptance-rejection, or content of behavior. The basis for drawing a single centroid is the assumption that the grouping together of these variates is due to their common perceptual orientation. That the first behavioral facet is more important is simply a rephrasing of the principle that the behavioral "half" of the Ringex variables is more salient (i.e., contributes more variance, or determinism) than the perceptual "half." In effect, this contributes to the evidence that perceptual circumplexes are more coherent than behavioral circumplexes. It should also be pointed out that loadings on the first centroids vary in valence, in each case, as a function of the content facet. That is to say, behavioral variables appear spatially in two distinct clusters, almost perfectly opposing one another along the first centroid. The behavioral circumplexes are thus <u>not</u> equally spaced; the content facet exerts an enormous polarizing influence, very little mitigated by the remaining two facets, object and mode. The main thing here is that perspective exerts a much milder influence on behavior than behavior exerts on perspective.

Table 22 (Continued)

[e]Only the hetero-respondent (i.e., hetero-spouse) submatrices are included. For comparison with mono-spouse matrices, Subtables 22.A and ss.B may be consulted. It will be recalled that direct comparison of variables with identical facet profiles requires that one spouse's set of variables be reversed in order. Reveesals have been carried out for wives, throughout.

item composition, rather than at the level of spatial arrangement of variables. The arrangements are highly similar for husbands and wives, with wives' variables perhaps conforming a bit better to an idealized circumplex arrangement.

To probe a bit deeper into the structure of the perceptual circumplexes, it is interesting to note that while in every case the entire array is remarkably coherent (i.e., correlations are generally high and positive), it is nonetheless clear that the first four variables in each array, and the second four, as clusters, are even more coherent. This is particularly true of those perceptual arrays characterized by rejecting behavior, and especially so for husbands (where zero-order correlations occasionally appear between hetero-cluster variables). The implication of this is, of course, that a significant distinction is occurring between self appraisals and the appraisals made of others (i.e., the facet, 'actor', is clearly polarizing in character). Insofar as the circumplexes themselves are concerned, this indicates that variables are not equally spaced, but rather exist as two sets of four reasonably evenly spaced variables.

Behavioral arrays, given constant perceptual orientation, tend also to arrange themselves as circumplexes, although with many more exceptions than occurred with perceptual circumplexes. These exceptions, upon careful consideration, prove systematic, and are attributable in large part to one major distinction between Foa's treatment of the Ringex variables and that adhered to here. Specifically, Foa (1962) reflected (i.e., assigned a weight of -1.00 to) those variables characterized by rejection, and consequently transformed his behavioral matrices into positive manifold form. The current investigator, seeking not to complicate interpretation of the variables, chose not to reflect them. Consequently, in the current data, all variables characterizing opposite levels of the content facet correlate negatively with one another, whereas Foa's (e.g., 1962) do not.

This difference in analytic strategy introduced an unexpected difference in the <u>order</u> of variables in the behavioral circumplexes. If the first or second four (Foa chose the latter) variables in each of the behavioral circumplexes in Subtables 22.C and 22.D are reflected, then the variables, as ordered, are indeed arranged appropriately (i.e., as circumplexes). However, in their current, unreflected condition, they are <u>not</u> properly ordered. This can be deducted by noting that negative correlations near the main diagonal are very large (indicating great distance between variables), and negative correlations far from the main diagonal are smaller (indicating less distance between variables). When these negative values are reversed in valence, then larger means nearer, and smaller means more distant. As the variables appear here, in the current data set, the ordering can be slightly altered, and the arrays then meet the criteria for circumplexes. In each case, the appropriate ordering is: 2, 1, 4, 3, 7, 8, 5, and 6. The variables represented by these numerals, again in circumplex order are: emotional acceptance of the other, social acceptance of the other, social acceptance of the self, emotional acceptance of the self, emotional rejection of the other, social rejection of the other, social rejection of the self and emotional rejection of the self. It is indeed interesting to observe that this ordering coincides with that originally posited by Foa (1961), but later changed (Foa, 1962).

As has been clearly and thoroughly discussed in the earlier sections of this manuscript, both of these orderings of variables are systematic (i.e., non-random), and entirely in keeping with the principles concerning the structure of circumplexes. The sole distinction between the two orderings is concerned with how one arranges or juxtaposes facets with regard to one another, in a theoretical sense, and with whether or not one incorporates the semantic principal component, 'intensity'. The ordering which ultimately is manifested by the variables is contingent only upon what one chooses to do in the regard of reflection (or, more simply, scoring).[41] The current investigator can see no reason to reflect the variables, and consequently, they will be left as they are. Behavioral circumplexes, then, are in keeping with Foa's earlier (1961) conceptual schemata.

To summarize, then, it can here be concluded that both perceptual arrays with constant behavioral orientation, and behavioral arrays with constant perceptual orientation are arranged as circumplexes. Behavioral circumplexes are not consistent with Foa's later (e.g., 1966) presentations, but, rather, support his earlier (e.g., 1961) conceptualization, due to an abstaining from reflection. Criteria one and two concerning whether or not a Ringex model fits these data, have been met. Given the change in the behavioral circumplexes, however, it is clear that the Ringex, if appropriate, will be somewhat different from that Foa has proposed.

To premit evaluation of the data in accordance with criteria three and four, it is essential to consider the coherence of the perceptual and behavioral circumplexes. By coherence, of course, what is meant is the spread of variables, within circumplexes, with regard to one another. There are several means of accomplishing this, but perhaps the simplest is to treat each perceptual and behavioral circumplex array as a cluster, and to estimate communalities for variables within each cluster, on the basis of a single, first centroid (or cluster sum). Subtables 22.E and 22.F contain these estimates for perceptual circumplexes for husbands and wives, respectively. Subtables 22.G and 22.H contain the analogous statistics for behavioral circumplexes. Larger communalities, and by extension, larger first centroids, indicate more coherent arrays of variables.

The perceptual arrays are more coherent for wives than for husbands, and generally more coherent for accepting than for rejecting behavioral orientations. The former of these two discrepancies is interesting, but poses no threat to criterion three. The latter discrepancy, however, indicates that the Ringex is not of identical cross-sectional area at all points, but rather swells somewhat (i.e., is more spread out) on one side (that containing rejecting behavior types). One exception to this occurs for the wives' perceptual circumplex number seven, that representing emotional rejection of the other: this array is astonishingly coherent. In any event, the configuration, cross-sectionally, of the Ringex is slightly more complex than predicted, but at least generally systematically so.

The behavioral circumplexes are again more coherent for wives than for husbands, and are generally less coherent than perceptual circumplexes. The more coherent behavioral circumplexes approach the status of the less coherent perceptual circumplexes. This is clearly in keeping with the Ringex model, and meets the second part of the third aforementioned criterion. The fourth criterion, that prescribing the ordering of the behavioral circumplexes with respect to coherence, introduces a major problem, however.

For wives, this criterion can be considered met: behavioral circumplex number one, that representing the perceptual orientation, wives' view of the husbands' actual behavior, is most coherent of the lot. Succeeding circumplexes are sequentially less coherent, until a minimum is reached at behavioral circumplex number six. Behavioral circumplexes number seven and eight then begin to increase. This arrangement would place circumplex number one (of the behavioral arrays) on the inner surface of the Ringex, and behavioral circumplex number six on the outer surface. It is clear that the circumplexes are not so evenly spaced as they appear in Foa's (1966) idealized model, but the fit certainly is an adequate one.

The model, unfortunately, does not fare so well with the husbands' data. Behavioral circumplex number four is maximally coherent, and, moreover, no simple ordering on the basis of coherence seems to exist. More specifically, <u>any</u> ordering which can be drawn from the data contradicts the Ringex model. Several alternate, reasonably regular, spatial structures could be posited, none of which can legitimately be thought of as a torus, in shape.[42]

To briefly summarize the spatial juxtapositioning of the primary Ringex variables, it can here be concluded that: (1) for both husbands and wives, perceptual and behavioral variables can be arranged, in accordance with Foa's (1966) propositions, as circumplexes; (2) for both husbands and wives, perceptual circumplexes vary considerably in coherence, and consequently deviate somewhat from the regularity demanded by the Ringex model; (3) for both husbands and wives, perceptual circumplexes are more coherent than behavioral circumplexes; (4) when perceptual and behavioral circumplexes are arranged together, a Ringex emerges for wives, but some other, as yet unspecified structure emerges for husbands.

It is now appropriate to juxtapose variables for husbands and wives. Due to the appearance of the irregularities in the behavioral circumplexes of the husbands, however, it is felt reasonable to assemble only the perceptual circumplexes for husbands and wives. Juxtaposing behavioral circumplexes must, unfortunately, remain contingent upon further analytic consideration of the data.

Subtable 22.I summarizes the correlation matrices between husbands' and wives' variables, for constant behavior type. In general, these matrices manifest the single factor patterning Foa (1966) discovered. That is to say, values are high at the corners, and taper off toward the middle. The interpretation is straightfoward: spouses are better able to estimate one anothers' actual behaviors than ideal behaviors, and moreover, actual behaviors tend to be used to estimate ideal behaviors. The few exceptions to this rule are consequences of poorly internally consistent variables.

It is interesting to note that diagonal values in these matrices are not regularly maximal, relative to other, off-diagonal values. That is to say, identical variables (i.e., those differing only in terms of spouse responding) are not at all necessarily the best predictors of one another. This is true even of the small, two by two submatrices appearing in the upper left and lower right corners of the interspouse matrices in the table. It is appropriate, thus, to comment that spouses are not particularly reliable (i.e., objective) perceivers of the behaviors of one another.

Insofar as the purely spatial juxtaposition of husbands' and wvies' perceptual circumplexes is concerned, it is the case that though interspouse circumplexes lie close to one another spatially, with behavior held constant, variables characterized by an ideal level tend to bend away from one another, and toward the actual level variables.[43] This is particularly noticeable with the interspouse matrices representing rejecting sorts of behavior, where ideal perspectives appear to be completely unrelated to one another. To some extent, this condition is to be expected, as the construct, 'ideal behavior', is necessarily somewhat vague, and must have, as its anchor, or reference space, some sense of actual behavior.

The Prediction of Dyadic Adjustment

Primary Ringex Variables

The primary Ringex variables for each spouse were correlated with the dyadic adjustment scores for both spouses. These coefficients are summarized in Table 23; Subtable 23.A contains the correlations for husbands' Ringex variables, and Subtable 23.B contains the analogous values for wives' Ringex variables. Since it was predicted that dyadic adjustment would be positively related to accepting behaviors and negatively related to rejecting behaviors, significance tests of the correlations are one-tailed. Starred coefficients are significant for an alpha of .05.

The decision to correlate each spouse's Ringex variables with <u>both</u> spouses' dyadic adjustment scales was not originally proposed, but was felt important enough to add. The bases for this decision included: (1) the obvious differences in composition of dyadic adjustment between husbands and wives; (2) the consequent, relatively moderate ($r = .6047$) relationship between husbands' and wives' dyadic adjustment; (3) the clear differences between the structuring of wives' and husbands' primary Ringex variables, emphasizing the relative indeterminacy of the latter. All three unpredicted features of these data point toward the conclusion that poorly understood factors are influencing the arrangement of variables. It was believed possible that an examination of the relationships between each set of Ringex variables and both spouses' dyadic adjustment might serve to clarify a part of this indeterminacy. To simplify the discussion of the hypotheses, as proposed, the coefficients in Table 23 are first discussed within hsubands and wives, and only then is the prediction of one spouse's dyadic adjustment on the basis of the <u>other</u> spouse's primary Ringex variables considered.

Table 23

Prediction of Dyadic Adjustment with the Primary Ringex Variables[a]

23.A Husbands' and Wives' Dyadic Adjustment as Predicted by Husbands' Primary Ringex Variables.[b]

Behavior Type: Social Acceptance of the Other

	Dyadic Adjustment	
Perceptual Type	Husbands	Wives
(1)	.4554*	.3695*
(2)	.3846*	.3447*
(3)	.3109*	.2823*
(4)	.3666*	.3327*
(5)	.1827	.4184*
(6)	.2843*	.4210*
(7)	.6233* (.7800)[c]	.5011* (.8178)
(8)	.6600*	.4765*

Table 23 (Continued)

Behavior Type: Emotional Acceptance of the Other		
	Dyadic Adjustment	
Perceptual Type	Husbands	Wives
(1)	.5318*	.5610*
(2)	.4477*	.5269*
(3)	.4173*	.4167*
(4)	.4604*	.4750*
(5)	.3316*	.4345*
(6)	.4359*	.4713*
(7)	.6466*	.6779*
(8)	.6591*	.6923*

Behavior Type: Emotional Acceptance of the Self		
	Dyadic Adjustment	
Perceptual Type	Husbands	Wives
(1)	.3469*	.2130
(2)	.4301*	.2198
(3)	.3202*	.1423
(4)	.2705*	.1334
(5)	.1646	.2092
(6)	.1066	.0720
(7)	.5529*	.3681*
(8)	.5644*	.4212*

Table 23 (Continued)

Behavior Type: Social Acceptance of the Self		
	Dyadic Adjustment	
Perceptual Type	Husbands	Wives
(1)	.1378	.1188
(2)	.1375	.1282
(3)	-.0160	.0069
(4)	.0848	.1472
(5)	.2836*	.1598
(6)	.2619*	.1513
(7)	.2800*	.1456
(8)	.2571*	.1224

Behavior Type: Social Rejection of the Self		
	Dyadic Adjustment	
Perceptual Type	Husbands	Wives
(1)	.0609	.0384
(2)	.0263	-.0310
(3)	.0129	.0338
(4)	-.0865	-.0820
(5)	-.0971	-.0982
(6)	-.0211	-.0356
(7)	-.3837*	-.1945
(8)	-.4311*	-.2217

Table 23 (Continued)

Behavior Type: Emotional Rejection of the Self		
	Dyadic Adjustment	
Perceptual Type	Husbands	Wives
(1)	-.1194	-.0923
(2)	-.1754	-.1392
(3)	-.1743 (-.2378)*	-.1155
(4)	-.1447	-.1106
(5)	.0218	-.1204
(6)	-.0028	-.1714
(7)	-.3865*	-.1990
(8)	-.4201	-.2126

Behavior Type: Emotional Rejection of the Other		
	Dyadic Adjustment	
Perceptual Type	Husbands	Wives
(1)	-.4969*	-.2543*
(2)	-.1191	-.1010
(3)	-.1586	-.1817
(4)	-.2017	-.2577*
(5)	-.1029	-.0034
(6)	-.1506	-.1226
(7)	-.4871* (-.5674)	-.1884 (-.2195)
(8)	-.6329*	-.2499*

Table 23 (Continued)

Behavior Type: Social Rejection of the Other

Perceptual Type	Dyadic Adjustment: Husbands		Dyadic Adjustment: Wives	
(1)	-.5018*		-.2415*	
(2)	-.1648		-.2364*	
(3)	-.2584*	(-.2890)	-.1848	
(4)	-.1973	(-.2548)*	-.1990	(-.2569)*
(5)	-.0121		.1579	
(6)	-.1877	(-.2475)*	.0112	
(7)	-.2586*		-.0776	
(8)	-.4131*		-.2420	

Table 23 (Continued)

23.B Husbands' and Wives' Dyadic Adjustment as Predicted by Wives' Primary Ringex Variables.

Behavior Type: Social Acceptance of the Other

	Dyadic Adjustment	
Perceptual Type	Husbands	Wives
(1)	.4156*	.4859*
(2)	.3990*	.4437*
(3)	.2527*	.3860*
(4)	.3411*	.4544*
(5)	.1426	.2510*
(6)	.2479* (.2856)	.3052* (.3517)
(7)	.3192*	.5256*
(8)	.3428* (.3795)	.5213* (.5772)

Table 23 (Continued)

Behavior Type: Emotional Acceptance of the Other

Perceptual Type	Dyadic Adjustment	
	Husbands	Wives
(1)	.4713*	.5752*
(2)	.4265*	.5438*
(3)	.3897* (.4418)	.4319* (.4896)
(4)	.3019*	.2969*
(5)	.1736 (.2450)*	.2245 (.3169)*
(6)	.2957* (.4527)	.2528* (.3870)
(7)	.4062* (.4934)	.4921* (.5978)
(8)	.3821*	.4707*

Behavior Type: Emotional Acceptance of the Self

Perceptual Type	Dyadic Adjustment	
	Husbands	Wives
(1)	.3372*	.4608*
(2)	.2908*	.4382*
(3)	.1383	.2211
(4)	.1327	.2376*
(5)	.1158	.0904
(6)	.1160	.0646
(7)	.2634*	.3463*
(8)	.3305*	.3732*

Table 23 (Continued)

Behavior Type: Social Acceptance of the Self		
	Dyadic Adjustment	
Perceptual Type	Husbands	Wives
(1)	.2477*	.3360*
(2)	.2883*	.3659*
(3)	.1966	.2533*
(4)	.1878	.2492*
(5)	.0259	.2062 (.3542)*
(6)	.0175	.1818 (.3825)*
(7)	.2634* (.3628)	.4211* (.5800)
(8)	.2149 (.2769)*	.3679* (.4740)

Behavior Type: Social Rejection of the Self		
	Dyadic Adjustment	
Perceptual Type	Husbands	Wives
(1)	-.2780*	-.0817
(2)	-.1927	-.0173
(3)	-.1021	.0421
(4)	.1416	.0719
(5)	-.0495	.0985
(6)	-.0395	.1736
(7)	-.1143	.0105
(8)	-.0399	.0468

Table 23 (Continued)

Behavior Type: Emotional Rejection of the Self

Perceptual Type	Dyadic Adjustment: Husbands	Dyadic Adjustment: Wives
(1)	-.3416*	-.2178
(2)	-.2317	-.1484
(3)	-.1747	.0011
(4)	-.1971	-.0470
(5)	.0555	.1919 (.2643)*
(6)	.0300	.1823 (.2511)*
(7)	-.1263	-.1016
(8)	-.1694	-.0513

Behavior Type: Emotional Rejection of the Other

Perceptual Type	Dyadic Adjustment: Husbands	Dyadic Adjustment: Wives
(1)	-.1763	-.0547
(2)	-.1365	.0451
(3)	-.0299	.0049
(4)	.0190	-.0002
(5)	.0808	.1284
(6)	-.0265	.0222
(7)	-.1931	.0509
(8)	-.3049*	-.1034

Table 23 (Continued)

Behavior Type: Social Rejection of the Other		
	Dyadic Adjustment	
Perceptual Type	Husbands	Wives
(1)	-.3782* (-.4471)	-.2059 (-.2434)*
(2)	-.3022* (-.3321)	-.0049
(3)	-.0530	.0310
(4)	-.3006* (-.3721)	.0228
(5)	.1847	.0964
(6)	.0200	.0799
(7)	-.1833 (-.2620)*	-.1236
(8)	-.2422* (-.2723)	-.1944

*p<.05.

[a]With alpha set at .05, and for a one-tailed test, a correlation of ±.2353 is required to attain significance. The test used is t, with n-2, or 48, degrees of freedom.

[b]Variables are ordered according to perceptual orientation; the numerals used represent perceptual orientations as they appear in the first note to Table 20.

[c]Parenthesized coefficients have been corrected for attenuation due to unreliability in the predictors. The corrected values are not, however, estimates of correlation assuming a perfectly reliable predictor. Rather, they have been stepped up to a magnitude predictable upon the basis of the average of those predictor reliabilities greater than or equal to .70. For husbands, this value is .8004; for wives, this average acceptable reliability is .7968. This strategy was adopted in order to avoid inappropriate inflation of correlations between criteria and predictors due to the partialing away of all of the unreliability. As such, these coefficients are more

Table 23 (Continued)

comparable with the uncorrected values (i.e., those predictions involving acceptably reliable predictors).

As was predicted, variables characterized by acceptance correlated positively, and variables characterized by rejection, negatively, with dyadic adjustment. This was true of both husbands and wives. Acceptance proved to be more strongly related to dyadic adjustment, also as hypothesized, even when the RBT scales for rejecting behavior were corrected for attenuation due to unreliability. This was particularly so for wives, indicating the rather extreme importance of acceptance in their marriages.

In keeping with what was hypothesized, actual behavior proved the better predictor of dyadic adjustment, relative to ideal behavior, again, even after unreliable predictors were adjusted. This, too, was present for both husbands and wives.

The more focal hypotheses concerning the primary Ringex variables did not emerge so convincingly supported by the data. Of the behavior types, it was predicted that within acceptance, the emotional mode would prove the better predictor when compared with the social mode; and that within either mode, behavior directed toward the other would prove the better predictor when compared with behavior directed toward the self. It will be recalled that these predictions were based upon the theoretical presupposition that mode would be more relevant than object, insofar as behavior is concerned. As it happened, for both husbands and wives, the reverse occurred: within each of these facets, results were consistent with what was predicted, but between the two facets, object was the more important. Consequently, for both spouses, acceptance of the other was more relevant predictively than acceptance of the self, and within either object, emotional acceptance was more relevant than social acceptance.[44]

Within rejecting behavior, the identical set of predictions was made, that emotional rejection would correlate more substantially with dyadic adjustment than social rejection, and that within either mode, rejection of the other would supersede rejection of the self. For husbands, within rejecting behavior, the facets of object and mode again were reversed in order of importance according to results, with the order within facets emerging as predicted. Thus, rejection of the other correlated more highly with dyadic adjustment than did rejection of the self, and within either object, emotional rejection correlated more highly than social rejection.

For wives, rejection was dramatically less relevant than for husbands, and with or without adjustment for unreliability in the predictors, there would seem to be little evidence that one behavior type better predicted dyadic adjustment than another. Perhaps behavioral type eight, social rejection of the other, was the best negative predictor of wives' dyadic adjustment; the remaining three rejecting behavior types seem to be undifferentiable, and quite unimportant.

Within a given type of behavior, it was hypothesized that of the actual level perspectives, the more interpersonal perspectives would be the better predictors of dyadic adjustment. Thus, it was predicted that the actual behavior of the self, as viewed by the other, would best predict dyadic adjustment, within a given behavior type, and that this orientation would be followed, in order of descending importance, by the actual behavior of the other as viewed by the self, the actual behavior of the self as viewed by the self, and the actual behavior of the other as viewed by the other. The numbers designating these perspectives, adhering to this order, are 8, 1, 7, and 2.

For husbands, rather than maximally interpersonal perspectives being the best predictors, it was the case that evaluations of the self were the most important. Thus, perspectives seven and eight correlated most highly with dyadic adjustment, followed by perspectives one and two. Generally, perspective eight was the best predictor of the lot, and this lies in accordance with what was hypothesized, but in most cases, perspective seven was nearly as relevant, and this clearly deviates from what was predicted.

For wives, interestingly, the pattern of results is somewhat more complex. For social acceptance of the other and social rejection of the self, results were the same as those just mentioned for husbands: the perception of the self was more important than the perception of the other. But for emotional acceptance of the self and of the other, the pattern reversed, and the more important predictors were perceptions of the other: perspectives one and two. Moreover, of this pair, perspective one, the husband's behavior from his own point of view, was more relevant than perspective two, the husband's behavior from the wife's point of view. For rejecting behaviors, only in the case of behavior type eight, social rejection of the other, did the wives' prediction attain significance, and then only after adjustment for unreliability. The corrected predictions indicate again that the husband's view of his own behavior is most important, followed by the husband's view of the wife's behavior. (It should be commented here that the findings concerning the wives' primary Ringex variables characterized by rejecting behavior are relatively uninterpretable, due to their greatly diminished importance, even after corrections were made for unreliability.)

Those perspectives characterized by the ideal level also did not arrange themselves as predicted. The hypothesis in this regard, it will be recalled, emphasized that at the ideal level, the self-perspective would assume predictive hegemony relative to the other-perspective. And within the self-perspective, it was predicted that the behavior of the self would be more relevant. That is, one's own ideal behavior, as viewed by the self, would be the most important thing, predictively, followed by one's view of the other's ideal behavior, the other's view of the self's behavior, and finally, the other's view of the other's behavior. Unfortunately, and due alike to the lowered internal consistency of ideal level variables and to their generally lesser predictive validity, it proved impossible to draw from them any consistent ordering whatsoever. In this case, results are equally vague for husbands and wives. On the basis of only the behaviorally accepting perceptual circumplexes, it is possible to suggest that perspectives three and four, the ideal behavior of the other from the other's point of view, and the ideal behavior of the other from the point of view of the self, respectively, are slightly more important than perspectives five and six, which represent the self's ideal behavior from the points of view of the self and the other, respectively. This, of course, contradicts what was hypothsized. Since the correlations were so uniformly low, however, it is impossible to determine to what extent, beyond this, systematicity in results exists. (In a very large sense, it was directly due to the more global hypotheses being borne out by the data that the more focal ones concerning rejecting behavior and ideal perspectives remain statistically unexplorable. That is, rejecting behaviors and ideal perspectives, as predicted, were not particularly accurate predictors of dyadic adjustment in the first place).

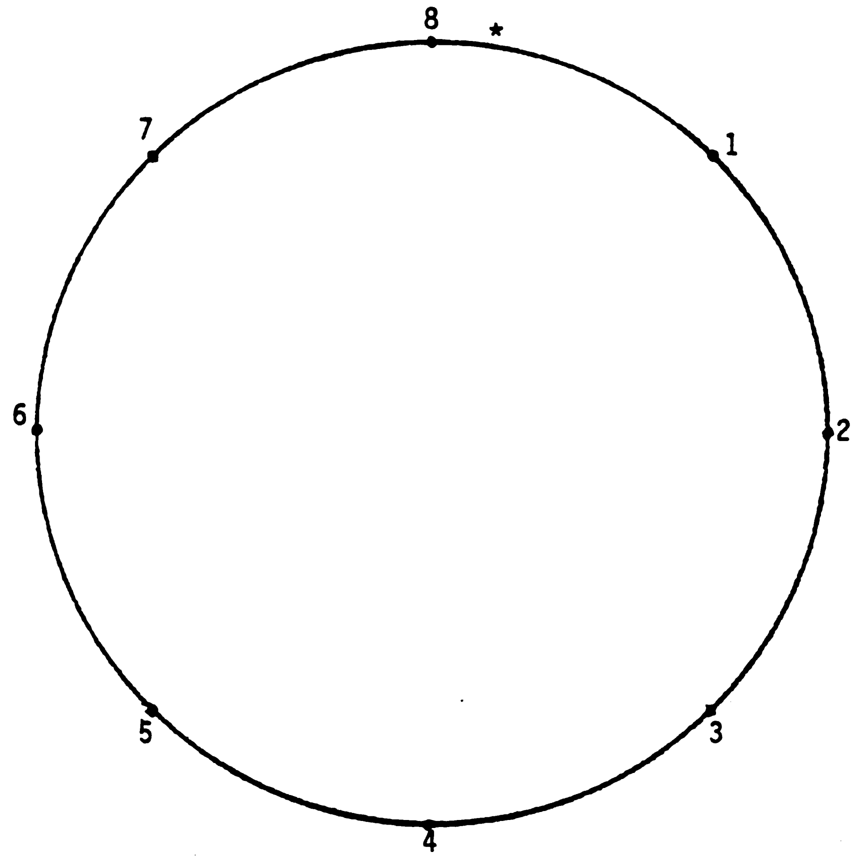
For both husbands and wives, then, the hypothesized results failed to obtain. For husbands, at least, the predictor thought to be the best indeed was, but for wives, the pattern was more complex, and even <u>this</u> prediction failed oftener than not.

In general, the failure of results to emerge as was predicted pivots upon the emergence of an order of facet importance contrary to expectations. Acceptance-rejection (i.e., content), as predicted, was clearly the most important behavioral facet, but object proved to be more significant than mode, in contradiction to the order hypothesized. Within behavior, actual-ideal (i.e., level) proved to be most important, as predicted, but self-other, as perceptual object, proved to be more significant than self-other, as perceiver (i.e., alias). Moreover, for wives, the ordering of these latter two facets proved to be contingent upon the behavioral object facet, indicating an interaction not predicted.

These latter inferences are more difficult to utter with conviction insofar as rejecting behaviors and ideal perspectives are concerned, simply because the first two hypotheses, those emphasizing the salience, respectively, of accepting behavior and actual level perspectives, were so overwhelmingly supported.

For husbands and wives, dyadic adjustment can be located within the arrays of Ringex variables. It was hypothesized that the construct would exist very near to perspective number eight within behavior type two: the spouses' view of their own actual emotional acceptance of the other, from the point of view of the other. It additionally was predicted that dyadic adjustment would be "pulled" slightly away from this point, in the directions of perspective two and behavior type three; that is, in the directions of the self's view of the other's actual behavior, both emotionally accepting of the other. This did not really obtain quite as predicted. What did occur is presented diagrammatically in Figure 9. This figure is a spatial interpretation of the findings discussed above.

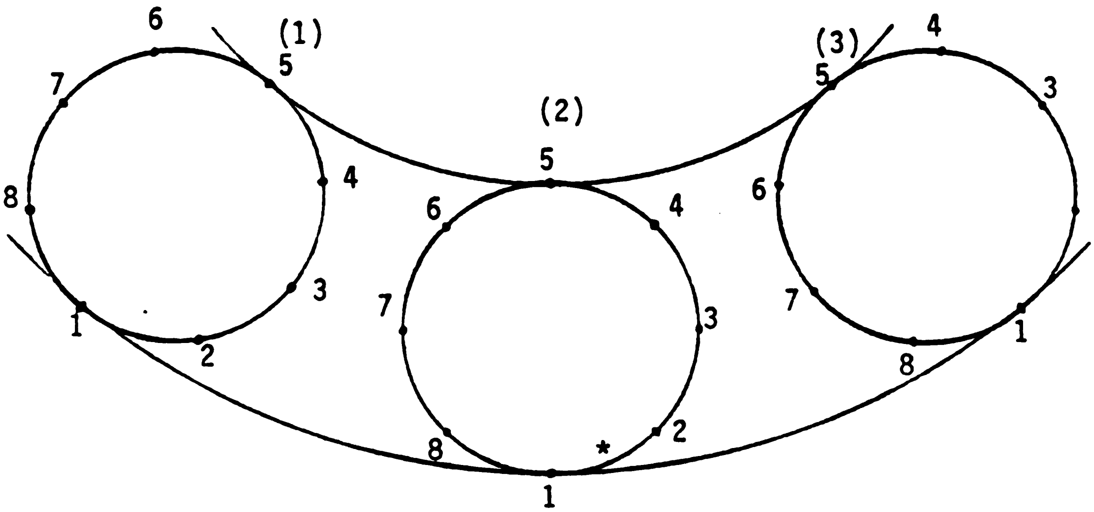
As was briefly mentioned above, husbands' dyadic adjustment was also correlated with wives' Ringex variables, and vice versa. In general, and as an overview, the criterion variables (i.e., both spouses' dyadic adjustment) were comparable enough in composition as to operate similarly with a given set of predictor variables (e.g., one array of eight perceptual or behavioral predictors). Thus, both spouses' dyadic adjustment were similarly predicted by either spouse's Ringex variables. This means, then, that perspectives one and two of the wives'



9.A Predicted Location of Dyadic Adjustment, Projected onto the Circumplex, Emotional Acceptance of the Other.

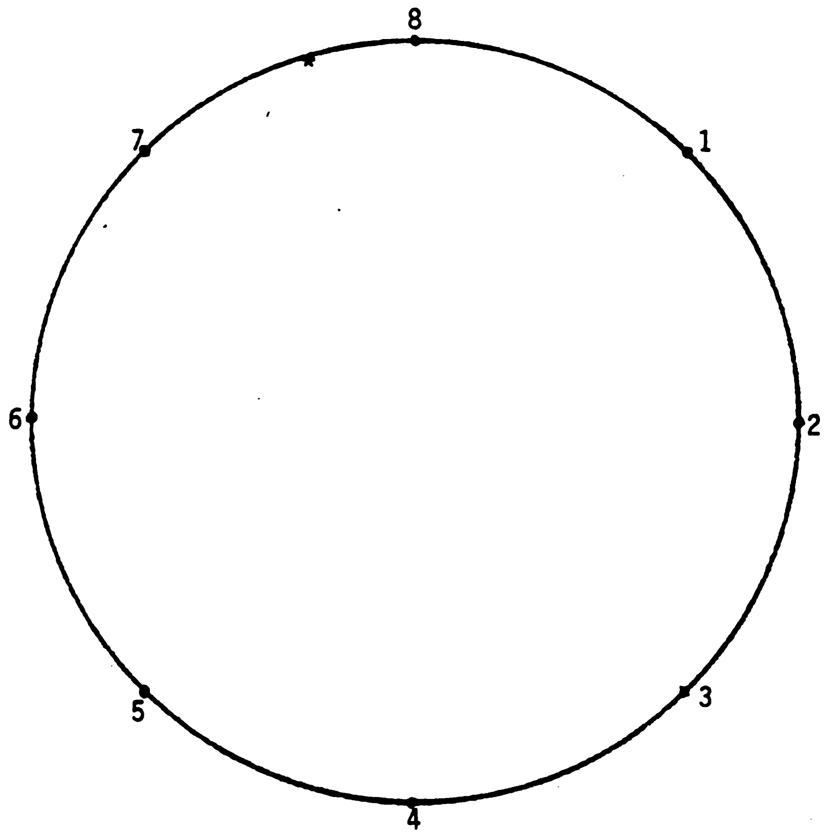
Figure 9

Spatial Diagram of the Point Location of Dyadic Adjustment, Plotted on the Ringex Variables[a]



9.B Predicted Location of Dyadic Adjustment, Projected onto the Ringex^{c}.

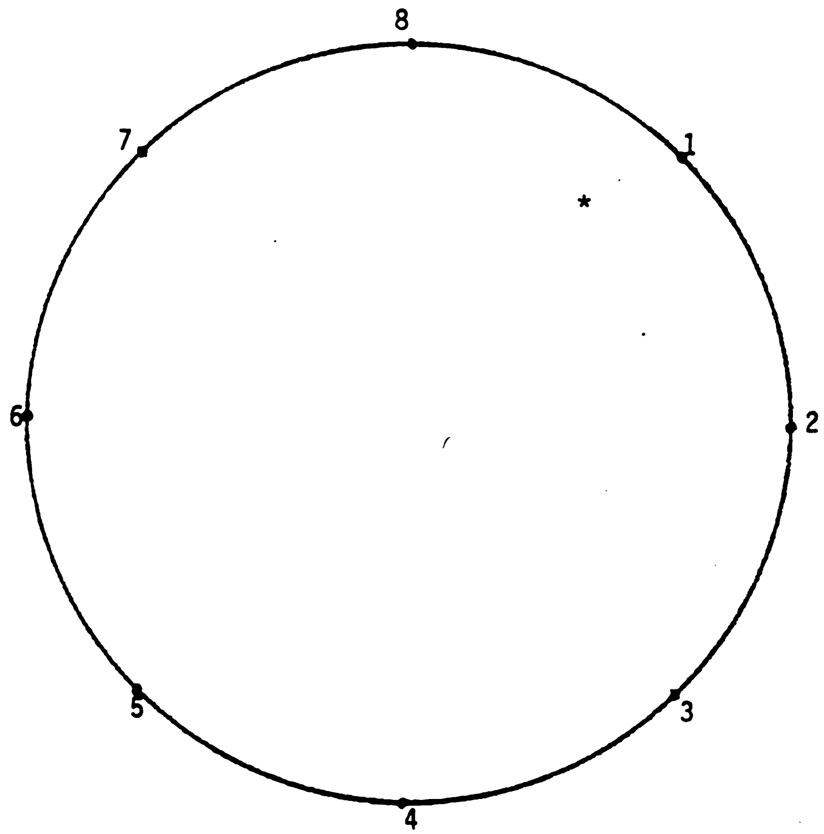
Figure 9 (Continued)



9.C Observed Location of Dyadic Adjustment Projected onto the Circumplex, Emotional Acceptance of the Other.

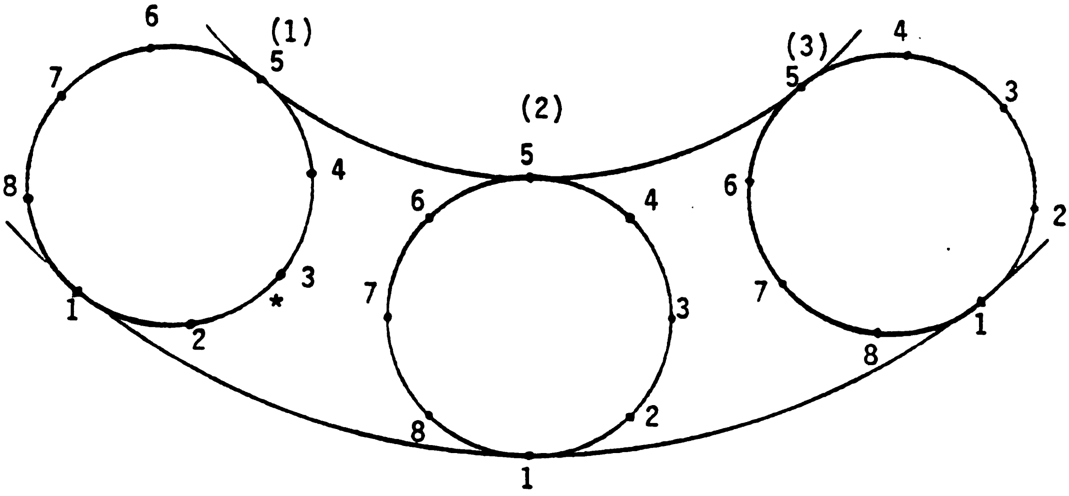
Husbands

Figure 9 (Continued)



Wives

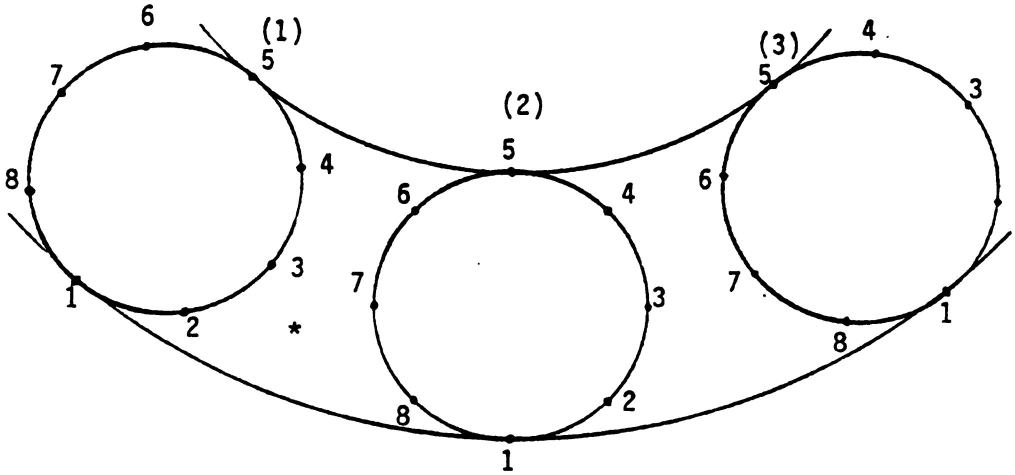
Figure 9 (Continued)



9.D Observed Location of Dyadic Adjustment, Projected onto the Ringex[d].

Husbands

Figure 9 (Continued)



Wives

Figure 9 (Continued)

[a]Drawing of the diagrams is conducted in accordance with the tenor of Guttman's (1966) order analysis of correlation matrices. The procedure is nonanalytical, but strategically quite logical.

[b]This is a side view of the perceptual circumplex number two, that associated with emotional acceptance of the other. The points on the perimeter of the circumplex are the spatial locations of the perceptual variables which define this circumplex. The asterisk is the presumed location of dyadic adjustment.

[c]Here, the side view of a part of the Ringex is presented. The smaller circles are perceptual circumplexes, the perspectives being numbered. The parenthesized numbers above each of the smaller circles refer to the behavioral types involved. The asterisk is toward the inside (i.e., projects back toward perspective eight).

[d]The asterisk projected onto the husbands' Ringex actually is back somewhat, in the proximity of perspectives seven and eight. In the wives' Ringex, the asterisk projects onto the surface more, in the proximity of perspectives one and two.

Figure 9 (Continued)

Ringex variables exert more influence relative to the analogous Ringex variables for the husbands, in predicting husbands' dyadic adjustment. And, perspectives seven and eight of the husbands' Ringex variables exert more influence in predicting wives' dyadic adjustment than do the analogous Ringex variables for the wives.

As a consequence of having correlated one spouse's dyadic adjustment with the other spouse's Ringex variables, it was discovered, in contradiction to what might have been reasonably expected, that the husbands' Ringex variables were actually the better predictors of both spouses' dyadic adjustment. Indeed, the highest (uncorrected) predictive validities obtained were between wives' dyadic adjustment and the husbands' perspectives seven and eight for behavior type two; i.e., husbands' estimates of the husbands' emotional acceptance of the other, from the points of view both of the self and of the other. The interpretation of this from the perspective of Radex Theory is, of course, that wives' dyadic adjustment lies spatially closer to the husbands' perceptual circumplex number two than it does to the same circumplex for the wives. A more substantive interpretation is that dyadic adjustment for both spouses is more contingent upon the behavior of the husbands than the wives. Even when the wives' Ringex variables are emphasized as predictors, it is the wives' estimate of the husbands' emotional acceptance of the other (i.e., of the wives) that really counts.

A final point worth mentioning is that regardless of which set of Ringex variables is emphasized as predictors, husbands' dyadic adjustment tends to correlate with a wider range of different behaviors and perspectives, with or without correction for attenuation, than does wives' dyadic adjustment. For example, the dyadic adjustment of husbands correlates substantially with all four varieties of accepting behavior, and sporadically with the four types of rejecting behavior; wives' dyadic adjustment, however, seems to be much more localized to behaviors characterized by acceptance of the other, and especially emotional acceptance of the other.

Derived Ringex Variables

Correlations between husbands' and wives' dyadic adjustment and the direct and absolute distance versions of the derived variables are presented in Table 24. Each derived variable was examined for predictive significance with respect to both spouses' dyadic adjustment, since not only are interspouse perspectives often differenced in the derivations, but also, as was pointed out in the previous section, it was discovered that husbands' Ringex variables were more salient predictors of dyadic adjustment than were wives'. Each of the nine Subtables (labeled 24.A through 24.I) within Table 24 summarizes one particular variety of derived variable (e.g., Subtable 24.B includes husbands' and wives' interpersonal understanding or misunderstanding).

It was hypothesized that: (1) similarity between compared perspectives, as opposed to complementarity, would operate to better predict dyadic adjustment; (2) derivations within each generic class could be ordered according to predictive merit in a fashion identical

Table 24

Prediction of Dyadic Adjustment with the Derived Ringex Variables[a]

24.A Husbands' and Wives' Dyadic Adjustment as Predicted by Husbands' and Wives' Estimates of Interspouse Agreement of Disagreement.

Agreement on Husband's Behavior

		Actual: $A(H_0A,W_1A)$		Ideal: $A(H_0I,W_1I)$	
		Dyadic Adjustment			
Behavior Type	Variate Type	Husband	Wife	Husband	Wife
(1)	DD	.06	-.14	-.09	-.08
	AD	-.12	-.07	-.02	.08
(2)	DD	.02	-.08	.08	.12
	AD	-.22	-.29*	.14	.04
(3)	DD	.13	-.15	-.04	-.14
	AD	-.08	-.05	-.04	-.10
(4)	DD	.02	-.17	.09	-.06
	AD	-.05	-.04	-.25*	-.27*
(5)	DD	-.06	-.09	-.12	-.08
	AD	-.13	-.04	.08	.02
(6)	DD	-.12	-.02	.15	-.07
	AD	-.18	-.10	-.23	-.23
(7)	DD	-.11	-.06	-.06	-.03
	AD	-.10	-.19	.00	.01
(8)	DD	.01	.06	.04	-.01
	AD	-.17	-.05	-.31*	.02

Table 24 (Continued)

Agreement on Wife's Behavior						
		Actual: $A(W_0A,H_1A)$		Ideal: $A(W_0I,H_1I)$	
		Dyadic Adjustment			
Behavior Type	Variate Type	Husband	Wife	Husband	Wife
(1)	DD	-.14	.12	-.14	-.05
	AD	.17	-.22	.12	.02
(2)	DD	-.16	-.10	-.17	-.22
	AD	-.29*	-.27*	.18	.14
(3)	DD	-.03	.17	-.13	-.06
	AD	.08	.02	-.01	-.01
(4)	DD	.09	.25	-.06	.01
	AD	.10	-.13	-.08	-.27*
(5)	DD	-.24	-.04	.03	.19
	AD	-.34*	-.07	-.17	.01
(6)	DD	-.02	-.02	.11	.21
	AD	-.00	-.04	-.08	.05
(7)	DD	.04	.19	.09	.16
	AD	-.11	.05	-.09	-.07
(8)	DD	.26	.09	.14	.19
	AD	-.11	-.20	-.10	-.05

Table 24 (Continued)

24.B Husbands' and Wives' Dyadic Adjustment as Predicted by Husbands' and Wives' Estimates of Interpersonal Understanding or Misunderstanding, Type One (Self-Referenced).

Wife's Understanding of Husband's Behavior

Behavior Type	Variate Type	Actual: $U(H_0A, W_2A)$		Ideal: $U(H_0I, W_2I)$	
		Dyadic Adjustment			
		Husband	Wife	Husband	Wife
(1)	DD	.13	-.04	-.01	-.03
	AD	-.11	-.06	-.04	-.08
(2)	DD	.17	.07	-.03	-.04
	AD	-.10	-.14	.08	-.02
(3)	DD	.18	-.12	-.05	-.14
	AD	-.06	.04	-.10	-.20
(4)	DD	-.03	-.21	.07	-.07
	AD	.04	.09	-.27*	-.25*
(5)	DD	-.20	-.19	.07	-.06
	AD	.00	.03	-.11	.03
(6)	DD	-.22	-.09	.13	-.11
	AD	-.16	-.05	-.20	-.20
(7)	DD	-.14	-.15	-.01	-.04
	AD	-.06	-.08	-.05	-.01
(8)	DD	-.08	-.07	-.11	-.01
	AD	-.22	-.03	-.13	.06

Table 24 (Continued)

Husband's Understanding of Wife's Behavior					
		Actual: $U(W_0A, H_2A)$		Ideal: $U(W_0I, H_2I)$	
		Dyadic Adjustment			
Behavior Type	Variate Type	Husband	Wife	Husband	Wife
(1)	DD	-.07	.14	-.06	.02
	AD	.13	-.24*	.09	-.00
(2)	DD	-.06	-.06	-.13	-.16
	AD	-.37*	-.27*	.18	.16
(3)	DD	-.07	.18	-.16	-.06
	AD	-.00	-.02	-.04	-.08
(4)	DD	.10	.24	.03	.13
	AD	.00	-.05	.02	-.13
(5)	DD	-.16	.05	-.04	.12
	AD	-.36*	-.08	-.18	.05
(6)	DD	.03	.02	.13	.21
	AD	-.06	-.09	-.05	.04
(7)	DD	-.12	.09	.06	.11
	AD	-.27*	.01	-.05	-.01
(8)	DD	-.06	.03	.16	.17
	AD	-.21	-.16	.05	.01

Table 24 (Continued)

24.C Husbands' and Wives' Dyadic Adjustment as Predicted by Husbands' and Wives' Estimates of Interpersonal Understanding or Misunderstanding, Type Two (Other-Referenced).

Husband's Understanding of Wife's Behavior

		Actual: $U'(W_1A,H_3A)$		Ideal: $U'(W_1I,H_3I)$	
		Dyadic Adjustment			
Behavior Type	Variate Type	Husband	Wife	Husband	Wife
(1)	DD	-.11	.14	.18	.10
	AD	-.01	.06	-.20	-.05
(2)	DD	-.20	-.12	-.00	-.09
	AD	-.19	-.13	-.06	-.11
(3)	DD	-.21	.04	.00	.07
	AD	-.08	-.03	.13	.07
(4)	DD	-.00	.19	-.11	.05
	AD	-.02	-.01	-.26*	-.28*
(5)	DD	.15	.14	.17	.11
	AD	-.25*	-.13	.09	.05
(6)	DD	.21	.06	-.17	.04
	AD	-.38*	-.20	-.25*	-.20
(7)	DD	.35*	-.15	.04	.00
	AD	-.30*	-.22	.00	-.00
(8)	DD	.23	.14	-.19	-.09
	AD	-.14	-.09	-.23	.13

Table 24 (Continued)

Wife's Understanding of Husband's Behavior					
		Actual: $U'(H_1A,W_3A)$		Ideal: $U'(H_1I,W_3I)$	
		Dyadic Adjustment			
Behavior Type	Variate Type	Husband	Wife	Husband	Wife
(1)	DD	.11	-.15	.22	.08
	AD	.23	-.17	.17	-.05
(2)	DD	.01	.02	.26	.23
	AD	-.05	-.04	.18	.00
(3)	DD	-.03	-.20	.12	.03
	AD	.12	.05	-.02	-.02
(4)	DD	-.06	-.23	.05	-.03
	AD	.15	-.09	-.06	-.24*
(5)	DD	.13	-.02	-.03	-.14
	AD	-.22	-.02	-.19	-.07
(6)	DD	.06	-.04	-.13	-.22
	AD	-.10	-.06	.05	.09
(7)	DD	.16	.02	-.18	-.25
	AD	-.27*	-.11	.00	.03
(8)	DD	-.14	.01	-.26	-.19
	AD	-.06	-.26*	.01	-.06

Table 24 (Continued)

24.D Husbands' and Wifes' Dyadic Adjustment as Predicted by Husbands' and Wives' Estimates of Expectation of Interpersonal Understanding or Misunderstanding.

Husband's Expectation of Wife's Understanding

		Actual: $EU(H_0A,H_3A)$		Ideal: $EU(H_0I,H_3I)$	
		Dyadic Adjustment			
Behavior Type	Variate Type	Husband	Wife	Husband	Wife
(1)	DD	-.10	.02	.21	.04
	AD	-.38*	-.27*	-.33*	-.15
(2)	DD	-.34*	-.35*	.12	.03
	AD	-.41*	-.51*	-.28*	-.31*
(3)	DD	-.21	-.24	-.09	-.24
	AD	.00	-.07	-.38*	-.39*
(4)	DD	.05	.07	-.08	-.03
	AD	-.01	.07	.04	-.10
(5)	DD	.32*	.17	.07	.05
	AD	-.11	-.11	.03	.06
(6)	DD	.21	.10	-.05	-.13
	AD	-.13	-.00	.03	.01
(7)	DD	.52*	.21	-.08	-.11
	AD	-.57*	-.28*	-.29*	-.21
(8)	DD	.45*	.37*	-.35*	-.23
	AD	-.45*	-.31*	-.35*	-.23

Table 24 (Continued)

Wife's Expectation of Husband's Understanding

		Actual: $EU(W_0A, W_3A)$		Ideal: $EU(W_0I, W_3I)$	
		Dyadic Adjustment			
Behavior Type	Variate Type	Husband	Wife	Husband	Wife
(1)	DD	-.10	-.06	.18	.08
	AD	.09	.24*	-.38*	-.40*
(2)	DD	-.09	-.13	.19	.05
	AD	-.22	-.28*	-.18	-.32*
(3)	DD	-.17	-.06	-.00	-.05
	AD	-.07	.16	.01	.08
(4)	DD	.11	.11	-.02	-.07
	AD	.12	.05	-.04	-.21
(5)	DD	-.19	-.12	.01	.12
	AD	-.14	-.05	-.01	.10
(6)	DD	.10	-.15	-.06	-.03
	AD	-.25*	-.16	-.30*	-.17
(7)	DD	.31*	.28*	-.33*	-.32*
	AD	-.31*	-.28*	-.33*	-.32*
(8)	DD	.20	.20	-.34*	-.02
	AD	-.22	-.23	-.34*	-.02

Table 24 (Continued)

24.E Husbands' and Wives' Dyadic Adjustment as Predicted by Husbands' and Wives' Estimates of Expectation of Agreement or Disagreement Regarding the Other.

Husband's Expectation

		Actual: $EA(H_1A,H_2A)$		Ideal: $EA(H_1I,H_2I)$	
		Dyadic Adjustment			
Behavior Type	Variate Type	Husband	Wife	Husband	Wife
(1)	DD	.22	.08	.26	.23
	AD	-.28*	-.15	-.35*	-.19
(2)	DD	.21	.08	.13	.18
	AD	-.33*	-.17	-.21	-.32*
(3)	DD	-.10	.03	-.08	-.00
	AD	-.18	-.01	-.33*	-.04
(4)	DD	.01	-.01	.23	.33*
	AD	-.50*	-.14	-.12	-.16
(5)	DD	.10	.18	-.19	.22
	AD	-.07	-.11	-.05	-.15
(6)	DD	.19	.16	.08	.02
	AD	-.05	-.09	-.12	-.08
(7)	DD	-.27	-.11	-.12	-.19
	AD	-.42*	-.22	-.12	-.19
(8)	DD	-.37*	-.06	-.00	-.10
	AD	-.46*	-.14	-.38*	-.15

Table 24 (Continued)

Wife's Expectation					
		Actual: EA(W_1A,W_2A)		Ideal: EA(W_1I,W_2I)	
		Dyadic Adjustment			
Behavior Type	Variate Type	Husband	Wife	Husband	Wife
(1)	DD	.13	.20	.16	.12
	AD	-.13	-.31*	-.22	-.11
(2)	DD	.32*	.33*	-.20	.30*
	AD	-.29*	-.33*	-.18	-.14
(3)	DD	.16	.10	-.03	.00
	AD	-.27*	-.37*	-.04	.02
(4)	DD	-.18	-.15	-.06	-.05
	AD	-.21	-.22	-.11	-.18
(5)	DD	-.27	-.17	.41*	.05
	AD	-.29*	-.15	-.49*	-.12
(6)	DD	-.35*	-.22	-.10	-.13
	AD	-.13	-.14	-.02	.11
(7)	DD	-.12	-.32*	.36*	-.04
	AD	-.34*	-.30*	-.36*	.04
(8)	DD	-.24	-.39*	-.42*	-.01
	AD	-.24*	-.34*	-.36*	.01

Table 24 (Continued)

24.F Husbands' and Wives' Dyadic Adjustment as Predicted by Husbands' and Wives' Estimates of Perceived Interspouse Behavioral Differentiation, Type One (Self-Referenced).

Husband's Estimate

		Actual: $B(H_0A, H_1A)$		Ideal: $B(H_0I, H_1I)$	
		Dyadic Adjustment			
Behavior Type	Variate Type	Husband	Wife	Husband	Wife
(1)	DD	.16	.12	-.16	.06
	AD	-.25*	-.42*	-.26*	-.13
(2)	DD	.11	.11	-.12	-.10
	AD	-.38*	-.49*	-.19	-.27*
(3)	DD	.25	.19	-.22	-.08
	AD	-.19	.05	-.34*	-.21
(4)	DD	.14	.02	.27	.04
	AD	-.03	.03	-.34*	.04
(5)	DD	-.41*	-.21	.04	.02
	AD	-.28*	-.06	-.10	-.20
(6)	DD	-.28*	-.12	.11	-.05
	AD	-.16	-.03	-.20	-.20
(7)	DD	-.34*	-.09	.09	.16
	AD	-.48*	-.28*	-.21	-.18
(8)	DD	.07	.08	-.01	.14
	AD	-.29*	-.09	-.25*	-.11

Table 24 (Continued)

Wife's Estimate					
		Actual: $B(W_0A, W_1A)$		Ideal: $B(W_0I, W_1I)$	
		Dyadic Adjustment			
Behavior Type	Variate Type	Husband	Wife	Husband	Wife
(1)	DD	-.23	-.13	-.14	-.22
	AD	-.31*	-.22	.03	.18
(2)	DD	-.24	-.19	-.02	-.06
	AD	-.39*	-.43*	-.13	-.03
(3)	DD	-.11	-.17	-.04	-.27
	AD	-.15	-.06	-.06	-.03
(4)	DD	-.01	.06	-.20	-.11
	AD	-.15	-.25*	.08	-.22
(5)	DD	.17	.08	-.19	.05
	AD	-.49*	-.11	.05	.11
(6)	DD	.17	.09	.20	.21
	AD	-.17	.03	.00	.15
(7)	DD	.11	.15	-.05	.02
	AD	-.03	-.12	.06	.03
(8)	DD	.20	.08	.29*	.08
	AD	-.26*	-.35*	-.00	-.02

Table 24 (Continued)

24.G Husbands' and Wives' Dyadic Adjustment as Predicted by Husbands' and Wives' Estimates of Perceived Interspouse Behavioral Differentiation, Type Two (Other-Referenced).

Husband's Expectation of Wife's Estimate

		Actual: $B'(H_2A,H_3A)$		Ideal: $B'(H_2I,H_3I)$	
		Dyadic Adjustment			
Behavior Type	Variate Type	Husband	Wife	Husband	Wife
(1)	DD	-.27	-.13	.17	-.11
	AD	-.30*	-.19	-.24*	-.09
(2)	DD	-.35*	-.32*	.13	.03
	AD	-.55*	-.51*	-.34*	-.28*
(3)	DD	-.26	-.28*	.21	-.06
	AD	-.35*	.04	-.18	-.03
(4)	DD	-.11	.00	-.42*	-.22
	AD	-.24*	-.16	-.39*	-.06
(5)	DD	.45*	.19	.10	.12
	AD	-.35*	-.11	-.08	-.06
(6)	DD	.31*	.12	-.17	-.00
	AD	-.34*	-.12	-.17	-.11
(7)	DD	.59*	.22	-.12	-.20
	AD	-.64*	-.25*	-.18	-.17
(8)	DD	.37*	.16	-.15	-.23
	AD	-.41*	-.23	-.18	.00

Table 24 (Continued)

Wife's Expectation of Husband's Estimate

Behavior Type	Variate Type	Actual: $B'(W_2A,W_3A)$		Ideal: $B'(W_2I,W_3I)$	
		Dyadic Adjustment			
		Husband	Wife	Husband	Wife
(1)	DD	.13	-.00	.17	.21
	AD	-.21	-.04	.07	.06
(2)	DD	.02	.05	.29*	.28*
	AD	-.16	-.33*	.00	-.25*
(3)	DD	-.06	.14	.06	.23
	AD	-.11	-.13	-.05	-.00
(4)	DD	.12	.04	.20	.09
	AD	-.15	-.22	.06	-.12
(5)	DD	-.12	-.05	-.09	-.02
	AD	-.41*	-.07	-.28*	.01
(6)	DD	-.04	-.08	-.19	-.17
	AD	-.18	-.10	.04	.15
(7)	DD	.18	.22	-.12	-.11
	AD	.04	-.05	.02	.03
(8)	DD	.05	.25	-.25	-.09
	AD	-.12	-.37*	-.06	-.05

Table 24 (Continued)

24.H Husbands' and Wives' Dyadic Adjustment as Predicted by Husbands' and Wives' Estimates of Perceived Behavioral Dissatisfaction, Type One (Self-Referenced).

Perceived Dissatisfaction With Self

		Husband: $D_0(H_0A, H_0I)$		Wife: $D_0(W_0A, W_0I)$	
		Dyadic Adjustment			
Behavior Type	Variate Type	Husband	Wife	Husband	Wife
(1)	DD	.56*	.20	.15	.43*
	AD	-.55*	-.10	.24*	.33*
(2)	DD	.42*	.43*	.18	.34*
	AD	-.35*	-.15	.06	-.06
(3)	DD	.51*	.34*	.20	.35*
	AD	-.45*	-.13	.06	-.15
(4)	DD	-.01	-.03	.31*	.33*
	AD	-.01	-.03	-.09	-.11
(5)	DD	-.43*	-.20	-.11	-.09
	AD	-.48*	-.20	-.04	.00
(6)	DD	-.41*	-.12	-.17	-.27
	AD	-.43*	-.21	-.10	-.16
(7)	DD	-.51*	-.16	-.23	.04
	AD	-.55*	-.23	-.15	-.04
(8)	DD	-.22	-.12	-.31*	-.29*
	AD	-.22	-.12	-.10	-.12

Table 24 (Continued)

Perceived Dissatisfaction With Other					
		Husband: $D_1(H_1A, H_1I)$		Wife: $D_1(W_1A, W_1I)$	
		Dyadic Adjustment			
Behavior Type	Variate Type	Husband	Wife	Husband	Wife
(1)	DD	.18	.09	.22	.20
	AD	-.23	-.16	-.21	-.11
(2)	DD	.18	.20	.35*	.49*
	AD	-.44*	-.44*	-.37*	-.40*
(3)	DD	.10	.10	.27	.31*
	AD	.06	.04	-.16	-.09
(4)	DD	.08	-.01	.13	.18
	AD	-.12	-.04	-.14	-.19
(5)	DD	.12	.08	-.40*	-.14
	AD	.07	.05	-.43*	-.14
(6)	DD	-.04	-.03	-.25	-.24
	AD	-.02	-.06	-.22	-.16
(7)	DD	-.15	.06	-.38*	-.11
	AD	-.44*	-.27*	-.45*	-.22
(8)	DD	-.34*	-.09	-.28*	-.33*
	AD	-.55*	-.22	-.30*	-.38*

Table 24 (Continued)

24.I Husbands' and Wives' Dyadic Adjustment as Predicted by Husbands' and Wives' Estimates of Perceived Behavioral Dissatisfaction, Type Two (Other-Referenced).

Expectation Regarding Other's Dissatisfaction With the Self

		Husband: $D_2(H_2A, H_2I)$		Wife: $D_2(W_2A, W_2I)$	
		Dyadic Adjustment			
Behavior Type	Variate Type	Husband	Wife	Husband	Wife
(1)	DD	.21	.18	.29*	.19
	AD	-.12	-.24*	-.25*	-.07
(2)	DD	.11	.21	.14	.25
	AD	-.47*	-.24*	-.20	-.19
(3)	DD	.14	.10	.22	.32*
	AD	.04	.09	-.08	-.07
(4)	DD	.18	.15	.17	.22
	AD	-.23	-.10	-.10	-.14
(5)	DD	.02	-.05	-.19	-.07
	AD	.02	-.05	-.17	-.02
(6)	DD	-.08	-.08	-.13	-.19
	AD	-.04	-.11	-.09	-.04
(7)	DD	.07	.13	-.30*	.11
	AD	-.15	-.22	-.45*	-.09
(8)	DD	.04	-.13	-.31*	-.03
	AD	-.28*	-.23	-.29*	-.05

Table 24 (Continued)

Expectation Regarding Other's Dissatisfaction With the Spouse					
		Husband: $D_3(H_3A,H_3I)$		Wife: $D_3(W_3A,W_3I)$	
		Dyadic Adjustment			
Behavior Type	Variate Type	Husband	Wife	Husband	Wife
(1)	DD	.53*	.14	.28*	.38*
	AD	-.55*	-.19	.07	.06
(2)	DD	.50*	.46*	.29*	.35*
	AD	-.51*	-.50*	.00	-.04
(3)	DD	.56*	.34*	.26	.33*
	AD	-.43*	-.20	.04	-.09
(4)	DD	-.07	-.07	.25	.25
	AD	-.09	-.21	-.02	.01
(5)	DD	-.44*	-.20	-.02	.01
	AD	-.49*	-.21	-.00	.03
(6)	DD	-.44*	-.16	-.23	-.22
	AD	-.44*	-.18	-.07	-.11
(7)	DD	-.62*	-.25	-.40*	-.21
	AD	-.60*	-.23	-.36*	-.21
(8)	DD	-.45*	-.33*	-.43*	-.31*
	AD	-.45*	-.33*	-.38*	-.26*

Note. Behavior types are ordered as in all other cases. Comparisons are between the perspectives as they are listed in Tables 8 through 13; notation has been appended so as to facilitate relating those variables with these. the acronym, 'DD', represents

Table 24 (Continued)

'directional distance' (scores); 'AD' represents 'absolute distance' (scores).

[a]Significance, in the case of the absolute distance scores, is based on a one-tailed t-test, with n-2, or 48, degrees of freedom. This is appropriate, as the valence (or direction) or these relationships was predicted. For the direct distance scores, a two-tailed test was used, since the valence of these relationships was not predicted (indeed, it was hypothesized that these relationships would not be significant). For a two-tailed test, with 48 degrees of freedom, a correlation of $\pm.2788$ is required for significance with alpha set to .05.

to that which was predicted for the primary Ringex variables, with regard to behavior type (e.g., acceptance would be more important than rejection, and within acceptance, the emotional mode would be more important than the social, and within mode, the other would be more important than the self); (3) when appropriate, actual level derivations would be more relevant than ideal level derivations (naturally, this distinction would be meaningless insofar as the dissatisfaction estimates are concerned). In order for similarity between perspectives to operate more saliently in predicting dyadic adjustment than complementarity, it must be the case that the absolute distance variates correlate negatively with dyadic adjustment, and moreover, that these coefficients be larger than the associated direct distance variates. Assuming that the absolute distance variates are more predictively salient, it is unimportant what the valences of the relationships between direct distance variates and dyadic adjustment are. Ideally, these coefficients would be of zero-order, but the important matter is that the absolute distance variates themselves operate as predicted. For complementarity, it would be predicted that absolute distance variates would correlate positively, and more substantially than direct distance variates, with dyadic adjustment. Should the direct distance variates emerge predictively superior to the absolute distance variates, then a type of unidirectional, or systematic, complementarity could be said to exist between compared perspectives. The interpretation of the systematic complementarity would be based upon the valence of the relationships between compared perspectives and the criteria. With respect to behavior types, the ordering, in terms of descending importance, was predicted to be: behavior type two, three, one, and four; within rejecting behavior, the predicted ordering was: behavior type seven, six, eight, and five. (These orderings are identical to those which were predicted for the primary Ringex variables, and which were not borne out for those variables.

The various generic classes of derived variables differed considerably with regard to the amount of support they provided for the hypotheses. Table 25 summarizes the extent to which the similarity hypothesis was supported by the derived variables. As can be seen, the absolute distance variates more effectively predict dyadic adjustment than the direct distance variates, in every case save the final class of derivations, perceived behavioral dissatisfaction. Moreover, with a single exception, the coefficients manifest the predicted (negative) valence. As a general statement, it can be said, then, that similarity between compared perspectives is more important in predicting dyadic adjustment than complementarity, with the exception, of course, of behavioral dissatisfaction. Additionally, and though varying in salience as a function of the types of perspectives compared, similarity is predictively important for <u>every</u> type of derived variable (including behavioral dissatisfaction).

This is by no means to conclude, however, that complementarity is irrelevant: clearly it too operates to predict dyadic adjustment, though not so uniformly as does similarity. Thus, for each class of derived variables excepting the first three, direct distance variates operated to significantly predict dyadic adjustment in more cases than would be anticipated on the basis of chance alone. And, in the case of behavioral dissatisfaction, the direct distance variates are superior predictors of dyadic adjustment, relative to the absolute distance variates.

In order to achieve a fuller understanding of the relative importances of, and the interplay between, similarity and complementarity among the derived variables, it is essential to consider the derived variables class by class. During this examination, it will also be possible to check the ordering of the behavioral types within classes of derived variables, in terms of their relative predictive importance. The comparison of actual and ideal levels will also be considered.

Subtable 24.A contains the coefficients representing the predictive efficacy of interspouse agreement or disagreement. In general, these variables are relatively unimportant predictors of dyadic adjustment. Similarity seems to be a bit more predictively relevant, and it is noteworthy that significant coefficients appear slightly more frequently for behavior types two and four, respectively, emotional acceptance of the other, and social acceptance of the self. Actual level variables and ideal level variables are on a par: four of each significantly predict dyadic adjustment. The predictive relationships are uniformly moderate in magnitude, the largest correlation being -.29. It would seem to be of relatively little importance to dyadic adjustment as to whether or not spouses' see themselves as they are seen by their partners.

Table 25

A Tabulation of Evidence in Support of the Hypotheses Concerning the Prediction of Dyadic Adjustment on the Basis of the Derived Ringex Variables[a]

	Number of Significant Coefficients	
Derived Variable	Direct Distance	Absolute Distance
Interspouse Agreement or Disagreement	0 (3)	8 (8)
Type One Interpersonal Understanding or Misunderstanding	0 (1)	7 (7)
Type Two Interpersonal Understanding or Misunderstanding	1 (4)	9 (9)
Expectation of Interpersonal Understanding or Misunderstanding	12 (14)	27 (26)
Expectation of Interspouse Agreement or Disagreement	11 (15)	22 (22)
Type One Perceived Interspouse Behavioral Differentiation	4 (8)	20 (20)
Type Two Perceived Interspouse Behavioral Differentiation	10 (14)	19 (19)
Perceived Behavioral Dissatisfaction (all types)	45 (54)	38 (38)

[a]The reference value for the entries in this subtable is 64 in all but one case. The exception is 'perceived behavioral dissatisfaction', for which the reference value is 128. Of 64 coefficiencts, by chance alone one expects to obtain, on the average, 3.20 significant values (and 6.40, for 128 coefficients), for alpha of .05. Frequencies of significant coefficients near this number must be concluded <u>not</u>

Table 25 (Continued)

to deviate from expectation due to chance alone. Parenthesized frequencies for the absolute distance variates indicate frequencies manifesting the predicted valence (i.e., negative). No valence was predicted for the direct distance variates. Had there been a valence predicted (i.e., had the critical value been the same as for the absolute distance variates), then as many coefficients as are parenthesized would have been concluded to be significant.

As is indicated by the values appearing in Subtables 24.B, and 24.C, neither type of interpersonal understanding is particularly important to dyadic adjustment, either. Again, those values attaining significance overwhelmingly favor similarity over complementarity, but only about one out of eight coefficients are significantly different from zero, and even these are modest (i.e., the largest value is -.38). Behavior type four, social acceptance of the self, is a bit more important than the other behaviors in both of these subtables. For type one, or self-referenced understanding, behavior type two, emotional acceptance of the other is additionally favored in importance. Type two, or other-referenced understanding, favors behaviors six, seven, and eight additionally, and about equally. Neither table contains enough significant coefficients to clearly state whether the actual or ideal level is more predictively important. Again, it must be concluded that being able to accurately predict what the other believes about his or her own behavior (type one understanding), or about the behavior of the other (type two understanding) is particularly relevant insofar as dyadic adjustment is concerned.

The predictive relevance of spouses' expectation of understanding is summarized in Subtable 24.D. In this case, both variants of distance scores figured reasonably prominently in predicting dyadic adjustment, although similarity did so more frequently. In this subtable, it can be seen that direct distance variates correlated negatively with dyadic adjustment when based on comparisons involving accepting behavior, and tended to correlate positively with dyadic adjustment when based on comparisons involving rejecting behavior. The perspectives compared, at either the ideal or the actual levels, were the zero and third order perceptual orientations within spouses, or the spouses' views of their own behavior, and the spouses' estimates of the other's view of their behavior. The shift in valence occurring as a function of the content (i.e., acceptance vs. rejection) facet indicates clearly that it is of some importance to their dyadic adjustment that spouses believe that their partners do not believe they are less accepting or more rejecting than they believe themselves to be. At the ideal level, the interpretation emerges that if one spouse's standards (or wishes) regarding her or his own behavior are lower than those believed to be held for him or her by the other spouse, then dyadic adjustment is lessened, relative to the reverse of this case. This patterning of correlations indicates, very clearly, the existence of systematic complementarity. However, it most cases, for those direct distance variates attaining significance, the analogous absolute distance variates manifest larger correlations, indicating that, in general, it is the similarity of the perceptions, and not their juxtapositioning, which is more important. In this table, too, values are not so modest: many correlations are of the order of $\pm$ .50, particularly those involving absolute distance variates. For expectation of understanding, also, behavior types one and two, and seven and eight, are favored. Respectively, these types include social and emotional acceptance of the other, and emotional and social rejection of the other. Of the four types, behavioral orientations two and seven, those emphasizing emotional acceptance and rejection, are perhaps most, and about equally, relevant. Moreover, in this subtable, actual level variates are more instrumental than ideal level variates.

It can thus be concluded that spouses' expectation of understanding operates to significantly predict dyadic adjustment. Moreover, although similarity between compared perspectives is perhaps more important than complementarity, a considerable degree of systematic complementarity exists; that is, though the main thing is that perspectives differ only slightly in adjusted couples, given that they do differ, it is important that the discrepancies occur in only one direction (i.e., within accepting or rejecting behavior). The ordering, in terms of importance, is the same, and contrary to what was hypothesized.

Expectation of agreement very closely parallels expectation of understanding, insofar as the patterning of predictive relationships is concerned. These variables are summarized in Subtable 24.F. However, in this case, the direct distance variates correlate positively with dyadic adjustment for accepting behaviors, and negatively for rejecting behaviors. Compared perspectives, as in the previous case, are within-spouse perceptions regarding self and other, and include a spouse's perception of the other, and the same spouse's view of the other's perception of her or himself. The systematicity present in the correlations involving the direct distance variates indicates that at the actual level, it is important for dyadic adjustment that each spouse believes the other sees him or herself as being more accepting and less rejecting than is the case, in the view of the spouse responding.

At the ideal level, it is important that the other's self-standards be seen as being higher than the standards one spouse holds for the other. Significant coefficients for these variates tend to pile up within behavior types one, two, seven, and eight. The interpretation offered for this systematic complementarity is that for one spouse to believe that the other experiences her or himself as being even more accepting and even less rejecting than is apparent to the spouse responding, indicates to the spouse responding that the other is committed to the relationship. The same interpretation applies to the ideal level, save that it is an important indicant of commitment that the other hold higher internal standards than those held for the other by the spouse responding.

Again, however, though systematic complementarity obtains for these variables, it is nonetheless clear that the major concern is that the perspectives not differ too much in either direction; i.e., that each spouse believes that the other sees her or himself in a way reasonably comparable to the way in which the spouse responding sees the other. Values in this table are also slightly more modest than those in the previous table. The largest values are on the order of only $\pm$ .40.

The two types of perceived interspouse behavioral differentiation are summarized for predictive efficacy in Subtables 24.F and 24.G. The first type includes, at actual and ideal levels, both husbands' and wives' estimates of the difference between the behavior of the self and of the other (i.e., partner). The second type refers to the spouses' expectations of the partner's perception of interspouse behavioral differentiation. Type one variables actually are those for which complementarity has typically been argued to hold. The current data, however, completely rule out the applicability of the thesis of complementarity. That is, the number of significant coefficients based on direct distance variates is four, and that is precisely what would be expected on the basis of chance alone. The data rather overwhelmingly support the hypothesis that it is perceived behavioral similarity between spouses which is important, and not systematic behavioral complementarity. For this table, as well, behavior type two is most predictively important, and it is actual, rather than ideal, behavior which is emphasized. Correlations vary somewhat in magnitude, with the larger values being on the order of -.40.

Type two perceived behavioral differentiation can, in effect, be understood as an attribution of perceived behavioral differentiation from one spouse to another. For these variables, the direct distance scores were more relevant than was the case for the type one variables, but again, the absolute distance variates operated more saliently as predictors of dyadic adjustment. For the direct distance variates, almost no coefficients at the ideal level achieved significance, but at the actual level, correlations with dyadic adjustment were negative for accepting behavior, and positive for rejecting behavior. This indicates that dyadic adjustment is lower for those spouses predicting that their partner views him or herself as being less accepting or more rejecting than their partner views the spouse responding to be. The interpretation offered for this is again that an attribution to the effect that the other believes her or himself to be less accepting or more rejecting than the other considers the one attributing to be is tantamount to an indictment that the other is not particularly committed (i.e., less committed than the attributing one) to the relationship. With this attribution, dyadic adjustment suffers, in a direct relationship.

As has been the case throughout, though a degree of systematic complementarity can be said to exist for these variables, it is again similarity which is of more predictive relevance. Correlations in this table vary considerably in magnitude, with many hovering around the level of $\pm .40$, and with the highest being quite substantial, at -.64. In this table, as well, behavior type two is clearly emphasized. Contrary to the previous tables, however, significant correlations occur much more frequently for the husbands' dyadic adjustment, as predicted by the husband's expectation of the wife's perception regarding interspouse behavioral differentiation, than for wives' dyadic adjustment on the basis of the wife's expectation of the husband's perception. That is to say, if husbands believe that their wives see a distinction between the spouses' behaviors, then dyadic adjustment suffers.

Subtables 24.H and 24.I summarize the predictive merit of the derivations of perceived behavioral dissatisfaction. In the case of these variables, and only this case, complementarity, of the systematic variety, proved clearly to be of more predictive significance than similarity. The explanation for this is somewhat complicated, but is made more manifest once the patterning of the valences of correlations between direct distance scores and dyadic adjustment is taken into consideration. For both husbands and wives, regardless of the order of the perspectives compared (i.e., zero order, first order, etc.), direct distance variates correlate positively for accepting behavior types and negatively for rejecting behavior types. This directly implies that for accepting behavior, positive differences in compared perspectives are associated with high dyadic adjustment, while negative differences are associated with low dyadic adjustment. A positive difference indicates that ideal behavior was in fact rated with a lower score than actual behavior, while a negative difference indicates the opposite situation. Thus, dissatisfaction is inversely related to dyadic adjustment. For negative behavior, the valences shift, because the interpretation of <u>less</u> rejecting behavior coincides with that of <u>more</u> accepting behavior. The relevant interpretation, then, is that behavioral dissatisfaction, with one's self <u>or</u> with one's spouse, and whether focused on the perceptions of the self or on expectations or attributions with regard to the other, is predictive of poor dyadic adjustment. Significant coefficients for these variables slightly favored behavioral type two, indicating that emotional acceptance of the other is the most important source of dissatisfaction. For husbands, this was less the case, and a broader focus was apparent.

The problem in interpretation arises when it is realized that though less frequently significant than direct distance variates, the absolute distance variates nonetheless are very frequently important predictors of dyadic adjustment. This implies that it is the difference alone that counts and not the direction. The key issues here are: (1) absolute distance variates tend to correlate a little less with dyadic adjustment than do direct distance variates; and (2) the two sets of variates operate to differentially define what is meant by dissatisfaction. Point one indicates that overall, the direct distance variates, and by implication, systematic complementarity, provides a better account of the data, relative to absolute distance variates, and similarity. Point two represents the notion that the absolute distance variates treat what one ordinarily might consider dissatisfying behavior (i.e., not enough acceptance, or too much rejection), and what one might ordinarily consider <u>oversatisfying</u> behavior (i.e., too much acceptance or not enough rejection) as equally dissatisfying. This is indeed necessarily the case, as the shift in valence between direct and absolute distance scores, as they predict dyadic adjustment within accepting behavior, clearly indicates that at least part of the direct distance scores for a given variate were negative in direction.

When the information encoded by both types of variates is integrated, it becomes clear that although acceptance and rejection alike can be dissatisfying when applied either too liberally or not liberally enough, it is more important, in the sense of having a negative impact upon dyadic adjustment, when acceptance is applied too stingily or rejection, too generously.

In general, now that each class of derived variable has been examined separately, it can be inferred that similarity, on the whole, is a better predictor of dyadic adjustment for most types of comparisons between or within spouses' perceptions. The exceptions are that for interspouse agreement and for both types of interpersonal understanding, neither similarity nor complementarity is particularly important; and for perceived behavioral dissatisfaction, systematic complementarity is the more important of the two, although similarity remains worthy of consideration. When examined for ordering of behavioral types, it was discovered that although type two behavior, emotional acceptance of the other, was usually the most important predictor of dyadic adjustment among the derived variates, it was virtually impossible to determine, with any degree of confidence, relative importance beyond this behavior type. For expectation of interpersonal understanding, expectation of interspouse agreement, and both types of perceived interspouse behavioral differentiation, it was found, as hypothesized, that actual level variates more frequently operated to significantly predict dyadic adjustment than did ideal level variates. For interspouse agreement, and for both types of interpersonal understanding, predictive relationships tended to be sufficiently weak that no determination along these lines could be formulated. For perceived behavioral differentiation, of course, the distinction is irrelevant, as in each case, for these variables, actual and ideal perspectives are differenced.

Discussion

The Construct, Dyadic Adjustment

The results presented here concerning the dyadic adjustment subscales and full scale offer an unfortunate commentary to the effect that the measure fails to operate as Spanier (1976) apparently believed that it would. There would seem to be several problems with the measure.

First, it is the finding of the current investigation that husbands and wives conceptualize dyadic adjustment differently, insofar as subscale relevance (to full scale dyadic adjustment) is concerned. As much can be inferred on the basis of the evidence that the patterning of both the subscale intercorrelations and the subscale-full scale intercorrelations differ considerably between husbands and wives. The structure of the subscales was factorially based, and consequently some shifting about can be anticipated upon cross-validation of the factor structure with an independent sample. However, Spanier, insofar as the current investigator is able to determine, rather dogmatically assumed that it was a plausible presumption that the construct, dyadic adjustment, is factorially identical for both spouses. This does not now seem to be a tenable presumption. It is here recommended that a revised version of the measure be developed, cross-validated, and successively altered until a coherent image of the construct emerges for husbands, and an alternate, non-identical, coherent image emerges for wives.

The second problem noted by the current investigator concerning the dyadic adjustment scale was that the shorter subscales, particularly for wives, were poorly internally consistent. This was traced to reduced item covariances within subscales for wives, again, especially for the shorter subscales. It would thus seem justifiable to propose that wives encode dyadic adjustment in a more complex way than husbands. That is to say, it may well be that not only do wives and husbands differentially weight the subconstructs of dyadic adjustment, but also, wives may manifest a cognitive space involving <u>more</u> subconstructs than the analogous space for husbands. Again, only successive replications and refinements of the measure and its subscale construction will serve to clarify and to resolve this problem. As it now stands, while the current investigator is aware of the necessarily tenuous character of these propositions, due to the size of the sample involved here, it would seem to be true that dyadic adjustment, as well as its subcomponents, are not acceptably defined or assessed by the dyadic adjustment scale.

<u>The Primary Ringex Variables</u>

There remain several as yet unresolved (and particularly galling) issues concerning the spatial juxtaposition of the husbands' and wives' Ringex variables. Of perhaps primary importance to the current investigator are two, including: (1) the problem involving the reflection of those behavioral types characterized by rejection, with the consequent reordering of the behavioral circumplexes; (2) the failure of the husbands' Ringex variables to appropriately map out a torus. The first of these difficulties is largely technical in nature; the second, however, contains theoretical ramifications.

The decision of Foa's (e.g., 1966) to reflect the behaviorally rejecting variables is perhaps theoretically sound, in that he argues that accepting and rejecting variables ought to be dimensionally coincidental, with less rejecting behaviors being by definition more accepting in character. (Actually, the first law of attitude or attribute measurement is, in Guttman's school, that within a single domain of content, e.g., interpersonal behavior or interpersonal sentiments, there should exist no negative correlations. This is principally due to problems, at a conceptual level, which are introduced and posed to Radex Theory. While these problems <u>may</u> be more semantic than methodological, Guttman has yet to have developed the mathematics to account for there being negative correlations among variables presumably in the same universe of content.)

While perhaps stated from a position of relative ignorance, it would seem to the current investigator that such a notion is, realistically, bunk. That such a word as ambivalence exists militates strongly in favor of the opposite theoretical premise: acceptance and rejection can be experienced and expressed independently and even simultaneously, as separate components of the same behavior.

The <u>real</u> problem, of course, is that <u>either</u> ordering (i.e., with or without reflection) can be accommodated by the facet construction underlying interpersonal behavior. All that is necessary to posit the ordering based on reflection is an adjustment of the nesting of the object (i.e., self-other) facet within the content (i.e., acceptance-rejection) facet. Consequently, as far as the current investigator can determine the ordering problem is a matter of personal taste.

Parenthetically, it is the case that the unreflected ordering of behavioral types coincides not only with Foa's early (i.e., 1961) conceptions, but also dovetails nicely with the circumplex models of The Kaiser Group (e.g., Freedman et al., 1951), and with Hurley's (e.g., 1976) recent thinking on the derivation of a two-factor solution for the circumplex model. It would thus appear that much of the debate about what is and what is not an appropriate ordering of behavioral types, generated in this paper and elsewhere, is more semantic and technical (mathematical) than theoretical in nature. Granted, the mathematical and even the purely semantic premeses and propositions have substantive, psychological interpretations, but perhaps they aren't so important as sometimes thought.

That the husbands' primary Ringex variables not only fail to reproduce the proper torus arrangement, but also deviate from the predicted structure in a seemingly systematic way, indicates the need for deeper consideration. Specifically, it would be advisable to subject the full 64 variable intercorrelation matrix to a small space analysis, plot the results in three-space, and attempt, on a facet-oriented basis, to account for these apparently non-random deviations from the predicted structure. Alternately, the matrix could be decomposed by means of an unrotated, simple centroid factor analysis, with a similar plotting in three-space. Unfortunately, both of these exercises are far too ambitious for consideration here.

Though speculative, it is the sense of the current investigator that the structure which emerges from such a treatment would manifest a noticeable deviation toward what might be called a "wedgex,' a structure of circularly arranged perceptual triangles, or triplexes, as it were. Alternately, the deviations might be best accounted for by two Ringexes, one of which contains husbands' view of husbands' behaviors, and one of which represents husbands' views of wives' behaviors. In either case, it is likely that the deviant structure would represent a relatively increased emphasis of the perceptual facet, actor (i.e., husband or wife). Husbands, that is to say, appear to make more of this distinction than do wives, and the consequence is that the Ringex shape is somewhat distorted.

A third problem with the Ringex is that for several of the variables, the items require some improvement. It is anticipated that the unreliability seen in some of the Ringex scales, particularly for the wives, could be improved by a more careful mapping of content into test items. Of special importance in this regard is the consideration of intensity of behavior, since, as was mentioned previously, those items tapping (or mapping) rejecting content of behaviors tended to be uniformly too intense, and consequently, couples, but particularly wives, failed to endorse these items.

The Prediction of Dyadic Adjustment

The generic, or more global hypotheses were upheld in this regard. Thus, dyadic adjustment is more effectively predicted by accepting and actual behavior, than by rejecting and ideal behavior. Moreover, dyadic adjustment is related positively with accepting behaviors and negatively with rejecting behaviors. The rationales provided for these hypotheses have been dealt with exhaustively in the previous sections of this manuscript, and will not be repeated here.

The more specific hypotheses were not so uniformly supported by the data. Whereas it had been reasoned that behavior directed toward the other (as opposed to the self) would be less important than the mode of the behavior (for which emotional was believed to be more important than social), this happened, according to the data, to be in error. Instead, the object of the behavior emerged the more important facet of the two, with behavior toward the other being more relevant than behavior toward the self. In the direction predicted, emotional behavior within either element of the object facet proved to be more salient than social behavior.

The reversal in predicted importance of these two facets did not alter the best single primary Ringex predictor (which was emotional acceptance of the other), nor the best single primary Ringex predictor with rejecting content (which was emotional rejection of the other), but beyond these two, the orderings were not as hypothesized.

At the level of the perceptual primary Ringex variables, it happened that for husbands, self-evaluations were the better predictors of dyadic adjustment. For wives, the patterning was more complex, and is at this time not understood. These findings contradicted what was hypothesized (i.e., that maximally interpersonal, in the sense of most often crossing the distinction between self and other, variables would best correlate with dyadic adjustment, when actual level behavior was being considered, and that for ideal level behavior, maximally intrapersonal, or self-oriented perceptions would best correlate with dyadic adjustment).

For the husbands, and for their actual level perspectives, it is clear that what has emerged is another reversal with regard to what was expected. In this case, however, the shift was not between one facet and another, but rather was from one pole of the actor facet to the other. For wives, in this context, the results are irregular enough as to prevent a clear consideration of the factors influencing them.

At the ideal level, correlations were uniformly so low (due to the support of the generic hypothesis in favor of the actual level variables) as to prevent a clear sense of ordering of perspectives from being formulated. To some extent, and particularly for wives, the same is true of variables characterized by rejecting behaviors, with the exception of emotional rejection of the other, which stood so nearly perfectly spatially opposed to emotional acceptance of the other as to magnify the correlations between it and dyadic adjustment.

It deserves emphasis here that the husbands' primary Ringex variables actually operated to best predict <u>both</u> spouses' dyadic adjustment.

Thus, it can legitimately be inferred that for husbands, dyadic adjustment is contingent upon their belief that they accept their wives emotionally. Moreover, this condition also guarantees their wives' dyadic adjustment. It would be interesting to work to further clarify this situation, for example, by using only those RBT scales which pertain to accepting behavior, and by attempting to predict a set of improved (empirically) dyadic adjustment subscales. Such an effort might prove to clarify the interdependencies between husbands' and wives' dyadic adjustment. Perhaps an item analysis of the dyadic adjustment scale, on the basis of the facet composition of the items, could be conducted. This would permit a much clearer understanding of the differential meanings assigned the aspects of dyadic adjustment by husbands and wives. For example, it may well be the case that to agree on the husband's career objectives indicates to the husband that he is being emotionally accepted by his wife, whereas a wife may agree if she feels emotionally accepted by her husband. The general comment worth offering here is just that many of the factors significantly influencing the current set of data are at best poorly understood, and a much more focal consideration of the variables involved, as well as their interrelationships, is needed prior to formulating definitive conclusions.

There are several points worth drawing concerning the use of the derived variables in predicting dyadic adjustment. Chief among these is the empirical fact that none of the derivations correlated as substantially with dyadic adjustment as did the emotionally accepting primary Ringex variables. It would seem appropriate to question, on this empirical basis, the merit of using such derived variables when the purer constructs of which the derivations themselves are composed are not only simpler to interpret, but are also more predictively efficacious. That is to say, perhaps the derived variables are poor enough as predictors to be considered scienfically irrelevant (even if clinically meaningful).

Adopting for the moment a less rigorous stance, the use of the derived variables did indeed permit some light to be shed on the arguments concerning complementarity and similarity. Some discussion concerning this is perhaps appropriate. First, to assess what might, for lack of a better term, be called <u>truly</u> interpersonal behavioral complementarity, it is necessary to establish comparisons between the actual behaviors of both spouses. These values were never estimated, simply because there is no basis upon which to do so. That is, intrapersonal comparisons with regard to the actual behavior of both spouses was estimated in a variety of ways, and it is here argued that these are the only reasonable comparisons to be made of interpersonal behaviors, between spouses. There are two reasons for this.

The first reason is that comparison between people requires an assumption to the effect that both people similarly define a construct, and that their units of measurement, and so forth, are compatible. The current investigator finds this assumption philosophically both untenable and untestable, and moreover, on the basis of clinical experience, clearly in error. It would be possible to develop a rating system, by means of which a third person could evaluate the behaviors of two people (e.g., spouses) with a common metric, in some sense eliminating the problem. But this is clearly very different from a self-report measure, and, as well, departs greatly from any sort of phenomenological consideration.

The second reason is that the results here show quite dramatically that it is the intrapersonal sphere, and the introjection, or inner awareness, of the other, that is important, and that best serves as a basis for comparison, and for establishing or evaluating the existence of, complementarity. Thus, the first three subtables of Table 24 contain derivations based on a comparison of perspectives between spouses. Very few of these correlations are significant, and even these are modest. Yet the remaining subtables, which invariably summarize intrapersonal comparisons (though in many cases involving one person's perceptions of both spouses), contain relatively many significant coefficients, frequently not modest in magnitude. The point of both these reasons is just that it is the personal views we hold of the world (of which, for us, other people comprise a very large part) which best summarize our happiness and unhappiness, our satisfaction and dissatisfaction. It makes relatively little difference as to whether, on the basis of some arbitrary metric, husbands do not emotionally accept their wives as much as their wives emotionally accept them. But should they feel this (or measure this, that is to say, in accordance with their internal, personal metrics), then it makes a very great difference.

It is consequently appropriate to argue that the systematic variant of complementarity noted in the data is explicitly intra-personal in character. In general, this means that to either spouse, for example, the other is seen as more committed, etc., than are they themselves, from their own points of view. This obviously contradicts "objective reality," since by definition both spouses simply could not be more committed to a relationship than one another. But it is not external reality which is relevant; it is the internal conceptions of external events which are important.

The current investigator is of the mind that the use of distance variates is an important means, as yet only inadequately explored, in the understanding of the relative importance of the conceptions people hold of the world. There would not currently seem to be a completely threshed out set of principles governing the computation and interpretation of these types of variates, particularly when more than a single type of distance estimate proves to correlate significantly with a single criterion variable. It is appropriate, then, to offer an appeal that a more complete methodology regarding these tools be derived and discussed.

Notes

[1]The instrument actually contains 134 items, but six of these are not scored. There seems not to be an explanation of exactly why the extra six items have been retained.

[2]So long as the items within a given category actually comprise a perfect scale, it is not essential to weight them according to intensity, since by choosing an item of high intensity, perfect scaling will guarantee that respondents will select, as well, all items within that category of lower intensity. It is clear, however, that the investigators really have not availed themselves of all the benefits of Guttman scaling (see Guttman, 1954b), and it remains the task of some enterprising (and motivated) newcomer to remediate this deficit!

[3]In fact, estimates of internal consistency were not reported. Efforts are currently being made to secure these. Test-retest correlations with a two week interim are solid; i.e., $\bar{r}_{xx}$ = .73 for sixteenths, and .78 for octants (LaForge and Suczek, 1955).

[4]At this point, data from ICL administrations had not yet been factor-analyzed. Thus, the selection of reference axes was truly arbitrary, although clearly based on content-oriented considerations. As subsequent research is viewed, it will become obvious that these

early investigators made a very reasonable choice (see Carson, 1969, pp. 93-121).

[5]Essentially, these criteria may be briefly described as follows: first, any single variable is selected. Then the remaining variables are ordered with regard to the first, and with regard to each other, depending on the magnitude of their intercorrelations. If a circumplex exists, the intercorrelation matrix of ordered variables will manifest a characteristic pattern. Namely, the ordering will have neither beginning nor end. Largest correlations will exist adjacent to the main diagonal, correlations will taper off as they depart from the diagonal, and then will increase again in the bottom left and upper right corners.

[6]A simplex was originally (Guttman, 1954a) defined as a set of variables differing with regard to one another solely in terms of complexity. Essentially, one orders variables according to intercorrelation, and then posits a set of underlying order factors. Each succeeding variable in the system, beginning, usually, but not necessarily, with the least complex, is then thought to contain everything included in the previous variable in the order, plus a bit (i.e., one order-factor) more. Subsequent, more flexible definitions of the simplex (Guttman, 1955, 1957, 1959) tend to permit the inclusion of other characteristics, such as intensity, in addition to complexity.

[7]Actually, in order to factor the matrix, it was necessary to reflect a few variables, since if left as it is, the matrix is not invertible (i.e., is singular). A conceptually expedient means of describing this state is that I constructed the variables so perfectly that it is not possible to generate a single best linear combination of variables. Any combination would do as well as any other. By reflecting, however, this obstacle can be removed quite effectively.

[8]After all, but two orthogonal vectors are required as a basis for R^2.

[9]Formally, a facet is a component set which, when combined with other component sets by means of rules defining a Cartesian product, produces structuples which, typically, are conceptualized as variables (Guttman, 1954-55, 1958; Foa, 1963, 1965). The ideas come from Guttman's (1954-55) theory of facets, although they are not really original ones. Actually, Fisher (1949) proposed an essentially identical conceptual orientation in his principles for designing experiments. And, the same ideas are present in the doctrine of Brunswik's (1956; see also Hammond, 1966) regarding representative designs. A facet-analytically based experimental design is, for all relevant purpose, the same thing as a design based on a thorough content analysis of one's domain of interest.

[10]In order to understand this notion of "second order" elementary components, it must first be accepted that in most contexts, facet

elements (i.e., elementary components, or values which facets may manifest) are probably themselves comprised of even more molecular Cartesian product sets of analogously more basic facets. As a consequence of this proposition, then, what we call 'variables' at any given level of complexity are, from a previous level of complexity, elements of a Cartesian product set of facets; and, from a succeeding level of complexity, facets, or even facet elements. As will be seen, Foa's (1961) "profiles" are both elementary components of the circumplex (as espoused by LaForge and Suczek, 1955), _and_ variables _forming_ a circumplex (Foa, 1962).

[11]So far as the theory of facets goes, it is possible for facets to be _polarizing_ or _modulating_. Polarizing facets, as their name implies, will tend, empirically, to produce bipolar dimensions. Modulating facets will tend, on the other hand, to produce gradients, or simplexes. A bipolar dimension of mood, with blackest depression and manic euphoria construed as the endpoints or poles, and with graded midrange values included, will be comprised of two facets, one polarizing and one modulating. Circumplexes are necessarily made up of two or more polarizing facets, and they contain _both_ polarizing and modulating facets.

[12]Actually, Foa (1961, 1962, 1965) has posited a theory of socialization to account for facet primacy. He holds that acceptance and rejection are differentiated quite early in childhood, with self-other and social-emotional distinctions being acquired subsequently,

and in this order. Assuming that this conceptual development follows a sequence from low to higher complexity, then the two principles, social development and complexity, will be coincidental. The whole has quite obvious implications concerning object relations theory.

[13]As outlined in the text, criteria one and three assume the existence of a _single_ set of order factors (i.e., elementary components, or facets). However, it is possible that more than one set exist, and contribute to the composition of variables (Guttman, 1955). Indeed, if negative correlations appear among variables in a circumplex, it is necessary that at least _two_ sets of order factors be present. And, if two sets _are_ present, then criteria one and three may _not_ be met unless the two sets are treated separately. One consequence of this will be that if the elementary components are treated as one large set, then variables based on them will not lead, ipso facto, to a prediction that they will be ordered as a circumplex, even though empirically, de facto, they may so arrange themselves.

[14]It should be pointed out that this reasoning works well in a "forward" direction only. That is, the linear combinations being discussed here are constructed assuming _no interactions_ among elementary components (profiles). Working in the other direction, it may be the case that, for example, the variable 'responsible-hypernormal', is comprised of profiles C, D, E, and F, and up to (4)(3) - 1, or 11 interaction components. What Foa is proposing is strictly theoretical, and may or may not pan out. Also, the presence of interactions may

spoil the orderly nature, and indeed the very existence, of a circumplex.

[15]Actually, this is coincidental with the argument Guttman (1954a) presents to the effect that conventional factor theories are, in general, superfluous and unnecessary. In the weaker form, which I personally, find more palatable, conventional factor theory provides an alternate manner (with regard to facet theory) of examining one's data. I agree, however, that it should remain of secondary or ancillary importance with respect to facet theory.

[16]Now, this need <u>not</u> be the case. But it <u>is</u> the case when dealing with a set of <u>n</u> facets which can be combined to produce a set of variables which exist in a space of <u>m</u> dimensions, where <u>m</u> is less than <u>n</u>. Even here, however, it can generally be shown that the less primary facets exist as dimensions in excess of those referenced by the major orthogonal axes or factors. It is only that these additional dimensions are usually radically less important than the major ones, and hence, typically they are ignored.

[17]Of course, the assumption is inherent that one will have completed a facet analysis of the content universe one is interested in, prior to ever collecting data, and that one will incorporate the consequences of this analysis into one's measures. Analysis of the data, then, will be largely confirmatory, and will usually not include a "blind factor analysis."

[18]I _could_ hold that the same is true of love vs. hate, but it really matters _not_ in that context, since no distinction is made within content and between objects in either of these sectors. In _no_ other sector is this true; all other distinctions are rendered more complicated.

[19]As he presented this thesis, it was unclear whether he was focusing intrapersonally, interpersonally, or both. For the sake of simplicity, I'll assume that he meant both. The assertion has not yet been tested, although I currently am reanalyzing one of his (Foa, 1962) data sets, and the early returns would indicate that the assertion holds in the intrapersonal case (i.e., my rejection of myself and my acceptance of another are indeed more intense than my rejection of the other and my acceptance of myself). This is covered in greater detail in the context of Foa's (1962) second model.

[20]For a fairly complete discussion of the theory of semantic principal components, the reader may wish to examine Guttman (1954a or 1954b). Essentially, semantic principal components, like their mathematical analogues, serve as a set of references from which to view one's data. Barring aberration in the data, the two tend to coincide. Mathematically, facets behave as semantic principal components.

[21]Analyses were based upon the correlation matrices presented in Foa (1962). It was necessary for me to conduct the analyses myself,

since Foa would very likely cringe at the thought of plotting variables in Euclidean space, and hence never carried out (or at least never published) factor analytic operations on his data. Complete results of these analyses are available upon request.

[22]As an aside, note that when factors are rotated to simple structure, the patterning of loadings is both more parsimonious and almost completely uninterpretable. This is, in fact, what the argument presented earlier was designed to emphasize. If I had blindly requested the analytically preferable version of rotated principal components, the output would have been hash! Here can be seen the beauty of confirmatory factor analysis in its quintessence.

[23]I underscore "at most two" here because if the additional assumption is made that certain interpersonal phenomena are factorially pure (i.e., are specifiable by a single factor or dimension), then it would be possible to select an array of variables which can be specified unidimensionally. Foa would obviously contend that this is impossible, and I tend to agree with him.

[24]As is frequently made explicit in the theory of factor analysis (e.g., Nunnally, 1978, p. 334), factors (or "reference vectors") are mathematical, linear combinations of variables. As, however, is much more frequently made explicit in our journals, the object of factor analysis is to determine those "pure" dimensions of which our variables are mathematical combinations. The point of this comment is to rebut the technical and fussy argument put forth by statisticians in support of

factor analysis: that it is the interpretation, and not the mathematical technique, which is backward. Without the interpretation, however, the technique is as valueless as would be a system of currency without dollars! Or, we would not undertake the laborious procedure of factor analysis if we weren't interested in "data simplification."

[25]It requires only minimal reflection to grasp this idea. Think for a moment of acceptance or rejection as such a pure component. In the interpersonal sphere, it is clear that acceptance, for example, cannot exist without a referant (e.g., self or other). And this referant is then a second component. Thus, in the interpersonal phenomenon, acceptance of the self, there are two components, both of which are required for the phenomenon to be meaningful. Foa, of course, argues that the third component, context, is also necessary. The point is that these elementary components cannot exist in pure form, and thus that interpersonal events, in their simplest meaningful form, exist as composites of elementary components.

[26]The reverse notion is equally true, in that an exhaustive (limited, of course, by the facets selected) behavioral array exists for each perceptual set. However, the former of these two statements is the more theoretically interesting one, as will become apparent further along.

[27]Small space analysis is essentially a technique which decomposes correlation matrices under ordinal assumptions. In addition to the

reference in the text (Guttman, 1968), the reader is referred to two other papers (Guttman, 1966, 1967), both of which describe the technique in relatively non-mathematical terms.

[28]In passing, it is perhaps worthwhile to observe that the actual-ideal distinction would qualify as the third principal component in an orthogonal factor analysis of all 64 variables. As before, the other two principal components would be acceptance-rejection and self-other. By now, however, it should be reasonably clear that a factor analysis, while parsimonious, would lead to the discarding of the majority of the information contained in the facet analysis leading to the construction and definition of the 64 variables involved.

[29]As is emphasized by Cronbach and Gleser (1953), the ordinary coefficient of correlation is one example of the difference scores. All other measures of association also fall into this category, including measures of interaction between or among variables.

[30]The relevant point here is that the correlation coefficient, as a distance measure, explicitly discards information concerning <u>both</u> elevation and scatter, since standard scores have equal means (zero) and standard deviations (unity). Cronbach (1958) does not seem quite to have forgotten this point, as he suggests factor analyzing covariance matrices rather than their completely standardized, counterparts, correlation matrices. Such an operation, in effect, retains scatter but eliminates elevation.

[31]Actually, the first-order variables can be continuous, but in producing derived variables it will then be necessary to establish more complex decision rules to dichotomize them <u>prior</u> to applying the calculus. And, since these decision rules will in general be arbitrarily designed by researcher or statistician, the probability of rendering the data meaningless (or at least less veridical) is finite and very large.

[32]'Realization' emphasizes that one spouse is "estimating" or "predicting" the ability of the other to predict her or his own response. The term, 'realization', is, in my opinion, applied only to distinguish between what are more appropriately thought of as <u>levels</u> of understanding.

[33]His analysis qualifies essentially as a blind cluster analysis. That is, orthogonal factors were extracted, and subsequently rotated to an oblique fit which was mathematically reasonable. Apparently, Spanier feels that the substantive fit was reasonable as well. It remains unclear why he did not merely cluster analyze the variables, as with a multiple groups factoring approach. The current investigator hopes to examine this possibility.

[34]Indeed, Veenstra (1978a, p. 131) discovered that DAS scores correlate quite imperfectly, though positively, between spouses ($\underline{r}$ = .784). The global notion of the "happy marriage" probably ought to be debunked, forthwith!

[35]Only the husband will be specified, for the sake of simplicity. Naturally, the identical argument is general both to husband and to wife.

[36]If the reader woodenly adheres to the notion that the circumplex is perfectly flat (i.e., perfectly represented in two dimensions), then she or he may conclude that my predictions are impossible, since by positing that dyadic adjustment is more closely aligned with 'emotional acceptance of the other', it follows that its inverse is <u>necessarily</u> more closely aligned with 'emotional rejection of the self.' However, the two-dimensional arrangement Foa developed is perfect <u>only</u> in non-Euclidean space (see Guttman, 1968). In Euclidean space, the circumplex of behavioral orientations with constant perceptual type actually deviates slightly toward the configuration called the cubex. Under this circumstance, facets are more clearly polarized, and the hypotheses are consistent with spatial configurations. To illustrate this, one need only imagine that the variables characterized by the object, 'other', bend up from the page a little, and the variables characterized by the object, 'self', bend down beneath the surface of the page a little. A projection of 'dyadic adjustment' onto this modified surface for the circumplex would thus result in a spatial arrangement consistent with my hypotheses. Should the reader wish to view evidence of the departure of the cricumplex toward the cubex, I can present her or him with an Euclidean analysis of Foa's data which illustrates this.

[37]Reliabilities (i.e., alphas) are: .90 for 13 items representing dyadic consensus; .94 for 10 items representing dyadic satisfaction; .86 for 5 items representing dyadic cohesion; .73 for 4 items representing affectional expression; .96 for the entire, 32 item scale. The individual scales are very clearly homogeneous clusters, and the full scale is likely dominated by one large, general factor.

[38]I know of no formally published treatment of the notion of external consistency. My own understanding and appreciation of this concept is due in very large part to my contacts, academic and otherwise, with Professor John Hunter, this campus. Essentially, the criterion, external consistency, is a nonanalytically derived (i.e., subjectively attained) conclusion regarding whether or not clustered variables (e.g., test items) can appropriately be construed as being distinct from variables appearing in other such clusters. Conceptually, it is the obverse of internal consistency, and is actually quite directly, conceptually derivable from what has been discussed in various places concerning simple structure. The idea, essentially, is that variables placed in one cluster ought to correlate in a consistent way with variables placed in other clusters. This makes considerable sense, since what the investigator is typically looking for in clustering variables in the first place is collections of variables which are more or less (and hopefully more, not less) factorially univocal. And, factorially univocal variables ought to correlate uniformly (whether low, high, positively or negatively) with all variables

existing in other clusters. I am in possession of what I believe are copies of the few written documents (by Hunter) concerning external consistency. I will gladly share them with interested readers.

[39]In the opinion of the current investigator, the problems outlined in conjunction with the treatment of dyadic adjustment as a collection of coherent, distinct factors are directly a consequence of Spanier's failure to cross-validate his measure prior to publishing it. In short, his findings are premature. Experience in psychological research has uniformly supported the thesis that successive factorings of any measure, given independent samples: (1) emphasize that item covariances shift, and (2) permit a focus on those item covariances which are least corrigible over samplings.

[40]My own sense is that Spanier was primarily invested in producing an instrument capable of realiably assessing his concept, 'dyadic adjustment'. He would appear to have been uninterested in individual differences, especially those occurring systematically between spouses, or those occurring as a function of sex. It now seems questionable to treat dyadic adjustment similarly for husbands and wives.

[41]The operation of reflection will have consequences, as well, in the regard of the juxtaposition of perceptual circumplexes with regard to one another. The complete clarification of these consequences, while desirable, is clearly a tedious, complex task, and beyond the scope of the current project.

[42]Nor is it the objective of the current project to derive or develop alternate orders, or regular structures to summarize them. This must remain a problem for subsequent analytic endeavor.

[43]Again, there are many directions in which one could move in the deeper examination of these matrices, none of which are emphasized in the current project.

[44]This is when, of course, the full range of perceptual types is taken into consideration, rather than just the one or two manifesting the highest correlations with dyadic adjustment. Given that perceptual circumplexes are spaced, relative to one another, as a function of behavioral type, then this is an appropriate strategy.

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APPENDICES

APPENDIX A

INTRODUCTORY INFORMATION

INTRODUCTORY INFORMATION

We are interested in studying some of the factors involved in producing happiness and unhappiness in marriage. All of the procedures we will be asking you to participate in have been designed to bring these factors to light. Perhaps a brief description of these procedures is in order.

First of all, we will be giving you a packet of questionnaires to complete. It is not necessary for you to fill out these questionnaires immediately. Our suggestion is that you complete them in your spare time. We will recontact you, and arrange to drop by your home for the purpose of picking them up when you have completed them. We estimate that it will take each of you about four to five hours to completely fill out these questionnaires. You will probably not want to do it all in one sitting. We request that you and your spouse do not discuss the questionnaires or your responses to them until after you have completed them, at least.

Briefly, the questionnaires have been designed to provide information about the following areas: 1) your individual traits, or personality characteristics; 2) your personal needs, such as affection from others, or security; 3) your perceptions of and attitudes about yourself, your spouse, your parents, and your friends; 4) your moods at different times and in different situations; 5) demographic information, such as your economic situation, your age, how long you've been married, and so on; 6) how satisfied or happy you are with various aspects of your marriage.

We will not be asking you for names and addresses, places of employment, or for other personally identifying information. We request that you do not write your name or other such information on them. Only your code number will appear on the questionnaires, so as to protect your anonymity. This code number is the only form of identification that is necessary for our purposes.

We believe that many of the questions will be stimulating and interesting, but we understand that some of the material may also be boring and tiring to fill out. This is why we suggest that you work only so long at a sitting as you are comfortable. Again, you do not have to finish everything at once.

When we come by to pick up your completed questionnaires, we will be happy to arrange a meeting with you to discuss the project more fully, and to share the results of your individual questionnaires with you. We have established the following guidelines concerning this activity:

First, you may select wither to receive personal feedback or to receive feedback together with your spouse, or not to receive feedback at all. In order to obtain feedback together, we require that both of you wish for this to occur. If either of you prefer only personal feedback, then we will not provide shared feedback, or feedback of your spouse's responses.

Second, the various questionnaires we will be using are not designed to provide information about how "good" or "bad" your marriage is, so we will not be able to offer you statements involving such judgements.

Since we are offering you the option of meeting with us to discuss your personal responses, it will be necessary for us to keep a temporary list of your names associated with your code numbers. There will be only one such list, and after we have met together for discussion, or if you decide you do not wish to meet with us for discussion, then your names will be permanently removed from this list. Once this has been done, it will be impossible for us or for anyone else to identify which responses are yours. After we have removed your name from the list, it will not be possible for us to share your responses with you, even if you remember what your code number was, so carefully consider whether you might wish to meet with us before deciding that you do not wish this.

One concern that you may have about your results is that you and your spouse may have many differences in your responses. We encourage you not to be alarmed by this, as it has been our experience that <u>all</u> husbands and wives tend to differ and disagree to some extent, and this is not necessarily a "bad" sign. However, we are also aware that these differences can be painful and at times may lead to arguments.

A second concern which may arise is that as a result of filling out the questionnaires you may find that you feel that there are problems in your marriage that you have not thought about before. We know that this, too, can be a painful experience.

Because of the risk that you may have these or other concerns after participating, we are prepared to offer you up to three meetings with us to talk over such difficulties, and hopefully, to resolve them. If after these three meetings you wish further consultation, we are prepared to provide you with referrals, for example, to the MSU Psychological Clinic.

It is our intention to analyze the data from all of the couples involved as a group. We will not be presenting or summarizing individual data. This will, of course, further protect your anonymity.

If you think you might be interested in the findings of our project based on the grouped data, then we request that at the time of our final contact with you that you leave us your name and phone number. Then, when our analyses have been completed, we will arrange to see that you have an opportunity to examine our findings.

If at any time you desire to remove yourself from participation in the project, you need only inform us of this decision. If you make this decision before we have removed your name from our temporary list, then we guarantee that your personal data will be destroyed if you so wish.

Are there any questions you would like to ask now?

If questions occur to you later, be encouraged to contact us at the number below:

Ken Bertram 353-8877 (Office)

Carl Chenkin 353-8877 (Office)

We thank you for your participation.

APPENDIX B

DECLARATION OF INFORMED CONSENT

DECLARATION OF INFORMED CONSENT

Michigan State University
Department of Psychology

(1) I have freely consented to take part in a scientific study being conducted by Ken Bertram.

(2) The study has been explained to me and I understand the explanation that has been given and what my participation will involve.

(3) I understand that Ken Bertram will keep a temporary list upon which my name and code number appear.

(4) I understand that after my final meeting with Ken Bertram, my name will permanently be removed from this list.

(5) I understand that I am free to discontinue my participation in the study at any time without penalty. Furthermore, I understand that until my name has been removed from the temporary list, that I am free to request that my personal data be destroyed, without penalty to me.

(6) I understand that after my name has been removed from this list, it will be impossible to identify which data are mine, and that consequently, my data can not be destroyed after this time.

(7) I understand that as a result of participating in this study, it is possible that I and my spouse may disagree about our responses and/or become aware of problems in our marriage that we had not thought about before.

(8) I understand that Ken Bertram will offer to meet with me, and, if we desire, with me and my spouse together, to discuss my (or our) responses, and to discuss whatever concerns may have arisen from my (or our) participation in the study.

(9) I understand that Ken Bertram is willing to schedule up to three of these meetings, after which, if I desire, he will offer me a referral for additional consultation.

(10) I understand that the results of the study will be treated in strict confidence and that I will remain anonymous. Within these restrictions, results of the study will be made available to me at my request.

(11) I understand that my participation in the study does not guarantee any beneficial results to me.

(12) I understand that, at my request, I can receive additional explanation of the study after my participation is completed.

Signature: ____________________

Date: ____________________

APPENDIX C

INFORMATION SHEET

HUSBANDS CODE NO: ______

INFORMATION SHEET

Your Sex: ______________

Your Age: ______________

Length of Time Married (Years and Months): ______________________

Number of Previous Marriages: __________

Number of Children: ____________________

Ages of Children: ______________________

Number of Children Living With You: ______________________________

Last Year of School You Have Completed: ___________________________

Occupation: ____

Your Income (Not Including That of Your Spouse): _________________ Per Year

APPENDIX D

ROLE BEHAVIOR TEST

RBT - <u>INSTRUCTIONS</u>

The purpose of this questionnaire is to help you form as faithful and sharp a picture as possible of the relationship between you and your husband or wife.

This is not a test. There are no right or wrong answers. Just answer the way you feel. This questionnaire will be kept in strict confidence.

On the following pages, you will find a number of brief statements describing behavior between husband and wife. After reading a statement, you are to answer four short questions about it. These questions appear on the attached answer sheet. For each question, quickly choose the answer which best fits your situation and write the <u>number of that answer</u> in the blank provided on the answer sheet. Remember, for each statement, there are <u>four questions</u> for you to answer. Please answer each question, but give only one answer to each question; then go on immediately to the next statement.

<u>EXAMPLE:</u>

Read the first statement. Now, on the answer sheet, read question (A). Pick the answer which best fits your situation and write the number of that answer in the blank on the answer sheet for question (A).

(1)	(A) <u>1</u> (B) ___ (C) ___ (D) ___	If the answer, "almost never," is the one that best fits your situation, then you would write "1" in the blank provided. Now go on to question (B), and so forth.

RBT

HUSBAND-WIFE RELATIONSHIP

The following twenty-four statements are about the behavior of a husband when he is with his wife.

(1) Dick shows his wife he likes her and cares for her; he tries to please her and do the things she likes.

(2) When he is with his wife, Bob shows disrespect for himself and acts like he thinks he is useless.

(3) James treats his wife with disrespect; he does not look up to her, and he downgrades whatever she does.

(4) Al proves his love for his wife by sharing things with her and helping her.

(5) When he is with his wife, Jack is a gloomy husband who acts unhappy with himself.

(6) William downgrades himself when he is with his wife; he does not show respect for himself and acts like he cannot do anything right.

(7) Mike acts spitefully toward himself in front of his wife, and does not try to please himself.

(8) Edward does not have pride in himself; he belittles himself in front of his wife and criticizes his abilities.

(9) Larry shows his wife he does not like her; he does things she dislikes, and he will not try to please her.

(10) David gives his wife a lot of love; he shows trust in her and is very affectionate with her.

(11) When he is with his wife, Peter acts displeased with himself and does not seem happy with himself.

(12) Gary does not show respect for his wife; he criticizes her and tells her she is useless.

(13) Robert acts as if everything his wife does is very important; he praises whatever she does.

(14) Richard belittles his wife when he talks to her; he looks down on her abilities and tells her she does not do things right.

(15) Joe is a happy husband when he is with his wife; he acts like a husband who knows he is a nice, likable husband.

(16) Dan acts spiteful toward his wife; he lets her know he dislikes her and cannot stand her.

(17) Chuck shows he is proud of what his wife can do; he tells her she is worth a lot and that she can do things very well.

(18) John gives respect to his wife; he shows her he admires whatever she does.

(19) Fred does not give love to his wife; he ignores her feelings and shows her he does not like her.

(20) When he is with his wife, Bill acts contented with himself and seems to be satisfied with himself.

(21) When he is with his wife, Paul praises himself for his abilities; he acts like a husband who thinks he does things very well.

(22) When he is with his wife, Tom is a cheerful husband who acts pleased with himself.

(23) When he is with his wife, Harry shows a lot of respect toward himself; he makes known his self-respect by what he says and does.

(24) When he is with his wife, Jim treats himself with dignity; he shows he respects himself by the way he talks and acts.

Now we turn to some statements about the behavior of a wife when she is with her husband.

(25) Pat shows her husband she loves him and cares for him; she tries to please him and do the things he likes.

(26) Sue gives respect to her husband; she shows him she admires whatever he does.

(27) When she is with her husband, Sandy treats herself with dignity; she shows she respects herself by the way she talks and acts.

(28) When she is with her husband, Carol is a gloomy person who acts unhappy with herself.

(29) Dotty does not give love to her husband; she ignores his feelings and shows him she does not like him.

(30) Bobbie treats her husband with disrespect; whe does not look up to him, and she downgrades whatever he does.

(31) When she is with her husband, Kate shows disrespect for herself and acts as if she thinks she is useless.

(32) Janet proves her love for her husband by helping him and sharing things with him.

(33) Ann shows she is proud of what her husband can do; she tells him he is worth a lot and that he can do things very well.

(34) When she is with her husband, Mary shows a lot of respect toward herself; she makes known her self-respect by what she says and does.

(35) Polly acts spitefully toward herself in front of her husband and does not try to please herself.

(36) Marie downgrades herself when she is with her husband; she does not show respect for herself and acts as if she cannot do anything right.

(37) Rose does not have pride in herself; she belittles herself in front of her husband and criticizes her abilities.

(38) Peggy does not show respect for her husband; she criticizes him and tells him he is useless.

(39) Barbara shows her husband she does not like him; she does things he dislikes, and she will not try to please him.

(40) When she is with her husband, Betty is a cheerful wife who acts pleased with herself.

(41) May belittles her husband when she talks to him; she looks down on his abilities and tells him he does not do things right.

(42) Margie acts as if everything her husband does is very important; she praises whatever he does.

(43) Jean is a happy person when she is with her husband; she acts like a wife who knows she is a nice, likable person.

(44) June gives her husband a lot of love; she shows trust in him and is very affectionate with him.

(45) Betsy acts spiteful toward her husband; she lets him know she dislikes him and cannot stand him.

(46) When she is with her husband, Terry acts displeased with herself and does not seem happy with herself.

(47) When she is with her husband, Sarah praises herself for her ability; she acts like a wife who does things very well.

(48) When she is with her husband, Terry acts contented with herself and seems to be satisfied with herself.

RBT-ANSWER SHEET **HUSBAND-WIFE** **CODE NO.____**

For statements one through twenty-four, you are to answer the four questions below:

(A) Do you act this way when you are with your wife?

(1) almost never
(2) seldom
(3) sometimes
(4) often
(5) almost always

(B) When he's with his wife, do you think a husband should act the way the husband in the story does?

(1) definitely not
(2) perhaps not
(3) perhaps yes
(4) yes
(5) absolutely yes

(C) Would your wife say that you act this way with her?

(1) almost never
(2) seldom
(3) sometimes
(4) often
(5) almost always

(D) Would your wife say that a husband should act as the husband in the story does?

(1) definitely not
(2) perhaps not
(3) perhaps yes
(4) yes
(5) absolutely yes

Below are the blanks for your answers. Write in the number of the answer for each question which best fits your situation. The numbers below refer to the statements you are reading. The letters refer to the four questions.

(1) (A)___ (B)___ (C)___ (D)___	(2) (A)___ (B)___ (C)___ (D)___	(3) (A)___ (B)___ (C)___ (D)___	(4) (A)___ (B)___ (C)___ (D)___	(5) (A)___ (B)___ (C)___ (D)___	(6) (A)___ (B)___ (C)___ (D)___
(7) (A)___ (B)___ (C)___ (D)___	(8) (A)___ (B)___ (C)___ (D)___	(9) (A)___ (B)___ (C)___ (D)___	(10) (A)___ (B)___ (C)___ (D)___	(11) (A)___ (B)___ (C)___ (D)___	(12) (A)___ (B)___ (C)___ (D)___
(13) (A)___ (B)___ (C)___ (D)___	(14) (A)___ (B)___ (C)___ (D)___	(15) (A)___ (B)___ (C)___ (D)___	(16) (A)___ (B)___ (C)___ (D)___	(17) (A)___ (B)___ (C)___ (D)___	(18) (A)___ (B)___ (C)___ (D)___
(19) (A)___ (B)___ (C)___ (D)___	(20) (A)___ (B)___ (C)___ (D)___	(21) (A)___ (B)___ (C)___ (D)___	(22) (A)___ (B)___ (C)___ (D)___	(23) (A)___ (B)___ (C)___ (D)___	(24) (A)___ (B)___ (C)___ (D)___

RBT-ANSWER SHEET (2) HUSBAND-WIFE CODE NO.____

For statements twenty-five through forty-eight, you are to answer the following questions:

(A) Does your wife act this way when she is with you?

(1) almost never
(2) seldom
(3) sometimes
(4) often
(5) almost always

(B) When she is with her husband, do you think a wife should act the way the wife in the story does?

(1) definitely not
(2) perhaps not
(3) perhaps yes
(4) yes
(5) absolutely yes

(C) Would your wife say that she acts this way with you?

(1) almost never
(2) seldom
(3) sometimes
(4) often
(5) almost always

(D) Would your wife say that a wife should act as the wife in the story does?

(1) definitely not
(2) perhaps not
(3) perhaps yes
(4) yes
(5) absolutely yes

Below are the blanks for your answers.

(25) (A)___	(26) (A)___	(27) (A)___	(28) (A)___	(29) (A)___	(30) (A)___
(B)___	(B)___	(B)___	(B)___	(B)___	(B)___
(C)___	(C)___	(C)___	(C)___	(C)___	(C)___
(D)___	(D)___	(D)___	(D)___	(D)___	(D)___
(31) (A)___	(32) (A)___	(33) (A)___	(34) (A)___	(35) (A)___	(36) (A)___
(B)___	(B)___	(B)___	(B)___	(B)___	(B)___
(C)___	(C)___	(C)___	(C)___	(C)___	(C)___
(D)___	(D)___	(D)___	(D)___	(D)___	(D)___
(37) (A)___	(38) (A)___	(39) (A)___	(40) (A)___	(41) (A)___	(42) (A)___
(B)___	(B)___	(B)___	(B)___	(B)___	(B)___
(C)___	(C)___	(C)___	(C)___	(C)___	(C)___
(D)___	(D)___	(D)___	(D)___	(D)___	(D)___
(43) (A)___	(44) (A)___	(45) (A)___	(46) (A)___	(47) (A)___	(48) (A)___
(B)___	(B)___	(B)___	(B)___	(B)___	(B)___
(C)___	(C)___	(C)___	(C)___	(C)___	(C)___
(D)___	(D)___	(D)___	(D)___	(D)___	(D)___

This completes the questionnaire.

RBT - INSTRUCTIONS

The purpose of this questionnaire is to help you form as faithful and sharp a picture as possible of the relationship between you and your husband or wife.

This is not a test. There are no right or wrong answers. Just answer the way you feel. This questionnaire will be kept in strict confidence.

On the following pages, you will find a number of brief statements describing behavior between husband and wife. After reading a statement, you are to answer four short questions about it. These questions appear on the attached answer sheet. For each question, quickly choose the answer which best fits your situation and write the number of that answer in the blank provided on the answer sheet. Remember, for each statement, there are four questions for you to answer. Please answer each question, but give only one answer to each question; then go on immediately to the next statement.

EXAMPLE:

Read the first statement. Now, on the answer sheet, read question (A). Pick the answer which best fits your situation and write the number of that answer in the blank on the answer sheet for question (A).

(1)	(A) 1	If the answer, "almost never," is the one that best fits your situation, then you would write "1" in the blank provided. Now go on to question (B), and so forth.
	(B) ___	
	(C) ___	
	(D) ___	

RBT

WIFE-HUSBAND RELATIONSHIP

The following twenty-four statements are about the behavior of a wife when she is with her husband.

(1) Pat shows her husband she loves him and cares for him; she tries to please him and do the things he likes.

(2) Sue gives respect to her husband; she shows him she admires whatever he does.

(3) When she is with her husband, Sandy treats herself with dignity; she shows she respects herself by the way she talks and acts.

(4) When she is with her husband, Carol is a gloomy person who acts unhappy with herself.

(5) Dotty does not give love to her husband; she ignores his feelings and shows him she does not like him.

(6) Bobbie treats her husband with disrespect; she does not look up to him, and she downgrades whatever he does.

(7) When she is with her husband, Kate shows disrespect for herself and acts as if she thinks she is useless.

(8) Janet proves her love for her husband by helping him and sharing things with him.

(9) Ann shows she is proud of what her husband can do; she tells him he is worth a lot and that he can do things very well.

(10) When she is with her husband, Mary shows a lot of respect toward herself; she makes known her self-respect by what she says and does.

(11) Polly acts spitefully toward herself in front of her husband and does not try to please herself.

(12) Marie downgrades herself when she is with her husband; she does not show respect for herself and acts as if she cannot do anything right.

(13) Rose does not have pride in herself; she belittles herself in front of her husband and criticizes her abilities.

(14) Peggy does not show respect for her husband; she criticizes him and tells him he is useless.

(15) Barbara shows her husband she does not like him; she does things he dislikes, and she will not try to please him.

(16) When she is with her husband, Betty is a cheerful wife who acts pleased with herself.

(17) May belittles her husband when she talks to him; she looks down on his abilities and tells him he does not do things right.

(18) Margie acts as if everything her husband does is very important; she praises whatever he does.

(19) Jean is a happy person when she is with her husband; she acts like a wife who knows she is a nice, likable person.

(20) June gives her husband a lot of love; she shows trust in him and is very affectionate with him.

(21) Betsy acts spiteful toward her husband; she lets him know she dislikes him and cannot stand him.

(22) When she is with her husband, Terry acts displeased with herself and does not seem happy with herself.

(23) When she is with her husband, Sarah praises herself for her ability; she acts like a wife who does things very well.

(24) When she is with her husband, Terry acts contented with herself and seems to be satisfied with herself.

Now we turn to some statements about the behavior of a husband when he is with his wife:

(25) Dick shows his wife he likes her and cares for her; he tries to please her and do the things she likes.

(26) When he is eith his wife, Bob shows disrespect for himself and acts like he thinks he is useless.

(27) James treats his wife with disrespect; he does not look up to her, and he downgrades whatever she does.

(28) Al proves his love for his wife by sharing things with her and helping her.

(29) When he is with his wife, Jack is a gloomy husband who acts unhappy with himself.

(30) William downgrades himself when he is with his wife; he does not show respect for himself and acts like he cannot do anything right.

(31) Mike acts spitefully toward himself in front of his wife, and does not try to please himself.

(32) Edward does not have pride in himself; he belittles himself in front of his wife and criticizes his abilities.

(33) Larry shows his wife he does not like her; he does things she dislikes, and he will not try to please her.

(34) David gives his wife a lot of love; he shows trust in her and is very affectionate with her.

(35) When he is with his wife, Peter acts displeased with himself and does not seem happy with himself.

(36) Gary does not show respect for his wife; he criticizes her and tells her she is useless.

(37) Robert acts as if everything his wife does is very important; he praises whatever she does.

(38) Richard belittles his wife when he talks to her; he looks down on her abilities and tells her she does not do things right.

(39) Joe is a happy husband when he is with his wife; he acts like a husband who knows he is a nice, likable husband.

(40) Dan acts spiteful toward his wife; he lets her know he kislikes her and cannot stand her.

(41) Chuck shows he is proud of what his wife can do; he tells her she is worth a lot and that she can do things very well.

(42) John gives respect to his wife; he shows her he admires whatever she does.

(43) Fred does not give love to his wife; he ignores her feelings and shows her he loes not like her.

(44) When he is with his wife, Bill acts contented with himself and seems to be satisfied with himself.

(45) When he is with his wife, Paul praises himself for his abilities; he acts like a husband who thinks he does things very well.

(46) When he is with his wife, Tom is a cheerful husband who acts pleased with himself.

(47) When he is with his wife, Harry shows a lot of respect toward himself; he makes known his self-respect by what he says and does.

(48) When he is with his wife, Jim treats himself with dignity; he shows he respects himself by the way he talks and acts.

RBT-ANSWER SHEET **WIFE-HUSBAND** CODE NO.____

For statements one through twenty-four, you are to answer the four questions below:

(A) Do you act this way when you are with your husband?

(1) almost never
(2) seldom
(3) sometimes
(4) often
(5) almost always

(B) When she's with her husband, do you think a wife should act the way the wife in the story does?

(1) definitely not
(2) perhaps not
(3) perhaps yes
(4) yes
(5) absolutely yes

(C) Would your husband say that you act this way with him?

(1) almost never
(2) seldom
(3) sometimes
(4) often
(5) almost always

(D) Would your husband say that a wife should act as the wife in the story does?

(1) definitely not
(2) perhaps not
(3) perhaps yes
(4) yes
(5) absolutely yes

Below are the blanks for your answers. Write in the number of the answer for each question that best fits your situation. The numbers below refer to the statements you are reading. The letters refer to the four questions.

(1) (A)___ (B)___ (C)___ (D)___	(2) (A)___ (B)___ (C)___ (D)___	(3) (A)___ (B)___ (C)___ (D)___	(4) (A)___ (B)___ (C)___ (D)___	(5) (A)___ (B)___ (C)___ (D)___	(6) (A)___ (B)___ (C)___ (D)___
(7) (A)___ (B)___ (C)___ (D)___	(8) (A)___ (B)___ (C)___ (D)___	(9) (A)___ (B)___ (C)___ (D)___	(10) (A)___ (B)___ (C)___ (D)___	(11) (A)___ (B)___ (C)___ (D)___	(12) (A)___ (B)___ (C)___ (D)___
(13) (A)___ (B)___ (C)___ (D)___	(14) (A)___ (B)___ (C)___ (D)___	(15) (A)___ (B)___ (C)___ (D)___	(16) (A)___ (B)___ (C)___ (D)___	(17) (A)___ (B)___ (C)___ (D)___	(18) (A)___ (B)___ (C)___ (D)___
(19) (A)___ (B)___ (C)___ (D)___	(20) (A)___ (B)___ (C)___ (D)___	(21) (A)___ (B)___ (C)___ (D)___	(22) (A)___ (B)___ (C)___ (D)___	(23) (A)___ (B)___ (C)___ (D)___	(24) (A)___ (B)___ (C)___ (D)___

RBT-ANSWER SHEET (2) <u>WIFE-HUSBAND</u> CODE NO.____

For statements twenty-five through forty-eight, you are to answer the following four questions:

(A) Does your husband act this way when he is with you?

(1) almost never	(4) often
(2) seldom	(5) almost always
(3) sometimes	

(B) When he is with his wife, do you think a husband should act the way the husband in the story does?

(1) definitely not	(4) yes
(2) perhaps not	(5) absolutely yes
(3) perhaps yes	

(C) Would your husband say that he acts this way with you?

(1) almost never	(4) often
(2) seldom	(5) almost always
(3) sometimes	

(D) Would your husband say that a husband should act as the husband in the story does?

(1) definitely not	(4) yes
(2) perhaps not	(5) absolutely yes
(3) perhaps yes	

Below are the blanks for your answers.

(25) (A)___	(26) (A)___	(27) (A)___	(28) (A)___	(29) (A)___	(30) (A)___
(B)___	(B)___	(B)___	(B)___	(B)___	(B)___
(C)___	(C)___	(C)___	(C)___	(C)___	(C)___
(D)___	(D)___	(D)___	(D)___	(D)___	(D)___
(31) (A)___	(32) (A)___	(33) (A)___	(34) (A)___	(35) (A)___	(36) (A)___
(B)___	(B)___	(B)___	(B)___	(B)___	(B)___
(C)___	(C)___	(C)___	(C)___	(C)___	(C)___
(D)___	(D)___	(D)___	(D)___	(D)___	(D)___
(37) (A)___	(38) (A)___	(39) (A)___	(40) (A)___	(41) (A)___	(42) (A)___
(B)___	(B)___	(B)___	(B)___	(B)___	(B)___
(C)___	(C)___	(C)___	(C)___	(C)___	(C)___
(D)___	(D)___	(D)___	(D)___	(D)___	(D)___
(43) (A)___	(44) (A)___	(45) (A)___	(46) (A)___	(47) (A)___	(48) (A)___
(B)___	(B)___	(B)___	(B)___	(B)___	(B)___
(C)___	(C)___	(C)___	(C)___	(C)___	(C)___
(D)___	(D)___	(D)___	(D)___	(D)___	(D)___

This completes the questionnaire.

APPENDIX E

DYADIC ADJUSTMENT SCALE

DYADIC ADJUSTMENT SCALE

CODE NO.____

Most persons have disagreements in their relationships. Please indicate below the approximate extent of agreement or disagreement between you and your partner for each item on the following list.

	Always Agree	Almost Always Agree	Occasionally Disagree	Frequently Disagree	Almost Always Disagree	Always Disagree
1. Handling family finances						
2. Matters of recreation						
3. Religious matters						
4. Demonstrations of affection						
5. Sex relations						
6. Friends						
7. Conventionality (correct or proper behavior)						
8. Philosophy of life						
9. Ways of dealing with parents or in-laws						
10. Aims, goals, and things believed important						
11. Amount of time spent together						
12. Making major decisions						
13. Household tasks						
14. Leisure time interests and activities						
15. Career decisions						

	All the time	Most of the time	More often than not	Occasionally	Rarely	Never
16. How often do you discuss or have you considered divorce, separation, or terminating your relationship?						
17. How often do you or your mate leave the house after a fight?						
18. In general, how often do you think that things between you and your partner are going well?						
19. Do you confide in your mate?						
20. Do you ever regret that you married?						

	All the time	Most of the time	More often than not	Occa-sionally	Rarely	Never
21. How often do you and your mate quarrel?	____	____	____	____	____	____
22. How often do you and your mate "get on each other's nerves?"	____	____	____	____	____	____

	Every day	Almost Every day	Occa-sionally	Rarely	Never
23. Do you kiss your mate?	____	____	____	____	____
24. Do you and your mate engage in outside interests together?	____	____	____	____	____

How often would you say the following events occur between you and your mate?

	Never	Less than once a month	Once or twice a month	Once or twice a week	Once a day	More often
25. Have a stimulating exchange of ideas	____	____	____	____	____	____
26. Laugh together	____	____	____	____	____	____
27. Calmly discuss something	____	____	____	____	____	____
28. Work together on a project	____	____	____	____	____	____

These are some things about which couples sometimes agree and sometimes disagree. Indicate if either item below caused differences of opinions or were problems in your relationship in the past few weeks. (Check yes or no)

	Yes	No	
29.	____	____	Being too tired for sex.
30.	____	____	Not showing love.

31. The dots on the following line represent different degrees of happiness in your relationship. The middle point, "happy", represents the degree of happiness of most relationships. Please circle the dot which best describes the degree of happiness, all things considered, of your relationship.

•	•	•	•	•	•	•
Extremely Unhappy	Fairly Unhappy	A little Unhappy	Happy	Very Happy	Extremely Happy	Perfect

32. Which of the following statements best describes how you feel about the future of your relationship?

_____I want desperately for my relationship to succeed, and would go to almost any lengths to see that it does.

_____I want very much for my relationship to succeed, and will do all I can to see that it does.

_____I want very much for my relationship to succeed, and will do my fair share to see that it does.

_____It would be nice if my relationship succeeded, but I can't do much more than I am doing now to help it succeed.

_____It would be nice if it succeeded, but I refuse to do any more than I am doing now to keep the relationship going.

_____My relationship can never succeed, and there is nothing more that I can do to keep the relationship going.