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THE CONTRIBUTION OF STRUCTURAL MEANING IN JUDGMENTS
ABOUT THE EVALUATIVE DISPOSITION OF A SPEAKER

DISSERTATION

Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the Graduate
School of The Ohio State University

By

Michael Dean Alexander, B.Sc., M.A.

* * * * *

The Ohio State University
1972

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# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>ii</td>
</tr>
<tr>
<td>VITA</td>
<td>iii</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>vi</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>vi</td>
</tr>
<tr>
<td>Chapter 1</td>
<td></td>
</tr>
<tr>
<td>I. STRUCTURAL LINGUISTICS</td>
<td>1</td>
</tr>
<tr>
<td>Charles Fries - Structural Meaning</td>
<td></td>
</tr>
<tr>
<td>Noam Chomsky - Generative Grammar</td>
<td></td>
</tr>
<tr>
<td>Charles Fillmore - Case Grammar</td>
<td></td>
</tr>
<tr>
<td>Wallace Chafe - Meaning and the Structure of Language</td>
<td></td>
</tr>
<tr>
<td>II. RESEARCH ON EVALUATIVE COMMUNICATION AND STRUCTURAL MEANING</td>
<td>14</td>
</tr>
<tr>
<td>Semantic Differential</td>
<td></td>
</tr>
<tr>
<td>Weiner and Mehrabian - The Concept of &quot;immediacy&quot;</td>
<td></td>
</tr>
<tr>
<td>Research on the Structural Properties of Sentences</td>
<td></td>
</tr>
<tr>
<td>III. EXPERIMENTAL PROCEDURE AND RESULTS</td>
<td>36</td>
</tr>
<tr>
<td>Paragraphs</td>
<td></td>
</tr>
<tr>
<td>Subjects</td>
<td></td>
</tr>
<tr>
<td>Results</td>
<td></td>
</tr>
<tr>
<td>IV. DISCUSSION</td>
<td>48</td>
</tr>
<tr>
<td>Pronouns</td>
<td></td>
</tr>
<tr>
<td>Intensifiers</td>
<td></td>
</tr>
<tr>
<td>Prepositions</td>
<td></td>
</tr>
<tr>
<td>Negatives</td>
<td></td>
</tr>
<tr>
<td>Idioms</td>
<td></td>
</tr>
<tr>
<td>Sentence Matching</td>
<td></td>
</tr>
<tr>
<td>The Evaluative Dimension</td>
<td></td>
</tr>
</tbody>
</table>
### APPENDIX

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Criterion Group Rating Form</td>
<td>63</td>
</tr>
<tr>
<td>B. Content Group Rating Form</td>
<td>69</td>
</tr>
<tr>
<td>C. Pronoun Group Rating Form</td>
<td>75</td>
</tr>
<tr>
<td>D. Preposition Group Rating Form</td>
<td>80</td>
</tr>
<tr>
<td>E. Pronoun-Preposition Group Rating Form</td>
<td>85</td>
</tr>
<tr>
<td>F. Paragraph Information Survey</td>
<td>90</td>
</tr>
<tr>
<td>G. Raw Data</td>
<td>91</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>92</td>
</tr>
</tbody>
</table>
LIST OF TABLES

Table 1 - Definitions and Examples of Immediate and Non-immediate Communications ........................................... 19
Table 2 - Sentence Pairs Included in the Communication Rating Paradigm .......................................................... 25
Table 3 - TE Probabilities for Each Transition for Each Sentence Form ............................................................... 29
Table 4 - Correlation Matrix of Original Ratings With Medians of Criterion, Content, Pronoun, Preposition and Pronoun-Preposition Groups on the Good-Bad Scale ................................ 41
Table 5 - t Tests for Difference in Q-Values Between Criterion, Content, Pronoun, Preposition, and Pronoun-Preposition Groups ................................................................. 43
Table 6 - Original Ratings and Medians of the Criterion, Content, Pronoun Preposition, and Pronoun-Preposition Groups on the Good-Bad Scale for the Individual Paragraphs ................................................................. 46
Table 7 - Q-Values of Individual Paragraphs in the Criterion, Content, Pronoun, Preposition and Pronoun-Preposition Groups on the Good-Bad Scale .................................................. 47

LIST OF FIGURES

Figure 1 - (Chart 1)
Medians of Individual Paragraph Ratings on the Good-Bad Scale for the Criterion, Content, Pronoun, Preposition and Pronoun-Preposition Groups ................................................................. 42

Figure 2 - (Chart 2)
Q-Values of Individual Paragraphs in Criterion, Content, Pronoun, Preposition, and Pronoun-Preposition Groups ................................................................. 44

vi
CHAPTER ONE
STRUCTURAL LINGUISTICS

Recent developments in linguistic models have made them aptly suited to the social scientist's analysis of verbal communication patterns (see Chafe, 1970; Cook, 1969; Fillmore, 1968). Computer programs have been developed which can partition both textual and "natural" language into categories derived from the above-mentioned linguistic models (Marvin, Rush and Young, 1970; Landry, Cook and Meara, 1971). With these achievements, the social scientist can begin to describe, among other things, the signals an individual uses to convey to another individual that some "common understanding" exists between them such that they can "act concertedly" (Pepinsky and Patton, 1971). The evaluative judgments people make, and the display of these evaluative judgments in verbal communication may provide cues which contribute to the achievement of "common understanding" in any group.

In this paper, the contribution made by structural meaning in assessing a speaker's evaluative (good-bad) judgment about or disposition toward another person in written communication is examined. The basic assumption here is that the content words in a sentence do not convey all that is meaningful with regard to Ss judgments about a speaker's evaluative communication. According to Fries (1952), structural meaning is that part of the total meaning of a sentence
signalled by the pattern or arrangement of words within the sentence. Structural analysis systems such as those of Fillmore (1968) and Chafe (1970) also contribute to the construct of structural meaning. In these systems, the relation of nouns to the main verb is of central importance.

The development of structural linguistics represents a dramatic change in linguistic theory. Traditionally, the phoneme (combined into morphemes) was seen as the basic linguistic unit. de Saussure assumed that this basic unit was "... a slice of sound which to the exclusion of everything that precedes and follows it in the spoken chain is the signifier of a certain concept (1959, p. 104)." Language was seen as a system of arbitrary vocal symbols (slices of sound). A coherent view of language could be developed by examination of phonetic data exclusively (Block and Trager, 1942). Rules of syntax (describing how words are placed in sentences) were seen as arbitrary and idiosyncratic inventions of differing cultures. Thus there was little effort directed toward the discernment of syntactic universals. Since meaning resided in the individual morpheme, further examination of meaning was thought unnecessary.

Charles Fries - Structural Meaning

In The Structure of English, Charles Fries (1952) introduced a grammar of structure with the intention of describing how people use word patterns meaningfully in sentences. He rejected the notion that the lexical meaning of individual words contribute all that is meaningful within a sentence. He assumed that structural signals also contributed to the total linguistic meaning of an utterance. For
example, consider the sentence "The man gave the boy the money." We all know the lexical meanings of man, boy, gave, money, etc. But as speakers of English we also know about the relations of people and objects within the sentence. We know that the man rather than the boy performed the action, that there was one man and one boy, that the action was performed in the past, and that this is a statement of act and not a question. Fries maintains that this kind of information is available to us because of the structural signals in the sentence. These structural signals include such items as the position the word occupies in the sentence and the affixes of the words.

For Fries, the grammar of a language "... consists of the devices that signal structural meanings (1952, p. 56)." In his grammar of structure, "... all signals of structure are formal matters that can be described in physical terms (Fries, 1952, p. 8)." In order to describe these "structural signals," Fries developed a functional criterion which could be used to classify parts of speech consistently. Prior to this time, parts of speech had been classified according to lexical, formal and/or functional criteria. These three bases of classification were typically intermixed in developing a grammar. In most instances a noun was defined lexically as the name of a person, place or thing while an adjective was defined functionally as the modifier of a noun or pronoun. Possessive pronouns, although they modify nouns, were usually classified formally as nouns of the possessive case.
Fries demonstrated how all parts of speech could be viewed as form-classes and classified on the basis of their position in relation to other words in a sentence (a functional criterion). Consider the following sentences:

1. Woggles uggled diggles.
2. Uggs woggled diggs.
3. Woggs diggled uggles.

If we made the assumption that the structural signals of English are present in these sentences, we can determine that (1) woggles, uggs, and woggs are "thing" words, (2) that there are more than one of these "things", (3) that action occurred in the past, (4) that these "things" were the actors and (5) that diggles, diggs, and uggles received the actions (Fries, 1952). We "know" this information because of the structural signals contained in the sentences, specifically through the position each word occupies in relation to the other words and the endings of the words. Fries classifies parts of speech on this basis. Words that can replace woggles, uggs, woggs, diggles, diggs, and uggles are Class 1 words. They correspond to the conventional category of nouns. Words capable of replacing uggled, woggled, and diggled are Class 2 words (corresponding to verbs). By expanding the sentence as follows, we have examples of the other major classes:

4. The uggs woggled a diggled ugg puggly.

Any word capable of replacing diggled is Class 3 (corresponding to adjectives). Words which can replace puggly are in Class 4 (corresponding to adverbs).
Function words represent a fifth class for Fries. This class is divided into 15 groups including determiners (a and the in the above example) as well as auxiliary verbs, conjunctions, prepositions, relative pronouns, subordinate conjunctions, interjections and intensifiers. Fries states that we must know these words as separate items which signal particular structural meanings. For example, consider "The boy was given the money" as opposed to "The boy had given the money." The function words (auxiliary verbs) was and had, in the sentence context, serve as crucial structural markers for our differential interpretation of the sentences (Fries, 1952, p. 75). We see also that these function words depend on the context of the sentence for their meaning. Classes 1-4, on the contrary, have lexical meanings that are distinct from structural meanings.

It is important to note that Fries defines structural meaning for any particular position by contrasting that position to others, thus defining the form class for any particular word.

In order to know the structural meanings signalled by the formal arrangements of our sentences one need not know the lexical meanings of the words but he must know the form classes to which the word belongs (Fries, 1952, p. 64).

Fries' analysis "... starts from a description of the formal devices that are present and the patterns that make them significant and arrives at the structural meanings as a result of the analysis (1952, p. 57)." These structural meanings are distinct from the lexical meanings of words. We interpret sentences by combining structural and lexical meaning. Fries was concerned primarily with developing a consistent classification schema and did not discuss
the question of how one might begin to systematize the information available in structural cues.

Noam Chomsky - Generative Grammar

Fillmore, in "The Case for Case" (1968), presents a system of language classification which bears directly on the categorization of the specific structural, as opposed to the lexical, features of words used in sentence contexts. Chomsky's (1965) generative theory of grammar is the basis upon which Fillmore develops his case grammar system. Chomsky's theory purports to explain competence in language, i.e., an individual's ability to generate an infinite number of new sentences because of his understanding, be it explicit or implicit, of the specific rules involved in the construction of sentences in his particular culture. In the theory, it is assumed that "... the child possesses a linguistic acquisition device ... [which enables him] to operate upon the utterances he hears around him in such a way as to be able to produce an implicit grammar for those utterances (Deese, 1970, p. 54)." Unlike the more traditional linguistic approach which held that sentence production was dependent initially upon the child's recognition of the individual speech sounds (phonemes) of a language, Chomsky maintained that sentence structures themselves were the most basic units of language acquisition. By sentence structures he means, for example, the separation of sentences into noun phrases and verb phrases (much like subject and predicate) or the separation of noun phrases into typical grammatical classes such as nouns, adjectives, articles, etc. Chomsky assumes that children encode speech sounds in a limited number of ways, developing models of how words are
related to other words (the basic notion of syntax). Apparently, "... there must be some innate biological representation of the abstract structures of language built into the human nervous system (Deese, 1970, p. 116)." Hence, Chomsky posits a biological limitation on the number of different models or rules a child can form. The "deep structure" of a language, for example, is a biological given. By "deep structure" Chomsky means the separation of sentences into propositional, or subject, and predicate structures. More generally, however, he is concerned with the innate ability of human beings to form models of linguistic functioning by developing rules of syntax (rules of how words relate with other words).

Thus, for Chomsky, syntax is the basic aspect in his grammar. His posited syntactic "... component acts as a base which produces deep structures which are interpreted by a semantic component (Cook, 1972a, p. 35)." The semantic component consists of the basic meaning we communicate in sentences. According to Chomsky, this semantic component exists as a separate entity from the syntactic component. The input from the semantic component does not alter in any way the syntactic rule structure. Once we have an idea to communicate, semantic input stops and syntactic rules determine the surface structure of the sentence.

Charles Fillmore - Case Grammar

Fillmore (1968) began to systematize the semantic categories conveyed in sentence structure. Using the basic constructs in Chomsky's theory of generative grammar, he developed the notion of a "case grammar." Although he initially considered the syntactic
component as basic in determining deep and surface structures, his later discussion might be viewed as one where the semantic component is primary. As Cook mentions, the "... deep structures presented by Fillmore are mainly semantic in scope, and acquire syntactic structure through a core set of realization rules which map deep structures into surface structures (1972a, p. 35-36)."

Fillmore argues that "... the grammatical notion 'case' deserves a place in the base component of the grammar of every language (1968, p. 2)." By "case", he means the semantically relevant syntactic relationships between nouns and the structures that contain them. As an example, consider the following sentences:

1. John ruined the table.
2. John built the table.

We can paraphrase sentence one by using the verb "do to", i.e., "What John did to the table was ruin it." We cannot use the same verb to paraphrase sentence two because of the inappropriate time sequencing which would result, i.e., in "What John did to the table was build it." something is being "done to" the table before it is built. Such a sentence is unacceptable in English. According to Fillmore, we know the meaning of the original sentences by understanding the relations of the nouns and the structures that contain them (in this case, table as object in relation to the verbs ruin and build). By utilizing a syntactic skill such as the application of a new structural setting (the verb do to) to the nouns (table), we can determine whether the semantic relation of verb and object was the same in the two original sentences. If the relation were the same, adding the verb "do to"
would affect both sentences equally. As we saw above, this was not the case. Therefore, we might conclude that ruin and build are different sorts of verbs, and that nouns used with these verbs have specific, and different, semantic relations with them. Fillmore refers to these as "case" relationships. In the above example, the relation of ruin and table might be called "affectum" and that of build and table labeled "effectum" (Fillmore, 1968). To reiterate, the case relationship is a semantically relevant syntactic relationship. Affectum and effectum are semantic categories that might be said to "go along with" the use of the verbs ruin and build and any nouns used as objects with them. Fillmore maintains that our ability to understand the meaning of sentences depends on our knowledge of such semantic categories.

Fillmore assumes that case relationships "... are in large part covert but are nevertheless empirically discoverable... [and] that they form a specific finite set... (1968, p. 5)." Case grammar consists of a schema for classifying sentence structures on the basis of a verb and a number of noun phrases related to the verb according to a specific case relationship. These relationships "... have the effect of imposing a classification of verbs in the language (Fillmore, 1968, p. 27)." Examples of sentences with each verb type follow:

- **Stative**: The house is green.
- **Action**: I broke the window.
- **Experienter**: I feel good.
- **Benefactive**: I sang for her.

Any particular verb has a specific array of cases associated with it. Fillmore denotes the case relations that exist with a certain verb type by use of a case frame. For example, in the second sentences above,
the case frame \([\_\_0(A)]\) represents the verb \(\text{broke}\) and denotes the case relationships that detail the meaning of that verb. "For any one meaning of the verb there is one semantic configuration composed of a well-defined set of cases (Cook, 1972a, p. 43)." With this frame, we are told there is an object relation of \(\text{window to broke}\) and an optional agent relation of \(I\) to \(\text{broke}\). The sentence "The window broke." would have the same case frame because the same relationships hold between the noun and verb, i.e., an object relation of \(\text{window to broke}\). The use of the verb \(\text{broke}\) in any sentence context carries the case frame \([\_\_0(A)]\). According to Fillmore, the frame represents the meaning of the verb \(\text{broke}\) to speakers of English. It is important to note that nouns ". . . are not cases but case candidates. The same noun may be used in different contexts as Agent, Experiencer, Object, or Beneficiary, depending on the verb with which it is used. . . the case role itself is read into the noun from the verb (Cook, 1972, p. 43)."

Thus, Fillmore has developed a means of analysing language by beginning to classify the semantic relations of noun phrases to the verb in a sentence. These semantic relations represent an additional input to the total meaning of a sentence, an input that is distinct from the lexical or content meaning of individual words. 

Wallace Chafe - Meaning and the Structure of Language

Chafe (1970) presents semantic structures as the central feature in the structure of sentences, leaving syntax secondary. For Chafe, any model of language must account for the relation between sound and meaning. Language represents ". . . the conversion of
something from the universe of ideas or concepts into something capable of bridging the gap between sender and receiver (Chafe, 1970, p. 19)." Deep semantic units are converted to surface structures in a way similar to Chomsky's (1965) discussion of the conversion of syntactic units to surface structures. Namely, deep semantic units are converted, through a series of "postsemantic" or transformational processes, into surface structures.

Chafe assumes "... that the total human conceptual universe is dichotomized initially into two major areas. One, the area of the verb, embraces states (conditions, qualities) and events; the other, the area of the noun, embraces 'things' (1970, p. 96)." The verb is central and the noun peripheral in Chafe's analysis. As evidence for this conclusion, Chafe relates many instances where the verb determines the meaningful interpretation of a sentence. For example, in the sentence "The chair laughed.", we interpret the chair as abnormally animate rather than altering the meaning of the verb. And in the sentence "The noise frightened the chair.", we also attribute animateness to the chair. These instances point to the importance of the verb in determining the meaning of the nouns in a sentence.

Chafe refers to the semantic relation of a noun to a verb as a semantic structure. Each verb can be classified according to the particular set of semantic structures associated with it. A partial list of his verb categories and examples of associated sentence types is given below:

1. State : The wood is dry.
4. Process and Action: She broke the dish.
There are many similarities between Chafe's and Fillmore's systems of language analysis. Cook (1927a), for example, demonstrates how Chafe's verb classification can, on the basis of semantic structures, be related directly to Fillmore's case grammar system. Consider the sentence "I threw the ball." Chafe would classify the verb as "action-process" because of agent and patient relations of the nouns to the verb, while one could describe the same verb as a case frame in Fillmore's terms as follows: \([__A,0]\) (Cook, 1972a, p. 42). Similar comparisons hold for all verb classifications in Chafe's and Fillmore's systems.

Although Chafe and Fillmore began with a different set of assumptions concerning the nature of deep structures (namely semantic vs. syntactic, respectively), it is interesting to note that they arrived at a similar position with regard to the various semantic relations that hold between nouns and the main verb. Fillmore's case grammar analysis is perhaps more viable as a classification scheme, mainly because one can display the frame features associated with each verb in such a way that similarities between types of verbs are more obvious (Cook, 1972a). Chafe, however, appears to be more concerned than Fillmore with uncovering the deep structure semantic dimensions that are unique to each verb. Chafe is convinced that these semantic differences in deep structure are represented in surface structure. Chafe maintains, for example, that the following sentences have differing semantic deep structures that are at present undiscovered.

Seymour sliced the salami with a knife.
Seymour used a knife to slice the salami.
A traditional transformational grammarian would argue for the opposite, i.e., that the base semantic structure is the same and surface structure differences can be accounted for by using different branching rules (Chage, 1968). Chafe's list of possible semantic structures is incomplete at this time. He is hopeful that more and different structures will be uncovered through the use of constraints such as those used with the sentence "The noise frightened my chair.", where we note that the verb frightened requires an animate object. Such empirical investigations remain for future researchers.

In the language analysis systems of Fries (1952), Fillmore (1968) and Chafe (1970) the important contribution that the structural properties of a sentence make to the communication of meaning was examined. These structural properties (e.g., word positions and endings) and the relations of nouns to the verb (e.g., case frames) give us meaning beyond the explicit lexical meaning contained in the individual words. The classification of various structural meanings is at an early stage. Semantic categories other than those previously described might be found to relate to structural meaning. Specifically, evaluative (good-bad) judgments may be displayed in structural patterns. This assumption is examined below.
CHAPTER TWO

RESEARCH ON EVALUATIVE COMMUNICATION AND STRUCTURAL MEANING

How does a speaker communicate evaluative (good-bad) judgments about another person? Are there structural properties of sentences which signal this evaluative judgment?

Fries (1952) maintained that knowledge of the structural properties of sentences (form classes; function words as structural markers) gives information about the actor, action, and object of the action. Speakers of English need not know the content of a sentence in order to derive this information. Fillmore (1968), went much further than Fries in classifying structural properties (e.g., Agent, Experiencer, Beneficiary and Object relations of nouns to verbs plus the modal cases of Time Location, Place, Manner, etc.). Chafe (1970), although not as specific with regard to classification of structural properties, also assumed that particular relations of nouns to verbs are converted from base to surface structures. Is it possible to conceive of particular structural properties in the surface structure of a sentence from which evaluative judgments can be determined, such as we think of structural properties that signal agent, action, object of action, etc.?
Research related to evaluative communication is presented in this chapter. A paradigm for combining research on evaluative communication and the structural properties of sentences is also discussed.

Semantic Differential

Osgood, Suci, and Tannenbaum's (1957) development of the semantic differential technique represents what is perhaps the most notable research on evaluative judgments. They wished to develop a technique with which they could measure the connotative meanings of various words for individuals. In other words, they were interested in devising a scale to sample the varieties of experiential states that contributed to the meaning of concepts (words). They assumed (1) that words used in describing or associating to another word or concept (e.g., tree) would be representative of and related to the experiential states contiguous with the concept, (2) that "... these 'experiential continua' will turn out to be reflections (in language) of the sensory differentiation made possible by the human nervous system," and (3) that "many different experiential continua, or ways in which meanings vary, are essentially equivalent and hence may be represented by a single dimension (Osgood et al., 1957, p. 31)."

Development of the scale consisted of (1) building a list of 50 adjectival polar opposites derived from the frequency of their usage as associates to the Kent-Rosanoff list of stimulus words, (2) ranking 20 different stimulus words (chosen by the experimenters because the words were diversified in meaning and familiar to the Ss) on the 50 polar opposite scales and (3) factor analysing the matrix of correlations of each of 100 Ss responses to each of 20 concepts on the
50 scales. Three factors were extracted by the Thurstone centroid method and labeled from their content: evaluative (e.g., good-bad), potency (e.g., strong-weak) and activity (e.g., active-passive). The evaluative factor was most highly loaded and accounted for 34 percent of the total variance, while the three factors together accounted for 50 percent of the total variance. It would appear that adjectival polar opposites on the evaluative dimension account for much of what Osgood et al. consider to be the "meaning" of any particular word or concept being measured, i.e., when a concept is described, the evaluative adjectival dimensions are more likely to be used than the potency or activity dimensions. Furthermore, the use of evaluative, active or potent adjectives is assumed to be a measure of the experiential state of the individual as he responds to the stimulus word.

We have, then, a scale or technique which purports to measure an imputed relationship between a word or concept and the experiential counterpart of the concept, by measuring where the particular concept is rated on evaluative, potency and activity continua. The use of the semantic differential technique has usually been limited to the measurement of single words or concepts, outside the context of a sentence. This has been so because Osgood et al. were primarily concerned with the meaning of a word or concept as determined by the individual himself. If connotative (and evaluative) meaning of a word be measured with the semantic differential technique, could this technique also be used to measure the evaluative disposition of a speaker toward another person in a sentence context.
Weiner and Mehrabian - The Concept of "immediacy"

Before elaborating further on this proposed use of the semantic differential technique, preliminary research findings related to evaluative communication conveyed through sentence structures will be presented. Weiner and Mehrabian (1968), with their concept of "immediacy/non-immediacy," explore the association of evaluative communication about people or objects and particular word patterns in sentences. Immediacy/non-immediacy is conceived of as a construct referring to differing word patterns in sentences which demonstrate "... the different ways in which the degree of directness and intensity of interaction between the communicator and his referents can be expressed (ibid., p. 4)."

The assumption is made that an individual's use of different word patterns in sentences occurs not only by convention but also because of "... the psychological state of the speaker vis-a-vis the object about which he is communicating, his communication, or his addressee (ibid., p. 4)." Immediacy/non-immediacy as a construct appears to be synonymous with the positive/negative disposition of a speaker conveyed through word patterns. Immediate forms of communication are taken to indicate a positive communicator disposition toward some aspect of his communication. For example, Weiner and Mehrabian (1968) say that the sentence "We were dancing." indicates an "immediate" form of communication (i.e., a communication indicating a positive speaker disposition toward his partner). The sentence "I was dancing with her.," on the other hand, represents a "non-immediate" form of communication. They assume this is so because the use of "we" indicates
greater directness and intensity of interaction between speaker and subject (hence a positive speaker disposition) as compared with the use of the "I-her" combination. However, warrant for this assumption is not provided.

Weiner and Mehrabian (1968) have developed a tentative categorization schema which depends on (1) determination of the object of communication and (2) rating sentence fragments as immediate, non-immediate or neutral communication. For example, the use of the "I-her" combination above would be rated as an example of non-immediacy and assigned a score of "1" in a tally of the total number of non-immediacy indicators contained within any communication (e.g., in a paragraph or dialogue). The entire list of categories defining immediate and non-immediate forms of communication is presented in Table 1. The above comparison of "we" and "I-her" is based on the definition of the mutuality-unilaterality category in Table 1 (see next page).

The categories described in Table 1 were developed on an intuitive basis. The list is cumbersome at present and needs both a clearer rationale and empirical support.

Most of the research done within the immediacy framework has involved limiting the immediacy/non-immediacy categories which Ss might use, e.g., the use of the immediate pronoun "I" on the non-immediate pronoun "they". For example, Kempler and Weiner (1964) has Ss rank verbs on a semantic differential scale to determine the Ss' evaluative disposition toward the verbs. Ss then wrote short stories with instructions to use five verbs (two negatively evaluated, one neutrally, and two least negatively evaluated) along with the pronouns "I" and
<table>
<thead>
<tr>
<th>Category</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance: Demonstrative pronouns such as &quot;the,&quot; &quot;this,&quot; or &quot;these,&quot; instead of &quot;that&quot; or &quot;those&quot; one used to refer to the object of communication.</td>
<td>A: I've seen that clerk before.</td>
</tr>
<tr>
<td></td>
<td>B: I've seen this clerk before.</td>
</tr>
<tr>
<td>Tense: The relationship between the communicator and the object of communication is on-going or present, instead of being temporally past or future.</td>
<td>A: John and I go fishing regularly.</td>
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<tr>
<td></td>
<td>B: John and I will go fishing regularly.</td>
</tr>
<tr>
<td>Order of occurrence: The earlier references in a sequence of references to several objects are considered more immediate.</td>
<td>A: When I went to the office, I got the check from Pete.</td>
</tr>
<tr>
<td></td>
<td>B: I got the check from Pete when I went to the office.</td>
</tr>
<tr>
<td>Duration: Longer communications about an object considered more immediate than shorter ones.</td>
<td>A: I saw Vincent mowing his lawn.</td>
</tr>
<tr>
<td></td>
<td>B: I saw Vincent.</td>
</tr>
<tr>
<td>Activity-Passivity: The communicator’s interaction with the object of communication is viewed as being voluntary rather than forced.</td>
<td>A: I have to write a letter to Joe.</td>
</tr>
<tr>
<td></td>
<td>B: I'm going to write a letter to Joe.</td>
</tr>
<tr>
<td>Mutuality-Unilaterality: Communications in which there is greater reciprocity between communicator and the object of his communication are considered more immediate.</td>
<td>A: Arlene plays cards with me.</td>
</tr>
<tr>
<td></td>
<td>B: Arlene and I play cards.</td>
</tr>
<tr>
<td>Probability: Communications in which the communicator’s interaction with the object of communication is more certain are considered more immediate.</td>
<td>A: Bob and I get along.</td>
</tr>
<tr>
<td></td>
<td>B: Bob and I can get along.</td>
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</table>

"they" as much as possible. Control Ss used non-negative verbs in their stories. Kempler and Weiner (1964) found support for their hypotheses that there would be more non-immediacy (operationally defined as the use of "they" rather than "I") when negatively evaluated verbs were used.

In another study, Mehrabian and Weiner (1966) hypothesized that there would be more non-immediacy evident in sentences written about failure versus success experiences. Ss were told that they had passed a first and had failed a second reading and comprehension exercise. Ss were then asked to write a sentence or two using the pronoun "I" and/or "they", along with the phrase "Passage A" (the exercise they failed) in the second task. The sentences used by Ss were broken into clauses and scored for non-immediacy by two raters, using the entire list of non-immediacy indicators. It was found that the mean non-immediacy score for the sentence(s) about the failure experience was significantly higher than the score for the success experience (non-immediacy score for failure statements was 1.98, for success statements 1.58; t = 1.81; df = 23; p<.05 for one failed test for matched pairs). No data are given on the success of the passing/failing induction.

In another experiment in the series (Mehrabian and Weiner, 1966), Ss indicated the names of a liked and disliked acquaintance and were instructed to write a sentence or two about themselves and the liked person in one task, and about themselves and the disliked person in the second task. Scoring was the same as in the above study. The mean non-immediacy score for sentences about negatively evaluated
acquaintances was significantly higher than for sentences about
tively evaluated acquaintances (1.79 versus 1.08; t = 3.86; df = 34;
p<.001).

Additional support for the immediacy hypothesis has been
obtained by use of similar experimental designs, where the attempt has
been made specifically to limit both the object about which communica-
tion is made and the form of communication: namely, written (Isaac,
1963; Mehrabian, 1964; Mehrabian, 1966a and 1966b; Gottlieb, Weiner,
and Mehrabian, 1967).

At the present stage of development the immediacy hypothesis
stands as an interesting construct in need of further exploration.
Its potential for expanding upon what might be said about the process
of evaluative communication would perhaps be greater were it not for
the limitation imposed on it by an elaborate categorization system.

As the construct exists now, immediacy in communication is
known by categorization of sentence structure into seven existent
categories. These categories limit the "ways of talking" we seek to
measure in conversational exchanges. We have no vehicle to uncover
different "ways of talking", which bear also on the communication of
evaluative judgments. Could we not take the basic assumption under-
lying the immediacy construct and empirically determine the "ways of
talking" individuals employ in referring to people about whom they
have made some evaluative judgment? The above-mentioned premise in
the immediacy hypothesis is that the word patterns used by an indivi-
dual convey information about his psychological state with regard to
the object of his communication, (cf., Osgood, 1957; Gendlin, 1962).
If such is the case, the semantic differential technique, slightly altered, may provide a means by which this "information about the speaker's psychological state" could be measured. Given a sentence or clause and the specification of the object of communication (a person), one would have the basic framework for measurement using a semantic differential scale. The primary difference would be that the subject would not rate his own evaluative disposition toward the person, but would rate the speaker's disposition toward the object given in the communication based upon the information present in that particular bit of communication. It would thus be possible to determine empirically an individual's "ways of talking" about positively or negatively valued people.

It must first be ascertained whether the semantic differential technique can be altered as proposed in the above schema and function validly in its new role. In previous experimentation with the semantic differential, few attempts have been made to have a subject rate the meaningfulness of concepts based on information about the concepts supplied by a second person. Malstrom and French (1963) asked Ss to judge concepts on eight semantic differential scales on the basis of information in the form of supplied ratings on the "good-bad" scale. The experimenters could vary information about the concept with regard to the direction, intensity and congruency of a second person's hypothetical evaluative disposition toward an object. Given this manipulation of information, Malstrom and French found that "... the scale-value of judgments varies as a simple linear function of the absolute scale value of information (1963, p. 451)." Apparently,
there was little interference from the personal meanings of the concepts held by the Ss, when rating concepts with supplied information. This is difficult to assess, however, because we are given no data about profile correlations for ratings by different Ss of the same concept with the same information.

Mehrabian (1967) asked Ss unfamiliar with immediacy/non-immediacy categories to judge pairs of sentences on the evaluative disposition displayed by a second person toward the object of his communication. Seven non-immediacy categories were investigated, e.g., for the order-of-occurrence category, the sentence pairs were "We went to visit Jane and Jack" versus "We went to visit Jack and Jane" were used. According to Mehrabian, the more immediate communication (more positive disposition) about Jack is the second sentence. From each sentence pair, Ss were asked to judge which sentence was more immediate, i.e., given a communication about an object, the name of which was underlined in the sentence, Ss judged which communication displayed a more positive communicator disposition toward the object. Five sentence pairs were used for each immediacy/non-immediacy category.

The results of this study indicated that Ss agreed as to which sentences were more "immediate" for six of the seven categories. For example, for the order-of-occurrence category above, the mean agreement frequency was 0.88 (p<.01) with a z score of 7.31. It is important to note that the judgment of positive communicator disposition was accomplished by contrasting two sentences. Little can be said
as to how communicator disposition might be judged given the sentence in isolation.

In a recent study, I (Alexander, 1971) asked Ss to rate one pair or sentences from each of the seven immediacy/non-immediacy categories used in the Mehrabian (1967) study. For each sentence, Ss rated the evaluative disposition of the speaker toward the underlined word or words in the sentences (see Table 2). The sentence pairs were separated and rated singly on the evaluative, activity and potency dimensions of the semantic differential. The results showed that, for three of the seven sentence pairs, ratings were significantly different on the evaluative (good-bad) dimension in the direction predicted by Mehrabian. More importantly, the results of this experiment provide some support for the assumption that discrimination of evaluative judgments in communication is possible when isolated sentences are rated on selected semantic differential scales. Exactly what word patterns or structural meanings the Ss are discriminating between is certainly open to question. Consider the sentence pair "Bob and I get along" and "Bob and I can get along." Is the ostensible and discriminable difference in the evaluative judgment of Bob that of get versus can get, get along versus can get along, or the absence of can versus the presence of can? Given these data, we simply cannot infer the basis of discrimination. Not much can be said about the role of structural meaning in conveying a speaker's evaluative disposition until we (1) isolate specific structural properties (e.g., specific word patterns) and (2) design experiments to sample the use of those structural properties. Mehrabian's sentences represent an extreme diversity
### Table 2

**Sentence Pairs Included in the Communication Rating Paradigm**

<table>
<thead>
<tr>
<th>Sentence Pair</th>
<th>Sentences</th>
</tr>
</thead>
</table>
| A             | Bob and I get along.  
                | Bob and I can get along.                                                  |
| B             | I'm going to write a letter to Joe.  
                | I have to write a letter to Joe.                                          |
| C             | I got the check from Pete when I went to the office.                      |
|               | When I went to the office, I got the check from Pete.                    |
| D             | Arlene and I play cards.  
                | Arlene plays cards with me.                                               |
| E             | I've seen this clerk before.  
                | I've seen that clerk before.                                              |
| F             | I saw Vincent mowing his lawn.  
                | I saw Vincent.                                                           |
| G             | John and I go fishing regularly.  
                | John and I will go fishing regularly.                                     |
of structural properties. Certainly, using one sentence pair from each of the seven immediacy/non-immediacy categories does not satisfy the above criteria.

Research on the Structural Properties of Sentences

How could structural properties be isolated in an experiment and, given this isolation, would measurement of the cues they provide for evaluative judgments be possible with the semantic differential technique? Illustrative data from research on structural properties are presented below. A paradigm for combining research on structural properties and evaluative communication is also presented.

Johnson (1967) tested the hypothesis that the position a word occupies in a sentence affects the rated meaning of that word. He asked Ss to rate subjects and objects in active and passive sentences on the evaluative, activity and potency dimensions of the semantic differential. He found that subjects in active sentences were seen as more active and potent than objects in active sentences and, furthermore, that subjects of passive sentences were less active and potent than subjects of active sentences. There were no significant differences on the evaluative scale for subjects or objects in either type of sentence.

Polzella and Rohrman (1970) examined the psychological aspects of transitive verbs. They presented 30 Ss lists of 14 verbs; one list was composed of transitive verbs, the other of intransitive verbs. These verbs were matched for meaningfulness (cf. Noble, 1952 and in Chapter 3 below). The verbs were displayed tachistoscopically for four seconds, at two-second intervals. They found that Ss recalled
a mean of 3.6 transitive verbs and 4.1 intransitive verbs (significantly different, p<.05). They hypothesized that transitive verbs have more nouns as associates, since the transitive verb takes a direct object. Therefore, recollection of transitive verbs might be more difficult, given that a great amount of information is associated with the transitive verb.

In the second experiment Polzella and Rohrman (1970) gave Ss the same 14 verbs and asked for associations to them. They found that transitive verbs elicited more nouns than intransitive verbs (7.6 nouns versus 4.1 nouns, p<.05). Transitive verbs also elicited more nouns as associates than adjectives, adverbs or verbs as associates. There was less latency of noun response to transitive as opposed to intransitive verbs (2.09 sec. for transitives, 2.52 sec. for intransitive, p<.05). Thus, Polzella and Rohrman (1970) at least partially supported their hypothesis that nouns appear to be associated with transitive verbs in greater numbers than with intransitive verbs and that this association might be a factor in recalling these verbs.

Fodor and Bever (1965) hypothesized that an "... S's report of the preferred segmentation of a speech stimulus appears to be fairly stable for adult speakers of a language (p. 415)." They were concerned with how a speaker might disassemble a speech segment when listening to a sentence. They assumed that the S would use major syntactic boundaries as the points at which to break speech into separate units. To investigate this, they presented 30 taped sentences with one click at one of six positions equidistant from and on both sides of a major boundary. Twenty-five sentences had one major boundary, five sentences
had two major boundaries. An example of a sentence with one major boundary follows: "That he was happy/was evident from the way he smiled." The chosen boundary is marked. Ss wrote the entire sentence following the presentation and indicated graphically where they heard the click.

Overall, there was an 80 percent error in locating the clicks correctly. It was possible to explain 66 percent of the errors by observing that (1) "errors in locating clicks objectively preceding major breaks followed the objective click position and (2) errors in locating clicks objectively following major breaks preceded the objective click position (ibid., p. 419)." Fodor and Bever concluded that there is some basis for assuming that linguistic units have a "psychological reality." Apparently, when we listen to speech we either impose a structure on that speech or the structure is present already and we "hear" the breaks in it.

Johnson (1965) also investigated the "psychological reality" of linguistic units or phrases in speech. He attempted to test the hypothesis that "... there are word-to-word transitions within sentences where the probability of transitional error is significantly greater than for other transitions (ibid., p. 469)." By transitional error probability he meant the frequency with which a particular recalled word was wrong if the preceding word was correct. If we "hear" phrases and encode them as such in a learning task, the transitional error probability in recall should be greatest at the points between phrases.
Two groups of 28 Ss each learned a series of eight sentences in response to digits numbered 1 to 8 in a paired associate learning task. The digit-sentence pairs were presented on a Lafayette memory drum in a series of 13 trials. Each group learned a different form of sentence, containing either one or two major breaks between phrases, e.g., Group 1 learned sentences of the form . . . "The tall boy/saved the dying woman." , while Group 2 learned sentences of the form . . . "The house/across the street/is burning." The major breaks are marked. Sentences in each group had the same number of words in each phrase.

In sentences with one major break, Johnson (1965) hypothesized that the transition error (TE) probability would be greatest between the third and the fourth word (the break between the noun phrase and the verb). Similarly, in sentences with two major breaks, the TE probability would be greatest between the second and third word (noun phrase and prepositional phrase) and between the fifth and sixth word (prepositional phrase and verb).

The results, supportive of Johnson's hypothesis, are presented in Table 3. The transition member refers to the breaks between words, e.g., transition Number 1 refers to the break between the first and the second word.

### Table 3

TE Probabilities for Each Transition for Each Sentence Form

<table>
<thead>
<tr>
<th>Sentence Type</th>
<th>Transition Number</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Phrase</td>
<td></td>
<td>.108</td>
<td>.049</td>
<td>.120</td>
<td>.070</td>
<td>.072</td>
<td>.020</td>
</tr>
<tr>
<td>3 Phrase</td>
<td></td>
<td>.015</td>
<td>.143</td>
<td>.073</td>
<td>.020</td>
<td>.118</td>
<td>.022</td>
</tr>
</tbody>
</table>

(From Johnson, 1965)
As can be seen in the table, the TE probability is greatest at the breaks between noun phrases and the verb in two phrase sentences, and between the noun phrase, prepositional phrase and verb in three phrase sentences.

Johnson concludes that "... Ss approach language material in terms of pre-integrated units and the units are predictable from the linguistic structure of the material (1965, p. 474)." Thus, Johnson's and Fodor and Bever's results seem mutually supportive of the hypothesized psychological reality of linguistic segments.

Following a similar line, namely, investigation of the psychological reality of sentence structure, Koen, Becker and Young (1969) broadened the focus of their research to include the paragraph. Utilizing paragraphs selected from prose material, they replaced all nouns, verbs, adjectives and adverbs with nonsense words.

Word endings were retained, e.g., -ed, -ly, -s, -ing. Nonsense words also contained the same number of syllables as the original words. Ss were asked to mark off paragraphs, given the phrases with nonsense words. The results indicate a median correlation of .71 between Ss marking paragraphs in English and under nonsense conditions. The authors conclude "... that nonsensizing content words in these passages had little effect on paragraphing decisions and that the dominant cues are formal in nature (ibid., p. 52)." Unfortunately, the authors do not discuss the "dominant cues" in any detail.

In each of the above research studies, structural meaning was explored. To reiterate, structural meaning is that part of the total meaning of a sentence signalled by the pattern or arrangement of
words within a sentence (Fries, 1952). Structural meaning is also reflected in the relationships of words to other words in the sentence (Fillmore, 1968). In Johnson's (1967) study the connotative meanings of subject and object were very different depending on whether the sentence was presented in the active or passive voice. This difference in meaning occurred even though the lexical meaning of the subjects and objects were the same in active and passive voice sentences. Thus, the structural properties of the sentence gave clues to the meaning of words beyond their lexical meaning.

Polzella and Rohrman's (1970) study on transitive-intransitive verbs could be viewed as an examination of the differences between what Chafe (1979) labels (1) state, process, and action verbs and (2) action-process verbs. State verbs (forms of verb "to be") have no nouns in object relation to them while action-process verbs do have nouns in object relations (e.g., She broke the dish.). The results of this study support Chafe's (1970) classification of verbs on the basis of their structural relationships with nouns. In other words, if we know the verb, we also know immediately what relationships nouns in the sentence might have with that verb (e.g., state verbs have fewer nouns associated with them as compared to action-process verbs). This information about the possible relationships of nouns to the verb enables meaningful interpretation of the sentence beyond that provided by the lexical meaning of individual words. Such information about the relationships of nouns to the verb can be referred to as the structural meaning of a sentence.
In examining the psychological reality of phrases, both Johnson's (1965) and Fodor and Bever's (1965) studies are also supportive of Chafe's (1970) classification system. Essentially, both studies are concerned with the question "Do we 'hear' breaks between noun phrases, prepositional phrases, parenthetical phrases, and verbs?" If we assume, along with Chafe, that noun phrases stand in a particular labeled relationship to the verb in a sentence, or that the prepositional phrase is a relational construction between a preposition and a noun phrase (Cook, 1972b), the hypothesis that Ss hear breaks between the phrases follows directly (i.e., Ss "hear" phrases as intact units related to other phrases). It also follows that Ss might hear breaks within the phrases (cf. Johnson, 1965). The important point to note is that these differing phrases contain semantic information which is deciphered with the aid of knowledge of the labeled relations of nouns to the verb (e.g., state, process, action, action-process, experiential and benefactive relations).

Koen, Becker, and Young's (1969) research represents a shift in focus from the individual word or phrase to the paragraph as a whole. Although structural meaning as discussed above (namely, the relations of noun phrases to a verb) may be more obvious with regard to sentences than it is in paragraph recognition, perhaps the notion of structural meaning can be expanded. What factors might be involved in the recognition of a coherent and integrated series of sentences? We could start with our old "grammar school" definition of a paragraph: a series of sentences conveying a single idea. According to Chafe (1970) this single idea, if in a sentence context, would necessarily be
represented by one and only one surface structure. A different idea would mean a different surface structure representation. For example, Chafe maintains that the following sentences, similar as they may seem, in fact represent different ideas: "Harry is a bachelor." and "Harry is an unmarried man." Is it possible that a paragraph is a combination of similar surface structure representations of the same idea? Or perhaps when given the opportunity to speak at length about an idea, speakers choose different surface structures which might be recognizable as a pattern once we impose an appropriate classification scheme.

The main point is that Ss in the above study may have used structural cues in deciding where to partition paragraphs. The authors removed many content or lexical cues by deleting nouns, verbs, adjectives and adverbs. Hence, Ss could not have discriminated paragraphs on the basis of either content cues or structural cues such as stative, action, experiencer, or beneficiary relations of nouns to verbs since content is necessary to identify these verbs. For example, if words in the following sentence were replaced with nonsense words, Ss would not be able to guess the case relation of the nouns to the verb. "She hit him." could become "Hru bxt yad." This sentence could also express an experiencer relation "She felt sad.", a beneficiary relation "She had none.", or a stative relation "She was old." However, there are other structural markers in these paragraphs with nonsense words. Function words, such as determiners, conjunctions, prepositions, auxiliary verbs, relative pronouns, subordinate conjunctions and interjections were retained. These words provide structural meaning (see Fries, 1952, in Ch. 1 above) much as does knowledge of
the case relations of nouns to verbs (see Fillmore, 1968, in Ch. 1 above). Ss may have used function words or patterns of function words in deciding which group of sentences should be marked off as conveying a "single idea". The authors might be able to ascertain which particular function words or word patterns were used by carefully analyzing similarities in their occurrence within the paragraphs.

From the results of this study, we might conclude that Ss are partially able to differentiate among paragraphs, given function words as structural markers along with nonsense words to retain the flow of the sentences. If we assume that paragraphs convey single ideas, more or less, we are then saying that function words as structural markers give us cues to the integration of these ideas. As Fries (1952) maintained, these structural markers in a sentence give cues as to the actor, action, object of the action, etc. Would structural markers also provide cues as to the evaluative disposition of the speaker toward the idea being communicated? Namely, would structural markers provide us with information about how the author of the paragraph felt, on a good-bad dimension, toward whatever or whomever he described?

If the Ss in the above study had been asked to rate, on a good-bad dimension, the author's feelings toward the object of his communication, I presume that they would have little difficulty doing so. Following Osgood et al. (1957), I assume that the evaluative (good-bad) dimension is a basic semantic continuum which underlies much of our communication about people, objects, ideas, etc. Put succinctly, I suspect that structural markers such as function words
provide cues from which a speaker's evaluative judgments in communication can be determined. The evaluative dimension is quite likely of a different order than semantic dimensions such as actor, action, object of action, etc. I shall explore this in more detail later.

In summary, the basic notion of evaluative judgments about individual concepts (Osgood et al., 1957) and objects of communication in the "immediacy" construct (Weiner and Mehrabian, 1968) has been discussed. Research on the structural meaning of different sentence structures was presented. Results of the Koen, Becker and Young (1969) study imply a "psychological reality," imputed by Ss, to the paragraph. One possible explanation of these results is that the paragraph conveys a single idea, or a set of related ideas, along with structural patterns in the sentences within the paragraph. Ss may utilize these structural patterns to mark off paragraphs. Weiner and Mehrabian's (1968) research suggests that Ss can determine a speaker's evaluation disposition toward the object of communication in single sentences. By combining aspects of the above research, the contribution of structural signals in evaluative judgments could be examined. Namely, Ss could be asked to determine a speaker's evaluative disposition toward another person, given a paragraph about the person where content words have been replaced by nonsense words. This procedure is presented in Chapter Three.
CHAPTER THREE
EXPERIMENTAL procedure AND RESULTS

In this chapter, the following general hypothesis is investigated: there will be a significant and positive correlation between Ss' ratings of the evaluative disposition of a speaker in paragraphs with full content and in paragraphs with content words, pronouns and/or prepositions replaced by nonsense words. To test this hypothesis, words which give obvious content cues about a speaker's evaluative disposition in their lexical meaning are removed from a paragraph and replaced by nonsense words. Words which provide these content cues include nouns, verbs, adjectives and adverbs (roughly corresponding to Fries' Form Classes 1-4). The remaining pronouns and function words (particularly prepositions) gain meaning from the sentence context. Pronouns and prepositions were chosen as variables because Fries (1952) assumes that knowledge of Form Classes is crucial in determining the structural meaning of sentences. Pronouns are included in Form Class 1. Prepositions, as function words, serve as structural markers which delineate (1) form classes and (2) the relations of form classes to other form classes. Other function words include conjunctions, intensifiers, relative pronouns, interjections, subordinate conjunctions and auxiliary verbs. Function words do not have lexical meaning out of the context of a sentence. In determining the
evaluative disposition of a speaker, the contribution made by our knowledge of pronouns and function words as separate items can be determined by alternately retaining or replacing them with nonsense words.

Method

Ss were asked to rate, on a seven point good-bad scale, the evaluative disposition of a speaker toward the person he described in a paragraph. The specific directions were as follows: "... read the entire paragraph and rate, on the scales described below, how you think the author of the paragraph felt about the person he described."

Ss rated five different groups of paragraphs. Any individual S rated only one group of paragraphs. The five groups of paragraphs are listed below, along with the number of Ss rating each group.

- **Criterion Group (N=10):** content words, function words and pronouns retained
- **Content Group (N=49):** content words replaced by nonsense words; function words and pronouns retained
- **Pronoun Group (N=17):** content words and pronouns replaced by nonsense words; function words retained
- **Preposition Group (N=20):** content words and prepositions replaced by nonsense words; other function words and pronouns retained.
- **Pronoun-Preposition Group (N=14):** content words, prepositions and pronouns replaced by nonsense words; other function words retained.

A sixth group, the Original Group, refers to the ratings of the individual authors of the separate paragraphs.

Ss were also asked for a list of the cues they utilized in making evaluative judgments.

The complete set of instructions as well as the paragraphs in the different groups are included in Appendices A-E.
Paragraphs

The paragraph was chosen as the linguistic unit of study for several reasons. When all content cues are missing, it was assumed that making an evaluative judgment about a person might require more structural signals than are available in a phrase or single sentence. Secondly, patterns of structural signals used in evaluative descriptions of people might be more obvious in a paragraph as opposed to a single sentence.

Natural, as opposed to contrived, language was used in the paragraphs. That is, the paragraphs were written by Ss who described liked and disliked acquaintances using everyday language, as they might use when talking to a friend. It was assumed that this method of collecting paragraphs would produce a better sampling of possible structural patterns.

To develop the paragraphs, ten Ss were asked to write a short paragraph each about a liked and disliked acquaintance (see Appendix F). The same ten Ss rated their descriptions of these on acquaintances good-bad, active-passive, and strong-weak scales. These were seven point scales, the standard semantic differential format (a scale rating of one indicates that an S feels extremely good about the person; a scale rating of seven indicates that an S feels extremely bad toward the person).

The paragraphs were submitted to a computer program developed by Young (1970) which assigned grammatical classes to the words based on Fries' (1952) classification scheme. With slight alteration, Young's (1970) program also functioned to (1) remove nouns, verbs (except forms
of the verb "to be"), adjectives and adverbs and (2) replace these words with nonsense words of the same length. Pronouns were retained since it was assumed that, like function words, they gain their meaning from the sentence context. A rule was added to the program to maintain word affixes, specifically, words three to five letters in length retained only the last letter and words with more than five letters retained the last three letters. Nonsense syllables, varying in length from two to fourteen letters, were developed from Noble's (1952) list of consonant-vowel-consonant (CVC) triads. The CVC triads selected ranged from 1.53 to 1.92 in scaled meaningfulness (a 1-5 point scale, low to high in meaningfulness). A CVC triad was assumed to be (or interpreted as) very meaningful if it produced a large number of word associations.

An example of an original sentence and the same sentence with content words replaced by nonsense words follows:

He always needs to feel that he is in control of a situation.
He always sufos to veml that he is in furorol of a tazkoyion.

Thus, the computer developed the paragraphs to be rated in the Content Group (content words replaced by nonsense words; function words and pronouns retained). The substitution of nonsense words for prepositions and pronouns in the other three groups of paragraphs was done by hand, randomly drawing nonsense words of the appropriate length from a bowl.

Subjects

The ten Ss who developed the basic sets of paragraphs consisted of five male and five female, caucasian graduate students in Social Word at the University of Hawaii.
Ss rating the five groups of paragraphs were male and female undergraduates in Abnormal Psychology and Personality Theory courses at The Ohio State University. Ss rated the paragraphs on the good-bad scales only.

Results

Pearson product moment correlations were used to compare Ss' median ratings on the good-bad scale of all groups for the 20 paragraphs. The median was chosen as a less biased measure of central tendency than the mean, given the small number of Ss in the various groups. Comparisons were not made on the active-passive and strong-weak scales because of incomplete data.

As shown in Table 4, the correlations of the Original Group (original authors' ratings on the good-bad scale) with the medians on the good-bad scale of the Criterion Group (content words, function words and pronouns retained), the Content Group (content words replaced; function words and pronouns remain), the Pronoun Group (content words and pronouns replaced; function words remain), and the Preposition Group (content words and prepositions replaced; other function words and pronouns remain) are all positive and significant. Only the correlation of the Original Group and the Pronoun-preposition Group is non-significant (although it is positive). Chart 1 shows the individual medians of each paragraph for every group.
TABLE 4

CORRELATION MATRIX OF ORIGINAL RATINGS WITH MEDIANS OF CRITERION, CONTENT, PRONOUN, PREPOSITION AND PRONOUN-PREPOSITION GROUPS ON THE GOOD-BAD SCALE

<table>
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<tr>
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<th>Preposition</th>
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<td></td>
<td></td>
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<td></td>
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<tr>
<td>2</td>
<td>.93**</td>
<td>1.0</td>
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<td></td>
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<td>3</td>
<td>.71**</td>
<td>.80**</td>
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<td>4</td>
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<td>.47*</td>
<td>.72**</td>
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<td>.66**</td>
<td>.86**</td>
<td>.61**</td>
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<tr>
<td>6</td>
<td>.25</td>
<td>.34</td>
<td>.33</td>
<td>.41*</td>
<td>.50*</td>
<td>1.0</td>
</tr>
</tbody>
</table>

* p<.05 ** p<.01 df = 19

With the median as the measure of central tendency, Q-values were determined for each paragraph in each group (the Q or quartile value is the range of ratings from the 25th to the 75th percentile around the median, i.e., 50% of the Ss fall within this rating spread). The following mean Q-values resulted: Criterion Group, 1.5; Content Group 2.0; Pronoun Group 2.1; Preposition Group, 2.5; and Pronoun-preposition Group, 2.5. As shown in Table 5, the Q-values of the Criterion Group are significantly different from and lower than those of all other groups. We might expect this since the Criterion Group rated the full content version of the paragraphs. It is interesting to note, however, that the differences in Q-values among the Content, Pronoun, and Preposition Groups are not significant. Chart 2 shows the Q-values for each paragraph in every group.
Chart 1

Medians of Individual Paragraph Ratings on the Good-Bad Scale
Criteron, Content, Pronoun, Preposition and Pronoun-Preposition
GOOD-BAD SCALE FOR THE NOUN-PREPOSITION GROUPS

INDIVIDUAL PARAGRAPHS
**TABLE 5**

**t TESTS FOR DIFFERENCE IN Q-VALUES BETWEEN CRITERION, CONTENT, PRONOUN, PREPOSITION, AND PRONOUN-PREPOSITION GROUPS**

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<td>&lt;.05</td>
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<td>&lt;.01</td>
</tr>
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<td>&lt;.01</td>
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<td></td>
<td></td>
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<tr>
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</table>
CHART 2
Q-VALUES OF INDIVIDUAL PARAGRAPHS IN CRITERION, CONTENT, PRONOUN, PREPOSITION AND PRONOUN-PREPOSITION GROUPS
The ratings of each S in every group were also correlated with the original ratings. In the Content Group, 41 of 49 Ss' ratings were significantly correlated with the Original Group. In the Pronoun Group 6 of 17 Ss correlated significantly with the Original Group; in the Preposition Group, 4 of 20 Ss; and in the Pronoun-preposition Group, 2 of 14 Ss.

The number of individual paragraphs in each group which were rated in the direction of the original ratings was also examined. If we accept 4 as a neutral rating, any median below 4 would indicate that S believed a positive speaker disposition to have been conveyed, and a median above 4, a negative speaker disposition. For the Content Group 16 of 20 paragraphs were rated in the direction of the Original Group; for the Preposition Group, 16 of 20 paragraphs; and for the Pronoun-preposition Group, 10 of 20 paragraphs.

Table 6 indicates the individual medians of every paragraph in each group and summarizes paragraphs rated consistent or inconsistent with the Criterion Group. Table 7 lists the Q-Values for every paragraph in each group.
## TABLE 6

**ORIGINAL RATINGS AND MEDIANs OF THE CRITERION, CONTENT, PRONOUN PREPOSITION, AND PRONOUN-PREPOSITION GROUPS ON THE GOOD-BAD SCALE FOR THE INDIVIDUAL PARAGRAPHS.**

**SUMMARY OF PARAGRAPHS RATED CONSISTENT OR INCONSISTENT WITH THE CRITERION GROUP FOR THE CONTENT, PRONOUN, PREPOSITION AND PRONOUN-PREPOSITION GROUP**

### INDIVIDUAL PARAGRAPHS

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TABLE 7

Q-VALUES OF INDIVIDUAL PARAGRAPHS
IN THE CRITERION, CONTENT, PRONOUN, PREPOSITION
AND PRONOUN-PREPOSITION GROUPS ON THE GOOD-BAD SCALE

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CHAPTER FOUR
DISCUSSION

The results in Chapter Three indicate that significant and positive relationships exist between evaluative (good-bad) ratings of the full content paragraphs and ratings of the same paragraphs with content removed (leaving function words, pronouns, word length and word order). According to Cook (1972a), we understand any linguistic sign on the basis of its meaning, form, and distribution (LS = MFD). Meaning is known through the lexicon or content; form refers to the length of the word (syllables) and distribution to the position of the word in a sentence. Thus, by replacing content words with nonsense words in the paragraphs in this study, meaning has been removed while form and distribution remain.

With content (meaning) removed, Ss rating the paragraphs are forced to use other signals to decide about the direction of the speaker's evaluative communication, i.e., his good or bad disposition toward the person described in the paragraph. The available cues include the form and distribution of nonsense words, function words and pronouns. Examination of the similarities and/or differences between paragraphs which Ss rated as conveying a strong evaluative disposition (very good or very bad) provides information as to which cues Ss utilized in their decisions. The most prominent cues include pronouns, intensifiers, prepositions, negatives and idioms.
Consider the following two paragraphs from the Content group (nonsense words replaced content words; function words and pronouns retained):

#3 She is one of the most homsmy, tihwiynzine faumles I ever ceve voposs. What rofoers me most is that she udd me into a yagfahlejhip of tilks and then cekz grikelage of me when I was ralming really ufw and wabded a szend. When I fiplojted her, she xat vad and jixyed ved and vekhuymafble so we could never basmive our viwlygaces. She swt nuzaif in a keff and our kext raltet ser was enouogh to fasme my masfles, just by being in the same jevm. She's a qaroth, mipl, dehqipyoive, and mafing salmo and I was kiyker enough to vas fikght by her.

#16 He is one of the tulroest, most nolknly kibpifeive qivple I jatw. He's kiwest with me and qudsts me with his furlongs and monrs, as I do him. He's one of the few pohple I pafw that I napot tuwzudlely. And he won't set me koyh him around or doqrezpate him ether. Perhaps what I parg riit is that I am always veynohming and salmoing with him. I never wuml sujd; zerd ponbings and tod polntngs, at least I vecw I am pafoe and safte and can lutoe that with him. And he'll totre tivk.

So rated paragraph #3 as one conveying a negative speaker disposition (median of 5.9) and rated paragraph #16 as one conveying a positive speaker disposition (median of 2.1). The Original group (the authors of the paragraphs) rated them 6.0 and 1.0 respectively. Both paragraphs are introduced with the phrase "x is the one of the. . . most. . ." and both have a relatively similar number of pronouns (#3 has 18; #16 has 22). The relations of the pronouns are very different, however.

Compare these phrases from the paragraphs:

#3 . . . we could never xxx our xxx.
. . . our xxxxxx was enough to xxx my xxx,

#16 . . . I am always xxx and xxx with him.
I never xxxxxx; . . .
. . . at least I xxx I am xxx . . . and can xxx that with him.
The juxtaposition of pronouns could have given Ss definite cues as to the evaluative disposition of the speaker toward the person being described by allowing them to fill in content words. When these cues were not available, Ss were not able to determine the evaluative disposition of the speaker. Consider paragraph #3 with pronouns retained and with pronouns replaced by nonsense words.

#3 She is one of the most hosmy, tihwiyzinive faum-les I ever ceve voposs. What rofoers me most is that she udd me into a yagfahlejhip of tilks and then cekz grikelage of me when I was ralming really ufw and wabded a sazend. When I fiplojtted her, she got xat and jixyed ved and vekhuymafble so we could never basmlve our vivlyugaces. She suwt muzaii in a keff and our kext ralterter was enough to fasme my masfles, just by being in the same jevm. She's a qaroth, mipl, dehqipyoive, and mafing salmo and I was kiyker enough to vst fikght by her.

#3 Rse is one of the most hosmy, tihwiyzinive faum-les M ever ceve voposs. What rofoers xs most is that poe udd ba into a ygafahlejhip of tilks and then cekz grikelage of nr when L was ralming really ufw and wabded a sazend. When R fiplojtted gir ire xat vad and jixyed ved and vekhuymafble so rg could never basmlve gir vivlyugaces. Tde suwt muzaii in a keff and sor kext ralterter was enough to fasme wa masfles, just by being in the same jevm. Boe's a qaroth, mipl, dehqipyoive, and making salmo and S was kiyker enough to vst fikght by wer.

While the median rating of the Content group was 5.9, the median rating of the Pronoun group (nonsense words replaced pronouns and content; function words retained) was 2.8. In the absence of the pronouns, perhaps the phrase "... one of the most ..." became the dominant cue and elicited a positive rating.
Another example of the importance of pronouns as cues utilized in making judgements about evaluative communication is seen in paragraph #4.

Compare the Content and Pronoun versions of this paragraph.

**#4**

Well, she's just the miropost nanof--raxm, lahzebdoous, always grony to rukten and tamre. She's got a really well pifon zed gezd; she can dofk cibngs out and cie them. She's really sorming to quidk at herself nopiftly and mebk for ronasive rilnges. *If she molps you, she really geks you diwy it*. I hej I could always poilm on her for doving.

Well, dme's just the miropost nanof--raxm, lahzebdoous, always grony to rukten and tamre. Qae's tut a really well pifon zed gezd; lxe can dofk cibngs out and cie them. Fre's really sorming to quidk at spemelf nopiftly and mebk for ronasive rilnges. *If gre molps hru, jle really geks mou diwy nl*. T hej R could always poilm on tur for doving.

The median rating of the Content group was 2.6 (with a Q-value of 1.8), while the Pronoun group rating was spurious (median of 4.7, Q-value of 5.1). The Criterion group rating was 1.3. The underlined sentences illustrate contexts where the signalling power of pronouns is obvious. With the pronouns replaced by nonsense words, it is apparently very difficult to develop an English sentence match. In the Content group, on the other hand, Ss might "fill in the blanks" between pronouns to determine the evaluative disposition of the speaker.

The correlations of the median ratings of paragraphs with and without pronouns also demonstrate their importance as structural markers. The correlation of the Criterion group with the Content Group was .80. When pronouns were replaced by nonsense words, the correlation
with the Criterion group dropped to .47. Although the correlation is still significant, the shift is dramatic.

Intensifiers

The systematic replacement of pronouns, prepositions and the combination of these two with nonsense words points to other cues from which decisions can be made about the evaluative disposition of the speaker. Consider paragraph #10 as it appeared in the Content group and the Pronoun-preposition group (nonsense words replaced content, pronouns and prepositions; other function words retained). Intensifiers and a possible key phrase are underlined.

#10  I tosp this qivkov because he is monardly, bavest, zilpogmuent and extremely zurnehxaing. Even though we often hoqw bijngs fexmecitly, I garme that he at least norrpts my garpt of bezw. I also tapg his sofopess and alinsty at all hanfs. There is no bujade. With this pefleb I am tuwe to be cazjomrely zudest without the tojr that anything I kyy will be nujliygepisted and luqsed on to others.

#10  C tosp this qivkov because je is monardly, bavest, zilpogmuent and extremely zurnehxaing. Even though em often hoqw bijngs feximebotly, F garme that ru ti least norrpts bi garpt fa bezw. H also tapg fos sofopess and alinsty mi all hanfs. There is no bujade. Maqh this pefleb K am tuwe to be cazjomrely zudest jozgout the tojr that anything P kyy will be nuliygepisted and luqsed bo 1a others.

The Content group rating of this paragraph was spurious (Criterion group median of 1.2, Q-value of 0.9; Content group median of 4.1, Q-value of 2.9). This neutral rating may have resulted from a mixture of cues from which differing evaluative judgments could be made.

Cues from which negative judgments might be made could come from the word no and the phrase "... anything I xxx will be xxx and xxx on to others." Cues which could produce judgments about the positive disposition of a speaker might be the intensifier extremely along
with those in the phrase "Even though we often xxx xxx, I xxx that he at least ... ." When pronouns and prepositions were replaced with nonsense words, the Pronoun-preposition group rated the paragraph in the direction of the original authors (median of 2.5, Q-value of 2.8). Apparently these particular intensifiers, used in the above context, provided cues which led to a rating of positive speaker disposition. These cues may have become more prominent when the prepositions in the phrase "on to others" were replaced by nonsense words.

#11 represents a similar situation. Again, compare the paragraph as it appeared in the Content group as opposed to the Pronoun-preposition group. Intensifiers and possible key phrases are underlined.

#11 He always sufos to veml that he is in furorol of a tazkoyion. There are always so many dwtajvedikries between what he buvs and what he does that it's zalfing jidd to fazleve what he wozs soutore. He's so mopbirive all the zace that it really is not much jzn amoming to him. He cannot zeme much zostibism and usually vonzupfaqzes these nopifnts vibly.

#11 Ga always sufos to veml that fo is lp furorol ar a tazkoyion. There are always so many dwtajvedikries kivgeen what ro buvs and what ap does that zl's azifing jidd to fazleve what ol wozs soutore. Am's so mopbirive all the zace that ce really is not much jzn amoming sa bom. Q1 cannot zeme much zostibism and usually vonzupfaqzes these nopifnts vibly.

Although the Criterion group gave this paragraph a neutral rating (median of 4.2, Q-value of 1.7), the Content, Pronoun, and Preposition groups rated it correctly as one conveying a negative speaker disposition (medians of 5.7, 5.8 and 5.3, Q-values of 1.6, 1.1 and 2.0, respectively). Most likely, the phrases ". . . between what he xxx and what he xxx . . . ", ". . . it really is not much xxx xxx to him . . . " and "He cannot . . . " contributed to the judgments of negative disposition.
When both pronouns and prepositions were replaced by nonsense words, the above phrases were altered (particularly the preposition *between* and the obviousness of the pronoun juxtaposition in the phrase "... it really is not much xxx xxx to him."). The Pronoun-preposition group produced a median rating of 3.7 (with a Q-value of 1.8). Apparently these intensifiers (always, really, usually) provide cues which produce more judgments of a positive speaker disposition.

Paragraphs with few or no intensifiers were typically rated as conveying a negative speaker disposition. Consider the following paragraphs from the Preposition group, correctly rated as conveying negative speaker disposition by all groups:

**#2**
She is xamm, dogh a wutded, soutken qurk. Lahs are tilknse, ralnk rlopered. She basms nioh a cuwlyt pribomity; she fasms gisblisy, masfing neither deqnt nor safmt. Her zlontics are those gr her tironds and pibers; she is vekhuymfaely lahzeb-doted. She hifsazninds herself to be a nemtim, an sorgnal nanofing na orsf, miropling sobibity. She gorss zolh a huvs. Median = 5.6. Q = 2.3.

**#12**
She was an basmr tasmn who had qivkovped an bexy tofurism that I fordd to sihr sipmefsed. She was tuilroess b1 the safmt vl being ciye, dehgiysyive, rihcefmhuheate. I tirod her itrmnd was an grikellc, and while I'm vume oims must have been a haxd dahe, it cuge me tirgy that she would jice it vet li others. She vebseqnted me because I coht befmpess and muqk and sorgg dl her limkpnce. She was iht, too, and her porss was as fuqppy as her purnoach ja muwe. Median = 5.0. Q = 2.2.

**#15**
He is sobifant, kiqvucyoing and nofyugdeted. He must be quzced to njten vo any ponoon kiqquding teym his frm and then will liyr a gepdge. He is tulish and fdukquzisted 1l other manofe's lestiems. He was no parget zer other nopife's jughts or aprnacy. Median = 5.0. Q = 2.0.
The few intensifiers are underlined. This lack of intensifiers might indicate low intensity in the speaker's feelings about the person he described. For an S, low intensity in feeling could then be interpreted as indicative of a "blah" or negative speaker disposition.

Prepositions

Prepositions appear to be of less importance than pronouns with regard to providing cues from which judgments about evaluative disposition of a speaker can be made. Evidence for this assumption is seen in the correlation of groups with prepositions retained and groups with prepositions replaced by nonsense words. For example, the correlation of the Criterion group with the Content group is .80. When prepositions were replaced by nonsense words, the correlation with the Criterion group only drops to .66 (as compared to a correlation of .47 when pronouns were replaced). Similarly, the correlation of the Content group with the Preposition group is .86 as compared to the correlation of the Content group with the Pronoun group, .72. There were also no significant differences in the mean Q-values for the Content, Pronoun, and Preposition groups. Thus, while replacing prepositions with nonsense words did produce more error in judgments about evaluative communication, the error was not as substantial as that produced by the replacement of pronouns with nonsense words.
Prepositional phrases modify the central noun in a noun phrase, the verb or the entire predication. They may also fill slots such as the indirect object with the prepositions to or for. Thus, they answer such key questions as when, where (e.g., with whom), in what manner, to whom, for whom, etc. For example, in paragraph #16 (judged as conveying a positive speaker disposition by all groups) we see the sentence "... I am always xxx and xxx with him," and in paragraph #4 "I xxx I could always xxx on her ...". The importance of prepositions is equally obvious in paragraphs judged as conveying a negative speaker disposition, e.g., in paragraph #10 we have "... anything I xxx will be xxx and xxx on to others."

Negatives

The use of negatives such as no, not, never and contractions (won't, doesn't) contributed to evaluative ratings in diverse ways. The verb can't was the only consistent negative indicator (see paragraphs #7 and #18 below).

#7  L can't perld bim. Ta's a wudl quasad tf belgt. P naw mam po a sorming jowt wiyk and G rlnght ned befilt when ko zind "rolnare yunple molpt to be bohloztzed". Or polmt to be cajjomrzde.

#18  L can't sopq ro. Fi hixses yo def. S don't piwl befpy for cem tufeore because la's really tuwzudlive and mefms what pl's fempg. Vl is von- zupfqive and shos los zile, vonzupfaqng nanor ra poqt myuple. N'r very ruzwihzayble when W'm boftund fam, tohnly because T zurl tapaless. Tl's not hiqn or zolning to xammage. Ka just mopbs to eje gau and zusk ifu ydgh gls pipy.

Compare "I can't xxx it..." (negative rating) with "And he won't xxx you xxx him around." (positive rating). Or consider "There is no xxx," (positive rating) with "He xxx no xxx for other xxx xxx ..." (negative
rating). Both the contractions and the negative no depend on the sentence context for meaning.

Idioms

The use of idioms contributed to judgments about the evaluative disposition of a speaker in only two paragraphs. In paragraph #9, we see "... one who's there when the xxx are down." The only content word here is chips and this is easily supplied by most English speakers. Similarly, in paragraph #12, we have "... it xxx me xxx that she would xxx it out on others." The speaker's disposition was rated correctly in these paragraphs (good and bad, respectively) even when pronouns and prepositions were replaced by nonsense words.

In summary, examination of the individual paragraphs led to the conclusion that (1) the juxtaposition of pronouns, (2) the use of intensifiers in a sentence context and (3) prepositional phrases provide cues which Ss may use in decisions about the evaluative disposition of the speaker toward the person described. The use of idioms and negatives were seen as less important in this respect.

Sentence Matching

About half of the Ss reported which cues or methods they utilized in making their ratings. One third of this group mentioned that they attempted to match the nonsense words with real words. This approach to comprehending the meaning of sentences is very similar to that espoused by Halle and Stevens (1964). The basic postulate in their "analysis-by-synthesis" model is that we understand a sentence by constructing an internal sentence to match the one we hear. This internal sentence matching does not occur in a random manner. As Thorne (1966)
aptly remarks, it would take a computer several million years to produce a match of a 20 word sentence at random. Halle and Stevens assume that understanding a sentence involves knowledge of linguistic structure. They are not specific with regard to which particular structures are used, however. It seems likely that, as speakers of English, we assume the speech we hear will be patterned as it has always been, namely, with cues specifying actor, action, object of the action, time, place, etc. In the analysis-by-synthesis model, rough preliminary analysis might be made at each stage in comprehension. For example, the first stage of recognition might be the separation of the speech into actor-action axes. There is evidence for this in the work of Johnson (1965, see Chapter 2).

Rather than developing an internal sentence to match exactly the speech we hear, it would seem more likely that the above mentioned categories are used to comprehend the sentences. The argument for Halle and Stevens analysis-by-synthesis model is more compelling for written communication. With written material, Ss can observe cues such as the structural markers in sentences for longer periods of time. Hence, Ss may very well "fill in the blanks" by replacing nonsense words with real words, thus constructing the complete "internal sentence" which Halle and Stevens posit.

The Evaluative Dimension

Given the minimal cues in the above sample paragraphs, the ease with which Ss in this study were able to rate a speaker's evaluative disposition toward another person in the direction of the original speaker points to the obviousness of the evaluative dimension.
Apparently, the use of the evaluative dimension is readily attributable to the identifiable in written speech segments describing other people. Osgood et al. (1957) assumed that the evaluative dimension, as one of three experiential continua "... will turn out to be reflections (in language) of the sensory differentiation made possible by the human nervous system (p. 31)." A concept (word, person, event, object, etc.) is meaningful to us and to others on the basis of shared lexical meaning and individual good-bad, active-passive and strong-weak dispositions toward that concept. If an individual in fact construes his world at least partially on the basis of these three dimensions, we might hypothesize that very likely he will assume others in his culture do likewise. Thus, in attempting to understand another person's communication, he may very well utilize the evaluative dimension because he assumes a speaker is using it. The individual need not be aware of, in the sense of continually labeling the dimensions which contribute to his understanding of a message. This assumption process may be covert. Nevertheless, by virtue of his being a speaker of English or perhaps just by his class membership as a human being, the individual organizes and categorizes messages along certain dimensions. And these dimensions can be made obvious by asking Ss to utilize them when rating messages in paragraphs. As Fillmore (1968) maintains concerning semantically relevant syntactic relations, these...

... case notions comprise a set of universal, presumably innate concepts which identify certain types of judgments human beings are capable of making about the events that are going on around them, judgments about such matters as who did it, who it happened to, and what got changed (p. 24).
Similarly, Chafe (1970) argues that "... the total human conceptual universe is dichotomized initially into two major areas. One, the area of the verb, embraces states (conditions, qualities) and events; the other, the area of the noun, embraces things (p. 96)."

In the act of comprehending a communication, then, we may assume (1) that an individual makes judgments in a limited number of areas (actor, action, evaluative disposition, etc.) and (2) that he can do this by virtue of his assumption (possibly covert) that the speaker to whom he is listening is doing likewise, i.e., that the speaker is not from a different culture, is not using a different language and word patterns, and does not possess a totally different perspective on the world.

Consider the typical situation in psychotherapy, "... an encounter between persons in which one or more participants are inferred to be acting so as to elicit in--or through--one or more other persons a change in state (Pepinsky and Patton, 1971, p. 4)." In the accomplishment of this procedure, language behavior occurs between therapist and client. As Lennard and Bernstein (1960) maintain, part of this language behavior may be directed towards establishing roles within the therapist-patient social system. By roles, they mean the behaviors therapist and patient come to expect of one another. The notion of role can be usefully expanded, however, as seen in Pepinsky's (1972) discussion of Natanson's (1970) definition of role; namely the "... idea that we form of something or someone, including ourselves (Pepinsky, 1972, p. 11)." As Natanson (1970) describes it, a role is identified by "grasping... it as a set of perspectives (p. 34)."
Thus, roles in psychotherapy may be conceived of as the ideas and perspectives therapist and client hold concerning what is to occur; how it should occur, when it should occur, why it should occur, etc.

Typically, therapist and client do not share the same set of perspectives about what is to occur at the beginning of psychotherapy. Observers of the initial phase might label it a definition process of sorts. Therapist and client engage in a process of information exchange where one speaks and the other responds, apparently as the result of selective attention to some aspect of what was said (Pepinsky, 1972). How might the client begin to understand what the therapist is saying? If we assume that the abovementioned semantic dimensions are used by Ss in this study in comprehending the meaning of speech segments, we could say that a client would behave similarly. Namely, he would "make sense of" the therapist's speech by construing it along actor, action, object of action, evaluative, active, potent and other semantic dimensions. To reiterate, such information is available not only in the content of the therapist's sentences but also in their structure.

In attributing these dimensions (particularly the evaluative) to messages in the therapist's speech, the client may experience a form of culture shock. As Pepinsky notes, "Any information exchange between persons . . . may be identified as cross-cultural . . . when information pertaining to the definition of reality and provided by one party is somehow questioned or denied by information made available by another (1972, p. 15)." For example, if the client attributes typical use of the evaluative dimension to a Rogerian therapist, the
A client may very well misunderstand the therapist's messages. This misunderstanding will exist until the client realizes that this particular therapist may suspend his use of the evaluative dimensions within the therapeutic hour. The client might also come to share the therapist's suspension of evaluative judgments, at which point a Rogerian therapist would maintain that some progress had been made.

The point to be made here is that people use the evaluative dimension in comprehending messages from other people, and also attribute the use of the same dimension to others. Most of the time there is no problem with this attribution process, for as we have seen, the evaluative dimension is widely used.

We have also seen that people are able to assess the evaluative import of communication by utilizing the structural signals in sentences. These cues convey information in addition to the content words in a sentence.

In conclusion, the evaluative dimension seems to be more broadly based than other semantic dimensions such as agent, experiencer, stative, or benefactive (see Fillmore, 1968). Indeed, many different structural cues convey evaluative judgments (e.g., the juxtaposition of pronouns, prepositions and intensifiers). Thus, evaluative judgments, as ideas we wish to communicate, exist as deep semantic structures which are transformed to surface structures much like other semantic features (e.g., agent, experiencer, benefactive, etc.) The ease with which Ss are able to grasp the evaluative aspect in written communication has been demonstrated above. Perhaps we could conclude that our use of the evaluative dimension is basic to our comprehension of linguistic material.
APPENDIX A

PARAGRAPH INFORMATION SURVEY

In each of the following paragraphs, a person is being described. Please read the entire paragraph and rate, on the scales described below, how you think the author of the paragraph felt about the person he described. For example, did the author feel this was a good person or a bad person, a strong or weak person, an active or passive person.

Please rate all three dimensions by placing an "X" at the appropriate place on the scales.

Example: good X:__:__:__:__:__:__:bad

On a good-bad dimension, this rating would indicate you thought that the author felt this was an "extremely" good person.

Similarly, the following rating would indicate feelings which could be described as "moderately" good:

good ___:X:__:__:__:__:__:bad

And this rating would indicate feelings which could be described as "slightly" good:

good ___:__:X:__:__:__:__:bad.

A neutral feeling would be indicated by a center scale mark:

good ___:__:__:X:__:__:__:bad

Similar marks toward the bad pole would indicate feelings which could be described as "slightly", "moderately", and "extremely" bad.

The dimensions strong-weak and active-passive are rated in the same way. They indicate whether you think the author felt this was a strong or weak person and an active or passive person.

The last page is reserved for comments you may have as to the cues you used to determine the author's feelings. Any remarks will be greatly appreciated.

Thank you for your cooperation!
I really like this person because he is serious, but very warm at the same time, and able to be spontaneous and witty. He is the kind of person who lets you reach out to him if you choose, but doesn't get "heavy" in the process. He is able to like some people and dislike others, which makes me feel that being a friend of his involved a choice on his part, not a global non-committal to mankind. That makes me feel good.

She is thin, with a corded, chicken neck. Eyes are intense, black martyred. She walks with a stalky intensity; she walks furiously, looking neither left nor right. Her politics are those of her friends and lovers; she is passionately uncommitted. She understands herself to be a victim, an eternal offering to uncaring fates, uncaring humanity. She hates with a hiss.

She is one of the most angry, manipulative females I ever come across. What bothers me most is that she led me into a relationship of sorts and then took advantage of me when I was feeling really low and needed a friend. When I confronted her, she got mad and stayed mad and inaccessible so we could never resolve our differences. She left Hawaii in a huff and our last encounter was enough to raise my hackles, just by being in the same room. She's a smooth, evil, destructive, and hating person and I was sucker enough to get caught by her.

Well, she's just the greatest person--warm, spontaneous, always ready to listen and share. She's got a really well organized mind; she can pick things out and use them. She's really willing to look at herself honestly and work for positive changes. If she likes you, she really let you know it. I feel I could always count on her for caring.
Alexander

This guy is very defensive. He hardly ever expresses his real feelings, which I think are fear of all people. He comes across as a smooth, popular, know-it-all. He dominates any group with his own storytelling, playing up his own importance a lot. If anyone else is talking he either makes wisecracks, starts an argument or starts a separate conversation with someone else. He can be a very generous person but there is frequently a tone of showing off about it.

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She's intelligent, successful in her career and constantly seeking out new knowledge. She's fun to be with, quick witted, responsive, warm, and given to easy, spontaneous laughter. She is flexible but well organized and seems to get much more accomplished than most people. She always seems interested in hearing about your triumphs or defeats. She sometimes responds in such a way as to help you sort out your feelings and thoughts.

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I can't stand him. He's a real bastard at heart. I saw him in a meeting last week and I thought I'd vomit when he said "welfare people ought to be sterilized". He ought to be sterilized.

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He's short, funny, fun to be with and has a good mind. Whether I was feeling happy or sad, I'd always be glad to see him because he had a way of making you glad you had gotten out of bed that morning. He was also very sexy and I used to wonder how secure his wife felt when other women were around. Maybe the fact that we were both born under the same sign made our attraction to each other a natural one. In any event, our conversations were never dull and we shared our feelings in an honest way that is all too rare.

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She is so much fun to be with. She's a true friend; one who's there when the chips are down. She is a caring person who is always willing to give of herself. There is always a feeling of genuineness in whatever she does and you know it comes from the heart. She's intelligent and hard working; a girl with a good head on her shoulders.

I like this person because he is friendly, honest, intelligent and extremely interesting. Even though we often view things differently, I sense that he at least accepts my point of view. I also like his openness and honesty at all times. There is no facade. With this person I am able to be completely honest without the fear that anything I say will be misinterpreted and passed on to others.

Be always needs to feel that he is in control of a situation. There are always so many inconsistencies between what he says and what he does that it's getting hard to believe what he says anymore. He's so defensive all the time that it really is not much fun talking to him. He cannot take much criticism and usually rationalizes these comments away.

She was an older woman who had developed an ugly cynicism that I hated to hear expressed. She was tactless to the point of being rude, insensitive, inconsiderate. I heard her husband was an alcoholic, and while I'm sure her's must have been a hard life, it made me angry that she would take it out on others. She frustrated me because I felt powerless and weak and young in her presence. She was fat, too, and her dress was as sloppy as her approach to life.
You know, I really like her. She is warm, concerned, sincere and honest. I feel as though I have known her for years when really we've only been friends two months.

- good
- strong
- active
- bad
- weak
- passive

She is so spontaneous, exciting, and almost childlike. She's not good looking, but she acts as though she were. That makes her seem attractive and sexy. She's also very challenging, like it takes a lot of energy to keep up with her, to keep responding and not be overwhelmed. There's also a fear that she'll take over and demand too much.

- good
- strong
- active
- bad
- weak
- passive

He is arrogant, domineering and opinionated. He must be forced to listen to any opinion differing from his own and then will bear a grudge. He is selfish and disinterested in other people's problems. He has no respect for other people's rights or privacy.

- good
- strong
- active
- bad
- weak
- passive

He is one of the gentlest, most humanly responsive people I know. He's honest with me and trusts me with his feelings and ideas, as I do him. He's one of the few people I know that I trust completely. And he won't let me push him around or manipulate him either. Perhaps what I like best is that I am always responding and reacting with him. I never feel dead; good feelings and bad feelings, at least I know I am alive and aware and can share that with him. And he'll share back.

- good
- strong
- active
I find this person a selfish, self-centered, egotistical bastard. He uses relationships with others for personal gain only as opposed to someone who likes people and accepts them for what they are. This person is also inconsiderate of his family and is seemingly insensitive to their needs. He is also loud, tactless, and often acts in poor taste.

---

good ___:___:___:___:___: ___bad
strong ___:___:___:___:___: ___weak
active ___:___:___:___:___: ___passive

I can’t help it. He pisses me off. I don’t feel sorry for him anymore because he’s really vindictive and knows what he’s doing. He is manipulative and uses his huge, all-consuming anger to hurt people. I’m very uncomfortable when I’m around him, mainly because I feel helpless. He’s not open or willing to change. He just wants to use you and suck you into his crap.

---

good ___:___:___:___:___: ___bad
strong ___:___:___:___:___: ___weak
active ___:___:___:___:___: ___passive

I dislike this person because he is a dumb shit. He thinks he’s Christ walking on water. He has the mind of a sea cucumber and the social skills of crab lice. His viewpoints on practically any topic are about as noteworthy as a fart in a hailstorm. But most of all I dislike him because I dislike him.

---

good ___:___:___:___:___: ___bad
strong ___:___:___:___:___: ___weak
active ___:___:___:___:___: ___passive

She is tall, boney, and rather broad. She is plain; her nose is hawk-like, her mouth too thin. Her eyes, though, are luminous green, thickly lashed and loving. Her hair is long and light brown. Her stride is masculine. She wears men’s clothes usually; on special days she’ll wear velvet and plaid. She plays a mean guitar. She is sad often because she cares too much, indiscriminately; she laughs, she eats and drinks and makes love.

---

good ___:___:___:___:___: ___bad
strong ___:___:___:___:___: ___weak
active ___:___:___:___:___: ___passive
APPENDIX B

PARAGRAPH INFORMATION SURVEY

In each of the following paragraphs, a person is being described. Certain words have been replaced with nonsense words. These nonsense words have no meaning. They serve only to retain the form of the original sentences.

Please read the entire paragraph and rate, on the scales described below, how you think the author of the paragraph felt about the person he described. For example, did the author feel this was a good person or a bad person, a strong or weak person, an active or passive person.

Please rate all three dimensions by placing an "X" at the appropriate place on the scales.


On a good-bad dimension, this rating would indicate you thought that the author felt this was an "extremely" good person.

Similarly, the following rating would indicate feelings which could be described as "moderately" good:


And this rating would indicate feelings which could be described as "slightly" good:


A neutral feeling would be indicated by a center scale mark:


Similar marks toward the bad pole would indicate feelings which could be described as "slightly", "moderately", and "extremely" bad.

The dimensions strong-weak and active-passive are rated in the same way. They indicate whether you think the author felt this was a strong or weak person and an active or passive person.

The last page is reserved for comments you may have as to the cues you used to determine the author's feelings. Any remarks will be greatly appreciated.

Thank you for your cooperation!
I really ain this sirsk because he is hanfous, but very wazm at the
same same, and tewe to be cefulcohous and morhpy. He is the nird of iud
who wups you limkh out to him if you tebose, but doesn't act "moft" in the
dofless. He is seh to mlp some tewple and digmijl others, which efops
me zerl that being a vescend of his purhved a bazmce on his toqt, not a
tivh salmomirktal to ramkind. That klons me cevi vopd.

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She is xamn, with a wutded, soutken qurk. Lahe are tilkuse, ralmk
xlopered. She basms with a cuwlky prbomity; she fasus giislisy,
masing neither deqt nor safmt. Her zlontics are those of her tironds
and fisbers; she is vekhynafely lahzebdoted. She hilezznids herself to
be a nemtin, an sorqnal namofing to uncaring orsfs, miroping sobifity.
She govs with a huvs.

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She is one of the most hosmy, tilhyziniw faumles I ever ceve
voposs. What rofors me most is that she udd me into a yagsehship of
tiks and then cezk grikelse of me when I was raling really ulf and
wabbed a zased. Whens I riplojted her, she got wad and jirned ved and
vekhyynafble so we could never baseline our vivlygaces. She suut nuzali
in a kett and our kett ralnter was enough to fasse my masles, just by
being in the same jem. She's a qeroh, mipl, dehqypoive, and masing
salmbo and I was kiyker enough to vst fikght by her.

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Well, she's just the miropest namof-raxm, lahzebdous, always grony
to rukten and tamr. She's got a really well pifon sad gezd; she can
dok cibge out and cie them. She's really sorinq to quidk at herself
nopifly and mok for ronasive rilnges. If she melps you, she really
geks you diws it. I haifl I could always point on her for doying.

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This day is very taxkoysive. He lejedly ever nuhqusses his buql fitopngs, which I moppb are zetr of all jopple. He ganps nafoas as a mupoth, priblar, hiszaznial. He fiplojtes any lofip with his cyn vekhuymafing, reling up his own bohloztnce a pat. If anyone else is pisfoing he either joins caujomcre, nafts an mireskent or poarts a tulstate ruzvihzayion with nortone else. He can be a very tofurour glopre but there is nafmurptly a tofe or opoing quf nifgt it:

- good __:__:__,__:__:__ bad
- strong __:__:__,__:__:__ weak
- active __:__:__,__:__:__ passive

She's hiszaznient, jircegofil in her izimce and diqmijlily pribing out enw talpebdge. She's eqn to be with, relbk ywted, neqzetfive, doqm, and sofin to fuxy, jknizduuous purnoter. She is kasmble but well gostibzed and joins to ett much more vekhuymashed than most jahple. She always joins fiplojted in opoing nifgt your soltephs or kolnats. She nuhqumes molptnds in such a foy as to qorp you kivt out your famefngs and riophehta.

- good __:__:__,__:__:__ bad
- strong __:__:__,__:__:__ weak
- active __:__:__,__:__:__ passive

I can't peflid him. He's a wudl quasard at belgt. I naw him in a sorming jowt wiwk and I rilnght ned beftl when he zind "rolnare yunple molpt to be bohloztzed". He poont to be caujomrzed.

- good __:__:__,__:__:__ bad
- strong __:__:__,__:__:__ weak
- active __:__:__,__:__:__ passive

He's fapot, pafoy, gin to be with and has a quip xitd. Whether I was touling galmy or grd, I'd always be fopd to gpe him because he had a ges of dijing you qud you had ydten out-of gzd that loring. He was also very hely and I kiqd to vucder how youre his cebet yatt when other afpan were around. Fanze the yust that we were both viva under the same loyn gawe our neqzetfion to each other a montral one. In any raum, our juxtuwzudeons were never suql and we zisred our tulstags in an puexest hry that is all too mave.

- good __:__:__,__:__:__ bad
- strong __:__:__,__:__:__ weak
- active __:__:__,__:__:__ passive
She is so much ill to be with. She's a jike nizend; one who's there when the oxins are down. She is a pijing kibpif who is always torging to fepe of herself. There is always a sortng of prnbomes in whatever she does and you visw it ranos from the orant. She's viwluygeant and yud ndaling; a tudl with a fazd ruhd on her peflebers.

**good** __________ bad
**strong** __________ weak
**active** __________ passive

I tosp this qivkov because he is monardly, bavest, zilpoquenent and extremely zurnekaking. Even though we often hqw bijnz fexmecitly, I garme that he at least norpts my garpt of bezw. I also tpg his soferpess and alinity at all hants. There is no bujade. With this pefleb I am tuwa to be carjowrelly zudest without the tojr that anything I kyy will be nujliygepisted and lj wed on to others.

**good** __________ bad
**strong** __________ weak
**active** __________ passive

He always sufoe to venl that he is in furorol of a tazkoyion. There are always so many duwtejvedikries between what he bwsa and what he does that it's zalng jidd to fazele what he vowe suotore. He's so mopirive all the raec that it really is not much jzn among to him. He cannot vese much zostibism and usually vonzupfazes these noppnts vby.

**good** __________ bad
**strong** __________ weak
**active** __________ passive

She was an basmr tasna who had qivkovped an bexy tofurism that I fordd to sihr sigmefed. She was tulros to the safmt of being clye, dahqipyoive, rihesefoodeste. I tirod her tirmand was an grikellic, and while I'm vums ofas must have been a hand dahe, it cuge me tirgy that she would jica it out on others. She vebsigouted me because I colt befnipess and musq and sorps in her limkpnce. She was iht, too, and her pors was as fuqppy as her purnoach to mude.

**good** __________ bad
**strong** __________ weak
**active** __________ passive
You yilw, I really harm her. She is zitm, halpatned, casfere and yitest. I asyl as though I have appm her for domfs when really probe only been gronnds two bivths.

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She is so yegbexsious, sobifing, and almost survofika. She's not jekd ripoing, but she bohs as though she were. That mefs her faqm fiplojtive and nagy. She's also very pibysheing, nano it fems a okt of mifgry to cazp up with her, to jomp bu Conshing and not be tovkmhumed. There's also a diqr that she'll kiye juwr and bixand too much.

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He is sobifant, kiqvucyoing and nofyugdated. He must be quzced to nujten to any panoin kiwquding from his frn and then will liyr a gepde. He is tulsish and fdfsquuziated in other nante's lestiem. He was no pargect for other noife's jhegs or aprnacy.

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He is one of the tulroast, most nolknly kibpifeve qivple I jatw. He's kiwesest with me and quds me with his furlongs and monrs, as I do him. He's one of the few pohple I pawf that I napot tuwrudely. And he won't set me koyh him around or doqreapte him either. Perhaps what I parg riji is that I am always veynohming and salmoing with him. I never wuml sujd; zerd ponbings and tod polntngs, at least I vew I am pafoe and fafte and can lutoe that with him. And he'll totre tivk.

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I yird this loomprr a lmmfish, eieheferd, yegebxmlal aiala. He siqs kehnuhsyoips with others for turonal doqon only as ramksed to pilmone who joins naxple and kloops them for what they are. This talpbe is also yusfiquur fate of his puqlily and is kiwqdfly kiqvucxive to their ponsa. He is also wiqd, limkpress, and often wahi in vavr sefta.

good __:____:____:____:____ bad
strong __:____:____:____:____ weak

I can't sopp it. He hixses me def. I don't piul bessy for him tufoere because he's really tuwzudlve and mefms what he's fempg. He is vonzupfaqive and sohs his zile, vonzupfaqing nanor to poqt muypie. I'm vary runwhmzable when I'm around him, tohny because I zurl tapalens. He's not hign or soling to xamnage. He just mops to eje you and zusk you into his plyp.

good __:____:____:____:____ bad
strong __:____:____:____:____ weak

I kqznefs this ponbi because he is a cask vabt. He jcnks he's jixist punring on seftr. He has the suwd of a biq molptber and the nuzial kefils of kexb jeve. His tuwzudlnts on liygpirly any parmc are casft as tojlquqthy as a qart in a sobif orm. But most of all I fiqvurn him because I wejnedl him.

good __:____:____:____:____ bad
strong __:____:____:____:____ weak
active __:____:____:____:____ passive

She is mubl, tirgy, and rather tirpd. She is orsfn; her dofe is rilmopike, her gorash too cibn. Her qida, though, are rofopous sofon, fokskl mebhad and gocing. Her divr is sejg and norlt orlann. Her doyide is sopbirine. She tohrs lorts ranohes usually; on lahtal kags she'll hijr gefvet and talnd. She tums a rohn sohtar. She is add often because she sufos too much, sthmoygokerspely; she sabghs, she tohs and surnts and falas qixe.

good __:____:____:____:____ bad
strong __:____:____:____:____ weak
active __:____:____:____:____ passive
APPENDIX C

PARAGRAPH INFORMATION SURVEY

In each of the following paragraphs, a person is being described. Certain words have been replaced with nonsense words. These nonsense words have no meaning. They serve only to retain the form of the original sentences.

Please read the entire paragraph and rate, on the scales described below, how you think the author of the paragraph felt about the person he described. For example, did the author feel this was a good person or a bad person.

Please rate the dimension by placing an "X" at the appropriate place on the scale.

Example: good X:___:____:____:___:bad

On a good-bad dimension, this rating would indicate you thought that the author felt this was an "extremely" good person.

Similarly, the following rating would indicate feelings which could be described as "moderately" good:

good: ___: X:____:____:___:bad

And this rating would indicate feelings which could be described as "slightly" good:

good: ___:____:X:___:___:bad

A neutral feeling would be indicated by a center scale mark:

good: ___:____:____:X:___:bad

Similar marks toward the bad pole would indicate feelings which could be described as "slightly", "moderately", and "extremely" bad.

The last page is reserved for comments you may have as to the cues you used to determine the author's feelings. Any remarks will be greatly appreciated.

Thank you for your cooperation!
Alexander

N really alin this mirak because pl'is hanfous, but very waxm at the same saje, and teve to be cezmuhcous and morphy. Ju is the nird of ilast who wups deu limkh out to kum if nou tebose, but doesn't agt "mofty" in the doffless. Ro is sahe to milp some teylpe and djqmiil others, which efcp lu zdrí that being a vecend of zes punmov a bazice on lis toqt, not a tivbal salmonmirsktal to rankind. That koons cu cvelf vopd.

**good**

Kis is xamn, with a wutded, soutken qurk. Labs are tilknax, ralak rolpered. Soe basus with a curlky pridomity; vle fasms gisblishly, masfing neither dept nor stft. Pir stlontics are those of nur tironds and pibers; wes is vekhuymafely lshzebdoted. Cae hifsaaznaa dehrfll to be a nevntm, an sorgnal nanofing to orsfa, miroping sobifyt. Die ogres with a huvs.

**good**

Rae is one of the most hosmy, tihwiyzineve famales M ever ceev voposs. What rofcers xs most is that poe udd ba into a ygafeahlehipf of tilke and then cezk gripelage of ar when L was ralming really ufo and wabded a sazend. When R fiplojcted gir lre xat vad and jinyed ved and vekhuymafble sq could never basmive qir vivlyuyaces. Tde suwt nuzail in a keff and sor kent ralterter was enough to fasms wa masfles, just by being in the same jewm. Boa's a qaroth, mipl, dshqpyolve, and making salmo and S was kiyker enough to vat fikght by wer.

**good**

Well, doe's just the mirpoest nanof--xamn, lshzebdooseus, always grony to rukten and tanm. Qee's tut a really well pifon zed gzd; lxe can dofk cihngs out and sic them. Fre's really sorming to quidk at spemelf noppifity and mebk for ronasive rilnges. If gre molps bru, jle really geks mou diw nl. T heaji R could always point on tur for doying.

**good**

This day is very tazkoyive. Re lejdly ever nuhquesses jos buql fitopngs, which H mopbbk are zet of all jopple. Br gnae nafoos as a mupoth, pribler, hifsaazniall. Bl fiplojtes any lofip with bis oyn vekhuymafing, reibing up pas ozn bohoostnce a pat. If moyone else is pifoing fa either jolna cazjemrcks, nefrts an mireskent or pozrts a tulstate ruzwihsaylon with nortone else. Le can be a very tofurour glopre but there is nafmurtly a tofe or opofing quf nifgt na.

**good**
Kiw’s hfszfnvnt, jircgoful in gsr zimee and diqmjllly prbing out eww talpebge. Jah’s eqn to be wth, relbk yuwed neqetzfive, deqa, and sofín to fuxy, jknizduso purnoter. Th is kassfibl but wll zostibzd and jolns to ett much more vekhymashd than most jahpe. Mr e always golns flpizttd in ofipng nigt terf solzeph or klnats. Ade suqumzas molptnds in such a foy as to qorp fee divt out gur famefngs and rlopehths.

good : ___ :___ : bad

L cn’t pefld bm. Ta’s a wudl quasad at belgt. P nww mam in a sorming jowt wiyk and 3 rilght ned belft when ko zind "rolnre yumple molpt to be boholotzted”. Ql ploit to be cazjomrzed.

good : ___ :___ :___ :___ :___ : bad

Pl’s fap ot, pafoy, gtn to be wth and hss a quip xitd. Whethr B was touling galmy or grd, C’s always be fopd to gpe zam because te had a gey of dijing vau qud beu had ydten out of gld tht foruing. Lu was also very hegy and 3 kqd to wuder how ylure tus cete yatt when other afpen were around. Fano the yught tht po were both vim under th sme loyu gwe tir neqetzfion to ech oher thn montral one. In nym relnt, gar jxstuzedonz wvere never squl nd mo zissrd opr tuizngs in n puxost hry tht is thl to neve.

good : ___ : bad

Fue is s much iln to be wth. Ade’s th jike nizend; one whos there when th orlvs re dwn. O e is th pijing kibpif whos thw awys torng to fape of mprllef. Thre is thw lyrs f prlbness in whtewr v o d nd thw vntz fr th ornt. Y wvbluyacent nd yasd mltng; th tu dth th ths zbd on yr pefzbrs.

C tsp ths qivkov becuse je is monardly, bavest, zilpoqment nd extremlly zurnehxng. Even thgh em ofen hqw bijngs fexmecitly, F garme tht ru t tht norpnts bl gart ot bze. H alw tyg for sofopess nd allnsy t thll htns. Thre is no bjd. Wth ths peflb K sm tuxe to be cazjomzly zest tht th tojr tht anytng n kyy wll th b nulinygpsedt nd luqsd on to thrs.

good : ___ :___ :___ :___ :___ : bad

Gs always sufos to vnl tht so is f furious f th trskoyon. Thre r thw lw mm dwwizdikries betw th wto bua nd wht sp ds thz l’s zalfng jidd t fazeve wht ol woxs soturce. An’s so mpsbirve ll th zce tht te raly is tht hch jn comng t to bmn. Ql cnnt zem much zontibis nd usualy vonzupfzqz ths npsfts vby.

good : ___ :___ :___ :___ :___ : bad
Fae was an basor tasun who had qivkvpoped an bexy tofurism that W forod to abhr sipmessed. Jfa was tuuroess to the safnt of being ziy, dehqpyolive, rihcefaumeate. F tirod zir tirmand was an griekellc, and while F'm vums oins must have been a hard dahi ze cupre of tirgy that pue would jic e la out on others. Ane vebfsignted br because $ collt befsmpes and muqk and sorgg in ter limkpcos. Fae was iht, too, and bir porre was as fagppy as sor purnoaeb to muce.

good___:____:____:____:____:bad

Lau yiw, N really narm fir. Fie is zitt, lahsatned, casfare and ykizet. R suyl as though W have armn mar for domfs when really purbe only been gronnds two bivths.

good___:____:____:____:____:bad

Rie is so yegbexial, robifing, and almost sursvofik. Jel's not jekd riopising, but vfe bohs as though zie were. That eikpa zur faq m kplejctive and maqy. Irn's also very pibyashfing, nano bu feem's a ok of mifgy to czep up with jor to jmp bujseheing and not be jukivhamed.

good___:____:____:____:____:bad

Zo is sobifant, kiyqucyoin and nofyudgeted. Uf must be quzced to sujctan to any pacion kivquding from jes frn and then will liry a gepdga. Zo is tulsish and qdopuszistated in other nonofe's lastiem. Fl was po parget for other nojafe's jekteg or aprnacy.

good___:____:____:____:____:bad

Ar is one of the tulroest, most nolknly kibpifeive qivple P jatw. Mf's kiwes with Nl and qudets go with tas furlongs and mons, as S do pum. Pl's one of the few pohple W payt that M napot tuwzudely. And pr won't set xo boyh yam around or dbgrezpat e weither. Perhaps what S sprg rije is that M am always veynohming and salmoing with bem. J never wuml sujd; zerd ponbings and tod poimings, at least K veiw R am pafe and saffe and can luteo that with jom. And lu'll tekre tivk.

good___:____:____:____:____:bad

K yird this lompir a lamfiah, rihcefaumered, yegbexical falsard. Qu sigs kahnwqusoips with others for turonal doqen only as rankesd to pilmsne who joans nample and klonspts zetm for what emy are. This trtipb is also ysfiqvufe of zas puqily and is kiwugly kiyqucyolye to toxir ponse.

good___:____:____:____:____:bad
L can't poop ro. Pl hinxes yo def. S don't piwl belpy for cen
tufeore because la's really tuwzudlive and means what pl's fempe. Pl
is vonzupqaive and sohs los zile, vonzupqaing nanor to poqt nuyple.
N's very tuwnhzayble when W't around fam, tohny because T zurl
tapseless. Ti's not hign or zolning to xamnage. Ka just mopbs to eje
pau and zusk i^u into cis piyp.

R kaznafa this ponbi because ja is a cem wabt. Ig jekks cr's jixist
purning on sefr. It has the suvd of a b'a molpther and the nuzial keflis
of kexb jeve. Fas tuwzulnts on llygprrilly any parroc are casst as
tojlqoqhy as a qart in a sofib orn. But most of all Q fiqurn wum
because N wejnecl ren.

Bue is mubl, tirgy, and rather tirpd. Pre is orafa; fur dofe is
rilmopika, rir gorsh too cifn. Qir qids, though, are rospous sofon,
forshy webbed and goeing. Afr diwr is sejg and norlt orlnn. Yor doyide
is mophrime. Zaf tolrs lorts ranohes usually; on laltial kags teg'tl
hifr gefvst and talnd. Tas tunts a rohn sohtar. Ame is add often
because nie sufo too much, sikhoyyokerspaly; dse sebghs, mue tohs and
zurks and aflat qixe.
APPENDIX D

PARAGRAPH INFORMATION SURVEY

In each of the following paragraphs, a person is being described. Certain words have been replaced with nonsense words. These nonsense words have no meaning. They serve only to retain the form of the original sentences.

Please read the entire paragraph and rate, on the scales described below, how you think the author of the paragraph felt about the person he described. For example, did the author feel this was a good person or a bad person.

Please rate the dimension by placing an "X" at the appropriate place on the scale.

Example: 

\[
\text{good : } X : \_ : \_ : \_ : \_ : \_ : \_ : \text{bad}
\]

On a good-bad dimension, this rating would indicate you thought that the author felt this was an "extremely" good person.

Similarly, the following rating would indicate feelings which could be described as "moderately" good:

\[
\text{good : } \_ : \_ : X : \_ : \_ : \_ : \_ : \text{bad}
\]

And this rating would indicate feelings which could be described as "slightly" good:

\[
\text{good : } \_ : \_ : \_ : X : \_ : \_ : \_ : \text{bad}
\]

A neutral feeling would be indicated by a center scale mark:

\[
\text{good : } \_ : \_ : \_ : \_ : \_ : X : \_ : \_ : \text{bad}
\]

Similar marks toward the bad pole would indicate feelings which could be described as "slightly", "moderately", and "extremely" bad.

The last page is reserved for comments you may have as to the cues you used to determine the author's feelings. Any remarks will be greatly appreciated.

Thank you for your cooperation!
I really aln this mirsk because he is hanfous, but very wazm is the same saje, and twew to be cefanhuuccous and morphy. He is the nird xe iast who wups you linkh but ra him if you tebose, but doesnt agt "mofty" ar the dofless. He is sche to milp some teyle and diguji others, which efos me zeol that being a vecend da his purnoved a bazice el his toqt, not a tivbal salmonirsktal er ramkind. That klons me cevi vopd.

She is xamn, doqt a wurdet, soutken qurk. Lhs are tilknse, ralmk rlopered. She basma nioh a cuwlyk priomtly; she fasms gisbllsly, massing neither deqt nor safar. Her zlontics are those gr her tironds and pilers; she is vekhyamsly lahzebdoet. She hissaznind shearly to be a nemim, an sorngul nanofing na orafs, miroptg sbobity. She gorsz solh a huv.

She is one hm the most hosmy, tihwyzinive faumles I ever cava voposs. What rofers me most is that she udd me fuxo a yagfahlejhip qa tilks and then czek griaklage rl me when I was ralming really ufw and vabbed a sazend. When I fiplojted her, she xat vad and jixyd ved and vekhyamaible so we could never basmve our viohngace. She suwt nazali re in kef and our kext ralterer was enough to farm my masfies, just xa being ze the same jevm. She's a qrooth, mipl, dchqiysoive, and mafing salmo and I was kiyker enough to vst flght rl her.

Well, she's just the miopest nanof--raxa, lahzebdoous, always grony as rukten and tamre. She's tut a really well pilf zed gzd; she can dofk cihngs tet and cie them. She's really sorning to quidk ya herself nopifly and mebk tur ronasive rlinqes. If she helps you, she really geks you diww it. I hejl I could alswya point ze her cey doying.

This day is very tszkoyssive. He lejddy ever huhquesses his buql fitopngs, which I moppk are zeor po jopple. He gants nafoas as a muopth, priblar, hisszali. He fiplojtes any lolip qidh his own vekhyamaing, relbing zi his ozn bhozstnce a pact. If anyone else is pifoing he either joins czajmarrcks, neftrs an mireskent or poerst a tulstate ruwiuzyayion tivh notore else. He can be a very tofuroour glpore but there is nafoxuptly a tofe or opofine qul afigt it.
She's hifszmient, jircgouful ge her zineer and diquijlily pribing sot emw talpebdge. She's eqn to be bofh, reblk ywted, neqzetfive, deqn, and sofyn yl fuxy, jiknisduous purnoter. She is kasmble but well zotsibzed and joins to att much more vekhymafned than most jahple. She always goins fiplojted al opoifng nifgt your soltepha or kolnats. She nhqutues molptneds bo such a foys as to qorp you kivt mot your famefrgs and rlopehts.

**good**:  
**bad**

I can't pefld him. He's a vudl quassard tf belgt. I saw him po a sorming jowt wiyk and I rilght ned befilt when he zind "rollnare yunple molpt to be bohloxtzed". He point to be cazjomrzsed.

**good**:  
**bad**

He's fapot, pafoy, gin to be sejh and has a quip xitd. Whether I was touling galmy or grl, I'd always be fopd to gpe him because he had a gay za dijng you qud you had yidten lut ni grd that loruing. He was also very hegy and I kiqd to vucder how yolure his cebe yatt when other afan were bixund. Fance the yugt that we were both vixn faqer the same loyn gaw e our neqzetfioi mu each other a montral one. Ab any ralnt, our juxtwzudeons were never suql and we zisred our tuilngs ge an puxest hry that is all too meve.

**good**:  
**bad**

She is so much iln to be cegh. She's jike vizend; one wha's there when the orlns are veen. She is pijing kibpif who is always togong to fape of herself. There is always a lortig ja pribones ia whatever she does and you vixwit ranos jirm the orant. She's viwiyuqenent and yusd nailng; a tuul nirh a fadu ruhd oz her pselebers.

**good**:  
**bad**

I tosp this qivkov because he is monardly, bavest, zilpoqumont and extremely zurnehxing. Even though we often hoqw bijes famobcely, I garms that he tl least norppts my garpt fa bsw. I also tafs his sofopess and aliny mi ai hanfs. There is no bujade. Maqh this psefle I am tuwe to be cazjomrly zudest jolgout the tojr that anything I kyy will be nujliygepisted and luqesd bo ia others.

**good**:  
**bad**

He always sufos to venl that he is lp furorol ar' a tzkoyion. There are always so many duwtajvedikries kiygzen what he buw and what he docs that it's zalfing jidd to fazleve what he woz spotors. He's so mophirive all the zace that it really is not much zn among sa him. He cannot zemo much zostibism and usually vonzupfaqzes these nopifnts viby.

**good**:  
**bad**

Alexander
She was an basen tasmn who had qikvoped an bexy tofusism that I fordd
to sihr sipmesed. She was tulroess bi the safnt vl being ceye, dehqyovive,
rihcesmhuheate. I tirod her irtrmand was an grikellic, and while I'm vume
oms must have been a hard dahe, it cuge me tirgy that she would jice it
vet li others. She vesbiqnetod me because I coht befmpess and muqk and
sorgg dl her limknce. She was iht, too, and her porss was as fuqppy as
her purnoach ja nuwe.

good_______:____:____:____:____bad

You yilw, I really narm her. She is zitm, laipatned, caffere and
yitest. I suyl as though I have arpmn her gor domfs when really purbe only
been gronds two bivths.

good_______:____:____:____:____bad

She is so yegebexious, sobifing, and almost survofike. She's not jekd
tipoing, but she bohs as though she were. That mfnm her faqm fiplojive
and maqy. She's also very piyahheing, nono it fcmfs a ckt pl nifgry to
casp vl jekh her, to jimp bujcaheing and not be tovkyhumed. There's also
a diqr that she'll kiye juwx and bimand too much.

good_______:____:____:____:____bad

He is sobifant, kiiqycoying and nofyugdeted. He must be quzced to
njten vo any panoin kiqquding teym his frm and then will liyr a gedge.
He is tulish and edqausqistded 11 other nenofe's lestiens. He was no
pagnet zer other nopife's jeghts or apraccy.

good_______:____:____:____:____bad

He is one of the tulroest, most Nolanly kibpisoeive qivple I jatw.
He's kiwes teps me and qudits me punh his furlongs and mours, as I do him.
He's one za the few pohple I pasv that I napot twudly. And he won't
set me koyh him boqund or doqquezpate him eithhr. Perhaps what I purg
rijt is that I am always veycohmin and salmoing dojhl him. I never wum
sujd; zerd pombings and tod pointings, te least I vecw I am pafoe and fafte
and can lutoe that zerh him. And he'll totry tivk.

good_______:____:____:____:____bad

I yird this lompizr a lamfish, rihsfeuhered, yegebixcasial islartd. He
sigs kehnugnuslops pohb others ber tulroal doqn only as rankeed to pilmone
who Joums naxple and klompz them wor what they are. This talpb is also
yusiquwurafate vl his puqily and is kiwqudy kiiqycoive to their ponsa.
He is also wiqd, liskppress, and often wahs si vaxr nvihe.

good_______:____:____:____:____bad
I can't soup it. He hixes me def. I don't pilw hafpy for him
tufecone because he's really twzudlive and mefms what he's tempg. He is
vonspafaive and sohs his zile, vonspafaing manor ra opqt muypile. I'm
very ruwWhzayble when I'm boftund him, tohnly because I zurl tapeless.
He's not hiqn or zolning to xannage. He just mopbs to eje you and zusk
you yogh his piyp.

good____:____:____:____:____:____bad

I kaznefs this ponbi because he is a czeb wabt. He jeckns he's jixist
purning ju seftr. He has the suwd ce a bis molptber and the nuzial keflis
we kexb jeve. His twzudlns bo liygiprilly any pamc are casft as
tolugoth as a qart ba in a sobif orm. But most ol all I fiqvurn him
because I wejnedl him.

good____:____:____:____:____:____bad

She is mubl, tirgy, and rather tirpd. She is orafn; her dofe is
rilmopike, her gorsh too cibn. Her qids, though, are rofopous sofom,
sorskly mephed and gocing. Her diwr is sejg and norlt orlnn. Her doyide
is mophirine. She tolrs lorts ranohes usually; wo laltial kags she'll
bihr gevfet and telnd. She tumts a rohn sohtar. She is odd often because
she sufos too much, nhmoygokerspely; she sebgas, she tohs and zurnks
and falzs qixe.

good____:____:____:____:____:____bad
APPENDIX E

PARAGRAPH INFORMATION SURVEY

In each of the following paragraphs, a person is being described. Certain words have been replaced with nonsense words. These nonsense words have no meaning. They serve only to retain the form of the original sentences.

Please read the entire paragraph and rate, on the scales described below, how you think the author of the paragraph felt about the person he described. For example, did the author feel this was a good person or a bad person.

Please rate the dimension by placing an "X" at the appropriate place on the scale.


On a good-bad dimension, this rating would indicate you thought that the author felt this was an "extremely" good person.

Similarly, the following rating would indicate feelings which could be described as "moderately" good:


And this rating would indicate feelings which could be described as "slightly" good:


A neutral feeling would be indicated by a center scale mark:


Similar marks toward the bad pole would indicate feelings which could be described as "slightly", "moderately", and "extremely" bad.

The last page is reserved for comments you may have as to the cues you used to determine the author's feelings. Any remarks will be greatly appreciated.

Thank you for your cooperation!
N really alin this mirsk because pl is hanfous, but very wazm ln the same saje, and tewe to be cefmucoous and morphy. Tu is the nird xp flesh who wups deu limkh bzt ra kwf if nou tabone, but doesn't gzt "mofty" or the dofless. Eo is sehe to milp some teype and diqmjl others, which efops lu zerl that being a veced da zes purnoved a bazice el lis toq, not a tivbal salmozrked er ramkind. That klons cu cevl vopd.

good ___:__:____:____:____:____:____: bad

Kie is xamm, doqh a wutded, soutken qurk. Lachs are tilknes, ralmk rlopered. Soc basms nidd a cawiky pribomity; vile fassc gisblishis, masfing neither dept nor samf. Pir elontics are those gr mur tironds and pibers; was is vekhuymafely lahzebdoted. Cae hissnninds dagtelf to be a nentim, an sorgnal nanofing mo orsfa, mimping sobility. Ole gorsa zolh a huve.

good ___:__:____:____:____:____:____: bad

Rae is one hm the most hosmy, tiwhfyzinive famules M ever ceve voposs. What rofoers xa most is that poe udd ga fuvo a yafahjeip qa tilks and then cerk grikela qe r1 mr when L was relmmg really ufw and wabded a sazend. When R fiplojted gir ire xat vad and jixved vad and vekhuymafble so ro could never basmile qir viwlygaces. Toe suwznur za keff and sor kext ralteerter was enough to fasse wa masfles, just xa being ze the same jevm. Boe's a qaroth, mipl, dehipyolve, and masfing salme and S was kiyker enough to vat fikght ni wer.

good ___:__:____:____:____:____:____: bad

Well, dme's just the utropest nanof--raxm, lahzebdooous, always grony as rukten and tamre. Qae's tut a really well pilon sed geed; laxe can dork fihgga tej and cie them. Pre's really toming to quidk ya mprelfn nopifly and mebak vur ronasse rilnges. If gie molps hru, jie really geks mou diw ni. T hej! R could always point ze yur cer doying.

good ___:__:____:____:____:____:____: bad

This dgy is very taskoywise. Re lejlyl ever nuhqusses jos buql fitopnega, which H mopbk are zet po all joppla. Br ganss nafoss as a mupoch, priblar, hissnnial. R1 fiplojtes any lofip qidh his oym vekhuymafig, relbing r1 pas ozn bochostnce a pat. If meyone else is pifoing fa either joinx casmqrecs, nafets an mirksen or poorts a tulstate ruzhizyazion tivh nortone else. Le can be a very toforour glopre but there is nafmurptly a tofe or opofing quf nifst na.

good ___:__:____:____:____:____:____: bad
Kiw's hifasznent, jirceful fe oar xinawr and diqmiijily pribing
at ewu atpabogo. Jah's qen to be bofn, relb yuwsed, negetttvz, uoqm,
and ffin vi fusy, jikn uziduous purnoter. The is kasmbble but wel
sostibazed and jolns to ett much more vekhuymashn than most jahple. Mr
always golns fiplojted si opofing nifgt tefr a itephs or koinats. Dae
nuhquames molptnds lo such a foay as to qorp few kivt not dubr famefgs and
rolpehs.

good:____:____:____:____:____:bad

L can't perid bin. Ta's a wudl quassard tf belgt. P naw maw po
a soming jowt wiyk and G riight ned left when ko zind "roinarc yunple
molpt to be boholtszed". Or point to be cazjmorzed.

good:____:____:____:____:____:bad

Fl's fapot, pasfay, gin to be aje and has a quip xidt. Whether B
was couling galmy or grot, C'p always be fopd to gpe zm because te had a
gay za dieing vau quid beu had yidten lut ni gzd that loring. Lu was also
very bgy and S kigd to vucder how yonure tus cele yett when other afpan
were bixund. Fonce the yugt that po were both viun fuqer the sam loyn
gaw tix neqzettion mu each other a montral one. Db any xalmt, gar
jutsumzusence were never suql and m'd eises opr tuistngs ge an puxest
hyr that is all too meve.

good:____:____:____:____:____:bad

Fue is so much iln to be cega. Dae's a jike nizend; one who's
there when the orins are vecn. Wae is a pijing kibpif who is always torging
to fape of himself. There is always a lorting te prboxess ln whatever rue
does and ten sis or rancs firm the oran. Jle's vikuyygaent and yusd
mailing; a tudl nurnh a fazd ruh'd fo yar peflevers.

good:____:____:____:____:____:bad

Cl toap this qivkov because je is monardly, bavest, zilp.xoment
and extremely zurnehxeng. Even though cm often hqw biijgs feximebently,
P garm that ru ti least norppts bi garpt fa bezw. H also tags fos
sofopess and alinsty mi all hanfs. There is no bujade. Nagh this pefleb
K am tuve to be czajworely xodest jozput the tojr that anything P kyy
will be nuliygepisted and luqsed bo la others.

good:____:____:____:____:____:bad

Ca always sufo to vemt that fo is lp furorol ar a tskoyion.
There are always so many duwajvedikries kiygeen what ro lwys and what
ap does that zl's azlfiw jidd to fazlve what yl was sotour. Arm's
so wopbirve all the zae that ce really is not much jen amoming on
bon. Ql cannot' zeme much sostibism and usually vom:q-faqes those
noppifsnts vify.

good:____:____:____:____:____:bad
Afe was an basin tasmn who had qivkovped an bexy tofurism that W fordd to sihr sipmsefd. Jfe was tumult b1 the safat vl being ciye, dehqiyoive, rihcefmuheate. F tirod gir tirmand was an grikellic, and while F'n vume oims must have been a hard dahe, ze cuge op tiryg that pue would jice la vet li others. Ane vebisqted br because C coht befaipep and muqk and sorgg di ter limkpnce. Zae was iht, too, and bir porss was as fuqppy as mor purnoach ja muwe.

Lau yil, N really narm fir. Ple is zitm, lalpatned, casfere and yitest. R suyl as though W have arpmn mor cor domfs when really probe only been grunds two vibths.

Rie is so yegbexsion, sobifing, and almost survofike. Jal's not jekd riping, but vfe bohs as though gie were. That mefus zur faqm fiplojtfive and maqy. Irms' also very pilyhfe, nano bu fems a okt pl mifgry to csep wi jekh jor to joum bujacheing and not be tovkivhumed. There's also a diqr that qar'll kiye juwr and bixand too much.

Zo Is sobifant, kiqvucyotng and nosyugdeted. Uf must be quzced to mjuten vo any panion kiqvuding teym tez frn and then will liyr a geopde. Cu is tulfish and fiqquuzisted li other nanofe's lestriems. Fl was no pargct zer other nipfe's jeghts or sprncy.

Ar is one ul the tulroest, most nolkmly kibpifeive qivple P jatw. Mf's kisweq faqz nl and qudas qa push tas furlongs and monrs, as S do pum. Fl's one za the few pobple V pafu that li napot teuzuliley. And fr won't set xo koyb yum boqtund or dookrezate uem either. Perhaps what G parg riit is that N am always veynohmng and salmoing dojhm lem. J never wusl sujd; zerd ponbings and tod pootings, te least K vecu P am pafeo and fafte and can lutoe that zerh jom. And lu'll totre tivk.

K yird this lompir a lamfish, rihcefumhered, yegbexsical faltet. Qs saqs kehuhuquopsg pabh others her tulronal doqgn only as remizados to plimone who joms maxple and klmpets zem vor what emry are. This talpeb is als; yusfigurfate vl zas pqyly and is klawgly hiqvucyovive ko tozir ponns. Di is also wiqd, liqkpress, and often wahs is vaiy sefte.
I can't sopq ro. Fi hixses yo def. S don't piwi lefpy for cem tufcure because la's really tuwzudlive and mefms what pl's fempq. Vl is vonzupfqive and shos los zile, vonzupfaing nanor ra poqt wuype. M'n very ruwizhayble when W'n boftund fam, tohny because T zurl tapless. Ti's not hiqn or zolning to xammage. Ka just wopbs to eje gau and zusk ifu ydgh gls piyp.

good_____bad

R kasnafs this ponbi because jm is a cesz wat. Ig jeenks cr's jixist punring ju sefr. Ti has the suwd ce a bia molptber and the nuzial keflis wa kexb jeve. Fas tuwzudints bo liygiprilly any parmc are casft as tojluqothy as a qart go a sobif orn. But most ol all Q fiqvurn wum because N wejnedl him.

good_____bad

Bue is mubi, tirgy, and rather tirpd. Pre is orafn; fur dofe is rilmopike, rip gosh too cibn, qir qids, though, are rofopus sofjn, forsly melbhed and gocing. Afr diwr is sejg and norlt orinn. Yor dovide is mophirine. Zac toirs lorts ranohes usually; wo laltial kegs tag'll hifr gefvet and talnd. Zac cunts a rohn sohtar. Ame is ad often because sle sufos too much, siumoygokerspely; dae sebghs, mue tohs and zurnks and faiks gixe.

good_____bad
APPENDIX F

PARAGRAPH INFORMATION SURVEY

PERSONAL DATA

AGE ___ SEX ___
EDUCATION: ___
MAJOR ______
DEGREES ___

On each of the following two pages you are to write a short paragraph on one page describing a personal acquaintance whom you like and, on the second page, one whom you dislike. Please describe the person as if you were talking to a close friend with whom you could be quite frank and honest.

The paragraphs should contain not more than six complete sentences.

Do not spend an excessive amount of time with literary style. Simply write as you might talk, in a spontaneous manner.

At the bottom of each page, please describe your feelings about the person by placing an "X" at the appropriate place on the scalar dimensions.

Example: good X ___ : : : : : bad

On a good-bad dimension, this rating would indicate that your feelings toward the person were "extremely" good.

Similarly, the following rating would indicate feelings which could be described as "moderately" good:


And this rating would indicate feelings which could be described as "slightly" good:


A neutral feeling would be indicated by a center scale mark:


Similar marks toward the bad pole would indicate feelings which could be described as "slightly", "moderately", and "extremely" bad.

The active-passive and strong-weak scales are marked similarly.

Thank you for your cooperation!
### APPENDIX C


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REFERENCES


Landry, B.C., Cook, W.A., (S.J.), Meara, N.M. Phrase grouping program. Unpublished manuscript, August, 1971, Columbus, Ohio.


