

such simple classifications as centripetal, centrifugal, and lineal are simply not adequate for a thorough investigation of meaning. They may help, but essentially they only point the way to more serious approaches to the problems.

VARIOUS SCIENTIFIC APPROACHES TO MEANING

A scientific approach to meaning widely used in the past is the traditional philosophical theory of "the mental image." This approach assumes that the real meaning of a word can be equated in some manner with the mental image associated with the symbol.<sup>1</sup> It has the advantage of seeming to simplify the study of meaning, for it is far easier to maneuver and classify the mental images than to sort and arrange the referents to which such word symbols might refer. In the long run, however, this "mental image" approach has proved relatively sterile, for it does not answer some of the basic questions about meaning. For example, to say that *triangle* means the mental image of an ideal triangle is not really satisfactory, for many shapes can be labeled triangles, and a mental image in the traditional sense cannot be an image of all these—certainly not all at the same time. The more abstract or generic the meaning of a term, the more difficult it is to produce a mental image that adequately reflects the function of this symbol.<sup>2</sup>

The behaviorist approach to meaning in terms of stimulus and response, using Pavlovian types of stimulus-response situations, corrected

<sup>1</sup> Certain of the principal philosophical approaches to meaning are: (1) the pre-Socratic, in which the word was regarded not only as a faithful reflection of reality, but in a sense as a kind of handle with which to control reality—for right words meant right thinking; (2) the Platonic position of nominalism, with the rejection of magical connections between words and referents and the assumption of purely human conventions as a basis for meaning, but with great importance attached to the relationship between the words and the ideas for which they stood; (3) the Aristotelian use of language as a system of correct classification of knowledge, since language not only expresses relationships, but also reveals them; (4) the Cartesian emphasis upon the separation of the phenomenal and the noumenal, thus producing a real tension between the symbol and the referent, a problem with which epistemologists since Descartes have continued to wrestle; (5) the position of the logical positivists (as well as the symbolic logicians), who have rejected the Cartesian formulation, based essentially upon Platonic concepts, and have not hesitated to use symbols to "define" reality (for they are only labels at best) and to construct whole symbolic systems; and (6) that of the existentialists, who relate object and name as an intuitive reality, for the name is an integral part of the existential experience—a position in some respects not too dissimilar from the pre-Socratic one.

<sup>2</sup> There is a sense, however, in which the use of the "image" of a symbol may be rehabilitated and made psychologically valid, if we use the framework suggested by Miller, Galanter, and Pribram (1960). Under these circumstances the image constitutes the conceptual point of departure for a plan. The image of a symbol, as a label for certain aspects of experience, actually serves both as a springboard for a plan to use the symbol and as a point of reference by which the use of the symbol may be evaluated—a kind of internalized system for truth testing. Under these circumstances the images become closely related to behavior, for they do not remain in some idealized realm apart from human behavior (as in Platonism), but are constantly affecting and being affected by experience.

some extravagant excesses in the traditional philosophical orientation. Psychologists insisted that no one could really test the meaning of mental images, since no one could get inside another's brain to see what went on there. One could always describe what went on in his own thinking, but such individual descriptions seemed too subjective to be valid for objective experimentation or measurement. Moreover, though the measuring of the responses of animals under closely controlled conditions was not too difficult, it was impossible to subject human beings to the same types of controls in order to get objective measurements of response to word stimuli. Furthermore, it proved hopeless to determine all the stimuli that might enter into any one person's use of a particular word as a response. As a result, behaviorists began to talk about "behavioral dispositions," a theory constructed on the basis of simpler types of animal responses, which were presumed to underlie human responses. These projections, however, have proved to fall far short of an adequate explanation of linguistic phenomena.<sup>1</sup> Nevertheless, thorough psychological investigations of meaning have done much both to sweep aside previous mentalistic views and to focus attention on certain essential elements in communication, namely, the stimuli and the responses involved in both speaker and hearer.

A somewhat different approach to language and meaning characterizes the work of the symbolic logicians, also called logical analysts or linguistic analysts, who have been dissatisfied with traditional logic, on the ground that it merely prescribes how people ought to think. Furthermore, they did not see much future in following the psychologists in describing how people presumably do think. What seemed more fruitful from their standpoint was a thorough investigation of language, either as the tool by which people manipulate their thoughts or as the system which, as closely as any other, reflects their thinking. Accordingly, symbolic logicians scrutinized language carefully and exposed many problems passed over by others, or merely taken for granted as a part of logic itself.

Some symbolic logicians have divided their study of meaning into three main parts, usually called (1) semantics, (2) syntactics, and (3) pragmatics.<sup>2</sup> For the symbolic logicians, semantics deals with the relationship of signs (or symbols) to referents, corresponding roughly to what people usually think of as the meaning of words. However, this meaning is regarded in a distinct way, for the referential meaning of any symbol is defined in terms of classes of referents. The referents themselves are infinite in variety, but the symbols are "handles" for dealing with groupings of similar objects and events. This process of classification is of course essential, for "unless one categorizes, that is, classifies, there is no basis for forming any judgments as to expectancies, for objects and events are in themselves unique. To handle them, we must classify them" (Roger Brown, 1958, p. 224).

<sup>1</sup> See Noam Chomsky (1959).  
<sup>2</sup> See Charles Morris (1946). A similar type of distinction was used by Charles Pierce (1934).

such words occur in patterns of substitution, that is to say, where superordinates may be substituted for subordinates, and vice versa. Moreover, some of the vertical divisions within large sets of hierarchically structured terms are usually very important for the semantic structuring of the language as a whole, and they often provide important hints as to certain basic distinctions in meaning within the semantic domains of single words. For example, if in the hierarchical structuring there is a clear-cut distinction between personal and nonpersonal, it is very likely that this dichotomy will be important in analyzing differences of meaning within the domains of many individual words. The English word *spirit*, for instance, has two rather widely differing areas of meaning, one for contexts in which *spirit* refers to a person-like "object," e.g. *he saw a spirit* and *the Spirit of God came upon him*, and another for contexts in which *spirit* designates an impersonal element, e.g. *he showed a lot of spirit* and *I like the spirit of the man*.

Hierarchical structuring does not, however, cover all types of vocabulary. For most relationals, a high percentage of abstracts, and a number of object words (e.g. kinship terms), hierarchical analysis is relatively useless.

Componential Analysis

In addition to linear plotting and hierarchical structuring, a third technique—componential analysis—may be employed to analyze the meaning of related series of words, provided that the relationships between terms are based on certain shared and contrastive features.<sup>1</sup> Effective componential analysis depends upon two major features: (1) a well-defined corpus of related terms, e.g. a kinship system, a set of case endings, and a pronominal series, and (2) the possibility of finding in nonlinguistic behavior (i.e. the distribution of these terms in the practical world) certain features which are determinate as to the basic contrasts between the symbols in question. For example, *father* and *mother* in English share the component of generation older than *ego* (the person central to the kinship structure in question), but they differ as to sex. The two components of generation and sex help us, therefore, to define the relationship of *ego* to *father* and *mother*. We can extend the number of kinship terms to include *grandmother*, *grandfather*, *grandson*, *granddaughter*, *son*, *daughter*, *uncle*, *aunt*, *nephew*, *niece*, *cousin*, etc. As we do so, it becomes evident that there are other important elements, e.g. descending generation in *son* and *daughter* (in contrast to ascending generation in *father* and *mother*), and lineality; for uncles and aunts are obviously not in the same relationship to *ego* as are his own parents. These components of meaning are of course testable in the nonlinguistic world, for we can confirm their validity in terms of biological relationships and marriage contracts.

<sup>1</sup> Some of the more important and illustrative treatment of componential analysis of meaning are given in: Jakobson (1936); Lotz (1947); Wonderly (1952b); Lounsbury (1956); McKaughan (1959); Austerlitz (1959); Wallace and Atkins (1960); Conklin (1962a). See bibliography.

In making a componential analysis of any group of related words there are five basic steps:<sup>1</sup>

1. Determining the limits of a "closed corpus" of data, i.e. limiting the study to a well-defined set of words which have multidimensional relationships consisting of certain shared and contrasting features.
2. Defining the terms as precisely as possible, on the basis of the objects involved. For example, for the English kinship term *uncle* we would specify father's brother, mother's brother, father's father's brother, and mother's father's brother, etc.<sup>2</sup>
3. Identifying the distinctive features which define the various contrasts in meaning, e.g. differences of generation, of sex, of lineality, etc.
4. Defining each term by means of the distinctive features. For example, father may be defined as first ascending generation, male, and lineal (i.e. direct line).
5. Making an overall statement of the relationship between the distinctive features and the total number of symbols classified. This is often done by means of some "plotting" or "mapping" of the semantic space.

By applying these five steps to a limited set of English kinship terms in which all the persons are in some measure biologically related (excluding those relationships defined only by marriage), we may illustrate clearly what is involved in a componential analysis, as follows:

1. The English terms chosen are *grandfather*, *grandmother*, *father*, *mother*, *brother*, *sister*, *son*, *daughter*, *grandson*, *granddaughter*, *uncle*, *aunt*, *cousin*, *nephew*, and *niece*.
2. These terms are then defined on the basis of the interrelationships involved (using in the following list the standard abbreviations of *Fa* for father, *Mo* for mother, *Br* for brother, *Si* for sister, *So* for son, *Da* for daughter):

<i>grandfather</i> :	FaFa, MoFa <sup>3</sup>	<i>uncle</i> :	FaBr, MoBr, FaFaBr, MoFaBr,
<i>grandmother</i> :	FaMo, MoMo		etc.
<i>father</i> :	Fa	<i>aunt</i> :	FaSi, MoSi, FaFaSi, MoFaSi,
<i>mother</i> :	Mo		etc.
<i>brother</i> :	Br	<i>cousin</i> :	FaBrSo, FaBrDa, MoBrSo,
<i>sister</i> :	Si		MoBrDa, FaSiSo, FaSiDa,
<i>son</i> :	So		MoSiSo, MoSiDa, FaFaBrSo,
<i>daughter</i> :	Da		FaMoBrSo, MoFaSiDa, etc.
<i>grandson</i> :	SoSo, DaSo	<i>nephew</i> :	BrSo, SiSo, BrSoSo, SiSoSo, etc.
<i>granddaughter</i> :	SoDa, DaDa	<i>niece</i> :	BrDa, SiDa, BrDaDa, SiDaDa,
			etc.

<sup>1</sup> In this section the methodology worked out by Wallace and Atkins (1960) is primarily followed.

<sup>2</sup> For the sake of simplicity uncles and aunts by marriage are excluded.

<sup>3</sup> Such abbreviations are to be read as "father's father" and "mother's father." All but the last element in such series is a so-called "genitive" or "possessive" form.

3. To determine the distinctive features of this set of words, we look for certain elements of meaning which are (a) shared by certain terms and (b) not shared by others. For example, we find that sex distinctions exist for all terms except *cousin*. A component of sex may then serve to divide all the other terms into two classes (male and female) and at the same time separate all these terms from *cousin*. On the other hand, a number of words differ primarily on the basis of generation. For example, *grandfather*, *father*, *son*, and *grandson* are all of the same sex, but differ essentially on the basis of being of different generations. On the other hand, *cousin* shows no such distinction. If we test all the possible interrelationships for a minimal number of distinctive features which will serve to define all these kinship terms, we end with the following three classes of components:

- a. Sex (S): male ( $s_1$ ) and female ( $s_2$ ).
- b. Generation (G): two generations above ego ( $g_1$ ), one generation above ego ( $g_2$ ), ego's own generation ( $g_3$ ), one generation below ego ( $g_4$ ), two generations below ego ( $g_5$ ).
- c. Lineality may be described in three degrees: ( $l_1$ ), in which the persons involved are direct ancestors or descendants of ego, and ( $l_2$ ) (colineals) and ( $l_3$ ) (ablineals), representing two successive degrees of less direct lineality.

4. If we redefine the meanings of kinship terms on the basis of these componential features of sex, generation, and lineality, we obtain the following type of description:

<i>grandfather</i> : $s_1g_1l_1$	<i>grandson</i> : $s_1g_5l_1$
<i>grandmother</i> : $s_2g_1l_1$	<i>granddaughter</i> : $s_2g_5l_1$
<i>father</i> : $s_1g_2l_1$	<i>uncle</i> : $s_1g_{1,2}l_2$
<i>mother</i> : $s_2g_2l_1$	<i>aunt</i> : $s_2g_{1,2}l_2$
<i>brother</i> : $s_1g_3l_2$	<i>cousin</i> : $s_1g_3l_3$
<i>sister</i> : $s_2g_3l_2$	<i>nephew</i> : $s_1g_{4,5}l_2$
<i>son</i> : $s_1g_4l_1$	<i>niece</i> : $s_2g_{4,5}l_2$
<i>daughter</i> : $s_2g_4l_1$	

It should be noted that in the above definition of terms by componential features it is necessary to list only three features for each "definition." At times, of course, a feature, e.g. *s* and *g* in the definition of *cousin*, has no accompanying numeral, for there is no subdivision of sexual or generational distinctiveness. In some instances, a feature includes two different grades, as for example,  $g_{1,2}$  in *uncle* and *aunt*.

5. The interrelationships of the various componential features may be conveniently described in two different ways: (1) by plotting the occurrences or nonoccurrences of such features, and (2) by mapping such differences in a kind of paradigmatic framework. The first type of description is illustrated in Figure 19.

Even a brief glance at Figure 19 indicates that there are certain systematic differences between the kinship terms. Both differences and similarities are more clearly shown, by mapping semantic relationships, as in Figure 20.

		grandfather	grandmother	father	mother	brother	sister	son	daughter	grandson	granddaughter	uncle	aunt	nephew	niece	cousin	
generation	$g_1$	+	+														
	$g_2$			+	+												
	$g_3$					+	+										
	$g_4$							+	+								
	$g_5$									+	+						
sex	$s_1$	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	$s_2$																
lineality	$l_1$	+	+	+	+												
	$l_2$					+	+										
	$l_3$																+

Figure 19

		$l_1$		$l_2$		$l_3$	
		$s_1$	$s_2$	$s_1$	$s_2$	$s_1$	$s_2$
$g_1$	grandfather	grandmother		uncle	aunt		
$g_2$	father	mother					
$g_3$	ego		brother	sister		cousin	
$g_4$	son	daughter	nephew	niece			
$g_5$	grandson	granddaughter					

Figure 20

Important advantages of such a componential analysis of meanings are as follows:

1. Attention is drawn to the distinctive features which underlie the contrasts, without the distraction of many additional features which are not so basic to the functioning of the system.
2. Unsuspected features or distinctions in meaning are often discovered in the process of a thorough application of such a system.

3. By componential analysis the functioning of a system is revealed in its simplest terms.

Componential structuring and mapping may of course take on various forms, depending upon the types of defining features and their multidimensional relationships. For example, Conklin (1962a) has made a componential analysis of the pronominal structure of Hanunóo and mapped it on a three-dimensional model:

The pronouns of Hanunóo are as follows:

- dah* 'they'
- kuh* 'I'
- mih* 'we'
- muh* 'you'
- tah* 'we two'
- tam* 'we all'
- yah* 'he, she'
- yuh* 'you all'

The traditional dimensions of this structure are:

1. Person: first, second, and third
2. Number: singular, dual, plural
3. Exclusion: inclusive, exclusive

If, however, we set up a paradigm on this basis we have the following rather asymmetrical structure:

<i>kuh</i>	1s	<i>tah</i>	1d	<i>mih</i>	1pe (exclusive)
—	—	—	—	<i>tam</i>	1pi (inclusive)
<i>muh</i>	2s	—	—	<i>yuh</i>	2p
<i>yah</i>	3s	—	—	<i>dah</i>	3p

On the other hand, by determining the minimal obligatory features of distinctiveness, one can arrive at a more satisfactory, economical, and semantically verifiable solution. This means using three sets of componential features, involving three types of oppositions:

1. limited membership (L): unlimited membership (-L)
2. inclusion of speaker (S): exclusion of speaker (-S)
3. inclusion of hearer (H): exclusion of hearer (-H)

A description of meaning in terms of these componential features provides the following definitions:

<i>dah</i>	-L, -S, -H	'they'
<i>yuh</i>	-L, -S, H	'you all'
<i>mih</i>	-L, S, -H	'we' (excl.)
<i>tam</i>	-L, S, H	'we' (inc.)
<i>yah</i>	L, -S, -H	'he, she'
<i>muh</i>	L, -S, H	'you'
<i>kuh</i>	L, S, -H	'I'
<i>tah</i>	L, S, H	'we two'

These componential meanings lend themselves to a three-dimensional mapping, as shown in Figure 21.

It must be recognized, however, that semantic space may be orthogonal, i.e. regular and systematic, or it may be nonorthogonal, i.e. irregular and nonsystematic. For example, in the mapping of the meanings of the core of American English consanguineal kinship terms, we were able to use a symmetrical type of mapping, with regularity of shape and without holes in the pattern. However, if we had added the meaning of *uncle* and *aunt* to include persons not biologically related, i.e. uncles and aunts through marriage, the mapping of the space would have been irregular in shape,

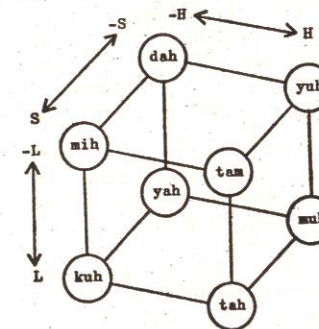


Figure 21

with a projection to take care of a feature of meaning not included in the restricted features whose relationships were so neatly plotted.<sup>1</sup>

Though componential analysis of meaning has many important advantages over a number of other techniques, one must recognize that such a procedure has a number of significant built-in limitations:

1. It is only applicable to restricted series of terms which have certain shared and contrastive features.
2. By analyzing only the minimal features of distinctiveness, many supplementary and connotative elements of meaning are disregarded, e.g. the emotive meaning in *mother* in contrast with *cousin*.
3. Componential analysis tends to define more what a term does not mean than what it does mean, for the distinctive features are really ways by which territories of meaning are "separated off" from one another, not means by which one "fills" such areas with meaning.
4. Though the componential features are fundamental to the functioning of a system, they are often not the focal elements in the consciousness of speakers. In other words, native speakers of a language will usually recognize the validity of componential features. However, they tend rather to think about areas of meaning and the classes of items which fit into such areas, rather than about the componential features which define the contrasts.

<sup>1</sup> For a treatment of orthogonal and nonorthogonal shapes of semantic territories, see Wallace and Atkins (1960).

TECHNIQUES FOR DESCRIBING THE REFERENTIAL MEANINGS OF SINGLE WORDS

There are three fundamental ways in which we may describe the domain of referential meaning of individual lexical units. We may (1) name the class, usually by contrasting it with other classes, (2) identify the individual members of the class, generally by listing, or (3) describe the distinctive features of the class. The first meaning may be called a "type" (Morris' *designatum*)<sup>1</sup> or generalized meaning. The second "definition" is based upon the listing of tokens of the class (Morris' *denotatum*), and may also be called the particular meaning. The third type of meaning is based upon "sufficient and necessary features of the class" (Morris' *significatum*), or, in other words, the abstract meaning of the class. For example, we may define *chair*, first by contrasting the term *chair*, as the name of a class, from other possibly related classes, e.g. *bench*, *stool*, *position*, *post*. Secondly, we may define *chair* by listing the specific tokens of the class, e.g. *the chair in the living room*, *the chair of philosophy*, *the electric chair*, *he will chair the meeting*. In a sense, such tokens are almost unlimited, for such referents of *chair* are extensive. Thirdly, we may define *chair* by describing the sufficient and necessary features which distinguish it from all other objects. For example, *chair* in at least certain aspects of its meaning is described in The American College Dictionary (1947) as "a seat with a back and legs or other support, often with arms, usually for only one person." The American College Dictionary then goes on to list other meanings based upon tokens, not upon "sufficient and necessary features," for many symbols cover such a wide area of meaning that there is not a single cluster of defining features, but chains of such features.

If we apply the three-way distinction between class, token, and features of the class to the above analysis of certain core words in the English kinship system, we find that the tokens (or *denotata*) are the individual persons identified by such abbreviations as FaFa, MoFa, FaBoSo, MoFaDa, etc. The classes are the groups identified by such terms as *father*, *grandfather*, *uncle*, etc., including all the tokens which belong to any such classes (the *designata*). The distinguishing features of the classes (the *significata*) are the componential features of generation, sex, and lineality. The *significata* are, of course, the prerequisites of any class, but as has been noted the meanings of words are not limited to these prerequisites, for there are also other features, which may be called the probabilities or possibilities of the class. We may say that in certain usages the terms *father*, *dad*, *daddy*, *pop*, and *old man* all have the same *significata*, and that to this extent the *denotata* are identical. Thus the same referent may be identified by all these terms. But these words certainly have different emotive meanings, i.e. features which as possibilities and probabilities are far more "fluid" and difficult to describe than are the prerequisites involved in the *significata*.

In order to describe the domains of referential meaning of individual

<sup>1</sup> See Charles Morris (1946).

lexical units, whether in terms of type, token, or features, there have traditionally been three kinds of techniques which have yielded the most helpful results: (1) derivational, (2) componential, and (3) distributional. Derivational analysis tends to concentrate on relating tokens to each other within the class. Componential procedures highlight the necessary, and sufficient features of the class, and distributional techniques employ the elements of the linguistic context to provide clues to basic divisions of semantic domains.

DERIVATIONAL TECHNIQUES

By derivational techniques we mean those by which the meanings of terms are explained on the basis of assumed "chains" or "trees" of meanings showing how one meaning of a term is derived from another. This approach is most conspicuously involved in the average dictionary, in which the meanings are usually arranged in a logico-historical sequence. This sequence attempts to indicate not only the historical order in which meanings have arisen, but also something of the logical order of dependence of one meaning upon another. For example, the Liddell and Scott Abridged Greek-English Dictionary lists the principal meanings of *charis* as 'outward grace', 'loveliness', 'charm', 'kindness', 'goodwill', 'thanks', 'gratitude', 'influence', 'gratification', and 'delight', in an assumed derivational order by which one meaning appears to be derivable from or relatable to another. Many times such lists of meanings seem to be neatly classifiable, especially in such a dictionary as the Oxford English Dictionary. However, Allen Walker Read (1955, p. 41) points out that: "in the compilation of the Oxford English Dictionary the intermediate or transitional quotations were discarded as being 'ambiguous' or 'not clear', and the resulting neat patterns are false to actual usage."

Part of our problem in attempting to set up a series of meanings based on a presumed historical development is that often we do not know the history, even in languages with rather extensive documentation; for many uses may be quite extensive on a colloquial level before they ever appear in a document. Moreover, even when we know something of the history and can reconstruct a "line of descent" for various meanings, the patterns are generally not at all certain. For example, it is possible to diagram the various meanings of Hebrew *\*kbd*, 'heavy', 'much', 'many', 'slow', 'abundant', 'burdensome', 'difficult', 'grievous', 'sluggish', 'dull', 'riches', 'respect', 'honor', and 'great', as in Figure 22 (Nida, 1958, p. 289).

This type of diagram has certain advantages, for it symbolizes, within a relatively limited space, a number of significant relationships of meaning. However, there are some serious drawbacks to this type of "derivational analysis," for: (1) the representation of relationships is oversimplified (several planes plus a dimension of time would be necessary if one were to diagram all the factors accurately); (2) the arrows imply a kind of etymological descent, which may or may not be correct; and (3) instead of two degrees of interrelationship (solid and dotted lines), there are actually several, with a considerable reciprocal

re-enforcement which can scarcely be shown on such a diagram. Hence, it must be recognized that any such plotting of meanings will inevitably skew the basic relationships existing in the Biblical usage of this lexical unit.

Analyses of meaning based on derivational procedures do, however, provide some very important insights, for any logico-historical grouping of meanings tends to produce "tree structures" which show important

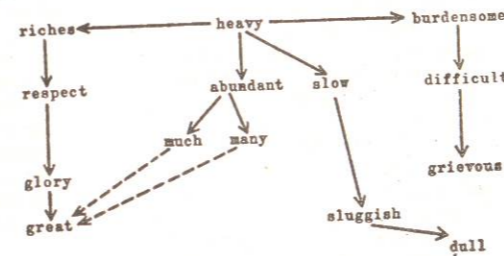


Figure 22

contrasts at certain nodes. In many instances, these points of branching coincide with distinctions based on contrasting features, as noted in the discussion of the meaning of *bachelor* in Chapter 3.

COMPONENTIAL TECHNIQUES

One striking defect in this diagram (Figure 22) of the meanings of the Biblical Hebrew root *\*kbd* is the failure to reflect some of the obvious features shared by different sets of meanings. For example, the meanings of 'riches', 'respect', 'glory', and 'great' are culturally favored, while the meanings of 'burdensome', 'difficult', 'grievous', and 'dull' are disfavored. Certain of the meanings are related directly to physical weight and others to derivable inertia. Still others express primarily an increased degree of some quality. Since there are significant components of meaning shared by some of the meanings and not by others, it is possible to apply a kind of componential analysis to these meanings as a way of pointing out more clearly certain of the interrelationships. These componential features may be diagrammed as in Figure 23.

This type of componential analysis, in contrast to the kind examined in connection with sets of words, does not presume to identify all the significant contrasts between various meanings of a term. It is merely a method by which we may group certain sets of related meanings in a significant way. In the above diagram, two of the components, namely, "culturally desirable" and "culturally undesirable," are largely emotive, rather than referential; and certainly these five components are not all the "sufficient and necessary features" for defining the area of meaning of the root *\*kbd*. On the other hand, such an analysis of meanings of a

single form has certain advantages, especially in the analysis of possible homonyms—terms identical in form, but unrelated in meaning, e.g. *pair*, *pare*, and *pear*; *read* and *reed*; and *light* (referring to brightness) and *light* (referring to weight). If there are no components or chains of components which unite any series of meanings, we may be quite certain that we are dealing with homonyms, not with highly divergent meanings of the same word.

Of course, these components must be carefully chosen for their cultural relevance and acceptability to native speakers of a language, for the native speakers are the ones who reshape the semantic structure of a language by recognizing the relationships which may not have existed previously. For example, historically the *by* of *by-law* is not the same as the *by* of *by-product*, or *by-path*, but for most American English speakers

	Heavy	Much	Many	Abundant	Great	Riches	Respect	Glory	Slow	Sluggish	Dull	Burdensome	Difficult	Grievous
Physical weight	+	±	±	±	±	+			±	±		+	±	±
Inertia	+	±	±	±		±			+	+	±	±	±	±
Culturally desirable		±	±	±	+	+	+	+						
Culturally undesirable	±	±	±	±					±	+	+	+	+	+
Increased degree					+			+		±	±			+

Figure 23

all these *bys* mean a subordinate or derivative sort of *law*, *product*, or *path*. Similarly, some persons identify *sex* in *sextette* and *rump* in *rumpus*, and for these persons the related forms have certain shared components of meaning (Read, 1949a).

At times a series of meanings of an apparently single term seem so disparate and unrelated that one questions the correctness of the presumed grouping of meaning. Particularly is this true when one deals with words occurring in cultural contexts entirely different from those familiar to one. For example, in Anuak, a Nilotic language of the Sudan, the word *iwok* occurs in at least ten rather widely different types of contexts (Nida, 1958, pp. 291-292):

1. "The one who made the world and everything in it is *iwok*." In this type of context *iwok* is always referred to as a person, but any traits of personality are mentioned only in rather vague terms.
2. "The *juu piny* must be placated by offerings and sacrifices." The *juu piny* (*juu* is the plural form of *iwok*) are literally 'gods of the earth', most of whom seem to have been borrowed from the neighboring Nuers. For the most part they are malevolent and they differ in activity and power. The relationships (1) between the *juu*