COMPONENTIAL ANALYSIS OF MEANING: THEORY AND APPLICATIONS

Susana Widyastuti

Yogyakarta State University

ABSTRACT

There are many different ways to approach the problems of meaning, since meaning is related to many different functions of language. The meanings of words in a language are interrelated and they are defined in part by their relations with other words in the language. Analyzed in the same semantic domain, words can be classified according to shared and differentiating features. Breaking down the sense of a word into its minimal distinctive features, componential analysis of meaning can be a useful approach in the study of meaning, particularly in determining the meaning of a lexeme. Although componential analysis has some difficulties and limitations in its application, it is still used in modern linguistics.

Key words: components, analysis, meaning, semantics

A. Introduction

Finegan (2004: 181-182) distinguishes three types of meaning, i.e. linguistic, social, and affective meaning. Linguistic meaning encompasses both sense and reference. One way of defining meaning is to say that the meaning of a word or sentence is the actual person, object, abstract notion, event, or state to which the word or sentence makes reference. Referential meaning may be the easiest kind to recognize, but it is not sufficient to explain how some expressions mean what they mean. For one thing, not all expressions have referents. Social meaning is what we rely on when we identify certain social characteristics of speakers and situations from the character of the language used. Affective meaning is the emotional connotation that is attached to words and utterances.

A word or lexeme presents a complex semantic structure. A lexeme is built up of smaller components of meaning which are combined differently to form a different lexeme. The meaning of a lexeme is a complicated structure where

elements of meaning have definite interrelation (Crystal, 1987: 104). All semantic elements in a word are not equally important. One (or some) of them is the dominant semantic element and it organizes around itself all the other ones, which may be more or less important for the meaning of a lexeme (Lyons J, 1995: 108 and Leech, 1983: 89).

A lexeme can be analyzed and described in terms of its semantic components, which help to define different lexical relations, grammatical and syntactic processes. The semantic structure of a lexeme is treated as a system of meanings. To some extent we can define a lexeme by telling what set it belongs to and how it differs from other members of the same set. Some abvious sets of this sort are sports (*tennis, badminton, soccer, golf, basketball,...),* colors (*red, blue, yellow, green, pink, ...*) and creative writing (*novel, poem, short story, essay, biography,...).* It is not difficult to say what the members of each set have in common.

According to Semantic field (or semantic domain) theory, lexemes can be classified according to shared and differentiating features. Here are more examples. *Wasp, hornet, bee* and other items denote 'flying, stinging insects'; *moth* and *housefly*, among others, denote insects that fly but do not sting; *ant* and *termite* are names of insects neither fly nor sting. The semantic features explain how the members of the set are related to one another and can be used to differentiate them from one another. The determination of such features has been called componential analysis (Kreidler, 2002: 87 and Wardhaugh, 1977:163). This writing treats only the componential analysis of referential meaning.

B. Discussion

1. Components of Meaning

Palmer says that the total meaning of a word can be seen in terms of a number of distinct elements or components of meaning (1976: 85). Components have a distinguishing function and serve to distinguish the meaning of a lexeme from that of semantically related lexemes, or more accurately they serve to distinguish among the meanings of lexemes in the same semantic domain.

To determine the meaning of any form contrast must be found, for there is no meaning apart from significant differences. Nida (1975: 31) states

> "If all the universe were blue, there would be no blueness, since there would be nothing to contrast with blue. The same is true for the meanings of words. They have meaning only in terms of systematic contrasts with other words which share certain features with them but contrast with them in respect to other features".

Jackson in "*Words and their meaning*" (1996: 83) dan Nida in "*Componential Analysis of Meaning*" (1975: 32) categorize the types of components into two main types, i.e. common component and diagnostic or distinctive component.

a. *Common component.*
   This is the central component which is shared by all the lexemes in the same semantic domain or lexical field.
b. *Diagnostic or distinctive components.*
   They serve to distinguish the meaning from others from the same domain.

A very simple example to explain these two types is provided by the words *man, woman, boy, girl,* and other related words in English (Leech, 1976: 96). These words all belong to the semantic field of 'human race' and the relations between them may be represented by the following matrix.

Tabel 1. Common and Diagnostic Components of the words *man, woman, boy*, and *girl*

Components	*man*	*woman*	*boy*	*girl*
[human]	+	+	+	+
[adult]	+	+	-	-
[male]	+	-	+	-

In the semantic domain of *man, woman, boy*, and *girl*, [human] is the *common component*, and they are distinguished by [adult], [male], [female] as the *diagnostic components*. The meanings of the individual items can then be expressed by combinations of these features:

Man	+[human] +[adult] +[male]
Woman	+[human] +[adult] -[male]
Boy	+[human] -[adult] +[male]
Girl	+[human] -[adult] -[male]

Before going further with the componential approach, it is important to consider possible differences in the roles of diagnostic components (Nida, 1975: 38). The differences can be best designated as (1) implicational, (2) core, and (3) inferential.

Implicational component are those implied by a particular meaning, though they do not form an essential part of the core meaning. On the contrary, implicational components remain associated with a meaning, even when other components are negativized by the context. The word *repent* has three diagnostic components: (1) previous wrong behavior, (2) contrition for what has been done, and (3) change of behavior, and the first component is implicational. Whether in a positive or negative context, e.g. he repented of what he did or he didn't repent of what he did, the implication is that the person in question did something wrong. The negation affects the core components which specify the central aspects of the event, but does not modify the implicational component.

The inferential components of meanings are those which may be infered from the use of an expression, but which are not regarded as obligatory, core elements. In the expression *the policeman shot the thief*, 'the thief was killed' is the inference, and without further contextual condition assumed to be the case. However, it is possible to deny this inference, e.g. 'the policeman shot the thief but didn't kill him'. At the same time an inferential component may be explicitly stated, e.g. *the policeman shot the thief to death* or *the policeman shot and killed the thief.*

2. *Componential Analysis of Meaning: Definition and History*

Componential analisis (CA) is based on the presumption that the meaning of a word is composed of semantic components. So the essential features that form the meaning are elementary units on semantic level. By componential analysis, it is possible to state the smallest indivisible units of lexis or minimal components (Aitchison, 2003: 92).

CA is particularly applicable to distinguishing the meanings of lexemes that are semantically related or in the same semantic domain. It is often seen as a process of breaking down the sense of a word into its minimal distinctive features; that is, into components which contrast with other components. It refers to the description of the meaning of words through structured sets of semantic features, which are given as "present", "absent" or "indifferent with reference to feature". To describe the presence and absence of a feature, binnary rules are used. The symbol '+' means the feature is present, while '-' means the feature is absent (Saeed, 2009: 260).

Structural semantics and CA were patterned on the phonological methods of the Prague School, which described sounds by determining the absence and presence of features (Jackson, 1996: 80). The method thus departs from the principle of compositionality (Saeed, 2009: 265). The lexical decomposition (or componential) approach to lexical semantics became one of the most influential in the 1960-1970s. In this theory, word meanings were broken down into semantic primitives or semantic features and their specifications.

CA is a method typical of structural semantics which analyzes the structure of a words meaning. Thus, it reveals the culturally important features by which speakers of the language distinguish different words in the domain. This is a highly valuable approach to learning another language and understanding a specific semantic domain of an Ethnography. Furthermore, Leech (1976: 98) states "as a distinctive technique, componential analysis first evolved in anthropological linguistics as a means of studying relations between kinship terms, but it has since proved its usefulness in many spheres of meaning".

The semantic domain where componential analysis was first used with some success was kinship terminology. Kinship terms are conventionally described in relation to a given person, technically termed by the Latin equivalent of the pronoun I: *ego*. There are some components needed to analyze the terms, they are gender and generation (in respect of *ego*). For examples, *brother* and *sister* are the same generation as *ego*. While *father* and *mother* are one generation above (ascending generation) and *son* and *daughter* are one generation below (descending generation). We therefore need two semantic components to distinguish the generation: [ASCENDING] and [DESCENDING]. Gender and generation are not sufficient in distinguishing the meanings, we then need another

component to contrast 'direct' or 'lineal' descent and 'collateral' descent. A semantic component of 'LINEAL' is then proposed. Below is the matrix which represents unique analysis of each term in the kinship system.

Table 2. The matrix of kinship terms (Jackson, 1996: 82)

Kinship terms	[MALE]	[ASCEND]	[DESCEND]	[LINEAL]
Father	+	+	-	+
Mother	-	+	-	+
Uncle	+	+	-	-
Aunt	-	+	-	-
Brother	+	-	-	+
Sister	-	-	-	+
Son	+	-	+	+
Daughter	-	-	+	+
Nephew	+	-	+	-
Niece	-	-	+	-
Causin	+/-	-	-	-

3. *Procedural Steps in the Componential Analysis of Meaning*

Componential analysis (CA) can only be done within the same semantic domain. There are three basic steps in the procedure for determining the diagnostic features (Nida, 1975: 48), they are:

a. determining the common features and line up all the apparently relevant differences in form and possibly related functions;
b. studying the relations of the features to one another, in order to determine the redundancies and dependencies; and
c. formulating a set of diagnostic features and testing such a set for adequacy.

Furthermore, Nida has developed these three basic steps into six procedural steps which are important for analyzing the components of a related set of meanings (1975: 54-61).

a. Conducting a tentative selection of meanings which appear to be closely related, in the sense that they constitute a relatively well-defined semantic domain by virtue of sharing a number of common components.

In this case, the meanings of *father, mother, son, daughter, brother, sister, uncle, aunt, nephew, niece* dan *cousin* all share the components of being applicable to human beings and designated persons who are related either by blood or by marriage.

b. Listing all the specific kinds of referents for each of the meanings belonging to the domain in question.

In some special situations one may even be able to list all the referents. For *father* and *mother*, as related to any one ego, there would presumably be only one referent. Expressions such as *father-in-law, mother-in-law, stepfather,* and *stepmother* are all regarded as separate semantic units and should be treated only as parts of extended domain, since they are clearly secondary in formal as well as semantic structure.

c. Determining those components which may be true of the meanings of one or more terms, but not of all the terms in question.

Obviously some of the meanings, as reflected in the differences between referents, involve the component of female sex, e.g *mother, aunt, daughter, sister, niece,* and *cousin*, while others involve the component of male sex, e.g. *father, uncle, son, brother, nephew,* and *cousin*. The term *cousin* is nondistinctive with respect to sex. One must proceed feature by feature to determine those components which do make distinctions, and ultimately the features of sex, generation, and lineality, and consanguinity vs. affinial relations prove to be the distinctive features.

d. Determining the diagnostic components applicable to each meaning, so that the meaning of *father* may be indicted as possessing the components: male sex, one ascending generation, and direct descent; *mother* as female sex, one ascending generation, and direct descent; *brother* as male sex, same generation as ego, and first degree of laterality; etc.

e. Cross-checking with the data obtained by the first procedure.

On the basis of the diagnostic features, one should be able to apply the correct terms to the referents known to possess such features.

f. Describing the diagnostic features systematically.

It may be done simply by listing the diagnostic features for each meaning (or term) or the arrangement of such data in the form of a tree diagram or matrix.

Tabel 3. The diagnostic features of kinship terms

+1 generation	*Father*	*Mother*	*Uncle*	*Aunt*	
0 generation	*Ego*	*Ego*	*Brother*	*Sister*	*cousin*
-1 generation	*Son*	*Daughter*	*Nephew*	*niece*	

4. Linguistic Basis for Componential Analysis

The actual linguistic procedures employed in CA consists of four types, they are naming, paraphrasing, defining, and classifying. If elicitation of usage is carefully conducted and if the results of such a procedure are carefully checked against spontaneous utterances, there is every reason to believe that the results of using the four basic processes of naming, paraphrasing, defining, and classifying can be essentially accurate (Nida, 1975: 64-66).

a. naming

The process of naming is in certain respects similar to reference, though the perspective is somewhat different. Reference is usually described as the relation established between linear unit and a referent, while naming is the specific act of designating a referent.

b. paraphrasing

Paraphrasing is also an important linguistic function and one can spell out the distinctive features of any semantic unit by employing certain types of paraphrases. *Uncle* can be paraphrased into *my father's brother* or *my mother's brother.*

c. defining

The process of defining would seem to be simply another form of paraphrase, but defining is a highly specialized form of paraphrase and is rarely used in actual language situations. It consists essentially in combining all the various specific paraphrases into a single statement based on the diagnostic components of the particular meaning in question. *Uncle* may be defined as *the brother of one's father or mother or the husband of one's aunt.*

d. classifying

It involves a triple procedure: (1) lumping together those units which have certain features in common, (2) separating out those units which are distinct from one another, and (3) determining the basis for such groupings. Classification is never merely a process of putting referents into conceptual

files for the basic kinship terms in English, it is essential to establish the features of sex, generation, degree of lineality, and consanguinity-affinal distinction.

5. *Contributions to the Study of Meaning.*

Componential analysis has a useful part to play in contributing to the description of meanings of lexemes (Jackson, 2009: 91-92). Here are some of the contributions.

a. Understanding synonymy.
   A pair of true synonyms will share the same set of semantic components.
   For example, *adult* and *grown-up* have the same components [+HUMAN] [+ADULT].
b. Establishing degrees of synonymy.
   We may talk of looser synonymy where a pair of lexemes have some but not all semantic components in common. For example, *barn* and *shed* would be looser synonyms. They share components [BUILDING], [STORAGE], but *barn* has additional component of [FARM] and perhaps that of [FOR CEREALS], while *shed* has perhaps the additional component [HOUSE].
c. Understanding antonymy.
   A pair of antonyms usually share all their components except one, e.g *man* and *woman* share the components [+CONCRETE], [+ANIMATE], [+HUMAN], but they are contrasted by the component [MALE].
d. Understanding the sense relation of hyponymy.
   Hyponymy refers to the relation of inclusion of meaning, e.g. the fact that the meaning of *rat* is included in the meaning of *rodent*.
e. Helping translator to produce accurate translation.
   CA Determines the essential features of meaning of lexical units, which is very useful in doing translation (Nida, 1975: 7).

6. *Basic Difficulties Encountered in the Analysis of Semantic Components.*

A number of fundamental difficulties are involved in determining the diagnostic components of the meanings of semantic unit (Nida, 1975: 61-64).

a. The lack of an adequate metalanguage with which to describe some of the diversities.

It is difficult enough to speak of distinctions in color, so that a contiguous series such as *violet, blue, purple, green, yellow, orange,* and *red* can be properly described in terms of diagnostic components. Another obvious example involves the semantic domain of odors: *stink, smell, stench,* and *malodor,* or the semantic domain of noises seperti *scream, screech, squeak,* and *squeal.*

b. Meanings which constitute a contiguous set.

The meaning of *even* in contexts such as *even john kissed Marry, John even kissed Marry,* and *John kissed even Marry* is paralleled to some extent by *only*, e.g.*only John kissed Marry, John only kissed marry,* and *John kissed only Marry*. The related meanings of *even, only,* and *just* are contiguous, therefore one must look for other sets of contrast to provide the basis for componential analysis.

c. Some terms which primarily differ only in the degree of intensity.

There may be no absolute feature which marks the difference but by only a relative contrast. *Toss* and *hurl* may be regarded as types of throwing, but the major difference is one of intensity, and accordingly one must reckon with a continuum on which there is no fixed boundary between the two. The speed at which a professional baseball player may toss a ball may be much faster than the speed at which some amateur ball players can hurl.

d. The meanings of certain terms exist only in one's passive vocabulary.

One may, for example, have a general idea of the meanings of *saunter, stroll,* and *meander,* as referring to ways of walking, but the fact that these terms are not in one's active vocabulary tends to make it difficult to determine how and to what extent such meanings differ.

e. The diversity of view points, especially in describing spatial relations.

For a *house* one can speak of behind and in front of, since a *house* is regarded as having a back and front. But when one speaks of behind a *tree* and in front of a *tree*, the spatial relation must be relative to a view point character or existing situation. Time involves similar difficulties.

f. The meaning of many abstract terms.

It involves a number of complications because of their potential syntagmatic relations to so many events and entities.

A word such as *lousy* may occur with a vast number of different semantic heads, e.g. *lousy meal, lousy person, lousy time, lousy deal, lousy weather,*

lousy grades, lousy book, lousy performance, etc. None of which have anything to do with a louse.

g. A word can have different meanings in different fields.
   The word *competence* is used in the fields of linguistics, education dan psychology, and they define and use it in different ways and contexts.
h. Deixis terms.
   The different meanings and use of "*there* and *here*" and "*this* and *that*" depend primarily on space and time.
i. Distinctions may be based on relations rather than on physical features.
   Certain aspects of complications have already been noted in the discussions of kinship terms, but meanings reflected in such terms as *friend, partner, colleague,* and *associate* are even more difficult to analyze.
j. The componential analysis becomes much more complex when the relation describe logical arrangements, as with *if, though, because, in order to*, etc.

7. *Applicability and Universality*

Is there then a set of semantic components which is universal and from which the meanings of lexemes in all languages are composed? If there is, we do not have yet the knowledge or the metalanguage to specify what such a set might be. Some words are also culture-bound, which means the meaning distinctions that are relevant to one culture may not fit another culture at all. For example, all cultures have kinship systems, but they are often organized in a quite different way (Jackson, 1991: 91).

Componential analysis is also limited in its range of applicability as it does not apply easily to all areas of the vocabulary. Semantic components, when they can be identified, have a discriminatory function and they add to our understanding of the meaning of a lexeme by providing points of contrast with semantically related lexemes. The meaning of a lexeme must also involve a number of perspectives, e.g. denotation, sense relations, and collocation.

Another problem of its application which shows its limitation is the fact that componential analysis (among other types of meaning) only focuses on referential meaning. In other words, it is only concerned with the relation between the lexical unit and the referent, and the meanings of lexemes which refer to objects. It is important to consider that not all words have referents (Nida, 1975: 25).

Some linguists also believe that componential analysis account naturally overlaps, since one can point to components which are apparently shared by overlapping words. *Cow, princess and tigrees* overlap because the share the component [FEMALE]. It is also somewhat inaccurate to speak of the meaning of words as being composed out of a heap of separate components. At best, these so-called components form only a small part of the overall meaning of the word in question, and the whole approach wrongly suggests that if we look a little more carefully, we may be able to sort out all of them. The words 'components' and 'componential analysis' have therefore faded out of fashion. Nowadays, people tend to talk of words having semantic properties, which are somewhat more satisfactory, since it does not imply that these properties are building blocks which need to be assembled.

It works best with taxonomies (sytems of classification, e.g. kinship) or sets of concrete objects. It is of more doubtful value in describing the meanings of more abstract lexemes, not least because we lack an adequate metalanguage. Consider the set of lexemes: *annoy, irritate, vex, displease,* and *provoke*. They all refer to the ways of causing someone to be angry or to feel angry, any member of the set is frequently defined in terms of one or more of the members. We may conclude therefore that there is no universal set of semantic components from which the meanings of lexemes are composed.

C. Conclusion

Components serve to distinguish among the meanings of semantically related lexemes in the same semantic domain. Analysis in terms of components, when the total meaning of a lexeme is seen in terms of a number of distinct elements or components of meaning, is not sufficient but can help to define the meaning of a lexeme formed by a number of semantic signs. Through six careful procedural steps of analysis which are simplified into four basic processes of naming, paraphrasing, defining, and classifying, componential analysis has been a useful approach to determine the meaning of a lexeme.

Since the meaning of a lexeme involves a number of perpectives, knowledge on the dimensions of meanings and metalanguage is very essential to make this analysis work. Despite its usefulness in the analysis of meaning, we may encounter difficulties and limitations in applying the theory. It can not be applied

easily to all areas of the vocabulary, due to in part metalanguage and cultural problems. In terms of its universality, it can be concluded that there is no universal set of semantic components from which the meanings of lexemes are composed.

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