

Theories of Semantics: Merits and Limitations

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Abstract

Meaning is so intangible that one group of linguists , the structuralists , preferred not to deal with it or rely on it at all . It is a variable and not to be taken for granted. Nevertheless , many theories have been interested in the study of meaning. Because of the limited scope of this paper, the discussion will cover some of the well-known theories of meaning formulated in the last century. Mainly referential theory of meaning, non-referential theory of meaning and generative grammarian theory of meaning are discussed. Some assumptions, merits and limitations for each theory are also described. The researcher hopes that many people can benefit from this article since meaning is a complex concept and difficult to understand.

Keywords: Generative Grammmarian Theory, Meaning, Non-Referential Theory, Referential Theory, Semantics

Introduction

Semantics is the technical term used to refer to the study of meaning, and, since meaning is a part of language, semantics is a part of linguistics. Unfortunately, “meaning” covers a variety of aspects of language and there is no general agreement about the nature of meaning, what aspects it may properly be included in semantics, or the way in which it should be described.

Meaning is so intangible that one group of linguists, the structuralists, preferred not to deal with it or rely on it at all. To illustrate what we mean by the intangible quality of “meaning”, think of such words as “beauty”, “goodness”, “love”; it would be hard to find two people who agree absolutely on what each of these words implies. A person may seem good to one onlooker and a hypocrite to another. Similarly, we all think we know what we mean by “boy” and “man”, but at what age does a boy cease to be a boy? At thirteen? Fifteen? Eighteen? Twenty-one? Meaning is a variable and not to be taken for granted.

Meaning has become a matter of great concern to philosophers, literary scholars and thinkers all over the world. Greek philosophers like Socrates, Plato, and Aristotle, and others in ancient China and in ancient India made many statements about meaning and some of them are still relevant today. Because of the limited scope of this paper, the researcher is going to discuss the main assumptions, merits, and limitations of three well-known theories of meaning. These theories are: referential theory of meaning, the non-referential theory of meaning and generative grammarian theory of meaning. None of them is perfect; each of them has merits and limitations. Since meaning is a complex phenomenon and difficult to understand, it is hoped that many students can benefit from this study and form certain views about meaning and how it operates. In the following sections, each theory will be explained with some detail

I. The Referential Theory of Meaning

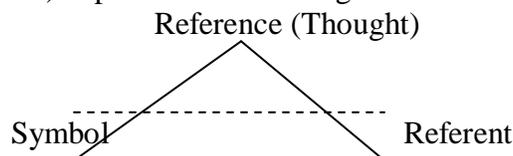
a. Meaning as the Relationship between Words and Objects

Greek philosophers say that there is a relationship between words and objects. In other words, the best way of indicating the meaning of a word is to refer to the object represented by that word. In their points of view, the best definition of the meaning of a word is its ostensive definition: defining an object by pointing to that object.

This view has been criticized because it works very well only with concrete words, such as *dog, house, table, sun, door,..etc*, but it does not with abstract words— such as, *the, and, because, ambition, happiness,..etc*.

b. Meaning as a Triangular Relationship

Ogden and Richard (1923:11) explained the meaning of a word with the help of a triangle.



The symbol is the spoken or written word; the reference is the information that the spoken or written shape of the word conveys to the reader/ hearer; and the referent is the thing or the object we talk about. The broken line means that there is no direct relationship between word and the object that it refers to. Their view about meaning is nearly the same as of the Greek philosophers. The only new thing they added is that it is the human mind that links an object

with the word used for that object. Again, this view works only with concrete words, but it does not with abstract ones.

c. Bloomfield's View of Meaning

Bloomfield (1933) stated that the context of situation was an essential part of meaning. He defined the meaning of a linguistic form as the situation in which the speaker utters it and the response which it calls forth in the hearer. Palmer(1981) used reference in the sense of non-linguistic world of objects and experiences. In this sense, the word reference is used for the whole network of the contexts of situations in which we live. In other words, both Bloomfield and Palmer focus on the context of situations. Bloomfield also thinks of meaning as something describable in terms of stimuli and responses like Skinner who came after him. Skinner (1957) views meaning as a result of stimuli and responses made by participants in a verbal act of communication. Like Skinner, Bloomfield explained his view of meaning with the help of an imagined verbal communication between Jack and Jill.

Jill, who is hungry, sees an apple. The apple in this case is the stimulus. This stimulus can produce in Jill a response in the form of an action and Jill can go and get the apple. Jill's response may as well be in the form of a verbal action and she may ask Jack to go and get the apple for her. Jill's verbal action operates as a linguistic response of his getting the apple for Jill. For him, meaning can be defined as the non-linguistic events that precede and follow that verbal action.

Bloomfield (p. 139) also states that "we can define the meaning of a speech form accurately when this meaning has to do with some matter of which we possess scientific knowledge". He believes that speech is a physical event and the human behaviors and language as part of human behavior are subject to the laws of science which were applicable in the case of other physical events in the universe. He thinks that knowledge obtained from research in physical sciences would solve all linguists' problems.

His belief may work well in the area of phonology, *the phonetic laboratory*. But in semantics, his view seems untrue because it is impossible for us to provide a scientifically accurate definition of the meaning of every word in a language. He himself asserts that "the statement of meaning is, therefore, the weak point in language study, and will remain so until human knowledge advances very far beyond the present state" (p. 140).

Leech (1981:2) has described this statement as "a pessimistic note, which turned out to be the virtual death-knell of semantics in the USA for the next twenty years". Therefore, Bloomfield's theory loses its force when we realize how many of the relevant predisposing factors are unknown and unknowable. Skinner's theory runs into difficulties of a similar kind. It is easy to identify the stimuli, the responses and reinforcing events in the lab, but human behavior, especially language is much more complex and it is impossible to identify the relevant events.

Malinowski (1923) and Firth (1951) believe that the description of a language could not be complete without some reference to the context of situation in which the language operates. They made statements of meaning in terms of the situation.

For Malinowski, a context of situation was a bit of the social process which can be considered a part or an ordered series of events. He does not provide the basis of any workable semantic theory. He does not even discuss the ways in which context can be handled in a systematic way to provide a statement of meaning.

Firth felt that Malinowski's context of situation was not satisfactory for the more accurate and precise linguistic approach to the problem. So, he sees the context of situation as part of the linguistic apparatus in the same way as are the grammatical categories that he uses. It was best used as "a suitable schematic construct" to apply to language event, and he, therefore, suggested the following categories.

- The relevant features of participants: persons, personalities.
- The verbal action of the participants.
- The non-verbal action of the participants.
- The relevant object.
- The effect of the verbal action.

In this way, contexts of situation can be grouped and classified; this is essential if it is to be part of linguistic analysis of language.

Firth's view of meaning is more comprehensive than many other views because, for him, meaning includes those aspects which are describable in terms of intra-linguistic relation, and also the other aspects which are described in terms of the relationship between language and the world outside language. But it is impossible to decide what is in the world and what is in language. Contexts of situations may not be right for the vast majority of the sentences that we encounter. He himself believes that we could never capture the whole of meaning.

II .The Non-Referential Theory of Meaning

Bridge (1927: 6) states that "the proper definition of a concept is not in terms of its properties, but in terms of actual operations". For him a concept is nothing more than a set of operations. If the concept is physical as of length; the operations are actual physical operations, namely, those by which length is measured: or if the concept is mental, as of mathematical continuity, the operations are mental operations, namely those by which we determine whether a given aggregate of magnitude is continuous.

Wittgenstein (1953) states a similar definition of meaning and says that the meaning of a word is defined by its use in the language. His opinion of words and concepts are like the instruments in hands of a technician.

Think of the tools in a tool-box: there is a hammer, pliers, a saw, a screw-driver, a ruler a glue-pot, glue, nails and screws. The function, of words are as diverse as the functions of those objects.

To make this view clear, he compares the use of language with the game of chess. Just as the role of a piece in the game of chess can be defined only in relation to the other pieces in that game, the meaning of a word can be defined only in relation to the way that is used in relation to other words in the language. To make his view evident, he says that the meanings of the word **have** are not the same in the following examples:

- Birds have wings.
- I have two children.
- I have a good memory.

Similarly, the meanings of the word **is** in the following sentences are not the same.

- The rose is red.
- Twice two is four.

Wittgenstein suggests the use of the lexical substitution technique to perceive the differences in meaning in these examples by allowing us to replace the word **is** in the second sentence by the sign of equality, and forbidding this substitution in the first sentence (p.149).

The non-referential approach as suggested by its name doesn't take into consideration the context of situations or the reference in determining what meaning is. There is a relationship between language and the outside world because language doesn't exist in vacuum. Therefore, this may indicate a weakness in this theory.

III .The Generative Grammarian Theory

Chomsky (1957) ignored meaning in his formulation, *syntactic structures*. This approach was based on the assumption that syntactic rules operate independently of meaning. Chomsky and others believe that changing the active into passive structures does not change the meaning of the sentence.

Kats and Fodor (1963) revealed a basic change in the transformational grammarian approach to the study of meaning in "*The Structure of a Semantic Theory*". Since then, meaning has been a matter of great theoretical concern to transformational grammarians. Despite several modifications suggested by others, their theory contributes to be the foundation to the study of meaning until present.

Chomsky (1965) introduced in his book: "*Aspects of the Theory of Syntax*", the concept of the deep and surface structure and stated that the meaning of a sentence depends on the network of relations in the deep structure of a sentence. Later on, the generative framework became two different theories. Lakeoff (1974), and others developed a theory known as *Generative Semantics*, whereas Jackendoff (1972) and others another theory based on the theory introduced by Katz and Fodor, and this theory is known as *Interpretive Semantics*. In the following two sections, the researcher is going to give a brief outline of these two theories.

A. Interpretive Semantic Theory

One aspect of this theory is the complete exclusion of the context of situation from its theoretical framework. This view is different from other views, particularly Firthian ones discussed previously. Katz (1972) and Fodor (1982) state that meaning should confine itself to the knowledge of language and not to the knowledge of the world. In other words, the aspects of meaning which are explainable only in terms of one's knowledge of the world should be better discussed by pragmatics and not by semantics. To illustrate their points they suggested the following sentences:

- Our store sells horse shoes.
- Our store sells alligator shoes.

It is on the basis of one's knowledge of the world (that shoes are made for horses but not for alligators and that shoes made out of the skin of an alligator but not out of the skin of horses) that one assigns only one interpretation to such phrases. Therefore, non-linguistic knowledge helps in understanding the meaning. But this knowledge which one needs for processing meaning is physically endless. So this theory will face difficulties if it attempts to include this knowledge within its framework. Katz and Fodor (1963) make the following observation. Since there is no serious possibility of systematizing all the knowledge of the world that speakers share and since a theory of the kind we have been discussing requires such a systematization, it is *ipso facto* not a serious model for semantics. Because of many changes

made in the basic structure of this theory in 1970s, the researcher is going to discuss it with some detail into two sections.

1. The Early Interpretive Semantics

The two components of interpretive semantics are the lexicon and the projection rules. The function of the lexicon is to provide the information we need for each word of the language concerning its role in meaning interpretation. The word has a grammatical portion and a semantic portion. The grammatical portion tells us whether the word is a noun, a verb, adjective, adverb...etc. The semantic portion of the lexicon provides us with semantic components of each word. To illustrate this, we should study the following examples:

Man= + human + male + adult
 Woman= + human –male + adult
 Child= + human ± male – adult
 Bull= + bovine + male + adult
 Cow = + bovine – male + adult
 Calf= + bovine ± male –adult
 Ram = ovine + male + adult
 Ewe= ovine– male + adult
 Lamb= + ovine ± male – adult
 Stallion= + equine + male+ adult
 Mare= + equine – male + adult
 Foal= + equine ± male – adult

On the basis of these semantic markers, the meaning of these words can be distinguished. Here the lexicon specifies the selectional restrictions applicable to each word. They help the user of language why a particular expression in a language is semantically anomalous. For example, *green ideas sleep*, is anomalous because we know that “green” has the feature+ physical object and “ideas” has the feature –physical object, so the meaning of these two words together is anomalous in standard English. Similarly, the word “sleep” has the feature + animate and it is the incompatibility of the selectional restriction between these two words that makes the sentence “ideas sleep” a semantically anomalous expression. The selectional restrictions help us in choosing one of the two or more meanings of a particular word in a sentence, for example, the word *ball* has two different meanings. It means “a round physical object” and it also means “ a dance”. If we have a semantic like, “*Murad kicked the ball*”, we choose the meaning “round physical object” based on selectional restrictions. The verb “kicked” can only take an object which has the feature + physical object. The word “ball” in the sense of dance has the feature – physical object.

The grammatical component provides us with the phrase makers of a sentence. Lexical items are put in proper places in the phrase marker of that sentence. At that stage, the projection rules assign a meaning to a sentence as a whole based on the structured lexical items in that sentence.

Interpretive semanticists believe that the meaning of a sentence depends on its deep structure. They also think that certain transformational rules have to be applied to the deep structure of a sentence to have its surface structure. These transformational rules do not affect meaning. This view was given a lot of importance at that stage of generative grammar as we will see in this paper.

2 .The Later Interpretive Semantics

Chomsky (1967:407) said the following:

In fact I think that a reasonable explication of the term “semantic interpretation” would lead to the conclusion that the surface structure also contributed in a restricted but important way to semantic interpretation, but I will say no more about the matter here.

His view contradicted some generative grammarians who thought that the deep structure of a sentence had all the necessary information for the semantic interpretation of that sentence and that the surface structure of a sentence had absolutely no role in its semantic interpretation.

Katz (1972) continued claiming that interpretive rules apply only to the deep structure of a sentence, whereas Jackendoff (1972) argues that interpretive rules apply to the deep structure and also to the surface structure. He also continued to hold the view that interpretive rules are necessary for semantic interpretation. His view of interpretive semantics is as follows:

Everything needed for the semantic interpretation of sentence is not present in its deep structure. To illustrate his view, he gives us the following two examples:

- Only Peter reads books on linguistics
- Peter Only reads books on linguistics

These two sentences are different in meaning. The difference is due to the position of the quantifier “*only*” in the surface structure of each sentence. He emphasized that applying interpretive rules, only to the deep structure was not always enough for a satisfactory semantic interpretation of that sentence.

Jackendoff pointed that the active and the passive forms of a sentence do not have exactly the same meaning. To explain his view, he supported us with the following examples:

- Many arrows did not hit the target.
- The target was not hit by many arrows.

In the first sentence “*many*” has a more prominent meaning, but in the second, the meaning of the negative becomes more prominent than the meaning of the quantifier. The difference in meaning in these two sentences is due to the different places of the *quantifier* and the *negative* in the surface structure of these sentences.

B. Generative Semantic Theory

This theory depends on the assumption that there is no distinction between syntactic and semantic processes. In other words, they are integrative. Chomsky (1965) pointed out that “the syntactic component of a grammar must specify, for each sentence, a deep structure that determines its semantic representation. (p. 16). The advocates of this theory took this view a step further and equated the deep structure of sentences with their semantic representation. Katz and Postal (1964) who were generative grammarians pointed that transformations do not change the meaning of a sentence and others continued holding the same opinion. They argued that all aspects of the meaning of a sentence are represented in the phrase marker of that sentence and the role of transformations is to change the semantic structure of a sentence directly to its surface structure. They were aware of the fact that in many cases the two transformational variants of a sentence, the active and the passive, for example, do not always convey exactly the same meaning. They were also aware of the fact that the meaning of a sentence depends to a certain extent on the place assigned to quantifiers and negatives in the surface structure of that sentence. But they accounted for all such changes of meaning in terms of what they called *global rules*. These global rules, for example, that if a logical element had a wider scope than another in the semantic representation of a sentence ,it must occur earlier in the surface structure of that sentence.

Interpretative Semantics versus Generative Semantics

For linguists, the deep structure, is the underlying network of syntactic relations. For generative semanticists, the deep structure is not “deep” enough. This approach wants the deep structure of a sentence to be so deep to be identical with its semantic representation. For interpretive semanticists, the semantic representation of a sentence has to be derived from its syntactic base, but for generative semanticists, the syntactic representation of a sentence, i.e. its surface structure has to be derived from its semantic base. For generative semanticists, the deepest level of the representation of a sentence is a network of language– independent categories definable by symbolic logic. They did make use of syntactic categories like noun, verb and sentence, but this was because these syntactic categories were virtual, the same as the categories of logic. The syntactic category of sentence, corresponds to the category of arguments and verbs correspond to the category of predicates in logic.

For generative semanticists, the underlying deep structure of a sentence has to be conceptualized in terms of the laws of thought compatible with the notion of a universal base hypothesis. Generative semanticists make no distinction between semantics and pragmatics, whereas interpretive semanticists did. Interpretive semanticists say that semantics should be studied only in terms of language, whereas the situational aspects of meaning should be studied by pragmatics and not by semantics. Generative semanticists increased the domain of grammar and included within its fold a study of all those societal phenomena which contribute to one’s understanding of meaning and one’s judgments about grammatically.

Lakoff (1974) emphasized the importance of external setting in the study of meaning and of grammar. He pointed out that there are certain concepts from the study of social interaction that are part of grammar, e.g. relative social status, politeness, formality, ...etc.

Interpretive semanticists avoided the context of situation in their formulation, but generative semanticists focused on the context of situation and considered it a vital part of their theory.

Conclusion

The researcher has discussed the main principles of three well-known theories of meaning, namely the referential theory to meaning, the non-referential theory to meaning and the generative grammarian theory to meaning. None of them is complete; each of them has strengths and weaknesses. It is hoped that students can benefit from this study by forming some background about meaning and how it operates since it is a complex concept and not to be taken for granted.

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