THE IMPORTANCE OF SEMANTICS
IN THE TEACHING OF LANGUAGE

Melaku Asfaw and Lakew W/Tekle*

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The word semantics is the name adopted by many linguists for the study of meaning of natural languages as distinguished from artificial languages and lower animals' semiotic means. In the study of semantics, meaning refers to the total experience, knowledge or norm commonly shared or behavior similarly exhibited by groups of people whenever they use their respective languages as means of expressions. The significance of meaning in a language has been attested by specialists in different professions. A linguist (Pei, 1948), for instance, said the function of a language is to "transfer.... meaning" and that "men have conveyed significant messages to one another since the dawn of history" (p.10). To a psychologist (Griffith, 1924) language is said to be created "when a meaning could be transferred to one

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mind from another" (pp. 207-208), and to a philosopher (Urban, 1939), "The philosophy of language... is concerned *with the evaluation of language as a bearer of meanings as a medium of communication and as a sign or symbol of reality*" (p.37). In fact, to this same philosoper.[11] The *sine qua non* of language is precisely the meaning of which the sounds, the motor processes and the tactual sensations, are the bearers" (p.66).

We thus note, to some extent at least, that the role semantics plays in language is indeed well recognized by scholars in different disciplines. Yet, at the same time, other noted scholars (Bloomfield, 1961, Chomsky, 1957) entertained different views about the place of semantics in the study of the grammar of a language. The gist of the arguments of these scholars and the counterarguments presented to their views will be treated next. It is hoped that these arguments will go a long way in delineating the role and importance of the meaning component of natural languages to all those persons interested in serious language studies. The pedagogical significance of the analysis and synthesis of the several views to the practising language teacher is the single factor that had prompted this study.

Background of Semantics

All people, whether civilized or primitive, have been using natural languages to express themselves with each other throughout man's recorded history. This particular characteristic of using language is species-uniform, and species-specific and is the main factor which distinguishes man from the other primates as can be noted from the following except:

> Animals... are one and all without speech. They communicate, of course, but not by any method that can be likened to speaking. They express their emotions and indicate their wishes and control one another's behaviour by suggestion. One ape will take another by the hand and drag him into a game or to his bed; he will hold out his hand to beg for food, and will sometimes receive it. But even the highest apes give no indication of speech (Langer, 1951, p.84).

Even though studies are still under way to find out if the other primates do indeed share these two characteristics with man, the general

consensus, at least for the moment, is that lower animals are unable to use natural language because the sound producing apparata of the lower animals are not well developed and that only humans have the capacity to make the different concactenation of sounds to date (Gardner and Gardner: 1969, Premack, D. 1970, Premack, A.J., and Premack, D.: 1972, Linden: 1974).

The experiments made on chimpanzees by Gardner and Gardner, the Premacks, and Linden showed that chimpanzees can be taught sign language to a limited degree. For example, the chimpanzee called Washoe in the Gardners' five years long experiment could understand and produce well over one hundred signs such as the signs for the words: more, eat, listen, please, key, you and me. In David Premack's experiment, the chimpanzee called Sarah was also taught to associate particular differently shaped and colored plastic symbols with metal backs, with particular meanings arranged on a magnetic board such that, for example, a red square and a blue rectangle could mean a banana and an apricot respectively.

In the cited experiments, it was found out that the lower animals' communication systems were limited and fixed. They were all stimulus-bound. They could be taught to associate a limited number of signs and plastic symbols with their meanings. Therefore, man who is usually referred to as "homo sapien" (man with wisdom), is the only possessor of characteristics " home loquen" (man the speaking animal), and ' grammaticus" (man the grammar maker).

Whether a natural language is shared by the lower animals or not, no one can deny the fact that it is instrumental in the creation of man's the values, needs, or world-views he abides by. Mowrer (1960) has rightly that language "has been transcendentalty important in the evol human culture and mentality" (pp. 117-118). This was emp expressed by Thorndike (1943) as follows:

> Language is man's greatest invention. It is a social tool more important than the community, the state, the law, the church, or the school. It is an intellectual tool as important as observation and experiment, and more important than logic. It is more important than all the

physical tools invented in the last two thousand years.
These assertions may well seem extravagant, but they
can be justified (p.60).

How does a natural language accomplish this task? Or, what goes into
the internal mechanisms of a natural language that makes it the main source
of man's reflective or thinking behaviors? When one is confronted with
such questions, one is likely to think of the sounds, words, and sentences of
the language. This is best expressed by Skinner (1974):

Language has the character of a thing, something a
person acquires and possesses... The words and
sentences of which a language is composed are said to
be tools used to express meanings, thoughts, ideas,
propositions, emotions, needs, desires, and many other
things in or on the speaker's mind (p.88).

The grammar of a language must be considered also. Does the grammar of
a language pertain to the analysis and synthesis of only the sounds, words,
and sentences of that language? Or is there something else missing? Per-
haps one may add the word "semantics" to the list of sounds, words and
sentences, for it unveils what is being represented by sounds, words, and
sentences after all.

How does a linguist react to the above listing? Although this may
appear a simple question to a casual reader, an attempt to answer it cer-
tainly requires the consideration of all efforts made to study the grammar
of a language to date. Such contemplation is likely to reveal the existence of
different camps of linguists who hold separate views regarding the com-
position of the grammar of a language. The answer to the question would
then depend to which of the camps of linguists the reference is made. For
instance, some (Bloomfield: 1961 and his followers) linguists have appro-
ached the study of grammar at the phonetic and morphophonemic level.
Others (Chomsky: 1957 and his followers) have gone a step further, and
have approached it at the syntactic level. Each of these groups considers its
own approach of studying grammar as the best method while at the same
time regarding the other's method as inappropriate. Nevertheless, both of

them have joined ranks in opposing the inclusion of a proper study of semantics in their analyses and syntheses of grammars.

Present Status of Semantics

To the dismay of the two groups of linguists mentioned above, semantics appears to have come of age at long last. The following statement is typical of the recent trends:

> In the last ten years, however, there has been a swing away from a view of semantics as messy, largely unstructured intellectual no-man's land on the fringes of linguistics, and a tendency to accord to it a more and more central position in linguistic studies a position which, at least in my views, it holds as of right (Leech: 1978:x).

Three Approaches to the Study of Grammar

With the inclusion of semantics in linguistic studies, we can say that there are at least three approaches to the study of grammar: (1) One which attempts to study mainly the phonetics and morphophonemics of a language (the structural school), (2) Another one which holds that the syntactic component is central in the study of language for it is here that sentences are assigned structure (the transformational generative school), and (3) One which maintains that any account of language which excludes meaning or semantics is incomplete (the semantics school).

The three approaches combined may be represented diagrammatically as follows:
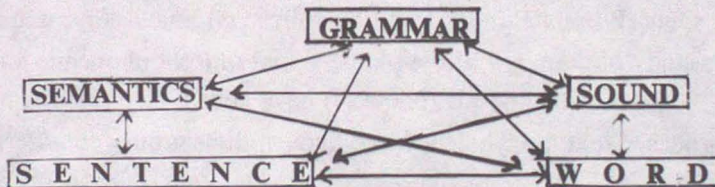
The **diagramme** attempts to depict the components of a natural language whose grammatical study must include so as to give a more or less complete picture of that language.

The Structuralists

The Bloomfield linguists are called structuralists. They have avoided semantics from their study of language as can be characterized by Bloomfield's view as described by Basilius, who wrote, "Professor Bloomfield's oft cited opinion (is) that a linguist's view of the psychology of language was not relevant to his function as a linguist" (Basilius: 1952: 99-100). Bloomfield (1961) himself stated:

> The statement of meanings is... the weak point in language-study, and will remain so until human knowledge advances very far beyond its present state. In practice, we define the meaning of a linguistic form, wherever we can, in terms of some other science. Where this is impossible, we resort to make shift devices. One is demonstration (p.140).

Bloomfield hoped that at some future time, our knowledge in all the sciences including physics, chemistry, psychology, language, etc. would be perfected to such a degree that we would be able to have a clear prespective of what the meaning or semantics component of a language is, and opted for remaining silent on the question of semantics as did all his followers. But when will the time envisaged by Bloomfield and his followers come? Will such a time ever come? To answer the question in the affirmative is tantamount to saying that absolute knowledge is possible. But this is contrary to the theory of knowledge which states that what we know is always relative in the sense that counter evidences are possible for no analysis or theory can be immune from improvement, modification or even replacement by yet another. As far as the structuralists and their "taxonomic" linguistics which seeks to limit itself to analyzing only texts or corpora is concerned, the study of semantics appears to be postponed

indefinitely, even though the postponment was considered to be unfortunate by many as can be observed from Hill's (1957) criticisms. Hill wrote that the decision to delay analysis of semantics "has made the linguist seem to the layman the perfect example of the impractical scholar who retreats from important issues" (p. 413).

The Transformational Generative Grammarians

Semantics did not have much luck with the transformational-generative linguists either. Colin Cherry (1975), an information theorist, has rightly written that the transformational-generative grammarians have considered "language as a purely syntactic system, avoiding question of "meaning" and "truth" as they would avoid the plague" (1975: 225). Even though he labelled this criticism on the universal grammarians' analyses of language for not including semantics in their studies, he is not enthusiastic about semantics himself . He has expressed his personal views on the subject as follows:

> It has been shown easier to memorize and recall long sentences of "meaningful" text than similar chains of random words. But your author would place more stress upon our syntactical habits: Upon our knowledge of sounds and their sequences of syllabic patterning and word sequences (p. 281).

Although Cherry has seen and acknowledged research findings which indicate that it is "easier to memorize and recall long sentences of meaningful text than... random words" (Miller and Selfridge: 1950), he has nevertheless emphasized the importance of our ingrained speech habits at the synatactic levels, rather than at the semantic level.

The transformational generative grammarians have tried to avoid the study of semantics. However, they were not very successful in avoiding it altogether from their analysis. How could they? After all, what is the expression of a language without its content and vice versa? Rather, they have chosen to make the analysis of the meaning component of a language peripheral to the proper study of linguistics as expressed by McCawley (1968):

> There is an uncomfortable similarity between the way
> that semantics has generally been treated in trans-
> formational grammar and the way that syntax was
> treated in the "phonological grammar" of Trager and
> Smith. In either case the subject is a nebulous area
> which cannot be dealt with on its own ground but is
> accessible only through the more manageable field of
> syntax or phonology (p. 125).

Such unfair treatment of semantics may be observed more clearly in
Noam Chomsky's works. Chomsky (1957) has developed the concepts of
surface and deep structures of sentences. In his analysis of surface and deep
structures he has stressed the importance of syntax over semantics. He has
assumed that syntactic transformations converting deep structures into
surface structures would give all one needs about meanings or semantics,
and that semantics is not "relevant" in "determining" or "characterizing
the set of grammatical utterances", as the following statement unequivocal-
ly shows:

> Despite the undeniable interest and importance of
> semantic and statistical studies of language, they
> appear to have no direct relevance to the problem of
> determining or characterizing the set of grammatical
> utterances. I think that we are forced to conclude that
> grammar is autonomous and independent of meaning,
> and that probabilistic models give no particular insight
> into some of the basic problems of syntactic structure
> (p.17).

Later on, however, Chomsky (1965) has realized the necessity of considering
the semantic component. His standard theory postulates that the deep
structure determines the logical form or meaning of a sentence as can be
confirmed in the following statement: "The syntactic component of a
grammar must specify, for each sentence, a deep structure that determines
its semantic interpretation" (p. 16).

Chomsky's standard theory was later revised by himself in what he called the extended theory. In this theory, Chomsky has written that phonologically specified surface structures must also be semantically interpreted in addition to the deep structures.

As explained above, Chomsky has modified his position on the sole importance of the syntactic component in the analysis of language in more recent writings. His recent writing has been interpreted by many linguists to mean that he has accepted the position that transformations are meaning preserving, as Partee's (1971) statement maintains: "The claim that semantic interpretation is entirely on deep structure is indeed equivalent to the claim that transformations preserve meaning" (p.2). Since Chomsky has also written that the phonological surface structure must also be semantically interpreted in his extended theory, Partee's assessement of Chomsky's position may as well be right .

Nevertheless Chomsky seems to be still unconvinced of the important role semantics has in the analysis of language. This can be assertained in the following statement:

> There is a widespread feeling that semantics is the part
> of language that is really deep and important, and that
> the study of language is interesting primarily insofar as
> it contributes to some understanding of these questions
> of real profundity. There is some merit to this view
> (Chomsky: 1977: 82).

Chomsky's statement that "there is some merit" to the "feeling that semantics is the part of language that is really deep and important" is disturbing to many people. From within the framework of Chomsky's transformational-generative theory, the ganerative semanticists believe that there is no essential difference between syntax and semantics. They consider deep structures to be identical with semantic representations thus denying the autonomy of syntax (McCawley: 1968, Lakoff: 1971). Nor do they support the belief that meaning is interpreted from either the deep structure or the deep and surface structures (cf.. Chomsky's standard and extended theories). George Lakoff has argued that deep structures are deeper and

more abstract than anything Chomsky has said it is, in fact the deep structures of sentences are semantically and not syntactically established.

Some linguists go to the extent of discrediting Chomsky's theory as a whole. Bartsch and Vennemann's (1972) book is an example of this trend. These authors have written that Chomsky's "theory of transformational grammar is ... not only de facto incomplete but is not even apparent that it can be completed" (p. 10).

As we have attempted to show in the preceding paragraphs linguistics (both structural and transformational), may have held back the study of semantics. Some linguists referred to the study of semantics as a "pseudoscience" (Fishman: 1977). With due respect to the structural and transformational grammarians' contributions to modern linguistics, it can be said that an analysis and synthesis of language which does not include the semantic component is incomplete, and therefore, not a comprehensive language study.

The Semantic Component of Language

What is the semantic component of language? Leaving aside the philosophical question of which comes first, language or ideas, to the disciplines of philosophy and psychology, we can assume that there is an observed relationship between linguistic and non-linguistic factors i.e. a relationship of phonemes, syllables, morphemes, words, and sentences to meanings, thoughts or ideas in the "outside world", "outside world" here meaning outside of language. Only when we consider this relationship are we analyzing the language process adequately , and this is what is meant by the study of meaning or semantics :

> The problem of meaning, then, is one of fitting together the partially (but never firmly) fixed semantic entities that we carry in our heads, tied to the words and forms of sentences, to approximate the way reality is fitted together as it comes to us from moment to moment (Bolinger: 1968: 220)

Ausubel (1963) had expressed the same views on meaning :

A symbol therefore acquires representational pro-
perties only when it evokes an image or other idea-
tional content in the reacting subject that is cognitively
equivalent to that evoked by the designated object or
situation itself (p. 36).

Since the major purpose of language is to communicate ideas, and
since the linguistic and non-linguistic factors are inseparably interconnect-
·ed in the communication process, an analysis of this communication proces
may shed more light on semantics.

The Communication Process

The communication process is consisted of two kinds of language
processes, namely, encoding and decoding. Encoding or coding is saying or
writing something with the use of a natural language. Decoding is inter-
preting or understanding the coded message from the spoken or written
language.

The majority of us think that encoding and decoding in one's own
native language is very simple because we are adept in the use of our res-
pective native languages at quite an early age. We almost feel that we are
using our native languages instinctively, but we know very well that
language is never instinctive but creative (Chomsky: 1957, 1965).

What exactly is going on in encoding and decoding of a language?

First of all, a speaker or writer has some ideas he or she wishes to
express. The idea or message is coded into a sentence. The decoder on listen-
ing to or reading the sentence or sentences tries to reduce the number of
possible alternate meanings (messages) to one, the one which the producer
(encoder) has in mind. If the decoder has no trouble in getting the meaning
of the producer's language in running sentences, then, we say that there is
no communication break down. This is the aim of modern rhetoric: to
express ideas effectively or understandably.

Secondly, we realize that in producing and under standing language,
people are not using identical processes as stated by Solberg: "There is no
reason to assume that speaking and hearing must be mirror image proces-

ses, even though both processes may utilize the same syntactic and semantic data base in long-term memory" (Solberg in Massaro: 1975: 348).

The difference in producing and understanding language is caused by the several subtle and sometimes not so subtle strategies involved in the coding and decoding of the language as indicated by research findings in linguistics, psychology, and psycholinguistics (Bever: 1970, Fodor, Bever and Garrett; 1974, Smith: 1971, Deese: 1971, Saporta: 1971, McNeill: 1965, Horman: 1971). The strategies are related to the numerous cues and miscues provided in the production of the language and the decoder's ability to follow these cues and get to the intended meaning.

Understanding of meaning with the medium of language is made possible by the segmental phonemes or the distinctive features of language, the words, the sentences, the prosodics or stress and pitch of speech (Crystal: 1975), and the paralinguistic features such as gestures and facial expressions. All of them are necessary in the act of speech for a clear dissemination of ideas. To argue that one of them is more crucial than the other in this regard is to beg the question.

Paralinguistics is perhaps the least studied component of language but it is an esential part of speech (Fromkin and Rodman: 1978). The study of the paralinguistic features such as facial expressions, hand gestures, head nods, is called kinesics, a recently developed linguistic science (Birdwhistell: 1966, 1970). Different applications of these paralinguistic features change or otherwise enhance meanings in people's utterances.

The prosodics have their share of contributions to make in clarifying meanings in the speech act. Stress refers to the volume or loudness of an individual's utterance, while the pitch indicates the frequency at which the vocal cords vibrate thus conveying various states of emotions of the speaker. The junctures are the division points or pauses made between words and word groups in the flow of speech for morphological and syntactic clarity.

Individual lexical elements have denotative (cognitive) and associative or sense meanings. The denotative meanings are the obvious referential

persons, objects or conceptualized representations in the real world. The associative meanings are obtained from the sense relations which words have with each other in utterances.

As for the syntagmatic relations (sequential word relations) the meanings of words are derived from the meaning of the sentence in which they occur. This is particularly so with referential meaning which is utterance-dependent. Referential expressions describe what is outside of language, i.e. the so-called non-linguistic factor. Reference to non-linguistic entities is made by proper nouns, personal and demonstrative pronouns, and descriptive noun-phrases.

In the communicative process, referring expressions have to be constructed in such a way that the intended meaning is properly understood. For example, generic reference describes something that is characteristic of all individuals in a class or set. An illustration from John Lyons (1978) will clarify the point:

    a) The lion is a friendly beast.
    b) A lion is a friendly beast.
    c) Lions are friendly beasts.

All the three sentences assert that all lions are friendly beasts. For the above reference expressions to be generic, all the lions found in the world have to be friendly. This concept can be expressed in a formula:

$(X) (LX \rightarrow FX)$ - for all values of X, if X is a lion, then X is friendly.

Does the above formula or the reference expressions (a,b,c,) capture the generic nature of the proposition? No, for it is possible to find at least one lion which is not friendly. However, the reference expression: "The lion is no longer to be seen roaming the Hills of Scotland" is a generic proposition (Lyons: 1978: 193-196) for no lions are found in the Hills of Scotland, i.e. there is no exception in this particular case.

Concluding Remarks

We have attempted to show or argue in this paper that the meaning component of language is essential and inseparable from its other features.

Even different arrangements of words in related sentences with essentially the same meaning, the communicative effect varies or differs. Observe the following three sentences:

    1) I enjoyed reading your magazine very much.
    b) Reading your magazine gave me great enjoyment.
    c) It was reading your magazine that gave me great joy.

Sentence (a) is simply a statement of a fact - that the man enjoyed reading the magazine. Sentence (b) is also a statement of a fact but the fact is expressed with emphasis-reading your magazine gave me a real enjoyment. Sentence (c) is again a statement of a fact, but the fact is singled out from a number of other activities the subject was involved in-reading your magazine gave me more enjoyment than the other activities.

The same difference of communicative effect is observed in active and passive sentences. In the sentence: "Assefa caught the fish", and "The fish was caught by Assefa," the active sentence answers the questions of "what did Assefa catch?" and the passive sentence answers the question of "what was caught by Assefa?" Both sentences cannot be equally appropriate with the same context.

Certain research works have indicated that sentences which contain relative clauses are easier to understand than those without relative clauses (Fodor and Garett; 1967, and Hakes: 1971). Other research findings indicate that sentences which have their main clauses at the beginning rather than in the middle of sentences are easier to understand (Clark and Clark: 1968). Researches by Weksel and Bever (1966) have indicated that when subordinate clauses come at the beginning of sentences, the sentences are harder to comprehend than when these clauses appear in the middle.

The examples as to what kinds of constructions give what kinds of meanings, or how meaning and syntax are intertwined to make the communication process possible, can be multiplied. That the meaning component of natural languages is omnipresent whenever we talk or discuss language is always true; otherwise, Chomsky's (1957) ungrammatical sentence, "colorless green ideas sleep furiously" won't be too ungrammatical, because there is nothing wrong with the linear and hierarchical arrangements

of the words in the sentence, and its syntactic structure is accepted by the grammar of the English language.

Therefore, we conclude that:

1. The semantic element isomorphic with the syntactic element, as Cornforth (1976) has stated:

> It is by means of words, and the combination of words in sentences that reality is reproduced in thoughts. Thoughts only become definite thoughts in so far as they are, as Stalin expressed it in his *Concerning Marxism in Linguistics*, "registered and fixed in words and in words combined into sentences." Ideas without language are as nonexistent as spirits without bodies (page 46).

2. The communicative process has a multidimensional semantic field (possible meaning). One must be familiar with the little shades of differe features of semantic markers in order to use a language effectively, for these little nuances of meaning differences may cause misunderstanding of contexts.

3. A natural language cannot be taught effectively without considering the meaning component. All teachers must realize that the structure (form) and meaning (content) of the language are like two sides of the same coin.

4. A sentence must give meaning in order to be accepted as a grammatical sentence-it is a carrier of meaning.

5. The meaning of the sentence is the result of the sense relations of the words used to construct in the first place.

6. The raison d'être of the sentence is the communication of ideas or meanings.

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