The Semantic Structure of Language

Deep and surface structure

Another way of looking at **form and meaning** is to think of them as **surface structure and deep structure.** One of the basic assumptions of this text is that there is a valid distinction between the **deep** (semantic) and the surface grammatical, lexical, phonological structures of languages. An analysis of the **surface structure** of a language does not tell us all that we need to know about the language in order to translate. Behind the **surface structure is the deep structure**, the meaning. It is this **meaning** that serves as the base for translation into another language.

A second basic assumption is that meaning is structured. It is not just an inaccessible mass. It can be analyzed and represented in ways that are useful to the translator. It is not ordered in the same way in which the **surface structure** must be ordered. It is a network of semantic units and the relations between these units. These units and relations may be represented in various ways. The conventions which will be used in this text have been chosen for practical reasons. The aim of the book is not to argue linguistic theory but to present tools which will help translators. Nevertheless, it is important to note that the procedures are based on the two assumptions given above.

Semantic structure is more nearly universal than grammatical structure. That is, types of units, the features, and the relationships are essentially the same for all languages. All have **meaning components** which can be classified as THINGS, EVENTS, ATTRIBUTES or RELATIONS, for example. But not all languages have the same **surface structure** grammatical classes— some have conjunctions, others do not, some have prepositional phrases, others do not. Word classes differ from language to language. The four semantic classes listed above occur in all languages. Any concept occurring in any language will refer to a THING, EVENT, ATTRIBUTE, OR RELATION.

Semantic **propositions** occur in, all languages. They consist **of concepts** (groupings of meaning components) related to one another with an EVENT, THING, or ATTRIBUTE as the central **concept**. Many

different ways could be used to represent a proposition. For example, the three concepts—JOHN, HIT, and BALL—and the roles—agent (the one who does the action) and affected (the *one* affected by the action)—might be indicated by saying:

the agent, JOHN, HIT the affected, BALL or a

diagram could be made as follows:

JOHN...agent...HIT...affected...BALL

The order does not matter. The meaning is not changed if the diagram were as follows:

BALL...affected...HIT...agent...JOHN

There are all sorts of conventions which could be used. Another would be to set up a formula like this:

agent: JOHN activity: HIT affected: BALL

For simplicity in presentation, we have chosen to express propositions with English surface structure forms, i.e. John hit the ball. This convention will be used throughout this text. For example, it is used in the following four propositions which are in sequential relation to one another.

DEEP STRUCTURE

John met Bill on the corner. John and Bill talked. Bill left. John left.

These four propositions can be encoded in any language with the surface structures of that language. In English, a number of alternate surface structure forms might be used:

SURFACE STRUCTURE

- 1. John met Bill on the corner. They talked. Bill left. Then John left, too.
- 2. John met Bill on the corner and they talked. Then Bill left and John did too.

- 3. John met Bill on the corner. After they talked, Bill left and then John left.
- 4. John and Bill met on the corner to talk. When they finished talking, Bill left first and then John also left.

In semantic structure the only ordering is chronological. However, this chronological order does not need to match the order of words in the grammatical structure and is often different (skewed). The above **propositions** could also be expressed in the following English form:

5. John left last, after he and Bill had met on the corner, talked, and Bill had left.

Anyone of the above would be considered an acceptable **surface structure** form with which to represent the four **propositions.** (It should be realized that this is a simplification of the matter in order to get across the general idea of the difference between **deep** and **surface structure.**)

Semantic units

The lexicon of the surface structure of a language is classified by distribution in the grammar. The classification and number of word classes will depend on the distribution which the words have as the subject, predicate, object, etc., in the sentence. For example, if we say, *"The work is difficult,"* the word *work* would be classified as a noun in English grammar. This is simply because it is being used as the subject of a grammatical construction. *Work,* however, is something that one does; it is an EVENT which is an action. There is, therefore, a skewing between semantic classes and grammatical classes at this point.

The sentence "The dog treed the cat" is grammatically a subject, predicate, object (SPO) sentence concerning its order of grammatical units. But the semantic structure is considerably more complicated. The translation into another language may not be a simple one clause sentence. The reason is that the verb *treed* is another example of skewing between grammar and semantics. *Tree,* which is a THING, is being used as a verb. The EVENT which took place is *caused to go up*. The meaning of the sentence is that *the dog caused the cat to go up into a tree* or *the dog chased the cat; therefore, the cat went up into a tree*. There is a great deal of skewing between the grammar and the semantics. The grammars of languages use various alternatives to express the semantic structure. Throughout this text we will discuss the kinds of skewing which a translator needs to watch for as he translates.

The smallest unit in the semantic structures a **meaning component**. **Meaning components** group together to form **concepts**. (These terms are defined more carefully in chapter 6.) **Meaning components** and **concepts**

Are classified into four principles groups-THINGS, EVENTS, ATTRIBUTE, RELATONS. THINGS include animate beings, natural and supernatural and all inanimate entities (boy, ghost, angel, stone, galaxy, blood). EVENTS include all actions, changes of state (process), and experiences (eat, run, think, melt, stretch, smile). ATTRIBUTES include all those attributes of quality and quantity ascribed to any THING or EVENT (long, thick, soft, rough, slowly, suddenly, few, all). Finally, RELATIONS include all those relations posited between any two of the above semantic units (with, by, because, since, and, therefore, after, or).

In the examples given above, you will notice that for the English examples, only nouns are used to illustrate THINGS, only verbs to illustrate EVENTS, only modifiers to illustrate ATTRIBUTES, and RELATIONS are illustrated by prepositions and conjunctions. In other words, in all of the examples given above there was a one-to-one correlation between the semantic and grammatical structures. There was no occurrence of "skewing."

Boy, which is a THING, is a single lexical item in English. However, it is made up of several meaning components—HUMAN BEING, MALE, and YOUNG. (HUMAN BEING belongs to the semantic class THINGS. MALE and YOUNG belong to the class ATTRIBUTES.) Some languages also have a word which includes these three meaning components in a single lexical item. However, other languages do not. Ndogo (Sudan) has a word *dako* which includes the meaning components MALE and HUMAN BEING. The word *vi* means YOUNG and, therefore, *vi dako* would be equivalent to the English word *boy*. In Chinantec (Mexico), each meaning component would be a separate word *jiuung dsea nu*. The three words mean YOUNG (CHILD), HUMAN, and MALE. The three words are equivalent to the English word *boy*. How languages organize the meaning components into words and phrases is a characteristic of each language.

Generally speaking, the nouns and pronouns of the grammar refer to THINGS in the semantic structure, the verbs of the grammar to EVENTS, etc. If there were no skewing, the relationship would be as follows:

THINGSnouns, pronouns

EVENTS..... verbs

ATTRIBUTES adjectives, adverbs

RELATIONS conjunctions, prepositions, particles, enclitics, etc.

In a simple sentence like, *John culled Mary*, JOHN and MARY belong to the semantic class THINGS and are nouns in this particular sentence; CALLED is an EVENT semantically and a verb grammatically. The structure of the sentence indicates that *John*, the **agent**, is the subject and *Mary*, the **affected**, is the object. There is no skewing between surface structure and semantic structure (presupposing that the unskewed form would have **agent** as subject and **affected** as object).

But in the surface structures of languages, there is a great deal of skewing. For example, in the sentence, "/ heard John's call," call is a noun in the surface structure. But in this particular sentence, it represents a semantic EVENT, call. Semantically, there are two EVENTS and two PROPOSITIONS which are represented in the surface form "/ heard John's call." The first proposition is John called and the second, / heard. It is possible to represent these two propositions in English by saying, "John called me and I heard him." This would not be skewed. However, if one says "/ heard John's call." thus, expressing the two propositions in a single clause rather than in two clauses, there is skewing. Discovering the semantic structure includes removing the skewing between semantic classes and grammatical classes.

Semantic hierarchy

In surface structure, units are grouped into increasingly larger units in a **hierarchy** of grammatical structures. Morphemes (roots and affixes) unite into form words, words unite phrases; phrases unite into clauses, clauses into a sentence, sentences into a paragraph, paragraphs into discourse units of various kinds and these unite to form a text— story, letter, sermon, or whatever.

Although semantic structure is more of a network of configurations, each being part of a larger configuration, for the practical purposes of this book we will look at semantic structure **hierarchically** also. The smallest unit is a *meaning component*. Meaning components unite into *concepts*, concepts into *propositions*, propositions into *propositional clusters*, proportional clusters into *semantic paragraphs*, semantic paragraphs into *episodes*, episodes into *episode clusters*, and these units unite to form *larger units of the discourse*. The structure is one of smaller groupings, uniting to form larger groupings. If there were no skewing between the semantic configurations and the grammatical structures then the relationship would be as follows:

meaning component morpheme (roots and affixes)

concept word

complex concept (concept cluster) phrase

proposition	clause
prepositional cluster	sentence
semantic paragraph	paragraph
episode	section
episode cluster	division
semantic part	part
discourse	text

The above would be the units for a narrative type discourse. Different labels would be needed for the units above the prepositional cluster for other discourse types. How many levels of structure will depend on the text. A book may have several parts; whereas, a shorter text will consist only of a single **episode**.

As has already been mentioned, and as we will point out in much more detail later, there is considerable skewing between semantic and surface structures and that is, of course, what makes translation a challenge. The translator must study the surface structure of the source language to find the **concepts**, **propositions**, etc., of the semantic structure. Then, he has the task of reconstructing meaning from the semantic structure into the surface structure of the receptor language. To do that he must have also studied the skewing of the receptor language grammar in relation to the semantic structure and know how to use this skewing to reconstruct meaning in a natural way in the receptor language.

The communication situation

One helpful way to look at the distinction between meaning and form (between deep and surface) is the way that Grimes states it (1975:114):

...it is desirable to make a distinction between those things in language over which the speaker can exercise choice and over which no choice is available to him. The former reflect meaning; as many linguists have pointed out, meaning is possible only when a speaker could choose to say something else instead. The latter are the more mechanical components of language, the implementation process by which the results of the speaker's choices are expressed in a conventional form that permits communication with someone else. The meaning which is chosen will be influenced by the communication situation, e.g. by who the speaker is, who the audience is, the traditions of the culture, etc. The speaker (or writer), basing his choices on many factors in the communication situation, chooses what he wishes to communicate. Once he has determined the meaning, he is limited to use the forms (grammatical, lexical, and phonological) of the language in which he wishes to communicate that meaning. He may choose one form over another in order to give a certain emotive meaning in addition to the information he wishes to convey. He may choose one form over another because he wishes to make some part more prominent than another, to add some focus to a part of the message.

For example, a mother who is angry with her son for not doing his part of the family chores, may desire to tell him to *empty the garbage*. She has told him to do it before, so he knows it is his duty. She will want to convey all of this meaning—the command to empty the garbage and the emotion she feels about it. To do so, she might not use a surface structure command form but rather a question (see Larson 1979), e.g. a *when* question—*When are you going to empty the garbage*! If he had never been told to do it before, and if she were not angry or exasperated, she would have probably used a command form such as "Please empty the garbage for me." Here, because of emotive meaning being communicated, we have a skewing of form and meaning in that a question form signals a command. Many languages do not use questions in this way, so a different form will be used in the translation. However, whichever form is chosen communicate both the information and the emotion of the source language.

The information content is:

agent: I..... activity: COMMAND

agent: YOU activity: EMPTY affected: GARBAGE

Before the form is chosen from the possibilities in the surface structure, sociolinguistic and psycholinguistic matters which affect meaning must be taken into account; and the speaker's purpose, which in this case is not just to command but to show frustration and insistence, must be included. A question form using *when* indicates this sociolinguistic and psycho-linguistic information.

The Aguaruna translation of "When are you going to take out the garbage?" would say: Wamak, wamak. (Wa aniame? Wamak tsuwat ajapata. A very literal translation back into English would be "Quickly, quickly. Why are you like that? Quickly garbage you-throw-out!" The form would be completely different from idiomatic English, "When are you going to take out the garbage!" But the same information and emotive meaning would be communicated. Every translator desires to be

faithful to the original. To do this, he must communicate not only the same information but he must also attempt to evoke the same emotional text.

For the translation to have the same dynamics as the original, it will need to be natural and easy to understand so that the readers will find it easy to grasp the _ message, including both the information and the emotional effect intended by the source language writer. Each source language text is written in a specific historical setting, in a specific cultural setting, and with a purpose, i.e. the intent of the author. These matters must also be taken into consideration if a faithful translation is to result. When ancient manuscripts are being translated into today's languages, there may be tension between trying to be faithful to the historical setting and trying to be faithful to the intent of the author. In order to get across the author's purpose, the translator may be tempted to update the historical material and "modernize" the translation. Such changes make the translation less faithful.

When a source language text is from a culture very different from the culture in which the receptor language is spoken, it is often difficult to translate in such a way that the results will communicate the same message. Details of how the communication situation and the culture affect translation are discussed in chapter 33.

EXERCISES -The Semantic Structure of Language

- A. Each of the following has at least one example of **skewing** between the deep (semantic) and surface (grammatical) structure. Underline the words which represent this **skewing**. Then rewrite the sentence so that the **skewing** is eliminated:
 - Ex. Forgiveness is important. *Forgiveness* is important. It is important to forgive. (Or, it is important that we forgive people.)
 - 1. The sheep was taken to the slaughter.
 - 2. They were told of the death of Susan.
 - 3. Suddenly there was a great earthquake.
 - 4. Her singing is too loud.
 - 5. Eating is very necessary.
 - 6. The man knifed him to death.

- 7. Length is unimportant.
- 8. Prayer comes first each day.
- B. The grammatical form may change without effectively changing the meaning. Below, a paragraph is given first with the grammar and semantics nearly matching. Here every event is realized by a finite verb, every participant by a noun, every relation by an overt marker, etc. Then three possible surface structures are given, keeping the meaning constant.

DEEP (SEMANTIC) STRUCTURE

Yesterday John went to town. Next John bought a car. Next John drove the car home. Next John showed the car to Mary. Therefore, Mary was very happy.

SURFACE (GRAMMATICAL) STRUCTURES

(1) Yesterday John went to town and bought a car. He drove it home and showed it to Mary, who was very happy.

(2) John bought a car yesterday when he went to town. Driving it home he showed Mary the car, which made her very happy.

(3) John bought a car in town yesterday. Mary was very happy when he brought it home and showed it to her.

In the example above, the paragraph is first written with all the concepts, propositions, and prepositional clusters given in full. Then the three surface structures which follow are used to communicate the same meaning. In these three different rewrites:

- a. What surface forms (specific words) are used to refer to the concept *John*?
- b. What surface forms are used to refer to the concept car?
- c. What surface forms are used to express the proposition?

Next, John drove the car home!

d. What surface forms are used to express the proposition?

Yesterday John went to town.

e. What surface forms are used to show the relationship between the two propositions *John showed the car to Mary* and *Mary was very happy?*

- C. Using the deep structure propositions in B above, translate the information into a language other than English. Rewrite in two or three different forms, keeping the meaning the same.
- D. Rewrite the following in English, changing the form but keeping the meaning as constant as possible. Rewrite the paragraph several times. Use natural, clear English sentences. (Such rewrites are called paraphrases because the same thing is being said in a different way in the same language. A paraphrase changes the form but not the meaning.)

The day was beautiful. It was 10 o'clock. Jane left the house. The house belonged to Jane. Next Jane drove the car to the post office. Next Jane stopped the car. Next Jane got out. Next Jane took a hold of the doorknob. The doorknob was on the door. The door was part of the post office. The door was locked. Therefore, Jane was frustrated. But Jane was not angry. Rather Jane was concerned. Jane wondered: Is Mr. Smith sick?

E. Using the information given in the paragraph in D above, translate this story into a language other than English. Rewrite the paragraph several times using different forms each time.