

## LINGUISTICS AND TRANSLATORS

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Many people believe that linguists are simply persons who know a great many languages. In fact, when one is introduced as a linguist, almost the first question asked is, "How many languages do you know?" Other people however, think of linguists as those who study only dead languages such as ancient Greek, biblical Hebrew or Ugaritic, and some imagine that linguists spend most of their time figuring out strange writing systems such as Egyptian hieroglyphs and Mayan signs. Though many linguists do engage in these kinds of activities, linguists are really not concerned primarily with learning many languages, nor are they principally interested in discovering the meanings of words in ancient manuscripts. They are far more concerned with what is called the "structure of language", that is to say, the systematic ways in which the parts of language go together to make sense.

Linguistics, which is the science of language, has generally been divided into four principal branches. First, there is *historical linguistics* which deals with the history of particular languages or of some feature of a language. Linguists who analyze the structure of Classical Greek (spoken in the time of Plato) and Koinē Greek (used in New Testament times) and then compare these two with Modern Greek, are studying the history of the Greek language, and are thus making contributions to historical linguistics.

Other linguists concentrate on what is called *comparative linguistics*, that is, they compare different languages. Usually, they compare languages which appear to have come from some single source. For example, there are the Indo-European languages which include languages such as Russian, Hindi, Punjabi, Persian, Greek, Armenian, Albanian, Lithuanian, the Romance languages (Spanish, Portuguese, French, Italian, Rumanian), the Germanic languages (German, Dutch, English, Norwegian, Swedish, Danish, Icelandic), and the Celtic languages (Welsh, Irish, Breton). More recently Hittite and Tocharian, an ancient language of Chinese-Turkestan, have been added to this list of Indo-European languages. A person analyzing these various languages and trying to compare them is concerned as to how they are divided up into various subgroups and how these subgroups are related to one another. When there are historical documents reaching back several thousand years, linguists can be far more certain about early relations between languages, but comparisons may also be made of languages which have no such historical records, for example, the Algonquin languages spoken by a number of North American tribes stretching from Newfoundland to California.

Some linguists compare languages which have no so-called "family connections". That is to say, they are not derived from some single language or group of related dialects. One may compare languages in Southeast Asia which belong to quite different families of languages but which have certain striking features in common, for example, the use of so-called "classifiers" employed in counting different kinds of objects: round objects, long slender objects, fat lumpy objects, tree-like objects, etc.

A third type of linguists are concerned with what is called *descriptive linguistics*. They emphasize the structure of languages and the systematic arrangements of the parts. They try to work out the "rules" (or the patterns) which govern the way in which people speak. By "rules" they do not mean prescriptions as to how people should talk, but rules in the sense of the systematic ways in which people use their own language. No language is a haphazard string of sounds, and words cannot be thrown together in any way a speaker may desire. Communication would not be possible unless there were regular, systematic ways in which speakers of a language put sounds, words and clauses together. For example, *tciepsn* is nonsense in English, but rearranged in accordance with regular patterns of consonant and vowel sequences the result is the word *inspect*. Similarly, *trusted this be cannot boy* is gibberish, but in proper syntactic sequence the combination makes sense, *this boy cannot be trusted*.

Still other linguists deal with what is called *applied linguistics*. This includes such activities as language teaching, translation, language planning, and dictionary making. Those who specialize in the theoretical aspects of language may be likened to physicists who study the properties of physical objects or phenomena. Such physicists are not especially interested in a particular piece of steel alloy or a uranium sample. What concerns them are the properties of any such piece of steel alloy or any piece of uranium having certain features. Similarly, theoretical linguists are not especially concerned about the features of some particular language. What interests them are the ways in which any and all languages function. In contrast with theoretical linguistics, applied linguistics may be likened to engineering. Engineers take the results of the studies of physicists and apply these to the construction of dams, bridges, highways and tunnels. Similarly, applied linguistics takes the results of studies in theoretical linguistics and applies these to such activities as teaching foreign languages, translation, literary analysis and dictionary making. It would be foolish to ask a theoretical physicist to build a bridge or to demand of an engineer that he work out formulae for nuclear fission. And it would be equally wrong to expect a theoretical linguist to construct a practical alphabet for a language newly reduced to writing or to formulate efficient procedures to guide translation work.

Each field of linguistics has its own important area of investigation, and each contributes to a better understanding of how languages really work. Translators have much to learn from linguistics, for in this way they can understand better the nature of the languages with which they are working. Similarly, linguists have much to learn from translators who are constantly involved in what is called "contrastive analysis". More than most linguists, these translators are aware of the subtle similarities and contrasts in languages.

### A Concept of Structure

Perhaps the most important insight which has come from the study of linguistics is the concept of structure—sounds, words, sentences, and even the discourses of a language represent systematic and recurring patterns of arrangement. There is nothing completely haphazard about communication. In fact, communication could not take place unless languages were systematic. One could not have a language consisting of millions and millions of words to identify all of the distinctly different objects and events which people experience. Furthermore, it would be quite impossible to have separate and distinct sentence structures for every type of idea that one would want to express. This would be a terribly inefficient system, for it would be completely beyond the mental capacity of the human race. What is needed is a limited number of words and a restricted number of rules for combining these words into meaningful phrases and sentences. Only in this way can a language function properly, but if it is to do so, it obviously must have some kind of systematic arrangement of the sounds, words and sentences; and this means essentially some kind of structure.

As linguists have repeatedly pointed out, all the elements of language, beginning with the sounds themselves, do have a structure. For example, if a language has a *p* and a *b*, a *t* and a *d*, and also a *k*, one can be quite certain that it will have a *g*, since sounds tend to be systematically arranged in sets of contrast, with so-called voiceless sounds, such as *p*, *t*, and *k*, corresponding to similar voiced sounds *b*, *d*, and *g*. Even when children learn their own mother tongue, they acquire the sets of contrast between sounds in a systematic way. For example, they do not acquire such diverse sounds as *p*, *d*, and *k*, but will usually begin by learning one set such as *b*, *d*, and *g*, and then when they begin to make a distinction between a *b* and a *p*, almost at the same time they begin to distinguish between *d* and *t*, and *g* and *k*. That is to say, their perception, awareness and response to the differences in sound are learned in a systematic manner. Of course, there may be so-called “holes in the system”, since no phonological system (that is, the system of sounds of a language) is ever completely symmetrical in every detail, but one may be assured that it is far from being haphazard.

Another very important fact about the sounds of a language is that they are “discrete” units. That means that a contrast such as exists between *p* and *b* would in every instance systematically distinguish between these two sounds rather than consist of a blurred gradation of sounds which might at one point sound more like *p* and at another time more like *b*, but would often remain somewhere in between. It is this discrete and separable character of the sounds of a language which makes it possible for one to write the different “phonemes”, those units of sound which make distinctions in meaning. But what is even more remarkable about our ability to write the discrete sounds of a language is the fact that in reality they are not pronounced as separate units. Speech is a continuous flow in which one sound glides into another and is affected by the sounds preceding it and in turn affects the sounds which follow. Nevertheless, from a psychological standpoint, we tend to hear this combination of sounds as being a string of segmented isolatable units—that is, as a series of consonants and vowels.

But what we hear (or perceive) when we listen to our own mother tongue are not the phonetically different sounds but the grouping of these sounds into meaningfully distinguishable classes. For example, in English we pronounce *k* at several different positions in the mouth. Compare the *k*-sounds in *keel*, *kill*, *kale*, *cat*, *cot*, *caught*, *coat*, and *coot*. Each one of these tends to be pronounced farther and father back in the mouth. But we are not aware of this, since the position of the *k*-sound is conditioned by the kind of vowel which follows. The *k*-sound is toward the front part of the mouth before front vowels, as in *keel*, *kill* and *kale*, but much farther back before back vowels such as in *caught*, *coat* and *coot*.

In some languages, however, the position of the *k*-like sound does make a difference in meaning. For example, in Bolivian Quechua *kaka* (with the *k*-like sound pronounced at about the midpoint on the palate) means "dirty", but *qaqa* (with the *k*-like sound pronounced far back in the mouth) means "cliff". In Bolivian Quechua it is not so much a matter of the vowels affecting the position of the *k*-like sounds, but of the *k*-like sounds affecting the vowels. There are only three basic vowels in Bolivian Quechua: *i*, *a* and *u*, but the *i* sound after a back *k*-like sound is changed to an *e* sound. It is the consonant which moves the vowel back, rather than the vowel moving the consonant back, as in English. But native speakers of Bolivian Quechua are no more conscious of these "conditionings" of their sounds than we are in English. All that we are aware of is the grouping of all the related sounds into what linguists call "phonemes", classes of related sounds which serve to distinguish between meanings. What is so amazing is that our brains are capable of taking in many phonetically distinct sounds and yet are able to assign them automatically to the proper phonemic classes without our being at all aware of what is happening.

One of the most interesting discoveries made by linguists about the structure of language is that the parts go together normally two at a time. This is called "binary" (or "two-part") structure. For example, the sentence *The small boy fell from the roof* consists of seven different words but they are not pronounced with noticeable pauses between them. Nevertheless, we have

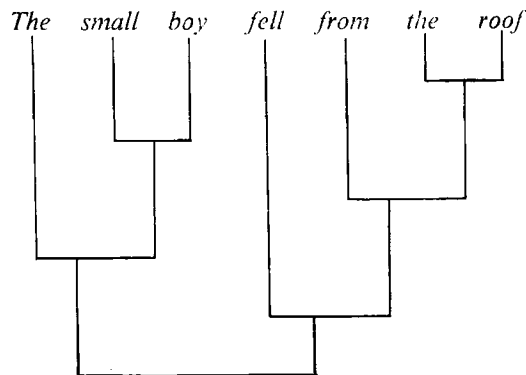


Figure 1

no difficulty in separating them one from the other. Grammatically these words are not just a series of forms, like beads on a string, but they consist of a structure in which at each level two parts are added together. The relations between these elements are diagrammatically presented in Figure 1.

Observe in Figure 1 that only two parts combine at each level. This tendency for binary (two-part) constructions is important in all languages, and it is significant not only for a simple sentence such as *The small boy fell from the roof* but also for a more complex sentence such as *He insisted he wanted them to go*. In the latter there are three subject-predicate constructions, the third and last embedded in the second, and the second and third embedded as a part of the first. These relations may also be diagrammatically represented as binary structures, as in Figure 2.

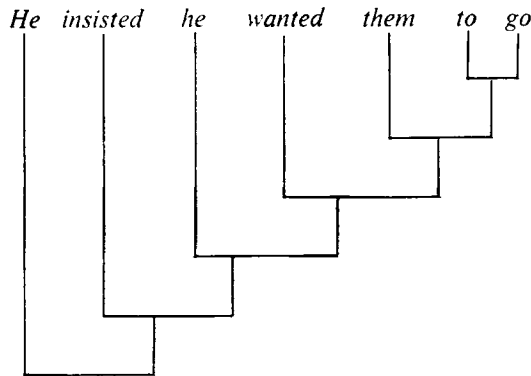


Figure 2

In analyzing the relations between (1) the longer, more involved sentences and (2) the smaller units which combine to make up such extensive structures, linguists have found that the "surface level" (that is, what people actually use in language) is made up of certain basic elementary structures. Some linguists speak about these elementary structures as "deep structures", while others more commonly speak of "kernel structures". But regardless of the level at which linguists wish to discuss the underlying elementary structures, there is an important relation between these and the more elaborate surface structures. For example, active structures are simpler than passive structures, and the passive structures are most sensibly described as derived from the active structures. Similarly, negative structures are derived by transformation from affirmative structures, and questions are transformed from statements. Also, certain structures are embedded within other structures. Direct or indirect discourse is a common example of this; for instance, *He said, "I want to go"* or *He said that he wanted to go*. The clauses *I want to go* and *that he wanted to go* are embedded as grammatical objects of the verb *said*.

This tendency to build elaborate surface structures out of simpler elementary structures by a process of what is called transformation is one of the very important discoveries which linguists have made about language, and

it can be particularly important for translators. By reversing the process of transformation, the translator can better analyze the meaning of the surface structure which he must translate. The best way to determine the grammatical meaning of a sentence is to analyze all the elementary structures out of which it has been made. In this way a translator not only can determine what are the parts of a complicated sentence, but he can much more readily determine the relations between the parts, since the elementary structures show more clearly the meaningful relations between the parts. After the translator has transferred this analyzed meaning from the source to the receptor language, he can then reverse the process and change these elementary structures back into an appropriate surface structure in the receptor language. This is the basic theory of translation procedure described in detail in the book *The Theory and Practice of Translation*, published by the United Bible Societies.

As has already been mentioned, languages simply could not function if it were not for the fact that they possess a relatively limited number of words and a limited number of rules for putting words together. Nevertheless, these limited numbers of words and rules can be put together in an unlimited number of combinations, thus making it possible for a person to say things which he has never heard said before and to understand expressions which have not been explained to him before. In a sense this means that language, which has only a finite number of units and rules, can nevertheless produce an infinite number of sentences. Moreover, language could never operate if it were not free from entanglement with things in the world for which the words are symbols. Languages must in a sense be arbitrary systems—but not necessarily illogical ones—and not tied to the things that one wants to speak about. For example, if there were certain features about a horse which made it necessary to employ particular sounds in referring to a horse, and if this were similarly true of all kinds of objects in the universe, then language simply could not exist as an effective mechanism of communication. The fact that a horse can be referred to in different languages by utterly different combinations of sounds is precisely what makes language really useful. For example, in German one can refer to a horse as *Pferd*, in French as *cheval*, and in Spanish as *caballo*, for there is nothing about the object horse which makes it necessary to use certain sounds to form a symbol which will refer to the object.

In order for them to be able to talk about new objects, events and abstracts which enter the experience of any people, their language must be free to expand areas of meanings or to reduce them. It must also be able to add words such as *quasar*, *polaroid* and *cosmonaut*. If languages were not open to change, they would become quite useless after a number of years. They must change, even as life itself changes.

For translators another fact about language is particularly important, namely, that all verbal communications are approximately fifty per cent redundant (or predictable). This applies to the levels of sounds, grammar, and even of meaning. This fifty per cent redundancy means that if one hears only half of a message, he is usually able to fill in the other half. Of course, this does not mean that one can hear only the first five words of a ten-word sentence and be able to predict what the rest of the sentence will be; but if

approximately half of the sounds throughout a series of words are heard, it is very likely that the other half of the sounds can be "reconstructed". Such redundancy may overcome physical noise, but it may be equally important in overcoming psychological distraction on the part of receptors. From a practical standpoint, fifty per cent redundancy means that no communication is one hundred per cent efficient, that is, with a maximum number of ideas packed into a minimum number of words. If one were to eliminate all redundancy however, a communication would be very quickly overloaded. It would simply be too hard to decode, for the flow of information would be so much greater than normal that the hearer or reader would quickly tire of trying to comprehend what was being said.

### Language Universals

For the translator perhaps the most important discoveries made by linguists are the so-called "language universals", those features which are characteristic of all languages throughout the world. There was a time when people thought that so-called "primitive languages", by which they meant the languages spoken by people having very simple material cultures, were in some way structurally inferior to the languages of "civilized peoples". But as linguists have studied languages in all parts of the world, they have found no basis whatsoever for the idea that the languages of primitive peoples are structurally inferior. On the contrary, linguists have discovered an amazing number of features which appear to be true of all languages. These language universals include all the logical relations—for example, cause and effect, reason and result, condition and result, concession and result, etc. These relations are, of course, not always expressed in the same ways. In English one might say *Although he had many wives, he was still poor* (which would be a perfectly logical comment in many African contexts, in which having a number of wives is an important economic asset), but in a corresponding African language there may not be a conjunction such as "although". However, one could express the same thought in another way. For example, one might say *He had many wives; nevertheless, he was still poor*.

All languages also have ways of talking about time, space and mode. They may not use tense as a feature of verbs, but they can always talk about various kinds of time. Likewise, languages can all speak of spatial relations such as "here", "there", and "over yonder"; and they all indicate modal distinctions to mark statements and questions, requests and commands, actuality and potentiality. They may not use subjunctive forms of a verb, but there are always ways in which the modal distinctions of the subjunctive can and must be expressed.

So far as can be determined, all languages also possess an important semantic distinction between objects, events, abstracts and relations. These differences are formally indicated in many languages by the use of nouns to identify objects, verbs to express events, and adjectives and adverbs to refer to abstracts. Conjunctions and prepositions generally mark relations. But what is important is not the classes of the words involved, but the

semantic distinctions between events (what happens) and the participants in events (the objects). Abstracts are the qualities and quantities of objects and events, and relations are the ways in which objects, events and abstracts are related to one another.

There is also surprising agreement among languages as to principal kinds of discourses; narration, exposition and dialogue. Narration consists of a series of related events and related participants. Exposition consists usually of a generic statement (a statement of general applicability), followed by a series of specific statements which illustrate, reinforce, or exemplify the generic statement. Dialogue is made up of a series of questions and answers, statements and contradictions, etc., in which the form of the response is largely governed by the form of the initial question or statement. The fact that all languages have these basic types of discourse makes translation immeasurably less difficult.

### **The Implications of Linguistic Studies for Translators**

As has already been evident from the preceding discussion, linguistics offers a number of important practical implications for translators. First, no one can any longer seriously argue that translation is impossible. It may be difficult for a translator to reproduce satisfactorily the form and message of some literary masterpiece, since any outstanding literary work so completely exploits the genius of the language in which it was created. It is also true that translation from one language to another almost inevitably involves a certain loss, but even between two persons using the same language there is always a certain loss or distortion in communication. Translation may be difficult—at times extremely difficult—but never impossible.

Second, translators can approach their task in a far more systematic manner as a result of the structural analyses made by linguists. Translators no longer need to regard each translational difficulty as being a unique and isolated problem. All such problems fit within certain structural categories. As a translator works, he should bear in mind that he is not dealing merely with a string of problems, but with a structure which involves systematically recurring patterns.

Third, on the basis of discoveries made by linguists, Bible translators can also have a more objective attitude toward the source and receptor languages. They need not look upon Greek and Hebrew as languages "which have come down from heaven". These languages have all the features, including the universals, characteristic of languages in general. Similarly, receptor languages need not be glamorized, nor should one fall in love with the exotic and try to reproduce indigenous idioms at all cost. There is nothing sacrosanct about the structure of the source languages, nor are the special features of receptor languages any indication of "a unique mentality". By viewing languages from a proper linguistic perspective, one can be far more objective, as well as efficient, in translating.

But not only do translators have much to learn from linguists. Linguists likewise have profited greatly from insights which have come from translators and those dealing with some of the theoretical problems of translation. A



recent book on comparative linguistics is based entirely upon translational correspondences. Certain important insights in transformational grammar resulted, at least indirectly, from interest in machine translation; and the practical issues of the correspondence in meaning between words—which is essentially a translational problem—have been important for anthropologists and lexicographers working with the structures of meaning.

The important discoveries made by linguists during the last twenty-five years have been so significant that some people tend to think that at last all the problems of language have been solved. In reality, however, the study of language has only begun, and each year there are more and more important insights which can contribute materially to the quality and effectiveness of translation work.

### **Translator's Think-Tank**

The United Bible Societies will hold its triennial translations workshop in Rüsclikon, Switzerland, from May 14 to June 10, 1972. The purpose of these workshops is to give the growing body of UBS translations staff an opportunity to examine their principles and procedures and to explore new developments in translations and related fields. Some of the technical phases of the work which will be examined are: discourse structures, semantics, figurative meanings, anthropology and translation, lexicography. Plans will be made for the research and writing required for the preparation of the continuing series of "Helps for Translators". Special attention will be given to the preparation and teaching of biblical backgrounds.

In addition to the concentrated hours of technical materials there will be reviews of administrative problems: the organization and administration of translation projects, evaluations and priorities of translations.

Approximately sixty participants from thirty countries will be taking part.