CHAPTER III

Several Types of
Linguistic Meanings

It is clear from the preceding exposition that one of the most important problems confronting linguists is the explanation of what types or varieties of meanings exist in language, and how to distinguish them and separate them from one another. But it is hardly possible to deal further with questions of semantics without perfecting the corresponding metalanguage. As the first step, we shall deal with the question of so-called grammatic, syntactic, and lexical meanings, and in this regard we shall try to define such widely used terms as "grammar," "syntax," and "morphology," although we do not claim to have the last word in defining these concepts.

Everything expressed in language represents the level of content, or the sum, of linguistic meanings. linguistic meanings ("designations"), from the standpoint of just what is being expressed, are of two types:

(1) Where the designations are definable as relations among linguistic elements (such as morphemes, words, and sentences), i.e., where some linguistic elements serve as symbols of relations among other linguistic elements, we shall speak of *syntactic* meanings.

(2) In all other cases, i.e., where the designations are not linguistic relations but rather something outside of language, or where they are some particular facts of reality (objects, ac-

tions, properties, abstract concepts, representations, etc.), or a relation of utterance to actuality, i.e., where linguistic elements serve as symbols of something extralinguistic, we shall speak of *lexical* meanings.

The concept of syntactic and nonsyntactic indicators (and, correspondingly, of meanings) can be defined more concretely as follows: Indicators are considered syntactic when they are used only in syntactic analysis of a text, i.e., when they are necessary only in order to find a governor for each word; all other indicators are considered to be nonsyntactic.

We shall note further that the name "lexical" is temporary for all nonsyntactic meanings; it will suffice until we can find a better term. One could call nonsyntactic meanings referential, and then further distinguish lexical and some other types of meanings among them. But this is a matter for further study.

Lexical and syntactic meanings must be expressed in all languages (see E. Sapir, *Language,* 1921). This means that in no language is an utterance without meaning if it consists of elements expressing both lexical and syntactic meanings. Here such meanings are necessarily expressed in general, and not specifically as being of one or the other type. In other words, language as a symbolic system demands the expression of both lexical and syntactic meanings in every utterance, but it is irrelevant for language in general (and in individual languages) just what meanings are expressed; this is determined by the content of an utterance, i.e., by extralinguistic factors.

Linguistic meanings (designations) are distinguishable from yet another standpoint. It may be the case that in one language several quite concrete[1] meanings (perhaps both lexical and synlactic) must be expressed, but not so in another language.

The concrete meanings necessarily expressed in a given language can be called the *grammatical* meanings of that language. Meanings not necessarily or individually expressed in a given language may be called the nongrammatical meanings of that language.

The statement that "grammatical meanings in a given language must be expressed in that language" has the following

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[1] Here, and in what follows, the word "concrete" is used in the sense of "particular," "given," "just exactly this."

significance. For this purpose, meanings have a variety of indi-
cators, one of which must appear in any utterance in which
there is an element present whose meaning can be joined (se-
mantically) with a particular grammatical meaning. Thus, in
some languages a word of a particular class cannot be used with-
out indicators having corresponding grammatical meanings.
Among these indicators there may be a zero; in that case the
physical absence of an indicator is understood to be just such a
zero indicator. Thus, in English, the meaning of *number* is
grammatical, and every noun must be accompanied by an indi-
cator of number (zero—singular; -*s*—plural). In Chinese, the
meaning of number is nongrammatical; therefore, although a
noun may be accompanied by a number indicator (*yige* and
other enumeratives for the singular, *men* for the plural), this
is not necessary. The absence of an indicator is not taken to be
a zero-th indicator, and if in the Chinese noun the number in-
dicator is physically absent, then the meaning of number for
this noun remains unexpressed.[2]

The question of whether a meaning is grammatical often
leads to a question about the presence of a zero indicator among
the indicators of that meaning.

In other words, some designators (indicators) are optional
from the standpoint of a language system: Their use is deter-
mined by extralinguistic factors (content) and their absence is
not discounted as being a zero indicator. Other designators are
necessary from the point of view of the language itself: Their
use is determined by the language's structure and their absence
is considered to be an indicator. Nongrammatical indicators
correspond to the first type, grammatical to the second.

In practice it is not always easy to differentiate between op-
tional and necessary indicators (i.e., to determine the presence
of a zero among the indicators of a given meaning), because
there are many transitional cases. For each concrete meaning
(and, correspondingly, for its indicators), special study is
needed. However, this problem lies beyond the scope of the

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[2] "In Chinese, as in Japanese, any noun can be used with reference both to
a real singular and to a real plural of an object; in other words, it does not
formally contain a specification of number within itself." (A. I. Ivanov, E. D.
Polivanov, *Grammatika sovremennogo kitajskogo yazyka* [*A Grammar of Modern
Chinese*], 1930, pp. 218-219.)

present chapter; for our purposes it is sufficient to believe that we are able in some way or another to distinguish the grammatical meanings in a language from the nongrammatical.

Grammatical meanings can be both lexical and syntactic. For example, noun-number meaning in Russian is lexical (the distinction of nouns by number is conditioned by extralinguistic distinctions) and grammatical (since noun number must be expressed in Russian). Likewise, the meanings of gender, number, and case are, for Russian adjectives, grammatical and also syntactic (gender-number-case distinctions in adjectives are not connected with any extralinguistic distinctions but merely rellect the syntactic bonds of the adjective).

These grammatical meanings define the specifics of a language. The general arsenal of linguistic meanings (i.e., what can be expressed in a language) is about the same for all languages. And languages differ primarily in that one language "prefers" certain meanings and makes them obligatory, i.e., grammaticizes them, while another language does this with other meanings. There may be languages that do not have grammatical—i.e., concrete, obligatory—meanings; this was true of ancient Chinese.

The relation of the grammatical, on the one hand, and the syntactic and lexical, on the other, can be schematized as in Table 1.

TABLE 1

Meanings Attributes	Nongrammatical		Grammatical	
	Lexical	Syntactic	Lexical	Syntactic
1. Must this attribute be expressed?	—	—	+	+
2. Are the expressed relations intralingual?	—	+	—	+

In this regard, language theory can be divided into lexicology, syntax, and grammar. Lexicology deals with the expression of extralinguistic factors, whereas syntax has to do with the expression of all possible relations among linguistic elements. Grammar occupies an intermediate position between lexicology

and syntax, it deals with both lexical and syntactic meanings, but only with those which must be expressed in a certain language (i.e., grammatical meanings).

The term "grammar" is applied here in a narrower sense than the generally accepted one; usually, grammar is understood to he not only the study of grammatical meanings but also the study of the relations among language elements—syntax. In order to avoid ambiguity and contradiction of the generally accepted terminology, the word "grammar" will be applied in the usual, traditional sense, and the study of grammatical meanings will be called "grammar proper."

All that has been said up to now is related only to the character of linguistic meanings as independent of the means of expressing them. Now we shall turn to these means, which are of two types, depending on whether meanings are expressed by them within the word or not:

(1) *Morphological,* i.e., means for the expression of any necessary linguistic meanings within the word. We identify affixing, alternation, reduplication, incorporation, for example, as morphological means.

(2) *Nonmorphological,* i.e., means for the expression of meanings outside the word. Here we identify the use of auxiliary words, word-order, etc.

(The quite complex question of word boundaries is not considered here; for the purposes of the present study it is sufficient to suppose that we can somehow define word-boundaries. Specifically, we consider—as in machine translation—a word to be a group of letters between two spaces.)

The difference between morphological and nonmorphological means is schematized in Table 2.

TABLE 2

Attribute \ Means	Morphological	Nonmorphological
Do the given means express some meaning within the word?	+	-

As we have seen, the terms "lexical," "syntactic," and "grammatical are set apart by two attributes and characterize meanings independent of the means of expression. These terms refer to the level of content.

The terms "morphological" and "nonmorphological" are set apart by a single attribute and characterize a means of expression independent of the expressed meanings. These terms relate to the level of expression.

The first and second oppositions lie on different planes. For this reason, the generally accepted subdivision of linguistic theory into lexicology, morphology, and syntax is not valid from a terminological standpoint. Even if we disregard the definitions proposed above, in traditional usage morphology is ordinarily understood to mean the study of the forms of words, i.e., of the means of expression by word-formation (within the word), while lexicology and syntax are the studies of the corresponding meanings. The use of the word "morphology" in place of "grammar" can be explained by the fact that in those languages from whose study the terminology of modern linguistics was formulated (especially the Indo-European languages), grammatical meanings are expressed mainly by morphological means, and, conversely, morphological means are preferred in these languages for expression of properly grammatical meanings. Hence the confusion of the terms "morphology" and "grammar" (or, more precisely, "grammar proper"), the terminologically inexact expression "morphological category," and other difficulties.

Consequently, it is necessary to produce a distinction between the types of meanings (lexical and syntactic, grammatical and nongrammatical) and the types of expression of meanings (by morphological and nonmorphological[3] means). Using this plan of opposition, one can classify the facts of language; here there are eight groups:

(1) Morphological expression of grammatical lexical meanings, e.g., indicators of number in the nouns of French, English, Russian, and other languages.

(2) Morphological expression of grammatical syntactic

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[3] Nonmorphological means are frequently called "analytic" and sometimes even "syntactic."

meanings, e.g., indicators of gender, number, and case in Russian adjectives: indicators of gender and number in French adjectives.

(3) Morphological expression of nongrammatical lexical meanings. Here the incorporation of lexemes in polysynthetic languages, word compounding (German, Hungarian, and other languages), and also various instances of word-formation in Indo-European, Finno-Ugric, Semitic, and other languages are illustrative. A clear example of morphological expression of nongrammatical lexical meanings is the change in gender of the Arabic verb or suffixing of pronouns.

(4) Morphological expression of nongrammatical syntactic meanings, e.g., the slit-writing of prepositions with a noun in Arabic *(bi, li,* etc.); slit-writing of the copula *-a* with the nominal part of a sentence in Georgian; the inclusion of indicators in a verb for all its noun modifiers and conditions in Chinook.

(5) Nonmorphological expression of grammatical lexical meanings, e.g., articles and compound tenses in French, English, and German, or indicators—again separate words—of plural number, such as *rnams* and *dag* in Tibetan.

(6) Nonmorphological expression of grammatical syntactic meanings, e.g., the particle *to* before an infinitive in English.

(7) Nonmorphological expression of nongrammatical lexical meanings. This group includes the most diverse, quite ordinary cases: Lexical meanings are expressed by individual words—lexemes.

It may seem that if some lexical meanings are expressed by each separate word, then they are expressed within the word itself, and one should speak of morphological means. But this is not the case. We shall explain here, and elsewhere in this book, what is meant by an expression of meaning within a word. Take the word *dver'* [door]; this word expresses several meanings. Now, let us join to the meanings expressed by this word the lexical meaning of *otkrytost'* [openness] (i.e., the door is open). To do this, we must use another word (*otkryta* [open, is open]), not just some indicator within the first word (which we would use if we had to add the meaning of plurality—*dveri* [doors]). Therefore, we speak of nonmorphological means of expressing the nongrammatical lexical meanings with individual words—lexemes.

(8) Nonmorphological expression of nongrammatical syntactic meanings—conjunctions, prepositions, copulas.

As stated above, we do not claim the distinctions and definitions introduced to be final ones. They merely serve as an illustration of how one may work to make linguistic terminology more exact and to create a system of exact concepts without which the applications of new, precise methods to the study of language are greatly hindered and sometimes become impossible.

Precise terminology is important for all areas of linguistics and especially for machine translation, about which more will be said in the next chapter.

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