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### 1 Introduction

If one were to take an informal survey among non-linguists regarding the primary function of human language, the overwhelmingly most common answer would be, "language is used for communication." This is the commonsense view of what language is for. It might, therefore, come as a surprise to many people that some of the most prominent linguists in the field reject this view and that many others hold that the fact that language may be used for communication is largely, if not completely, irrelevant to its study and analysis. Chomsky, for example, maintains that "human language is a system for free expression of thought, essentially independent of stimulus control, need-satisfaction or instrumental purpose" (1980: 239), and rejects as a "vulgar, instrumental" view of language the idea that communication is a necessary or even significant function of language (1975: 56-7, 1980: 229-30). Not all linguists share Chomsky's view, however, and many are strongly committed to a view of language which takes its role in communication as central to its study and analysis; they are a minority in the field at present. Such linguists are referred to as *functionalists*, and the general term applied to this approach is *functional* linguistics. Within contemporary linguistics there is an opposition between functionalists, on the one hand, and *formalists*, on the other, formalists being those linguists who are in substantial agreement with Chomsky's position. As we will see later, this distinction has evolved into a more subtle and complex opposition than it might seem at first glance.

The goal of this chapter is to introduce the reader to the basic ideas of functional linguistics and to give an account of how the ideas that today constitute functional linguistics arose. It will also be explained how the majority of professional linguists came to adopt a view of language which is so strikingly at odds with the view held by non-linguists.<sup>1</sup> In the next section, a number of terms and distinctions will be introduced that are relevant to elucidating functionalist and formalist approaches to the study of language. In the following section, a brief history of twentieth-century linguistics will be given and the development of the relevant ideas about language structure and function will be sketched. In the final sections, contemporary functional linguistics will be characterized and contrasted with formal linguistics, to see how genuine the opposition really is.

### 2 Communicative Functions of Language

What does the proposition "the primary function of language is communication" actually mean? What are the communicative functions of language? Many traditional accounts portray communication as being the conveying of propositions from the mind of one interlocutor to the mind of one or more other interlocutors, and the propositions are about some state of affairs, real or imagined. In the linguistic depiction of states of affairs, reference is made to entities in the states of affairs, and predications are made about actions involving the entities or relations among the entities in them. In this way speakers construct linguistic representations of situations, as in (1).

(1) The boy ate the bread in the kitchen.

There are three referring elements and one predicating element in (1): *the boy* (referring to one participant in the event) *ate* (predicating an action of the boy) *the bread* (referring to the second participant) *in the kitchen* (referring to the location where the event took place). Hence reference and predication are often taken to be the fundamental communicative functions of language.

But language is used for much more than representing states of affairs. It is used in all kinds of verbal social interactions: asking questions, giving commands, making promises, expressing wishes, etc. These different uses are known as speech acts (Searle 1969). Foley and Van Valin (1984) emphasize the social nature of language use and stress that speaking is a kind of social activity:

Communication is often construed in a narrow sense to mean "conveying propositional information from one person to another", and within such a view linguistic behavior consists primarily of referring and predicating about situations in the world, all other types of verbal behavior, e.g. asking questions or giving commands, being derivative of it. Silverstein (1976, 1977, [1987]) has cogently argued that such a view is fundamentally mistaken and that referring-andpredicating is only one of the many socially constituted functions of language and not a privileged one at that... Thus the assumption that language is a system of communication treats language as a crucial component of human social interaction and takes linguistic behavior, e.g. asserting, asking, promising, commanding, wishing and requesting, and the larger-scale speech activities which they constitute, to be social behavior. (p. 8) It should be noted that the claim that the primary function of language is communication does not entail the view that all uses of language are necessarily communicative. Foley and Van Valin (1984) continue:

There may well be instances of verbal behavior which are non-communicative, but this in no way undermines the fundamental functionalist tenet that an understanding of language structure requires an understanding of the functions language can serve... This position is analogous to claiming that in order to understand the structure of hammers it is necessary to know that they are used primarily for driving nails, even though they may also be employed as doorstops or paperweights or for tapping the ashes out of a pipe. Indeed, it would be difficult to account for the fact that the head of a hammer is always heavy metal and the handle wood or plastic and never vice versa, if one ignores its primary function, since a hammer could easily be a doorstop, paperweight or pipetapper with a plastic head and metal handle. Languages are much more complex than hammers, both structurally and functionally, but in both cases one cannot understand form independent of function. (pp. 8-9)

Thus, the function of conveying propositional information, i.e. linguistic depictions of states of affairs, is but one of many communicative functions that language has.

All of these different functions may have structural ramifications in languages. As a simple example, let's look at how two different languages express assertions (statements), interrogatives (questions) and imperatives (commands). In English, each of these requires a different syntactic structure. This is illustrated in (2).

(2)	a.	The boy is eating the bread.	Statement
	b.	Is the boy eating the bread?	Question
	c.	Eat the bread!	Command

In a statement, the subject precedes the tensed verb, be it an auxiliary verb (*is*), as in (2a, b), or the main verb (*ate*), as in (1). In a question, on the other hand, the tensed verb precedes the subject, as in (2b). In a command, there is neither a subject nor tense; the bare verb begins the sentence, as in (2c). A combination of syntactic (word order) and morphological differences (presence or absence of tense inflection) signals declarative, interrogative and imperative sentence types. Contrast this with the situation in Lakhota, a Siouan language of North America.<sup>2</sup>

(3)	a.	Hokšíla ki agúyapi ki yúta-hą (yeló).	Statement		
		boy the bread the eat-PROG DECL			
		"The boy is eating the bread."			
	b.	Hokšíla ki agúyapi ki yúta-hạ he?	Question		
		boy the bread the eat-PROG INT			
		"Is the boy eating the bread?"			

c. Agúyapi ki yúta ye! Command bread the eat IMP "Eat the bread!"

Lakhota, unlike English, expresses these different types of sentences by simply adding particles at the end of the sentence; no change is made in their syntactic structure, except for the omission of the subject in the command in (3c). The direct object NP and the verb are in the same position in all three examples. The optional particle *yeló* in (3a) signals that the sentence is a declarative utterance, i.e. a statement; it also indicates that the speaker is male. The particle *he* in (3b) signals that the sentence is a question (it is neutral with respect to the sex of the speaker), while the particle *ye* in (3c) indicates that the sentence is a command and that the speaker is female. This way of expressing questions, statements, and commands is much more common across the world's languages than the English pattern in (2), and the contrast between the two illustrates how the same communicative functions can be carried out in very different ways in different languages.

Functionalists normally focus on these linguistic functions from either of two perspectives. They will be referred to as the "pragmatics" perspective and the "discourse" perspective. The first perspective concentrates on the meaning of and the conditions on the appropriate use of different speech acts. The work is based on Searle's (1969, 1985) theory of speech acts and Grice's (1975, 1989) theory of the logic of conversation; Levinson (1983) provides an excellent overview. As an example of the kind of problem which this aspect of functional linguistics addresses, consider the following utterance.

(4) Can you pass the salt?

Taken literally, this question is about the addressee's ability to give the speaker the salt; its literal meaning can be paraphrased as "Are you able to give me the salt?" This is not how it is normally interpreted, however; it is normally understood as a request, not a question, and if the addressee simply answered "yes" without handing the speaker the salt, such a response would be considered impertinent, rude, or smart-alecky. The theories of Grice and Searle make it possible for linguists (and philosophers of language) to explain how a sentence with one form (that of a question) and a clear-cut literal meaning can be interpreted in context as a different kind of speech act with a rather different meaning.

The second perspective is concerned with the construction of discourse and how grammatical and other devices are employed to serve this end. As a simple example of this, consider the problem of keeping track of referents in discourse. When a speaker constructs a text about a number of states of affairs, each of which contains a number of participants, how does he or she code the referents so that the interlocutors can keep them apart but also keep track of the same referents that appear in more than one state of affairs? This problem is illustrated in the following English examples.

- (5) a. Mary called Sam, and she talked to him for an hour. He scolded her for refusing to help her sister at the party, and she replied that she had been too busy.
  - b. Mary called Sam, talked to him for an hour, was scolded by him for refusing to help her sister at the party, and replied that she had been too busy.

The two participants to be tracked are Mary and Sam, and in (5a) they are unambiguously referred to by third-person pronouns that are differentiated in terms of gender. Hence she or her always refers to Mary and he or him to Sam.<sup>3</sup> The situation is somewhat different in (5b); there are nouns or pronouns referring to Mary only in the first (Mary), fourth (her) and fifth (she) sentences, and yet she is clearly a participant in the state of affairs expressed by each clause. In this sentence, Mary is being tracked by syntactic means: the NP Mary is the subject of each clause, and it is omitted after the initial one. In this multiclause construction, a missing subject must be interpreted as being the same as the subject of the first clause in it; hence all of the clauses are construed as having the NP referring to Mary as the subject. The other participant, Sam, is tracked by means of a gender-marked pronoun, just as in (5a). This involves many of the central mechanisms of English clause-internal grammar: the voice of the verb (active vs. passive), grammatical relations (subject vs. non-subject), and case marking (nominative [he, she] vs. accusative [him, her]). English thus has two different ways of keeping track of referents in discourse: the gendermarked pronoun system in both (5a) and (5b), and the syntactic system in (5b). Why should it need the system in (5b), when the one in (5a) seems to work just fine? Consider the slightly different examples in (6).

- (6) a. Bill called Sam, and he talked to him for an hour. He scolded him for refusing to help his sister at the party, and he replied that he had been too busy.
  - b. Bill called Sam, talked to him for an hour, was scolded by him for refusing to help his sister at the party, and replied that he had been too busy.

In these examples both participants are male, and therefore the pronouns *he* and *him* are used to refer to both of them. The result in (6a) is serious ambiguity; who, for example, scolded whom? Either Bill or Sam could have done the scolding. In (6b), on the other hand, there is much less ambiguity. The NP referring to Bill must be interpreted as the subject of each of the clauses in the construction, and therefore the pronoun *him* in non-subject position is interpreted as referring to Sam. The only real ambiguity is with respect to whose sister it is; it could be either Bill's or Sam's. Thus in this case the syntactic referent-tracking mechanism yields less ambiguity than the gender-marked pronoun system. Different languages use different referent-tracking systems: some use gender-marked pronouns primarily, some use syntactic mechanisms

primarily, and some use combinations of them (see Van Valin 1987, Comrie 1989, 1994, Kibrik 1991).

It was mentioned above that many of the basic mechanisms crucial to clauseinternal grammar are involved in reference tracking, and this highlights an important aspect of functional analysis. Voice constructions like passive, or grammatical relations like subject and direct object are not treated as purely formal grammatical entities; rather, they are analyzed in terms of the functions they serve. With respect to voice constructions, in some languages they are part of a referent-tracking system, as in English, while in other languages they are not. If a language has a syntactic referent-tracking system, then grammatical relations like subject will be centrally involved in it; in languages which use a gender-marked pronoun system only, then neither voice nor grammatical relations will serve any role in referent-tracking. In functional linguistic analysis, forms are analyzed with respect to the communicative functions they serve, and functions are investigated with respect to the formal devices that are used to accomplish them. Both forms and functions are analyzed, not just functions. The interplay between form and function in language is very complex and is the prime focus of functional linguistics.

Even though examples from only two languages have been given so far, it should be clear that cross-linguistic comparison is a very significant feature of functional linguistics. As we will see in the next section, it is not a necessary part of this approach, as there are schools of functional linguistics which are not typologically oriented. In the United States in particular, the development of functional linguistics has gone hand in hand with the expansion of the study of language typology and universals. While there are typologists who are not functionalists, the combination of typology and functionalism is not just an accidental pairing of unrelated endeavors. Many of the major figures in the development of functional linguistics in the United States have worked on languages in which the grammatical marking of communicative functions is more obvious and direct than it is in English, the language on the basis of which most theorizing in linguistics in the US was done up through the end of the 1970s. For instance, since the mid-1950s linguists have recognized that the NP referring to the topic of the discourse (roughly, the participant the discourse is primarily about) is accorded special treatment in the grammatical systems of some languages (see Chao 1955, Hockett 1958, Lambrecht 1994). In the examples in (5) the sentences are about Mary, while in (6) it is Bill who is the topic. Two languages in which the notion of topic plays an important role are Mandarin Chinese and Japanese; in Mandarin, topic NPs may be given special syntactic treatment, and in Japanese they are marked by a special particle, wa.

(7)	a.	Nèi xie shù, shùshēn dà.	Mandarin
		those CL tree tree.trunk big	(Li and Thompson 1976)
		"Those trees, the trunks are big."	-

b.	Nihon	wa, Tokyo	ga	sumi-yoi.	Japanese
	Japan	TOP	SUBJ	easy-live	(Kuno 1973)
"As for Japan, Tokyo is easy to live in."					

Linguists such as Kuno, Li, Thompson and others took the insights derived from their study of Mandarin, Japanese, and other so-called "exotic" languages and applied them to the analysis of English and other more familiar languages; there they found functional motivations for grammatical phenomena, albeit not always coded as directly as in these languages. Hence the investigation of languages from Asia, Africa, Australia, and the Americas led to insights about the interaction of form and function in language that led directly to the development of functional linguistics in the United States. Functional approaches also arose in Soviet / Russian linguistics based on the study of the non-Slavic languages of the former USSR (Kibrik 1979, 1985; Bondarko 1991); these were undoubtedly influenced by the well-established Prague-based tradition of Slavic functional linguistics, which will be discussed in the next section.

### 3 A Brief Look at the Development of Linguistic Theory in the Twentieth Century

At the beginning of the chapter it was noted that many linguists hold that the fact that language is used for communication is largely irrelevant to its analysis. How did such a view arise? The answer lies in the theoretical development of linguistics in the twentieth century. The primary concern of linguists such as Franz Boas in the US and Ferdinand de Saussure in Europe at the start of the twentieth century was to lay out the foundations for linguistic science and thereby to define clearly and explicitly the object to be investigated in linguistic inquiry. Culminating in Boas (1911) and Saussure (1917), this work defined what came to be known as structural linguistics. Saussure drew a fundamental contrast between language (langue) and speaking (parole): language is a system of signs, whereas speaking is the use of the system on particular occasions. A linguistic sign is the association of a sound (signifier) and a meaning (signified), e.g. the Japanese signifier /inu/ has the signified "dog," while the English signifier /əd/ (orthographic -ed) has the signified "past tense." Saussure argued that the proper subject for linguistic investigation is the system of signs, not the use of the system. Bloomfield (1933) proposed a similar distinction: grammar (the linguistic system) vs. meaning (the use of the system on particular occasions). He too argued that linguistic analysis should concern itself only with grammar.

What is the nature of the linguistic system? Saussure proposed that there are two fundamental relations among signs which define a structural system: co-occurrence (syntagmatic) and substitution (paradigmatic). The English sign

-ed, for example, is in a syntagmatic relation with the verbs that it appears suffixed to, e.g. *load*, *pit*, and *include*, and it is in a paradigmatic relation with the other suffixes that can occur on these verbs, e.g. -s "present tense," -en "past participle," or *-ing* "present participle." Similarly, Lakhota *agúyapi* "bread" from (3) is in a syntagmatic relation with *ki* "the" and a paradigmatic relation with *hokšíla* "boy," since both *agúyapi* and *hokšíla* can co-occur with *ki* "the." In (3a, b), *hokšíla ki* "the boy" is syntagmatically related to both *agúyapi ki* "the bread" and *yúta* "eat," and it is paradigmatically related to other Lakhota NPs which can cooccur with these two other elements, e.g. *wičháša ki* "the man" or *wíyą wą* "a woman," as shown in (8).

- (8) a. Wičháša ki agúyapi ki yúta-ha (yeló). man the bread the eat-PROG DECL "The man is eating the bread."
  - b. Wíyą wą agúyapi ki yúta-hą (yeló).
    woman a bread the eat-PROG DECL "A woman is eating the bread."

Syntagmatic relations define the frame in which paradigmatic relations exist, and the elements in a paradigmatic relation to each other constitute classes which are in syntagmatic relation to each other. To continue the Lakhota example, "noun + article" constitute a syntagmatic frame, i.e. they co-occur with each other as a regular pattern in the language. Each of the constituents of this pattern, namely "noun" and "article," are themselves names for substitution classes; that is, in terms of the examples we have seen, *wičháša* "man," *wíyą* "woman," *hokšíla* "boy," and *agúyapi* "bread" can be substituted for each other in the "article" position. Syntagmatic (co-occurrence) and paradigmatic (substitution) relations among signs constitute the structure of language, and it is this structure, and not the way signs are used in speaking, that is the proper domain of linguistic study, according to Saussure and Bloomfield.

Chomsky (1965) proposed a distinction analogous but not identical to Saussure's and Bloomfield's, namely competence vs. performance. Competence refers to a native speaker's knowledge of his or her native language, and performance is how a speaker puts that knowledge to use on particular occasions. Performance is very close to Saussure's *parole* and Bloomfield's meaning, but competence includes not only the linguistic system but also native speakers' knowledge of it. Hence it adds a cognitive dimension to linguistics that had been deemphasized by Saussure and denied by Bloomfield. For Chomsky, the proper domain of linguistic inquiry is competence only.

How do Saussure's, Bloomfield's and Chomsky's distinctions relate to the issue raised in the introduction, namely, the primary function of language? Since *parole* / meaning / performance concerns the use of language, and since one of these uses is surely for communication among humans, it is natural to associate the communicative function of language with *parole* / meaning /

performance. As we have seen, all three theorists maintain that linguistics is not concerned with the analysis of *parole* / meaning / performance but rather with the study of *langue* / grammar / competence. Hence it is but a short leap to the conclusion that the communicative functions of language are irrelevant to the analysis of language structure (*langue* / grammar / competence). Given that Saussure is generally acknowledged to have laid the foundations for the modern study of language, it is consequently not surprising that many linguists have adopted this view. Thus, a view of language that might seem puzzling to non-linguists arises rather naturally out of the way linguistic theory has developed in this century.

Does this mean that functional theories are theories of *parole* / meaning / performance? The answer is, for the most part, "no." Foley and Van Valin (1984) make this point explicitly.

It must be emphasized that functional theories are *not* performance theories. That is, they seek to describe language in terms of the *types* of speech activities in which language is used as well as the *types* of constructions which are used in speech activities. They do not attempt to predict the actual *tokens* of speech events. In other words, the theories seek to describe the interaction of syntax, semantics and pragmatics in types of speech activities; they do not try to predict the occurrence of particular constructions in actual speech events. They are theories of systems, not of actual behavior. (p. 15 [emphasis in original])

How can the various communicative functions of language discussed in section 2 be incorporated into the study of language structure? The two fundamental relations defining a structural system are cooccurrence (syntagmatic) and substitution (paradigmatic), as mentioned above. The co-occurrence relations among substitution classes constitute a level of structure. If the elements in the substitution classes are phonemes, then the syntagmatic combinations of phonemes are morphemes. If the elements in the substitution classes are morphemes, the syntagmatic combinations are words. If the elements in the substitution classes are words, the syntagmatic combinations are sentences. This is the extent of the study of *langue* / grammar / competence as practiced by Saussure, Bloomfield, and Chomsky. But it is possible to extend the analysis further: if the elements in the substitution classes are sentences, then the syntagmatic combinations are discourses or kinds of speech events. In analyzing sentence types in terms of the kinds of speech events or discourse they can occur in, one is analyzing their communicative function. So, for example, the examples in (2)-(4) all occur in specific types of speech acts. The examples in (5) and (6), on the other hand, involve sentences with particular properties within a discourse context. Hence it is in fact possible to extend the study of langue / grammar / competence to take the communicative functions of linguistic forms into account. This is what Foley and Van Valin were getting at above: it is possible to analyze the potential contexts in which constructions appear, in order to uncover the contextual constraints on their distribution. We can take passive constructions to exemplify this point. In the active voice in English, the doer of the action is the subject, while in the passive voice the NP referring to the participant affected by the action is the subject. In (5b) and (6b) passive is used in the third clause. The subject, which is the topic of the minidiscourse, is not the doer of the action of the verb in that clause. The construction in (5b) and (6b) requires that the topic be the subject of each sentence in it, and therefore passive must be used in the third sentence. This suggests that there is a connection between the topicality of participants and the occurrence of the passive construction, i.e., when the doer of the action is less topical than the other participant, a passive is favored, because it permits the more topical participant to appear as subject. Subjects in English and many other languages are typically topic-like, although there are instances of non-topic subjects. The overwhelming tendency in languages is for the NP referring to the topic to come first in a sentence, followed by elements introducing new information into the context. The following possible question–answer pairs illustrate this.

- (9) a. Who did Sally slap?
  - b. She slapped Pat.
  - b'. Pat was slapped by Sally / her.

While the sentences in (9b) and (9b') are perfectly grammatical English sentences, they are not equally good as answers to the question in (9a); (9b) is much better than (9b'). (The most likely answer would be *Pat* by itself, but the whole sentence is included to help illustrate the point.) Part of the reason for this difference in appropriateness derives from discourse factors. The question in (9a) establishes Sally as the topic and also that slapping occurred; the new information requested is the identity of the person slapped. The sentence in (9b) presents the elements expressing established information first followed by the NP *Pat*, which is the answer to the question. The sentence in (9b'), on the other hand, presents the new information first followed by the established information, with the topic NP last in the sentence. Hence it is inappropriate in the context created by the question in (9a). This account is somewhat oversimplified, but it nevertheless illustrates how linguistic analysis can be extended to take communicative functions into account.

The idea of extending linguistic analysis to include communicative functions was first proposed by Czech linguists. Virtually all contemporary functional approaches trace their roots back to the work of the Czech linguist Mathesius in the 1920s as part of the Prague School (Mathesius 1928, 1929). He and his successors developed the theory of functional sentence perspective. They were the first to fully develop the observation that the elements expressing more established information (what was earlier called the "topic," what the Pragueans call the "theme") precede the elements expressing new information (what is often called the "focus" and what Pragueans call the "rheme"). This is a salient feature of Slavic languages, as the following examples from Russian (Comrie 1979) show. In the translations, the focus is in small caps, and the square brackets group the topical elements and focal elements together.

(10)	a.	Q:	[Kto] [zaščiščajet Viktor-a]? who.NOM defends Victor-ACC Focus Topic	"Who defends Victor?"
		A:	[Viktorazaščiščajet][Maksim-Ø].Victor-ACC defendsMaxim-NOMTOPICFocus	"Maxim defends Victor."
	b.	Q:	[Kogo] [zaščiščajet Maksim-Ø]? who.ACC defends Maxim-NOM Focus TOPIC	"Who(m) does Maxim defend?"
		A:	[Maksim-Ø zaščiščajet] [Viktor-a]. Maxim-NOM defends Victor-ACC TOPIC Focus	"Maxim defends Vıстоr."
	c.	Sp1:	[Maksim-Ø] [ubivajet Aleksej-a]. Maxim-NOM kills Alexei-ACC TOPIC FOCUS	"Maxim KILLS Alexei."
		Sp2:	[A Viktor-a]? and Victor-ACC Focus	"And VICTOR?" [i.e. "What is happening to Victor?"]
		Sp1:	[Viktor-a Maksim-Ø] [zaščiščajet]. Victor-ACC Maxim-NOM defends TOPIC Focus	"Maxim defends Victor."

Aside from the fact that question words like *kto* and *kogo* "who" occur at the beginning of the sentence, as they do in many languages, the ordering of elements is topic (theme) followed by focus (rheme). It was noted in section 2 that the study of so-called "exotic" languages by English-speaking linguists had led to insights about the functional motivation for grammatical phenomena, but here the crucial insight derives from the native language of the linguists. The theory of functional sentence perspective was developed primarily with respect to the analysis of Slavic languages, but its ideas have been applied by other linguists to a range of phenomena in many languages.<sup>4</sup> This theory was first brought to the attention of English-speaking linguists in Halliday (1967); Kuno (1972a, 1972b) and Chafe (1972) applied them to issues that were of concern to theoretical linguists in the US at that time. By the end of the 1970s, a number of functional approaches were emerging in both the US and western Europe.

#### 4 Functional Approaches

There is a great diversity of views among those who label themselves as functionalists. One of the curious features of functionalism in linguistics is the apparent paucity of explicitly articulated, named theories. There are really just three: Functional Grammar (FG) (Dik 1978, 1989), Systemic Functional Grammar (SFG) (Halliday 1967, 1994), and Role and Reference Grammar (RRG) (Foley and Van Valin 1984, Van Valin 1993, Van Valin and LaPolla 1997). Nichols (1984) presents a survey of functionalist approaches which usefully categorizes them as extreme, moderate, and conservative. Her descriptions of each are still valid and are given below.

The conservative type merely acknowledges the inadequacy of strict formalism or structuralism, without proposing a new analysis of structure . . . The moderate type not only points out the inadequacy of a formalist or structuralist analysis, but goes on to propose a functionalist analysis of structure and hence to replace or change inherited formal or structural accounts of structure . . . Extreme functionalism denies, in one way or another, the reality of structure qua structure. It may claim that rules are based entirely on function and hence there are no purely syntactic constraints; that structure is only coded function, or the like. (1984: 102–3)

Conservative functionalism, as exemplified in the work of Kuno (e.g. 1972a, 1972b, 1975, 1987) and Prince (e.g. 1981a, 1981b), seeks to augment standard formal analyses with functional principles, thereby creating an additional functional "component" or "module" in the grammar. Kuno (1987) is very explicit on this point.

Functional syntax is, in principle, independent of various past and current models of grammar... Each theory of grammar must have a place or places where various functional constraints on the well-formedness of sentences or sequences of sentences can be stated, and each can benefit from utilizing a functional perspective in the analysis of concrete syntactic phenomena. Therefore, in theory there is no conflict between functional syntax and say, the government and binding theory of generative grammar. (1987: 1)

These approaches assume the same basic notion of grammatical structure that formal theories do and propose constraints or rules that either supplement or in some cases even replace purely structure-oriented rules. They do not challenge the fundamental assumptions of formal theories, and therefore they represent an extension of them rather than an alternative to them.

Moderate functional theories do reject the assumptions of formal theories such as Chomsky's and are presented as alternatives to them. Two of the theories mentioned above, FG and RRG, are moderate functional theories. These theories reject the conceptions of grammatical structure that underlie formal theories, but each proposes a different replacement view of structure. However, they do not deny the validity of the notion of structure *per se* and do not claim that all grammatical structure is reducible to discourse structure or some other functional notion(s). Rather, they view grammatical structure as strongly influenced by semantics and pragmatics and undertake to explore the interaction of structure and function in language. The following are characterizations of moderate functionalist views of language. First, Dik (1991) characterizes the FG view of language as follows.

[A] language is considered in the first place as an instrument for communicative verbal interaction, and the basic assumption is that the various properties of natural languages should, wherever this is possible, be understood and explained in terms of the conditions imposed by their usage. The language system, therefore, is not considered as an autonomous set of rules and principles, the uses of which can only be considered in a secondary phase; rather it is assumed that the rules and principles composing the language system can only be adequately understood when they are analyzed in terms of conditions of use. In this sense the study of language use (pragmatics) precedes the study of the formal and semantic properties of linguistic expressions. (1991: 247)

Second, Van Valin (1993) lays out the basic assumptions of RRG as follows.

RRG takes language to be a system of communicative social action, and accordingly, analyzing the communicative functions of grammatical structures plays a vital role in grammatical description and theory from this perspective . . . Language is a system, and grammar is a system in the traditional structuralist sense; what distinguishes the RRG conception . . . is the conviction that grammatical structure can only be understood with reference to its semantic and communicative functions. Syntax is not autonomous. In terms of the abstract paradigmatic and syntagmatic relations that define a structural system, RRG is concerned not only with relations of cooccurrence and combination in strictly formal terms but also with semantic and pragmatic cooccurrence and combinatory relations. (1993: 2)

The rules and constraints proposed in FG and RRG bear little resemblance to those proposed in generative theories, and therefore these theories do not complement formal theories but, rather, are alternatives to them. Both of these theories are strongly typologically oriented. RRG, for example, grew out of attempts to answer the following questions: (1) what would linguistic theory look like if it were based on the analysis of Lakhota, Tagalog, and Dyirbal, rather than on the analysis of English?, and (2) how can the interaction of syntax, semantics, and pragmatics in different grammatical systems best be captured and explained? (Van Valin 1996: 281).<sup>5</sup>

Extreme functionalism, as manifested in the works of Hopper (1987) among others, rejects the validity of any notion of structure other than that of discourse structure and seeks a radical reduction of grammar to discourse. On this view, grammar is strongly motivated by discourse, and the emphasis on the primacy of discourse leads even to the rejection of semantics as a valid part of linguistic investigations, where "semantics" is understood as the study of the meaning of forms independent of their discourse function(s). Extreme functionalism abandons the basic Saussurean conception of language as a structural system, which underlies structural and generative linguistics, as well as conservative and moderate functionalism.

Falling somewhere between moderate and extreme functionalism is SFG, which takes a strongly discourse-oriented view of language, but which nevertheless does not deny either the reality of structure in language nor the Saussurean foundations of modern linguistics. SFG is a "top–down" analytic model which starts with discourse and works "down" to lower levels of grammatical structure. Halliday (1985) maintains that the ultimate explanations for linguistic phenomena are to be found in language use.

Language has evolved to satisfy human needs; and the way it is organized is functional with respect to these needs – it is not arbitrary. A functional grammar is essentially a "natural" grammar, in the sense that everything in it can be explained, ultimately, by reference to how language is used. (1985: xiii) . . . The orientation is to language as a social rather than an individual phenomenon, and the origin and development of the theory have aligned it with the sociological rather than psychological modes of explanation. At the same time it has been used within a general cognitive framework. (1985: xxx)

SFG is less concerned with issues of sentence grammar than FG and RRG, and more with discourse structure. Hence it falls toward the more extreme end of the spectrum.

Among the three approaches, it could be argued that conceptually the biggest gap is between extreme functionalism and all the others, since it represents the greatest departure from the mainstream currents of twentieth-century linguistics. There is a context in which extreme and moderate functionalism fall together in opposition to conservative functionalism, however. This is the issue of the relationship between the functionalist and generative theoretical agendas. As the quote from Kuno makes clear, there is no inherent conflict between the goals of generative grammar and those of conservative functional syntax, but this is not the case with moderate and extreme functionalism. The extreme view rejects the generative enterprise and the questions it deals with altogether; for its adherents, the issues raised by generative researchers are pseudo-problems created by an invalid methodological approach to language. Moderate functionalists have a rather different perspective. Their agenda is broader than that of generative linguistics, since it is not limited to issues of sentence grammar but also includes discourse and other pragmatic issues, and therefore the moderate functionalist agenda subsumes the formalist agenda at the same time that it transforms it in terms of functional categories and relations. Thus in RRG, for example, research has focussed not only on discourse-related issues like reference tracking but also on formalist issues like constraints on *wh*-question formation and relative clause formation (Van Valin 1995).

One of the most salient features of Chomskyan (but not all formal) linguistics is the goal of describing a native speaker's grammatical competence and explaining the acquisition of language by children. Not surprisingly, functionalist approaches vary with respect to their stand on these issues. Since conservative functionalists basically follow general generativist doctrine, they too subscribe to this goal, and they follow the standard Chomskyan view regarding the existence of an autonomous language faculty. Moderate functionalist theories all adopt this goal, with the reinterpretation of grammatical competence as communicative or textual competence, and at least some (RRG) expressly reject the Chomskyan autonomy hypothesis. Van Valin (1991, 1994, 1998) and Van Valin and LaPolla (1997) present a model of the acquisition of syntax which does not assume an autonomous language acquisition device. Opinion among extreme functionalists varies on this issue; Hopper (1987) explicitly denies the validity of any psychological interpretation in linguistics, while Bates and MacWhinney (1982, 1987, 1989) develop what they call the "competition model" to account for language acquisition.

## 5 Formal vs. Functional Approaches to Language

This discussion began with contrasting views on the primary function of language, and a dichotomy was set up between those linguists who believe it to be communication and take the communicative functions of language to be important for its analysis (the functionalists) and those who at the very least consider the communicative functions of language to be irrelevant to its analysis, following Chomsky (the formalists). This contrast, as one might suspect, is rather oversimplified, and when one scans the topics that formalists and functionalists investigate, the distinctions become somewhat blurred. In the 1980s only functionalists talked about referent tracking, discourse and information structure (topic, focus), among other issues, but that has changed significantly. There are formal theories of discourse and information structure, e.g. Kamp and Reyle (1993) and Vallduví (1992), and analyses of the role of notions like topic in the syntax of different languages, e.g. É. Kiss (1987, 1994). Until the early 1980s the problems of so-called "exotic" languages were primarily the province of typologists and functionalists, but since then linguists of all theoretical persuasions have begun to investigate them. Whereas it was then possible to identify a formalist or a functionalist merely by the problems they investigated, this is no longer the case today.

What, then, distinguishes formalists from functionalists? There is one fundamental difference which sets functionalists of all persuasions off from formalists, and there is a second distinction which separates extreme functionalists from both formalists and conservative and moderate functionalists. This distinction concerns the type of explanatory criteria that the approach recognizes. Table 13.1 summarizes the relevant types of explanatory criteria.

The label "theory-internal" refers to the fact that within a particular domain, e.g. syntax, the criteria are applied to competing analyses within that domain; it does not mean that they are specific to any particular linguistic theory. They are explicated briefly in (11).

		External criteria	
Domain to be explained	Theory-internal criteria	Language-internal	Language-external
Syntax	Economy Motivation Predictiveness	Phonology Semantics Pragmatics Processing	Reasoning Categorization Perception

Table 13.1	Types	of explanation	tory criteria
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Source: Van Valin and LaPolla 1997: 7.

- (11) Theory-internal explanatory criteria
  - a. Economy (also known as "Occam's razor"): is it the simplest account?
  - b. Motivation: are the main explanatory constructs independently motivated or are they specific to the problem at hand?
  - c. Predictiveness: do the hypotheses predict phenomena beyond those for which they were formulated?

If an approach restricts itself to theory-internal criteria only, then syntactic phenomena are explained in syntactic terms, semantic phenomena in semantic terms, phonological phenomena in phonological terms, etc. This is often expressed in terms of the thesis of the autonomy of syntax, and it applies to semantics and phonology as well; phenomena in each domain are to be explained in terms of constructs, rules, or principles which involve elements in that domain only. The external explanatory criteria involve factors outside of the domain being studied, and they can be internal or external to language itself. Invoking phonetics to account for some phonological phenomenon is an example of permitting language-internal external criteria in explanation, whereas invoking some feature of the human perceptual system to account for some phonological phenomenon would be an instance of using language-external external criteria in explanation.

As is evident from the citations earlier from Kuno, Dik, Van Valin, and Halliday, functional approaches look to semantics and pragmatics as the basis for explanations of syntactic phenomena. Formal approaches, on the other hand, restrict themselves to theory-internal criteria in explanation, for the most part. When formal and functional accounts of the same phenomena are compared, this contrast stands out clearly. For example, the explanation for the difference in grammaticality in (12) is quite different in the two approaches. These sentences involve sentence-internal pronominalization, and the issue is whether a particular lexical noun and a particular pronoun can be interpreted as coreferential (identical subscripts indicate intended coreference).

- (12) a. As for  $his_i$  sister,  $Tom_i$  hasn't talked to her in three weeks.
  - a'. \*As for his, sister, she hasn't talked to Tom, in three weeks.
  - b. It is his<sub>i</sub> sister that Tom<sub>i</sub> hasn't talked to in three weeks.
  - b'. It is Tom's<sub>i</sub> sister that he<sub>i</sub> hasn't talked to in three weeks.

The fact to be explained here is why coreference between *his* and *Tom* is very difficult, if not impossible, to get in (12a') but possible in the other sentences. In standard formal accounts, e.g. Chomsky (1981), the explanation is stated in terms of the relative positions of the lexical noun and the pronoun in the syntactic phrase-structure tree representing the structure of the sentence. In functional accounts, e.g. Kuno (1975) and Bolinger (1979), the difference is attributed to the different information structures in the sentences, i.e. differences in which NP functions as topic and which as focus. Chomsky defines pronominalization as a syntactic phenomenon, and therefore only syntactic factors are relevant to its explanation; when competing syntactic accounts of pronominalization are evaluated, only the theory-internal criteria are employed. For functionalists like Kuno and Bolinger, on the other hand, semantics and pragmatics can be brought into the explanation, and competing accounts would be evaluated with both theory-internal and -external criteria. The centrality of external explanations for linguistic phenomena is a point that all functionalists agree on.

The second feature which distinguishes extreme functionalists from the rest concerns the role of theory in linguistics. Virtually all formal linguists are strongly committed to working within a well-defined theoretical framework, but this is not the case with functionalists. Conservative functionalists, who view their work as augmenting formal grammars, fall in with formalists on this point. Many moderate functionalists are likewise theoretically oriented, as witnessed by the development of theories like RRG and FG, which employ technical metalanguages and explicit representations of the relevant syntactic, semantic and pragmatic phenomena they investigate. Extreme functionalists, on the other hand, deny the validity of functional theories and maintain that true functional theories are impossible. Givón (1989) argued that all theories are inherently formal, and therefore that a functional theory was a contradiction in terms. They also view the use of any kind of explicit notations or representations as inherently formalist and reject them as well. From an extreme functionalist perspective, RRG and FG do not even count as functional approaches, because of their commitment to theory development and use of explicit notation and representations.

### 6 Conclusion

The label "functional linguistics" is a cover term for a complex web of ideas and methodologies, many of which are more distant from each other than they are from many formalist ideas. Bates (1987) noted that functionalism is like Protestantism, a group of warring sects which agree only on the rejection of the authority of the Pope. Work by conservative functionalists has yielded important insights regarding the pragmatic nature of many syntactic constraints, but they do not address the crucial question of the nature of structure in language, particularly syntactic structure, since they assume a generative account of structure. Extreme functionalists have uncovered many important generalizations about discourse structure, information flow, and the discourse functions of grammatical forms, but by rejecting the notion of language as a structural system they have, like the conservative functionalists, avoided one of the central questions of linguistic theory, that of the nature of linguistic structure. Only moderate functionalists have attempted the difficult task of proposing alternative conceptions of linguistic structure and developing explanatory theories. While there has been some convergence between the work of conservative and moderate functionalists on the one hand, and many formalists on the other, they are nevertheless distinguished by their respective views on what counts as an explanation. All functionalists agree that language is a system of forms for conveying meaning in communication and therefore that in order to understand it, it is necessary to investigate the interaction of structure, meaning and communicative function.

#### NOTES

- 1 It is often asserted by advocates of Chomsky's view that science leads to results that defy common sense, the prime example being modern physics. However, the counterintuitive results of special relativity and quantum mechanics deal with phenomena outside the range of human experience, i.e. subatomic particles or objects moving at close to the speed of light. Linguistics does not deal with such phenomena; rather, it deals with what has long been considered the quintessential human phenomenon. Hence it is reasonable to question the denial of the relevance or the importance of the most obvious feature of the phenomenon to be described and explained.
- 2 Abbreviations used in glosses: CL "classifier," DECL "declarative," IMP

"imperative," INT "interrogative," PROG "progressive," Sp "Speaker," SUBJ "subject," TOP "topic."

- 3 Strictly speaking, the pronouns could refer to other individuals of the appropriate gender. However, in this and all subsequent examples, we will limit our discussion to the universe of discourse defined by the first sentence in the construction.
- 4 For an overview of the Prague School, see Vachek (1964, 1983), and for more recent work by Prague School functional linguists, see Sgall et al. (1986) and Firbas (1964, 1992).
- 5 Tagalog, an Austronesian language, is the national language of the Philippines, and Dyirbal is an Australian Aboriginal language.