

# Functional Grammar and Turkish<sup>1</sup>

2

Gerjan van Schaaik

Boğaziçi Üniversitesi, İstanbul

## 0 Introduction

The primary aim of this paper is to introduce the Turkish reader to the theory of Functional Grammar (henceforth: FG), a linguistic theory that is being taught at Boğaziçi Üniversitesi since September 1996. Secondly, it aims at showing that this theory has great relevance for Turkish in that it constitutes a sound basis for the description of linguistics data of Turkish, and that by maintaining the basic theoretical points of departure many seemingly complex phenomena can be explained in a 'functional way'. It is not the author's intention, however, to present an 'in depth analysis' or 'evaluation' of both FG and its relation to linguistic work on Turkish, but this article should merely function as an 'eye-opener' to those who are interested in approaches that intend to cover more linguistic strata than syntax only. Therefore, due to both the nature and the limited size of this article some details must remain undiscussed.

Section 1 gives a brief description of what FG claims to be in terms of methodological preliminaries. In section 1.1 the main constraints on the power of the theory are explained, and in section 1.2 the basic levels of linguistics description are presented.

As for the application of FG to Turkish, section 2.1 illustrates how pragmatic notions can be used for the description of constituent order; in 2.2 it will be shown how the general principles apply to the process of word formation; 2.3 goes into the relationship between morphology and syntax; section 2.4 presents the highlights of an FG-analysis of Turkish compounds; and in 2.5 another type of formation rule, the formation of a predicate based on a term, will be discussed. Section 3 contains some conclusions and suggestions for further research.

## 1 Functional Grammar

The fundamental question in taking a functional view to language and language use is how people succeed in getting across their ideas, beliefs, knowledge etcetera by using linguistic expressions, that is, how do people

---

<sup>1</sup> First published in Turkish as '*İşlevsel Dilbilgisi' nedir?*' in *Dilbilim Araştırmaları* 1998, Ankara: BBB, page 9-25. The present text underlies the Turkish version.

communicate by means of language? Human beings are not only able to correctly produce and understand linguistic structures in many different situations, but they also know exactly how to derive knowledge from linguistic expressions by way of reasoning, and they know not only what to say but also how to say it, given a particular situation. Functional Grammar deals in first line with the linguistic capacities that underlie language use, and is meant as a general theory about the grammatical organisation of natural languages.

As is well known, in linguistics there are quite many theories or research traditions, each of them taking different views on what language is and on what should be included in the study of natural languages. In some traditions (the 'formal paradigm') language is regarded as an abstract formal object, a set of sentences. In such approaches, then, the aim of linguistics is to describe sentences in terms of formal syntax, that is, in terms of rules that reflect the order of constituents. Meaning and context play a lesser role, at least not as long as syntax is capable of giving sufficient descriptive power. The main-stream linguistic school taking this approach is called (chomskyan) 'generative grammar'.

In the functional research tradition ('paradigm'), however, language is in the first place a means of social interaction, and language forms an integrated part of the communicative competence of human beings. Therefore, language activity is not only structured, which is determined by rules, norms, and conventions, but it also is co-operative in the sense that at least two participants are required to make the use of language useful since it serves to achieve communicative goals. The instruments or tools which are used for this purpose are called linguistic expressions, which in turn are structured by the rules of semantics, phonology, morphology, and syntax (grammatical rules). On the other hand we have rules which govern the actual use of linguistic expressions in a given communicative setting. These rules are called pragmatic rules. Since 'pragmatics' deals with the full body of information concerning beliefs, preconceptions, feelings, and knowledge, it is the linguistic expressions which are used as an instrument to convey pragmatic information from Speaker to Addressee, both being the communicative partners in a given situation.

The construction of linguistic expressions is carried out in a functional way, that is, there is a close relationship between the way expressions are built up and the communicative goals it serves. They fulfil only some function in certain settings, co-determined by contextual and situational information which is available to Speaker and Addressee. In this way, it will be understandable that pragmatics is considered as the all-encompassing framework in which semantics and syntax can be studied.

### 1.1 General Principles

FG favours four standards of adequacy: 1) a grammar of some language should be able to generate all linguistic expressions by specifying rules and principles in which the most significant generalisations of that language are brought together (descriptive adequacy); 2) linguistic expressions should not be thought of as isolated objects but as instruments used by a Speaker to evoke an intended interpretation by the Addressee, given a certain communicative setting being determined by a situation and a context which is built up by linguistic expressions itself (pragmatic adequacy); 3) a grammar should comprise a) a production model; b) a model for the interpretation of linguistic expressions; and c) a device that represents the storage facility for basic linguistic material and rules which are used in the aforementioned models (psychological adequacy); and 4) the theory of FG should be capable of providing grammars for languages of any type, thereby accounting for differences and similarities between individual languages and language groups (typological adequacy).

A further requirement that is (self-)imposed on FG is a certain balance between abstractness and concreteness with respect to its descriptive power. 'Abstract' and 'concrete' both pertain to the relative distance between linguistic expression and its underlying structure. On the one hand, for purely practical reasons the descriptive apparatus of a theory must stay as close as possible to the linguistic data found in any language, but on the other hand, in order to be applicable to languages of any type that part of the theory must have a certain degree of abstractness. Suppose we have to formulate a generalisation over the form of the subjects and objects in *The dog bit the cat* of English and *Köpek kediye ısırdı* of Turkish. We could say that underlyingly *dog*, *cat*, *köpek* and *kedi* are 'definite' (for which FG uses a definiteness operator in all four cases), but that the *expression rules* for English predict that this operator is always expressed as 'the', whereas those rules for Turkish tell us that definiteness is expressed on objects only (as the accusative case marker). Thus, apart from the lexical material the nominal constituents of these examples have the same structure in both languages, what differs over these languages is the (set of) expression rules which map those structures onto their actual linguistic expressions.

A third important characterisation of FG is that it takes a particular point of view with respect to the more general problem of 'generative power' of rule systems within linguistic theories. Roughly speaking, a theoretical framework with rules that generate sentences can be 'too weak', that is, the rules do not generate expressions which meet the requirement of descriptive adequacy (not

all sentences can be generated), or the rules are 'too strong', viz. the grammar produces more types of sentences that are actually found in a particular language (it is over-generative). In order to avoid the latter type of problem, a number of constraints has been formulated in FG, the most important of which are as follows. Structure-changing operations, which are achieved by deletions, substitutions and permutations of linguistic material are avoided. Rather, structures are developed into linguistic expressions by gradual expansion and not by transforming one structure to another by means of the operations referred to above. Thus, the similarities and differences between (a) *misafirin odası* 'room of the guest' and (b) *misafir odası* 'guest room' is not explained in terms of deriving (b) from (a) by deleting the genitive suffix, or by transforming (a) and (b) from one and the same 'deep structure', but by showing that these constructions both have a derivational path of their own. Similarly, the 'inverted value' of *kitabım var/yok* 'I have a/no book' is not arrived at by saying that *var* is substituted by *yok* or that *yok* is substituted by *var*, but rather by investigating the general underlying structure of existential expressions, and by studying the effect of negation operators on such structures. As for permutations, for the ordering differences as found in for instance *ben gidiyorum* 'I go' versus *gidiyorum ben* 'I go', the placement of *ben* is not analysed in terms of 'movement' of some constituent from one place in the underlying structure to another, but rather by assuming that a certain underlying structure may be expressed in different ways, due to different syntactic and/or pragmatic factors.

There is, however, one type of 'transformation' that is accepted within FG. What must be thought of is not the type of transformation (as in 'transformational grammar') that is associated with for instance the derivation of a passive sentence from an active one, but rather with building new lexical material: predicate formation. On the assumption that lexical items are predicates with a pre-defined structure, the correspondences between certain basic predicates and their derived forms is accounted for by Predicate Formation Rules. Such rules describe the relationship in terms of form, structure, and meaning between both types of predicates. It is quite obvious that for instance, *gazete-ci* 'journalist' and *gazete-ci-lik* 'journalism' are related to *gazete* 'newspaper'. By means of (different) formation rules it is described how *gazete-ci* is derived from *gazete* and how *gazete-ci-lik* is based on *gazete-ci*. In some cases also the structure or lexical category of the derived predicate is affected. As we will see in 2.3 below, in *Türk-leş* 'to become Turk' the noun *Türk* has 'transferred' to the category of verb, and the intransitive verb stem *Türk-leş* is 'transformed' into the transitive verb stem *Türk-leş-tir* 'to Turkify'.

## 1.2 Structural Units

The unit that underlies the actual linguistic expression is called 'underlying clause structure'. This is a complex abstract structure, which can be divided into several levels: at the topmost level (level 4) we find the clause itself, a structure that is associated with 'speech act'. This is in fact the utterance itself and the relevance to distinguish this layer is found, *inter alia*, in the observation that reference can be made to an utterance, for instance by means of a demonstrative. This can be exemplified by the following fragmentary dialogue: A- *Seviyorum seni, biliyor musun?* 'I love you, you know that?' B- *Keşke bunu söylememiş olsaydın* 'Wish you had not said that', in which *bunu* 'that' of (B) may be about the entire clause of (A) or about either of its parts.

One layer further down in the hierarchy, on level three, we find the structure of the proposition, the mental correlate of which is 'possible fact'. Also to this type of entities reference can be made, for instance, when saying *Onu öylesine sevdiğini hiç tahmin edemedim* 'I couldn't have guessed that you love him that much', in which the embedded clause *Onu öylesine sevdiğin* expresses a fact, being true or false (a property which is taken as a typical for facts). Of course, both the propositions based on the matrix predication and embedded predication are facts, or more precisely 'possible facts' in 'possible worlds'.

For the construction of an underlying clause structure it is first of all required to build up a predication. Predications are formed by taking a predicate from the lexicon for which a number or terms are to be constructed, the latter being based on lexical predicates as well. Suppose a predication is based on *sat* 'to sell'. This verb is a three place predicate, that is, this verb brings along three arguments, the relation between which is designated by *sat*. Firstly, there is a 'seller', secondly an 'object to be sold', and thirdly, a 'buyer'. Now, suppose further that these arguments are instantiated by *terms* based on *Ali*, *araba* 'car', and *adam* 'man' respectively. In a simplified fashion the relationship between these entities (expressed as terms) can be represented as the follows:

- (1)        *sat* (*Ali*) (*araba*) (*adam*)

It will be clear that the nature of these arguments as designated by the verb, can be coded in terms of semantic functions: *Ali* is the Agent, *araba* the Patient and *adam* the Recipient, functions which can be directly expressed in Turkish by case markers for nominative, accusative, and dative respectively.

A structure such as (1) is called a predication, which correlates with 'state of affairs' or with 'the conception of something that may be the case in some

world'. States of affairs can occur, take place, happen etcetera, and therefore they can be located in place and time, and they can be perceived (heard, seen other otherwise 'sensed'). A predication, being a linguistic structure that describes a State of Affairs, is a level 2 entity. Predications can be located in time and space by applying an appropriate (tense or aspect) operator ('past'), and by adding additional terms (satellites), as in:

(2) past [ e : [sat (Ali) (araba) (adam) (dün akşam) ] ]

The event described by  $\{[sat (Ali) (araba) (adam)] (dün akşam)\}$  can be symbolised by the variable  $e$  (level 2), and likewise, speech acts are symbolised by  $E$  (level 4), propositions by  $X$  (level 3) and terms by  $x$  (level 1).

As for terms, their general structure is centred around a term-variable  $x$ , to which one or more terms-operators (for definiteness, number, etcetera) are applied and which is restricted by one or more predicates.

Consider the following example of Turkish:

(3) ( p m x : ağaç (x) : yaşlı (x) )

The operator  $p$  stands for 'proximate', a notion that is expressed by means of a demonstrative, and  $m$  stands for 'more than one', being expressed as 'plural' (as opposed to  $l$  which triggers the singular). The variable  $x$  symbolises a first order entity which is characterised by the nominal predicate *ağaç*, and which is further restricted by *yaşlı*, an adjectival predicate.

Expressions at all layers have in principle a similar structure, for they consist of a variable to which an appropriate operator may be applied, and which is restricted by the corresponding linguistic structure, which in turn may be expanded by appropriate satellites. Thus, the overall structure of the layered hierarchy can be represented by the following:

(4) Structural Unit	Entity Type	Variable	Order
clause	speech act	E	4
proposition	possible fact	X	3
predication	state of affairs	e	2
term	entity	x	1

Additionally, the most basic unit is of course the 'predicate', the entity type of which can best be described by 'property' and/or 'relation'. Also for predicates a variable ( $f$ ) must be assumed, since not only reference can be made to the

units listed in (4) but to a mere predicate as well. For instance, a reply to *Seni seviyorum* 'I love you' in the form of *Ben de (seni)* 'Me too' can only be understood in a meaningful way when it is assumed that in the latter expression reference is made to the predicate *sev* 'to love'.

## 2 Applications to Turkish

In this section we will present some illustrations of the general principles of FG as explained above. In section 2.1 it will be shown that for word order phenomena of Turkish a very general schema can be set up which is based on the observation that syntactic notions such as subject and object do not provide a basis which is 'precise' or 'narrow' enough to account for differences in constituent ordering. Rather, the pragmatic notions of Topic and Focus will be used to pinpoint certain positions at the sentence level, where in principle all types of constituents may be placed. Section 2.2 shows how word formation can be dealt with in general: a lexical word is 'transformed' to another, new word by suffixation; and 2.3 goes into the general question as to what must be understood by the notions of 'word' versus 'sentence'. In certain linguistic approaches this opposition seems to be of crucial importance to be able to decide at which level (morphology or syntax) structures like the famous *Türk-leştirilmeyeceklerden misiniz* 'Are you one of those who will not be Turkified?' must be analysed. It will be shown that in an analysis within the framework of FG such oppositions appear to be pseudo-oppositions, not only because morphology is instrumental to syntax but also since the actual usage of some expression determines at what level it should be analysed. In 2.4 a similar derivational process is described, that of compound formation. In this section we will try to illustrate that problems like "how many words are structures like *çay evi* 'tea house' and *Baltalimanı kemik hastalıkları hastanesi*? 'Baltalimanı Hospital for Bone Diseases'" are solved in a very similar way, namely by looking at the actual usage of expressions and not by searching some kind of 'deep' structure. Finally, in section 2.5, an illustration will be presented for the FG claim that languages should be taken seriously, viz. "whenever there is some overt difference between some constructions X and Y" one should start out "on the assumption that this difference has some kind of functionality in the linguistic system" (cf. Dik, 1989: 17).

### 2.1 Syntax I: Word Order Phenomena

As has been indicated in section 1.1, differences in the order of constituents over a series of sentences which are built up by the same lexical material are accounted for by assuming that constituents are assigned a place in some pattern rather than being 'moved' from one position to another. Now, consider the following sentences based on 'I sold my records to Ahmet':

(5)	a	<i>Plaklarımı Ahmet'e sattım</i>	(S)	O	IO	V
	b	<i>Ahmet'e plaklarımı sattım</i>	(S)	IO	O	V
(6)	a	<i>Ahmet'e sattım, plaklarımı</i>	(S)	IO		V O
	b	<i>Plaklarımı sattım, Ahmet'e</i>	(S)	O		V IO
(7)	a	<i>Ahmet'e sattım, ben</i>		IO		V S
	b	<i>Plaklarımı sattım, ben</i>		O		V S
(8)	a	<i>Plaklarımı ben sattım, Ahmet'e</i>		O	S	V IO
	b	<i>Ahmet'e ben sattım, plaklarımı</i>		IO	S	V O

Sentences (5)-(8) are all construed on the basis of the three place verbal predicate *sat*, which presupposes a 'seller' (*ben*), an 'object being sold' (*plaklarım*), and a 'buyer' (*Ahmet*). In terms of the grammatical notions S (subject), O (direct object), IO (indirect object), and V (verb) the differences in order are represented in the right hand side column above. As follows from this representation, it is very troublesome to characterise the 'canonical' word order of Turkish in terms of the grammatical notions used here. Obviously, many orderings seem to be possible and the question is of course by what principles these different orderings can be explained. The notions used here reveal at best that 'objects' tend to be placed before the verb, but looking at the distinction between 'direct object' and 'indirect object', it is not quite clear which type of constituent goes preferably to the verb left position and it is not very clear either under which conditions this may occur. Furthermore, the status of the notion of 'subject' is somewhat unclear too: in (5) and (6) there is no overt subject – the (S) indicates merely that an overt subject could be placed in the sentence initial position, but there is only subject verb agreement. In the case of (7), however, the overt subject is placed in the sentence final position.

So, what do we mean by saying that Turkish is a (canonical) SOV-language, while so many alternative orderings are possible which are all highly frequent, particularly in spoken language?



In order to generalise over the differences in constituent ordering it proves again right that two principles of FG are relevant: 1) differences in word order reflect some difference in functionality, and 2) constructions should not be studied as isolated objects, but in relation to their context. Taking these ideas into account we may say that *Plaklarımı Ahmet'e sattım* and *Ahmet'e plaklarımı sattım* can be considered the answers to the questions *Plaklarını kime sattın?* 'To whom did you sell your records?' and *Ahmet'e neyi sattın?* 'What did you sell to Ahmet?' respectively. A typical characteristic of question words like *kim* and *ne* is that they express the 'demand' for pragmatic information. This explains why such words usually occupy a special position in a sentence. Pragmatically speaking we can say that such words are 'focal', or in terms of FG, that they have been assigned the pragmatic function 'Focus'. This function, then, reflects the status of some constituent that presents the 'most salient information' of the whole. Now, if focal constituents are placed immediately before the verb in Turkish, does it give any clue then for the remaining examples? Yes, it does, because the test for 'what' and 'to whom' hold for (6) and (7) as well. The sentences of (8) on the other hand, have *ben* 'I' in pre-verbal position and these sentences can be thought of as providing an answer to the question *Plaklarını kim sattı (Ahmet'e)?* and *Ahmet'e kim sattı (plaklarını)?* respectively. Again, since some information is requested the corresponding constituents appear in the focal position. As a first approximation, we can generalise over the data by means of the function Focus and say that focal elements are expressed pre-verbally. In schema:

(9) X Y Z Focus Verb A B C

Now, what about the positions X, Y, and Z in this schema? Sentence (5a) may be taken as a 'neutral' statement providing information about what the referent of the subject did. Possibly, it could be an answer to a question along the lines of *Sen ne yaptın?* 'What did you do?' (5a) can be considered as the unmarked form in which such information is conveyed. Its counterpart (5b), however, is marked for 'focussing' on the objects being sold. Sentences (5)-(6) can all be expanded by the overt subject *ben*. In such cases we might say that the 'topic' of these sentences ('what the sentence is primarily about') is the referent of the pronoun *ben* (*in casu* the Speaker). Since there is always subject-verb agreement in Turkish the subject need not be expressed in many cases. But when the subject is expressed, which occurs in most cases in sentences which are much longer than the examples presented here, the occurrence of an overt subject may be taken as a 'flag', a marker which signals that the sentence is actually

about the referent of that subject. In other words, we are dealing with a topical constituent (a *Topic*, in FG). Thus, we can say that the sentence initial position is typically occupied by constituents which have the pragmatic function *Topic*, to the effect that the schema of (9) can be rewritten into the following pattern:

- (10)      Topic X Y Z Focus Verb A B C

In this way we have generalised over the ordering phenomena by using pragmatic functions instead of grammatical notions. It must be noticed, however, that although (10) represents a general pattern consisting of special positions for certain constituents, not all positions need be filled (or occupied) by some constituent. It must be read as: 'if there is a topical constituent, then it goes to the sentence initial position' and 'if there is a focal constituent, then it goes to the pre-verbal position'. In all other cases, the positions X, Y, and Z must be used, for which the general (unmarked) order S–IO–O is relevant.

As for the positions A, B, and C, the exact conditions which determine whether they are occupied or not are again to be found in the context in which these sentences are used, and not in syntactic properties as such. For topical and focal constituents it may be assumed that topics (the constituent about which something is predicated) and foci (providing the most salient information) have a high degree of informational value. Constituents such as *plaklarımı* in (6a) and (8b), *Ahmet'e* in (6b) and (8a), *ben* in (7a-b), on the contrary, have a much lower degree of informational value: (6a) and (6b) are typically used in situations where it has been talked about the 'objects being sold' (*plaklarım*) or the 'buyer' (*Ahmet*) of these goods. They represent, as it were, old or given information (in the sense of being 'introduced some time ago' and 'referred to a number of times') and the occurrence of constituents referring to that type of information can be explained as serving the purpose of reminder or clarification. Needless to say that both positions A and B can be occupied.

## 2.2 Morphology: Predicate Formation

In this section we will briefly exemplify what is understood by predicate formation. Within the framework of FG a distinction is made between *lexicon* and *fund*. The lexicon contains basic predicates and basic terms only. According to their formal and functional properties predicates can be categorised as, at least, verbal, adjectival, or nominal. Semantically, predicates designate properties or relations. Both predicates and terms may be derived from other predicates or terms. These derived predicates and derived terms reside, together with the

lexicon, in the fund. Derivation is achieved by means of predicate formation or term formation. Consider the following examples of words, for which it can be assumed that the items in column B are derived from those in column A:

(11)	A	B
a	<i>süt</i>	<i>süt-çü</i>
b	<i>süt</i>	<i>süt-lü</i>
c	<i>sütçü</i>	<i>sütçü-lük</i>

The predicate *süt* 'milk' can be considered as basic predicate: without this predicate the derivational forms listed under aB, bB, cA, and cB would be non-existent. To arrive at *sütçü* 'milkman' on the basis of *süt* a Predicate Formation Rule (PFR) is assumed, which takes a basic predicate as its input and which produces a derived predicate as its output. For the derivation under discussion, such a rule can be (roughly) formalised in the following fashion:

(12) **Predicate Formation Rule (Derived Noun: N-CI)**

Input:	N	<i>süt</i> (= basic predicate)
Output:	N-CI	<i>süt-çü</i> (= derived predicate)
Category:	N	Meaning: 'one who is professionally occupied with N'

Apart from specifying the category of the type of input predicate, the rule includes a specification of its effects, that is, it should be described what kind of morpheme is attached (1) and what the semantic effect is in relation to the input predicate(2). In the example above, a very gross sort of meaning description has been presented which certainly will not cover all instances of N-CI. On the other hand, when a derived predicate is lexicalised (included into the lexicon as a basic predicate) it is in most (if not all) cases done on the basis of semantic shift: the meaning of the derived predicate is not longer related to the basic predicate by the morpheme attached.

Another type of PFR can be set up for the derivation of *sütlü* 'with milk'. The overall shape is in principle similar to that of (12):

(13) **Predicate Formation Rule (Derived Adjective: N-II)**

Input:	N	<i>süt</i> (= basic predicate)
Output:	N-II	<i>süt-lü</i> (= derived predicate)
Category:	A	General meaning: 'containing N'

Since this type of predicate formation may take basic predicates and derived predicates as input, a certain degree of recursion may be expected as well. Indeed, the form listed under cB is derived from the one under aB:

(14) **Predicate Formation Rule (Derived Noun: N-Ilk)**

Input:	N-CI	süt-çü	(= derived predicate I)
Output:	N-CI-Ilk	süt-çü-lük	(= derived predicate II)
Category:	N	General meaning: 'the profession of N-CI'	

For the different phonemic values of the suffixes *-CI*, *-II*, and *-Ilk* expression rules are involved that map the abstract morphemes onto the required form, depending on the phonemic build-up of the roots.

### 2.3 Syntax II: Words and Sentences

A seemingly important question in some theoretical frameworks is how to deal with structures like the following:

- (15) *Türk-leş-tir-il-me-yecek-ler-den misiniz*  
 Turk-D1-D2-D3-NEG-FUT-Pl-ABL-Q-Agr2p

In an attempt to give an answer to the question whether this structure should be analysed at a morphological level or in the domain of syntax, it is mostly said that the whole thing looks like two words, but that, as a matter of fact, "it is really a sentence". Whatever the considerations or criteria might be for such a judgement, let us see how this structure could be analysed from a functional point of view.

First of all, a distinction should be made between derivation and inflection. From the glosses above it is visible that we have three derivational suffixes: based on the lexical noun *Türk* a verb is formed by adding the category changing (N→V) suffix *-leş* (D1), which gives the meaning 'to become (a) Turk'. Next, the verbal suffix *-tir* (D2) is attached which makes a new verb with the causative meaning 'to make become (a) Turk' (= to Turkify). Finally, the whole complex is further expanded by yet another verbal suffix, *-il* (D3) which yields a passive verb stem: *Türk-leş-tir-il* 'to be made become (a) Turk' (= 'to be Turkified'). These derivations are performed in a step by step fashion, following a principle to be explained below. Whereas *Türk* is a noun, the forms *Türkleş*, *Türkleştir*, and *Türkleştiril* are all verb stems. They may be lexicalised, that is, be stored in one's personal (mental) lexicon as 'form plus meaning'.

The remainder of the string can be characterised as inflectional, meaning that all suffixes starting from *-me* are considered as the formal expression of operators, such as negation (*-me*) and future (*-yecek*) (both on level 2), plural and ablative (both on level 1), and finally, a question marker (*mi*) and the person agreement suffix (*-siniz*) (both on level 3).

However, another interesting phenomenon occurs. There is another categorical transition from verb to noun, taking place 'between' the future suffix and the plural suffix. At that stage of the development of the entire string, inflectional material such as the plural marker and case markers may be attached. Simultaneously, we have arrived at the level of the predication: *Türk-leş-tir-il-me-yecek* is actually a term (NP) which is used independently. And it is an indefinite term: 'someone who will not be Turkicised'. The formation of *Türk-leş-tir-il* can be covered by predicate formation rules in three steps, as described in the previous section. The reason for this approach is three-fold. Firstly, a noun is converted to a verb by adding *-leş*. The predicate structure is not changed, only the lexical category and meaning are different. Secondly, on the basis of the verbal stem *Türkleş* the derived verbal stem *Türkleştir* is formed, but in this case both meaning and argument structure are changed. Whereas *Türkleş* is intransitive, the stem *Türkleştir* is transitive. Thirdly, the formation of a passive verb is realised by adding the passive morpheme *-il*, to the effect that *Türkleştiril* has become intransitive.

Returning to the inflectional level, several morphemes are attached as the formal expression of operators. As is clear from (15) the derivational processes precede the expression of inflectional material: the formation of the entire string *Türk-leş-tir-il-me-yecek-ler-den misiniz* is carried out via a path of gradual expansion, for it starts out as a noun and ends up as a clause. In this way it can be understood that the closest approximation to the entire structure is a 'sentence', but on the other hand it is fully clear that even an extremely simple structure like *Türk* may be regarded a clause or sentence, for instance, in providing an answer to the question *Alman mı?* 'German?' or a comment to a statement *Onu Alman sandım* 'I took him for a German'. All this shows that it is not the structure as such, or its morphological complexity, that determines what it should be called but that it merely depends on its function within some context. In brief, within FG the difference between word and sentence is a matter of usage of a linguistic expression, so without taking this into account their status as such is not relevant, let alone a problem.

## 2.4 Morpho-Syntax I: Compound Formation

A compound is a word group or combination of words that has a meaning of its own, more or less independent from the meaning of their constituents. Not only simple constructions such as *çay evi* 'tea house', *misafir odası* 'guest room' and *kadın doktoru* 'gynaecologist' may serve as examples, but more complex units such as *çay evi sahibi* 'tea house owner', *Türk dil kurumu* 'Turkish Linguistics Society' and the aforementioned *Baltalimanı kemik hastalıkları hastanesi* as well. Three questions about the formation of compounds are relevant: 1) what kind of linguistic material can be combined in order to form a compound; 2) what is the status of what is generally recognised as the possessive suffix third person singular, *-(s)I*, dubbed here as Compound Marker (CM); 3) how can complex structures be explained in terms of simple structures, on the (preliminary) assumption that such a relationship holds.

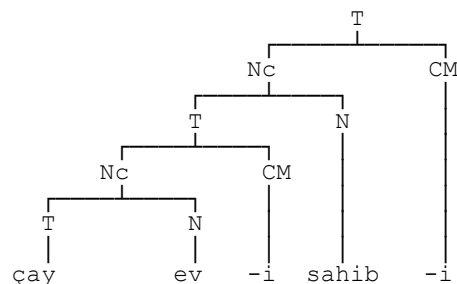
With regard to the first question, it is obvious that not only 'bare' nominal predicates may form a structural element in such compounds for we find constructions that contain material that is expected to occur at another level than that of the bare predicate as well. This observation is based on constructions such as *önemli işler dosyası* 'important matter file' (containing an adjectival modifier for *işler*, besides the plural marker *-ler* on *iş*); *dört çocuk babası* 'four children father' (which contains a numeral specifying *çocuk*); *Türkiye'nin sesi radyosu* 'Radio the Voice of Turkey' (in which a possessor phrase is combined with the head of the compound); and finally *Ankara belediyesi* 'Municipality of Ankara' (in which we find a proper noun). It is clear that the notion of 'nominal predicate' alone is not sufficient to describe the facts. Rather, the notion of term is more suitable since the additional examples all show that the structures combined with the head of the compound have properties that can typically be ascribed to terms: terms consist of a nominal head which may be modified by adjectives; terms can be specified for number (singular versus plural; cardinals); terms may be specified for definiteness (as is the case for the application of a proper noun as the head of a term); and finally, the head of a term may be specified by a possessor term. In this way, 'uninflected' elements like *çay*, *misafir*, *kadın* may be taken as the expression of terms in which no further specification for number is given or in which no modifiers are applied.

As for the occurrence of the compound marker (CM), which is identical with the possessive suffix third person singular in form but not in function, the matter is somewhat more complicated. Comparing structures such as *çay evi sahibi* and *Türk dil kurumu* reveals that in some cases this marker occurs in a position which remains 'empty' in other circumstances (*ev-i* versus *dil-Ø*).

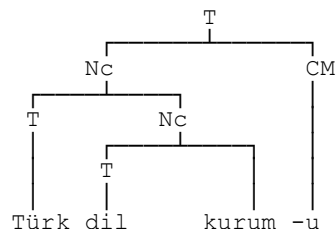
Taking a more detailed look at the way the constituents are related to one another shows that these constructions should be analysed as (*çay evi*) *sahibi* and *Türk (dil kurumu)* respectively. These differences can be characterised as Left Branching Compounds versus Right Branching Compounds, due to the fact that *çay evi* is formed before it is combined to the final expression in which *sahibi* is the head, and similarly, *Türk dil kurumu* is the result of combining *dil* and *kurum* to the intermediate structure *dil kurum*, which is in turn combined with *Türk*. For the occurrence of the CM in the second element in a compound, the current analysis is compatible with the FG-view that no material may be deleted when it does not conform to the actual linguistic expression. An explanation in terms of the order in which smaller structures (e.g. *çay evi* and *dil kurum*) are built up predicts whether the CM occurs in the 'middle' of a construction that comprises of three elements. But what is the moment that the CM is attached? For there seems to be a generative difference between *çay evi* which does contain the CM and *dil kurum* which does not contain the CM in the analysis presented here. A clue to an answer to this question can be found in the observation that a CM is not combinable with possessive markers: we find *diş fırça-m* 'my tooth brush' but not *\*diş fırça-sı-m*. This latter opposition shows that two different markers mutually exclude each other. Since the attachment of a possessive suffix is typically within the domain of expression rules at term level, this strongly suggests that the expression of the CM too is to be assumed at this level: it is the inflectional domain where the conflict arises. If this is all correct, it implies that *çay evi* is an expression which is a term itself based on the nominal compound proper *çay ev*, and that the term *Türk dil kurumu* is based on the compound proper *Türk dil kurum*.

The structural dependencies of *çay evi sahibi* and *Türk dil kurumu* can be represented in the following fashion:

(16) Left Branching Type: 'çay ev-i sahib-i'



## (17) Right Branching Type: 'Türk dil kurum-u'



As for the third question, being "how can complex structures be explained in terms of simple structures", from the analysis presented so far it is clear that the relationship between both types of constructions can be accounted for in terms of recursion. A term and a noun are combined into a compound proper which takes a CM when expressed as a term (as in *çay evi*) and which remains 'as such' when combined with another term in order to form a second compound (as in *dil kurum*). At the top most level, the final product (a Nc) must be expressed as a free term taking the compound marker, or as a possessive term requiring an appropriate possessive suffix.

Finally, even more complex structures such as *Baltalimanı kemik hastalıkları hastanesi* can, in much the same way, adequately be described in the model presented here. The explanatory power of this model can be found in two characteristics: 1) in principle, structures of infinite length can be described, due to the recursive nature of compounding; and 2) the occurrence of the CM is predicted correctly, to the effect that deletions and other structure changing operations are not necessary. Furthermore, the view defended here that the CM is attached on term level rather than on the level of the Nc proper is corroborated in the light of the way predicate formation rules are thought to be structured in derivational morphology (cf. 2.2). A simple example will suffice to illustrate this claim.

Suppose the adjective *güneş gözlüklü* 'with sunglasses' were to be derived from *güneş gözlüğü* 'sunglasses'. Without any special measures the CM should be removed (deleted) and the *ğ* be restored to *k*. Now, taking the Nc *güneş gözlük* (and not a form which already contains the CM) as the input to a predicate formation rule, the one and only thing that has to be described in that rule is the attachment of some morpheme, in case of the example given here it should be specified that *-ll* is added to form the adjective predicate, e.g. *güneş gözlüklü* 'with sunglasses'.



## 2.5 Morpho-Syntax II: Term Predicate Formation

In this section an illustration will be presented for the FG claim that languages should be taken seriously, viz. 'whenever there is some overt difference between some constructions X and Y' one should start out 'on the assumption that this difference has some kind of functionality in the linguistic system' (cf. Dik, 1989: 17).

In analysing the structural properties of *Ali gelmiş değil* and *Ali gelmedi* the 'semantic content' of the first construction is usually represented along the lines of 'It is not the case that Ali came', whereas the second sentence is translated as just 'Ali didn't come'. When we consider the negator in the first paraphrase in terms of its scope, we might regard this negator as 'extracted' from, and, as a consequence, semantically equivalent with 'It is the case that Ali didn't come'. As for the second construction, saying that 'Ali didn't come' is from the point of view of its content not really different from 'It is the case that Ali didn't come'. And even for 'Ali didn't come' as representing the content of *Ali gelmedi*, we can use equally well the paraphrases 'It is not the case that Ali came' and 'It is the case that Ali didn't come'. Any characterisation of a state of affairs, say, X can always be expanded by stylistic material like 'it is the case' yielding 'it is the case that X'. It follows, then, that the translations of both constructions are in fact fully equivalent, and hence, that they do not provide a sound basis for an analysis that aims at doing justice to differences in form in relation to (possible) differences in meaning. Indeed, in a very sketchy approach one might say that the constructions exemplified here have the same overall meaning: 'Ali didn't come'. Still remains the question why a simple verbal construction (*Ali gelmedi*) exists side by side with a much more complex type of construction that exhibits a nominal instead of a verbal negator (*Ali gelmiş değil*). That such oppositions are not based on a sort of 'occasional' formation but on productive rules can also be illustrated by such pairs as for instance *Ankara gidecek değilsin* and *Ankara gitmeyeceksin*, roughly 'You won't go to Ankara at all' and 'You will not go to Ankara' respectively.

Given the differences in form of both constructions, the incentive at the beginning of this section urges to look at other types of differences in meaning. But let us first see what can be said about the structural differences. As has been indicated above, the underlying structure of *Ali gelmedi* is very straightforward: the negated predication is based on the verbal predicate *gel* with *Ali* as the first argument term. The structure of *Ali gelmiş değil*, however, is not that transparent at first glance. It does not contain a verbal but a nominal negator, and the construction type that shows the closest resemblance is repre-

sented by *Ali zengin değil* 'Ali is not rich', *Ali öğretmen değil* 'Ali is not a teacher', *Ali Fatma'nın kardeşi değil* 'Ali is not Fatma's brother' and *Ali okulda değil* 'Ali is not at school'. Especially the latter type of constructions is illustrative for the point to be made here. Whereas we can assume for the first two examples that the underlying predicates are an adjectival and nominal predicate respectively, for the second pair of examples it is fully clear that a *term* is predicating over *Ali*: "something that he is (not)", e.g. *Fatma'nın kardeşi* 'Fatma's brother' and *okulda* 'at school'. Since we are dealing with nominal predications, the nominal negation operator is in all cases expressed as *değil* (which is complementary to the verbal *-mE* and the existential *yok*).

All this leads to the conclusion that expressions such as *gitmiş* and *gidecek* in the examples above must be of nominal nature as well, and that they both must be term-predicates rather than finite constructions. The constructions that are typically found in such environments are headless relative clauses, and thus, *gitmiş* can be interpreted (paraphrased) as 'someone who has gone' and *gidecek* as 'someone who will go'. In this way it has indeed become visible that the nominal type of construction is much more complex than the simple declarative type of expression *Ankara gitmeyeceksin*. A functional explanation for the co-occurrence of a more complex construction (albeit seemingly with the same overall meaning) can be found in the observation that both constructions are not inter-changeable in most (if not all) circumstances, just because they do **not** have the same meaning. Whereas the simple construction just denies *gideceksin* (*gitmeyeceksin* and *gideceksin* are each others counterparts) in a neutral way, the construction *gidecek değilsin* is not just a negative counterpart of some other construction, but has a strong modal load since it negates class-inclusion, as expressed by an indefinite term based on a headless relative. To paraphrase these examples in English, there is a strong modal difference in saying 'you are not someone who will go' or just 'you won't go', due to the fact that including and excluding an Addressee more or less simultaneously in and out of the class of goers is not the same as negating the 'go-relation'. It is this rather complex way of characterising the referent of the subject which justifies and allows for a modal interpretation.

### 3 Conclusions

It is far too easy to say, I think, that FG is just another framework with a practical set of descriptive tools, as for instance the layered model of the clause structure, the use of operators, and the like. Due to a number of principled viewpoints, within the functional approach syntax is not an autonomous do-

main in which all phenomena can be accounted for in terms of rules and principles that do hold in the formal domain only, but it rather seeks for ways to integrate semantic, syntax and pragmatics. As we have seen in section 2.1, taking into account that syntax is instrumental with respect to pragmatics, an important step towards an explanation of the syntactic patterns of Turkish is achieved by using pragmatic notions in place of pure syntactic ones. Secondly, with respect to the generative power of the theory, a number of constraints have been formulated that heavily bear upon any type of syntactic or morphological analysis. The only sort of operation that may be compared with the general idea of 'transformation' are rules for predicate formation, as exemplified in section 2.2. Section 2.3 shows that a linguistic expression can only be analysed in terms of its usage, and not only on the basis of its morphological make-up. In 2.4 it was shown that in analysing compound constructions deletions and other types of structure changing operations are not necessary but even incompatible with other types of predicate formation rules. The final section, 2.5, gives an illustration of the claim that whenever two constructions exist which are overtly different in structure (but seemingly the same in overall meaning), it is highly probable that some kind of functional explanation can be found that accounts for these differences.

#### **Bibliography (General):**

- Dik, Simon C., 1989, *The Theory of Functional Grammar (Part 1: The Structure of the Clause)*. Dordrecht: Foris.  
 Dik, Simon C., 1996, *The Theory of Functional Grammar (Part 2: Complex and Derived Constructions)* (Edited by Kees Hengeveld). Berlin: Mouton de Gruyter.  
 Siewierska, Anna, 1991, *Functional Grammar* (Linguistic Theory Guides). London: Routledge.

#### **With reference to Turkish:**

- Schaaik, Gerjan van, 1984, *A Functional Analysis of Aspects of Turkish Grammar*, MA Thesis. Amsterdam: University of Amsterdam.  
 Schaaik, Gerjan van, 1985, Valentie-reduktie in het Turks [Valency Reduction in Turkish]. In: *Tijdschrift voor Taal- en Tekstwetenschap* 2 1985, 127-139.  
 Schaaik, Gerjan van, 1992, The Treatment of Turkish Nominal Compounds in FG. In: Michael Fortescue, Peter Harder and Lars Kristoffersen (eds.), 1992, *Layered Structure and Reference in a Functional Perspective*. Amsterdam: Benjamins. 231-252.  
 Schaaik, Gerjan van, 1993, Similarity in Turkish, *EUROTYP Working Papers*, Series V.6, 1-53. Strasbourg: European Science Foundation.

- Schaaik, Gerjan van, 1994, Negation in Turkish. In: P. Kahrel - R. van de Berg (eds.), *Negation*. Amsterdam: John Benjamins. 35-50.
- Schaaik, Gerjan van, 1996, *Studies in Turkish Grammar* (Reihe Turcologica, Band 28). Wiesbaden: Harrassowitz.
- Schaaik, Gerjan van, 1996, A Blueprint for a Redhouse. In: Ahmet Konrot (ed.) *Proceedings of the 6<sup>th</sup> International Conference on Turkish Linguistics*, (August 1992). Eskişehir: Anadolu Üniversitesi Basın.
- Schaaik, Gerjan van, 1997, On the usage of *gibi*. In: Lars Johanson and Éva Csató (eds.) *Proceedings of the 7th International Conference of Turkish Linguistics*. Wiesbaden: Harrassowitz.
- Schaaik, Gerjan van, 1997, Türkçe'de Öznelik Eksiltme. In: *Türk Dilbilim Araştırmaları*. Ankara: Hitit Yayınevi.
- Schaaik, Gerjan van, 1999, The Order of Nominalizations in Turkish. In: *Turkic Languages* Vol 3 Number 1. Wiesbaden: Harrassowitz.
- Schaaik, Gerjan van, forthc. Higher Order Compounds of Turkish (= Higher Order Compounds in Turkish: Some Observations. In: Celia Kerslake and Aslı Göksel (eds.) *Proceedings of the Ninth International Conference on Turkish Linguistics, Oxford (UK), 12-14 August 1998* (Reihe Turcologica, Band 35). Wiesbaden: Harrassowitz. 113-120. (= Paper 7, this volume).
- Schaaik, Gerjan van, in prep. *The Noun in Turkish. Its Argument Structure and the Compounding Straitjacket*. Wiesbaden: Harrassowitz.