Periphrastic Tense/Aspect/Mood¹

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0 Introduction

In this paper I will address the question as to how the expression of tense and aspect in certain periphrastic constructions as described in Mixajlov's classification (1961, 1962, 1965) relate to the theoretical approaches of tense and aspect systems as advanced by Johanson (1994) and Dik (1997).

Mixajlov (1964: 7) defines so-called periphrastic constructions as a number of analytical means to express the course (progress), tense, and/or modality of an action as denoted by some verb. As he states in his introduction, "...эти формы выражают, во–первых, начало, длительность, завершение, результативность действия; во–вторых, выполняют функцию уточнения настоящего, прошедшего и будушего времени; во–третих, выражают различные модальности", that is, "these forms express first of all the beginning, duration, termination, and the result of some action; secondly, they fulfil the function of indicating the present, past, and the future tense; thirdly, they express several modalities".

As a matter of fact, these descriptions reflect the order in which periphrastic constructions are treated in his book. In this way, there seems to be a stark parallelism with the Aktionsart-system, as we find in, for instance, Russian. Furthermore, Mixajlov claims that Turkish has an extremely rich system of periphrastic constructions. This is indisputably true, but due to the more or less limited character of the present paper, we will deal with three types of constructions only. The ones that will presently be taken into account are to some extent comparable with those constructions as discussed in Van Schaaik (1996), which, in turn, can all be analysed as term-based expressions. Hence, the types of construction to be presented here are morphologically based on combinations of 1) *-yor* and *ol*; 2) *-EcEk* and *ol*; 3) *-Er/-mEz* and *ol*. However, the way in which these periphrastic constructions will be analysed is not intended to be an exhaustive overview of Tense/Aspect and Mood systems, but rather, this paper will only provide a sketchy outline of possible approaches to a more detailed in-depth analysis.

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In this paper it will be shown that the forms referred to by 1) above are all either tense or mood, whereas those listed under 2) and 3) express aspect only, due to the combined application of a tense marker to a (variable) verb root and the tense marker -DI to the auxiliary *ol*.

The paper is organised as follows. Section 1 gives an overview of the constructions involved; section 2 provides some theoretical background with respect to tense, section 3 deals with aspect, and section 4 with mood. Section 5 goes into the question as to how the expression of tense, aspect and mood relates to the multilevel hierarchy, as advanced in Functional Grammar (henceforth: FG) (cf. Dik, 1997; Hengeveld, 1988). In the sections 6-9 constructions based on the combinations –*yor ol*, –*EcEk ol* and –*Er/-mEz ol* will be analysed in detail, and section 9 deals with the conclusions.

1 Periphrastic Constructions

As a working definition we might say that a periphrastic construction is a part of a clause that contains a verb marked for tense (or for aspect, too), followed by *ol* to which a marker for Tense/Aspect/Mood has been attached.

Typically, some periphrastic constructions of Turkish express either tense, aspect or mood, other forms however express combinations such as tense/aspect or tense/mood. In this paper the following main construction types will be discussed: tensed forms (1); aspectual forms (2)-(5); modal forms (6)-(9):

- (1) [...] uzun süren bir yalnızlığ-ı bekli-yor ol-acak-lar long lasting a loneliness-acc await-pres2 ol-fur-agr3p
 "[...] they will be awaiting a long lasting loneliness"
- (2) [...] bank-lar-da, bazen, bir iki kişi otur-uyor ol-ur-du bench-pl-loc sometimes one two person sit-pres2 ol-pres1-proj1
 "[...] on the benches there were sometimes sitting one or two people"
- (3) Mektub-a bir daha bak-acak ol-du ama, ceb-in-de bul-ama-di letter-dat once more look-fut ol-past but pocket-ps3-loc find-negpot-past "He wanted to look at the letter once more, but couldn't find it in his pocket"
- (4) Yemek-ler-in-i yalnız ye-r ol-du meal-plur-ps3-acc alone eat-pres1 ol-past "He gradually came to eat his meals alone"

- (5) Göz-ü sen-den başka bir şey gör-me-z ol-du eye-ps3 you-abl other thing see-neg-pres1 ol-du "His eyes became to see no-one but you"
- (6) Dut ağacın-ın üzerinde otur-uyor ol-uyor-du-k mulberry tree-gen in sit-pres2 ol-pres2-proj1-agr1p
 "We used to be sitting on a mulberry tree"
- (7) Aynı şaşkınlığ-ı o da benim göz-ler-im-de oku-yor ol-malı-ydı same amazement-acc he too my eye-pl-ps1-loc read-pres2 ol-'must'-proj1 "He, too, must have been seeing the same amazement in my eyes"
- (8) Bu durum bebeklik-te başlı-yor ol-abil-ir this state babyhood-loc begin-pres2 ol-pot-pres1
 "It may be the case that this state starts during babyhood"
- (9) "Eğer kork-uyor ol-sa-ydı-m çukur-a atla-ma-z-dı-m" de-di if fear-pres2 ol-cond1-proj1-agr1s pit-dat jump-neg-pres1-1s say-past1
 "If it were the case that I feared I wouldn't have jumped into the pit, said he"

As for the data this study is based on, a wide variety of electronic texts was scanned for the occurrences of the forms referred to above. This text collection, containing almost 2 million words, comprises some 35 contemporary novels, 18 documentary texts, 19 texts based on interviews and spontaneous speech, 14 newspapers and 13 magazines.

Certain combinations of some tense marker plus a form in ol, such as *-EcEk* olacak and *-Er ol-ur*, may be thought to be non-existent on theoretical grounds, whereas other combinations turn out to be attested in very low numbers only. The constructions this study focuses on are all highly frequent. In the table below, impossible formations are indicated by '*', unattested forms by '0', low frequent forms by a number (the absolute number of their respective occurrences), and highly frequent forms by '++'. The distribution of forms is as follows:

(10)		-EcEk	-Er	-mEz	-yor	
	1	*	0	0	6	ol-*(may)acak
	2	++	*	0	5	ol-ur(+sa)
	3	++	++	++	++	ol-du
	4	1	++	0	0	ol-muş-tu

	-EcEk	-Er	-mEz	-yor	
5	4	4	0	1	ol-uyor
6	0	0	0	0	ol-makta
7	1	2	0	1	ol-malı
8	0	0	1	++	ol-abil(ir)
9	0	0	0	++	ol-amaz
10	0	0	0	++	ol-sa

Negative forms were detected as well, with the following results: $-mEyEcEk \ ol-ur(sa)$ (3); $-mEyEcEk \ ol-sa$ (4); $-EcEk \ ol-ma++$ (0); $-Er \ ol-ma++$ (0); $-mEz \ ol-ma++$ (0); $-yor \ ol-ma++$ (0). Note that '++' in the latter four examples indicates that any suffixes after the negative marker -me weren't attested either on the basis of the previously defined search string.

As for the way the table in (10) is organised, for the forms listed under 1-2 (*ol-acak*, *ol-ur(+sa)*) it is tentatively assumed that they express tense only, for those under 5-6 (*ol-du*, *ol-muş-tu*, *ol-uyor*, *ol-mak-ta*) that they express aspect, and for those under 7-10 (*ol-mali*, *ol-abil/olamaz*, *ol-sa*) that they express mood.

2 On Tense

According to Dik (1989: 202), who largely follows Comrie (1985), a first approximation to a description of tense can be formulated as follows: 'Temporality distinctions serve to locate the SoA, as designated by some predication, at some interval along the time axis'.

In this way, tense is seen here as the grammatical expression of some sort of temporality, as can be illustrated by the following examples for Past tense and Future tense respectively:

(11)	Hasan gel-di	Past Tense
	Hasan come-past1	
	"Hasan came / has come"	
(12)	Hasan saat iki-de geli-ir / -iyor / -ece Hasan hour two-loc come-pres1/pres2/fu	

"Hasan comes/ is coming/ will come at two o' clock"

Most languages have a basic opposition between 'Past' and 'Non-Past' and within these systems some finer distinctions are made at the levels of 'Past'

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(such as 'remote past' versus 'recent past') and 'Non-Past' (such as 'present' versus 'future').

According to Johanson (1971,1994) we find for Turkish the following labels for the expression of what is termed in his work 'Aspektotempora'. A first, tripartite, division is made at the level of finite expressions for tense/aspect: *anterior, non-anterior,* and *prospective*. In terms of simplex, that is non-compositional, forms, there are within the group of 'non-anterior' expressions three ways of expressing the 'present': present1 (*-ir*), present2 (*-iyor*), and present3 (*-mekte*). Furthermore, the subclass 'prospective' contains one simplex form, future (*-ecek*), and the subclass 'anterior' has two simplex forms: the non-posterminal (*-di* = 'praeteritum simplex') and the postterminal (*-miş* = 'praeteritum inductivum'). Summarizing these divisions we get the following picture:

(13)	present1	-ir	(non-anterior)
	present2	-iyor	(non-anterior)
	present3	-mekte	(non-anterior)
	future	-ecek[tir]	(prospective; futurum simplex)
	past1	-di	(anterior; non-postterminal; praeteritum simplex)
	past2	-miş	(anterior; postterminal; praeteritum inductivum)

Of course, all kinds of combinations of various tense/aspect markers are possible by introducing a second reference point in the past or future (relative to the 'moment of speaking'). In Johanson's approach such compositional forms are analysed as follows: *prospective oriented* (*-miş ol-acak*); *postterminal* (*-miş-tir* = praeteritum constativum); *non-postterminal* (*-di-ydi* = praeteritum mne-monicum); plus a whole series of forms which are sub-categorised under the label *anterior oriented*: *intraterminal* (*-ir-di* = imperfect1, *-iyor-du* = imperfect2; *-mekte-ydi* = imperfect3); *postterminal* (*-miş-ti* = plusquamperfect); and two (anterior oriented) *prospective* forms: future of the past (*-ecek-ti* = futurum praeteriti) and finally, the prospective oriented ('perfective') form *-miş ol-acak-ti*. Examples of the usage of such compositional 'past tense' forms are:

(14)	gel-ír-di	'came / used to come'	imperfect1
	gel-iyór-du	'was coming, was to come'	imperfect2
	gel-mekté-ydi	'was coming, was to come'	imperfect3
	gel-míş-ti	'had come'	plusquamperfect
	gel-ecék-ti	'would come'	futurum praeteriti
	gel-miş ol-acák-(tı)	'will / would have come'	prospective oriented

The anterior oriented forms are all composed by means of a basic tense/aspect marker plus the application of the enclitic (unstressed) 'past tense marker' -(y)DI. Clearly, in Johanson's analysis only two compositional forms are based on the application of the auxiliary verb *ol*: the prospective oriented forms -miş *ol-acak* and -miş *ol-acak-ti*. It is also clear that forms such as the ones which are the topic of this paper can not be accommodated for in this analysis: -yor *ol*++, *-EcEk ol-du* and *-Er/-mEz ol-du*.

3 On Aspect

Some authors, especially those of (older) (learning) grammars of Turkish do not make too much of a difference between tense and aspect: at best we find descriptions in the style of "*-yor* is comparable to 'present continuous' or 'progressive form' *-ing* in English. As we have seen in section 2, Johanson (1994) combines Tense and Aspect into "Aspektotempora", a system that seems to make a lot of sense for 'simple' and compositional tensed constructions, but his model does not go into any of the periphrastic forms as listed in (1)–(9). However, Kornfilt (1997), also being inspired by Comrie (1978) does make a distinction between Tense and Aspect in a very recent work on Turkish, although it is not always clear in what sense certain terms are used, e.g. does 'Imperfect' stand for Tense or Aspect. We will return to this matter below.

Largely inspired by Comrie (1976), Dik (1989: 186), makes the following distinctions, which we will use here as working definitions: "The pre-theoretical term Aspectuality covers a number of semantic distinctions", and "[the term] 'Aspect' is reserved for those aspectuality distinctions which are grammatically coded rather that lexically".

Furthermore, Aspectuality covers *Aktionsart, Imperfective/Perfective, Phasal Aspectuality, Quantificational Aspectuality* and these notions will be dealt with in the sections 3.1–3.4.

3.1 Aktionsart

Aktionsart (Modes of action) is designated by the predicate and its arguments and generally speaking Aktionsart is not grammatically coded. The for the present paper most relevant types of SoA^2 as defined within the framework of FG are [±Dynamic], [±Telic], [±Momentaneous], [±Control]. Let us pick out just two of these types of SoA to show in what sense they might play a role with

² For a typology of State of Affairs, see Dik (1989: 89 ff).

respect to what is grammatically expressed in the constructions under consideration. The feature [±Control] can be exemplified by: John opens the door [+Control] versus The tree fell down. Generally, it is assumed that the feature [±Control] determines whether a verb can be used in orders or requests or in using an imperative form. *Fall asleep!, *Be intelligent! are said to be ungrammatical because the underlying verbs are all specified for [-Control], although many exceptions can be attested: Don't die!; Don't fall out of the window!; Drop dead!

For Turkish, the feature [±Control] seems to be relevant for the description of what type of so-called dative verbs can be passivized. Passivization of such verbs is only possible if the first argument is the 'controller' of the situation, that is, if the referent of the first argument has the power to determine whether or not the SoA will obtain. Compare:

(10)	а	Polissuçlu-ya megafon-la bağır-dıpoliceman suspectbull-hornshout-past2"The policeman shouted at the suspect with a bull-horn"	[+Control]
	b	Suçlu-ya megafon-la bağr-ıl-dı suspect bull-horn shout-pass-past2 "They /It was shouted at the suspect with a bull-horn"	[+Control]
(11)	a	Ayşe açık yara-ya el-i-yle değ-di Ayşe open wound-dat hand-ps3-inst touch-past1 "Ayşe touches the open wound with her hand"	[-Control]
	b	* <i>Açık yara-ya el-i-yle değ-il-di</i> open wound-dat hand-ps3-inst touch-pass-past1 "The open wound was touched by her hand"	[-Control]

In (10 a-b) 'controlled' events (Action) are expressed by *bağır*- (active – 'to shout') and *bağr-ıl* (passive – 'to be shouted') respectively, whereas a 'non-controlled' event (Process) can only be expressed in the active voice (cf. (11a)).

The feature [±Telic] has to do with the question whether an Action or Process has a natural termination point (cf. Comrie, 1976: 44). A [+Telic] interpretation is possible when both arguments of a two place verb (such as *write*) are expressed, but only as [–Telic] when the second argument has not been specified. Compare:

(12) a J. wrote a poem about Brunhilde Wagner (*for/in two hours) [+Telic]

b J. wrote (*in/for two hours)

[-Telic]

As can be inferred from these examples, a [+Telic] interpretation is possible when we include a noun phrase that specifies the time span in which the action is accomplished – the poem is finished, whereas leaving out the second argument, *in casu* 'a poem about Brunhilde Wagner' allows only for a [–Telic] interpretation, irrespective of the occurrence of a noun phrase that specifies the duration of the action ('for two hours') – from (12b) it cannot be inferred that the writing (possibly one or more works of poetry) has been finished, only that 'John has done some writing'.

Another domain in which telicity plays a role is that of logical inferences. A sentence based on a verb of movement in combination with a locative noun phrase allows for a [-Telic] interpretation only and the expression of 'duration' is possible, as is exemplified by (13a). Taking a directional noun phrase in combination with such a verb, however, leads to a [+Telic] interpretation, as is shown in (14a). But what is more, is that the logical inference represented in (13b) holds, whereas the one in 14b) does not.

- (13) a John was walking in the park (*in / for two hours) [-Telic] b \rightarrow John has walked in the park
- (14) a John was walking to the library (*for / in two hours) [+Telic]
 b → *John has walked to the library

For all that matter, a central issue here is of course to what extent 'telicity' is grammatically coded. As has been indicated above, this is generally not the case but for Turkish there are some indications that there is some interplay with markers for tense/aspect. Kornfilt (1998: 362) sketches a picture that is not very transparent at first glance, but the 'acid-test' for duration and time span sheds some more light on the matter. Let us firstly consider Kornfilt's examples:

(15)	а	Hasan bir masa yap-tı H. a table make-past1 'Hasan made a table'	[+ Telic]
	b	<i>Hasan bir masa yap-iyor-du</i> H. a table make-pres2-proj1 'Hasan was making a table'	[± Telic]

Assuming that the verb *yap* 'do, make, build' is not lexically coded for 'telicity', as opposed to for instance one of the meanings of *çalış* 'try, attempt', the reason that (15b) can only be interpreted as [+Telic] is due to the fact that there is the present marker *-iyor* (pres2), giving a 'non-anterior' (cf. Johanson, 1994: 248) and 'intraterminal' (cf. Johanson, 1994: 254) flavour to the overall interpretation of the temporal flow of the action. In other words, what is being referred to is an on-going action taking place in the past.

It should be noted that in the sense of 'make', the second argument of *yap* in (15) cannot be left out. In this respect this case differs from the examples presented in (12). Nevertheless, the feature $[\pm Telic]$ can still be tested on the basis of expanding (15a) with *iki saat içinde* 'in two hours', and (15b) with *saatlerce* 'for hours' or *saat yediden beri* 'since seven o'clock', as can be shown by the following oppositions:

(16) a Hasan iki saat içinde/*saatlerce bir masa yap-tı [+Telic] Hasan 2 hours in / for hourse a table make-past1 "Hasan made a table in two hours" b Hasan iki saat içinde bir masa yap-ıyor-du [+Telic] Hasan 2 hours in a table make-pres2-proj1 "Hasan made a table in two hours" c Hasan saatlerce / saat yediden beri bir masa yap-iyor-du [-Telic] Hasan for hours /since 7 o' clock a table make-past1 "Hasan was making a table for hours / since 7 o'clock" d Hasan senelerce / aylarca / haftalarca / günlerce masa yap-ti [-Telic]

d Hasan seneterce / aylarca / haftalarca / gunlerce masa yap-ti [-1enc] Hasan for years / months / weeks / days table make-past1 "Hasan (has) made tables for years / months / weeks / days"

What counts in (15) and (16) is the opposition between the stressed -ti (15a–16a) and the stressed -iyor (which ends up as a compositional form through expansion by the unstressed -(y)DI (proj1)) in (15b–16 b-c), which constitutes an opposition that also can be analysed in terms 'perfective' versus 'imperfective', and hence, the use of the aspecto-temporal markers -ti (perfective interpretation) and -iyor (imperfective interpretation) itself might lead to a [+Telic] interpretation.

Contrasting (16d) with (16a) reveals that also the category Number contributes to a possible [–Telic] interpretation. Whereas (16a) cannot be expanded by a phrase denoting the duration of the event, (16d) is perfectly grammatical with such expressions. Clearly, in (16a) *masa* 'table' is specified for Number by *bir* 'one/a', but *masa yap* in (16d) can be considered as a verb with an 'incorporated object'³, meaning as much as 'to make tables'. Hence, (16d) allows for a [–Telic] interpretation only since it is about some activity characterised by *masa yap*, specified for duration but not giving any clue about the actual number of tables being or having been produced.

3.2 Imperfective/Perfective

This system forms a bipartite system in which an SoA is presented from an outside point of view, as one complete indivisible whole (*Perfective*) or from an inside point of view, that is, as non-complete or in progress (*Imperfective*). Especially the value 'Imperfective' may in actual usage get several other *interpretations:* e.g. *progressive* (SoA ongoing), *habitual/recurrent* by virtue of some habit), *iterative*, occurring repeatedly), or *continuous*. But these interpretations are distinct from the corresponding aspectual values. Typical examples are (Russian):

(17)	а	<i>Ja čital knigu</i> "I read/was reading the/a book"	(imperfective)
	b	Ja po-čital knigu	(perfective)

b Ja po-čital knigu
"I have read the/a book" (from beginning to end)

By means of (17a) it can be reported that 'some reading' was performed, whereas by means of the perfective prefix *po*- it is in (17b) explicitly stated that the whole book was read.

3.3 Phasal Aspectuality

This type of aspectuality has to do with what can be said at some reference point on the temporal dimension in relation to the occurrence of the SoA.⁴ The most important notions are *Prospective, Ingressive, Progressive, Egressive, Perfect.*

³ For object incorporation in Turkish, see Nilsson (1986).

⁴ For a more detailed account, see Dik, 1989:190.

(18)	John is going to work	(prospective)
	John starts working	(ingressive)
	John is working	(progressive)
	John stops working	(egressive)
	John has worked	(perfect)

Phasal Aspects thus have a temporal component, but the semantics is more complex than just locating the SoA on the temporal axis. Some of them, for instance the expression of 'progressive' in (19), are based on a 'locative' metaphor. Consider:

(19) *Çocuk dön-düğ-ün-de, ihtiyar adam iskemle-de uyu-mak-ta-ydı* child return-prt-ps3-loc old man pier-loc sleep-inf-loc-proj1
 "When the child came back, the old man was sleeping on the pier"

In fact, we find two 'locative metaphors' in (19): *cocuk dön-düğ-ün-de* "in the child's coming back" \rightarrow 'when the child came back', and *((adam uyumak)-ta)-ydt* "((the man sleep)-loc)-past" \rightarrow 'the man was sleeping'.

3.4 Quantificational Aspectuality

Quantificational Aspectuality does not 'enter' into the definition of the SoA itself: it deals with 1) *Habit* (habitual propensity of the participant involved); 2) *Frequency of occurrence* (including: *Semelfactive* ('just a single time'), *Iterative* ('several times'), *Frequentative* ('many times'), *Distributive* ('several times, different participants'); 3) *Continuity* ('all the time, without interruption'); 4) *Intensity* ('with high speed/intensity, to a high degree').

4 On Mood

Dik (1997: 205,251) distinguishes three types of modality: 1) *Inherent Modality, 2) Objective Modality, 3) Propositional Modality.*

Distinctions for *Inherent Modality* show how a participant is involved in a certain SoA with respect to *ability* ('can', 'be able', 'be willing to'), *obligation* ('must', 'have to'), or *permission* ('may', 'be allowed to').

Distinctions for *Objective Modality* express how the speaker evaluates the likelihood of occurrence of some SoA or the chances that some SoA will ob-

tain, and there are two sub-areas: expressions for *Epistemic Objective Modality* by means of which the speaker assesses the actuality of some SoA in terms of his knowledge in general along the scale of "Certain-Probable-Possible-Improbable-Impossible"; and there are expressions for *Deontic Objective Modality* by means of which the actuality of some SoA is evaluated in terms of moral, legal, or social norms, all running along the lines of "Obligatory-Acceptable-Permissible-Unacceptable-Forbidden".

Distinctions for *Propositional Modality* signal the speaker's personal commitment to the truth of a proposition. Personal responsibility for the content of the proposition is conveyed through expressions for *Subjective Modality* and *Evidential Modality*. For Subjective Modality two sub-areas can be distinguished: *Personal opinion* (according to the speaker's opinion it is certain, probable, possible, etc. that some proposition is true) and *Volitional* (the speaker wishes or hopes that some proposition is true). For Evidential Modality we can distinguish three sub-areas: *Experiental* (on the basis of his previous personal experience the speaker concludes that the proposition in question holds), *Inference* (on the basis of available evidence the speaker infers that some proposition is true), and *Hearsay* (on the basis of what the speaker has been told, he takes the proposition for true), often referred to as *Quotative* or *Reportative*.

5 The Expression of Tense, Aspect, and Mood

Within Functional Grammar linguistic expressions are analysed in terms of the 'underlying clause structure' (cf. Dik, 1989; Hengeveld, 1989). This is a complex abstract structure, which can be divided into several levels or layers: the topmost layer (level 4) represents 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, do you know that?' B- Keşke bunu söylememiş olsaydın 'I wish you hadn't said that', in which bunu of (B) may be about the entire clause of (A) or about either of its parts. One layer further down in the hierarchy (level 3) 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 really had no idea that you loved him that much', in which the embedded clause Onu övlesine sevdiğin 'you love him that much' 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 (level 2) are formed by taking a predicate from the lexicon for which a number or terms (level 1) are to be constructed, the latter being based on lexical predicates as well. The idea of layered structures can be schematised thus:

Structure	Type of entity	Order	Variable	
Clause	speech act		4	Е
Proposition	possible fact	3	Х	
Predication	state of affairs	2	e	
Term	entity	1	х	

Various distinctions for tense, aspect, and mood are thought of being brought about by the application of operators. It is assumed that tense forms are the formal expression of predication operators, applied at level 2. As for aspect, Aktionsart is seen as being designated by the predicate and its arguments and since various distinctions are not grammatically coded, they should be accounted for in the lexical domain. In as far as aspectual oppositions such as Imperfective / Perfective are to be taken as 'inflectional', viz. the corresponding grammatical expressions are the result of the application of operators, or as 'derivational' (cf. the Russian example in (17), section 3.2), or as 'fluctuating' over both systems, is not quite clear. The various ways of expressing distinctions in the realm of *Phasal Aspectuality* and *Quantificational Aspectuality* leads to the assumption that in many cases some operator or combinations thereof are applied for which a mapping is more or less easily accounted for by the expression rules. For Mood three levels are relevant. First, Inherent Modality is dealt with at level 1, e.g. calis 'work' calis-abil 'to be able to work / may work'. Second, expressions for Objective Modality are related to operators applied on level 2 and/or to the usage of modal particles, e.g. Epistemic Objective yorul-(muş-sun-dur) '(I take it that) you must be tired'; Deontic Objective gitmeli-sin 'you must/ should go' (moral or social obligation). Third, for the different forms of Propositional Modality it is assumed that they signal the application of an operator on level 3, e.g. gel-me-sin 'may he not come / he shouldn't come' (Subjective Modality - volition); Ayağı kırık-mış 'his leg is broken' (Evidential Modality - inferential or reportative).

In many a case it is not the combination of affixes as such but rather the context that (co-)determines how a certain expression should be interpreted. For instance, *gid-eme-z* 'he cannot go' expresses inherent modality (ability – level 1) in the context of *Ayağı kırık* 'his leg is broken', but in the context of *İnşaata girmek yasaktır* 'Forbidden to enter the construction site', it simply expresses objective deontic modality (permission – level 2).

With respect to the linear ordering of suffixes that allow for an interpretation in terms of tense, aspect, and mood distinctions the following observation may be relevant. As is claimed by Dik (1997: 296) in languages which distinguish Objective and Subjective moods in the verb, these can be combined in such a way that the latter distinction has scope over the former, e.g. *gel-eme-z ol-abil-ir-di* 'It may have been (tense) the case (subjective mood) that he was not able (inherent modality) / could not come (objective deontic modality)'. Especially this phenomenon makes it sometimes difficult to determine what the contribution of each morpheme or particle (? *olabilir*) is to the overal interpretation.

6 Tense, Aspect, Mood in Constructions based on -yor ol

In the sections (6-9) some data will be presented and analysed, and in order to determine what can be derived from possible presuppositions and information given in the context, every example of relevant data will be followed by a brief discussion with respect to its overall interpretation, all based on explanations and judgements of native speakers of Turkish. Each section will be concluded by a summary of these interpretations together with a tentative analysis.

6.1 Tensed Forms

 (20) [...]uzun süren bir yalnızlığ-ı bekli-yor ol-acak-lar long lasting a loneliness-acc await-pres2 ol-fut-agr3p
 "They will be awaiting a long lasting loneliness"

The combination *bekli-yor ol-acak* 'will be awaiting' is in principle a tensed form since the future suffix -EcEk cannot be attached to a verb root ending in -Iyor. Hence, the usage of *ol* can be regarded as the application of an auxiliary element. Contrary to the tensed compositional past (cf. (14) in section 2), the prospective oriented (compositional) past, e.g. *gel-miş olacak(-tı)* 'will/would have come', and compositional conditional expressions (which are not discussed as such in this paper), the future marker -EcEk is the sole suffix that

requires the auxiliary *ol*. In this way, 'tensed' is here seen from the perspective of *ol-acak*.

6.2 Aspectual Forms

 (21) "Beyin kanama-sı geçir-iyor ol-abil-eceğ-im" düşün-dü-m brain bleeding-CM 'have'-pres2 ol-pot-fut-agr1s think-past1-agr1s
 "I thought: it would be possible that I was having a bleeding in the brain"

The form *geçir-iyor ol-abil-eceğ-im* exhibits a sequence of three morphemes: pres2 (*-Iyor* = non-anterior); pot (*-Ebil* = potentialis), and future (*-EcEk* = prospective). Roughly speaking, a translation of (21) in English could be rendered as "It will be possible (may be the case) that I am having a bleeding in the brain (cerebral hemorrhage)". Disregarding the modal *-Ebil*, this structure resembles (29) on the basis of the sequence of 'pres2' and 'future'. Yet, looking at aspectuality from the perspective of *geçir-iyor* implies that *ol* must be seen as an auxiliary.

(22) [...] bank-lar-da, bazen, bir iki kişi otur-uyor ol-ur-du bench-pl-loc sometimes one two person sit-pres2 ol-pres1-proj1 "[...] there used to be one or two people sitting on the benches"

In contrast to (29) and (21), the form *ol-ur-du* cannot be considered an auxiliary form for the following reasons. The suffix pres1 (*-Ir* = non-anterior) is according to Johanson (1994) a sort of 'neutral' present tense/aspect marker which is (as opposed to pres2 (*-Iyor* = non anterior)) very suitable to express the 'habitual/repetitive' aspectual character of some events. Therefore it can be regarded as an expression for Quantificational Aspectuality, as touched upon in section 3.4. Basically, the suffix *-Ir* behaves like an ordinary tense marker, since it is expanded by the projectional suffix -(y)DI (proj1 = past). Another important point is that *ol* is not only used as a pure auxiliary – a carrier for grammatical material, but also as an independent verb in the following senses: 'to become; to happen/occur'. Taking the latter meaning, (22) can be interpreted as "It used to happen/occur, sometimes, that one or two people were sitting on the benches", or as "It happended regularly that ...". In this respect *bir iki kişi otur-uyor* should be seen as a complement of the independent verb *ol* 'to happen/occur'.

(23) Dut ağacın-ın üzerinde otur-uyor ol-uyor-du-k

mulberry tree-gen in sit-pres2 ol-pres2-proj1-agr1p "It occurred that we were sitting in a mulberry tree"

A somewhat different and at the same time also more complicated situation underlies the analysis and interpretation of (23). Whereas the subject of the verbal complex in (22), being 'third person singular', shows no verb agreement in any of the verbal parts, such subject agreement is expressed in (23) through ol-uvor-du-k for 'first person plural'. Another difference with (22) is, of course, that (23) has a double sequence of the suffix pres1 (-*Iyor* = non-anterior): oturuyor ol-uyor-du-k. In this case it is very likely that ol should be seen as an auxiliary or even more so an independent verb in the sense of 'to be'. One argument to consider *ol* in this case as an auxiliary is found in the observation that many sequences of certain suffixes are morphotactically blocked: a double expression of *-ivor* seems to be impossible (comparable to *-ivor ol-acak* in (20)) and hence, an auxiliary element should be used to facilitate simultaneous expression of two 'conflicting' morphemes. An argument in favour of regarding ol as expressing 'to be' is motivated by the fact that ol-uvor-du-k contains the suffix -(y)DI (proj1) plus the copular form -k 'we', expressing agreement. The former suffix locates the whole at some point along the temporal axis (i.c. nonanterior \rightarrow 'past') and the agreement suffix binds it to the (covert) subject 'we'. Taking these circumstances into account, the complex construction Dut ağacin-in üzerinde otur-uyor ol-uyor-du-k can be conceived of as expressing something along the lines of "We were/happened to be (continuously)" (= ol*uyor-du-k*) entities to be characterised as "(continuously) sitting in a mulberry tree" (= dut ağacın-ın üzerinde otur-uvor). In Van Schaaik (1996) it was advanced that the latter type of structure can be regarded as a term-based construct, corresponding to a headless relative clause, i.e. 'someone who is sitting...'. It remains to be seen, however, what kind of (morphological and syntactic) circumstances determine the plausibility of such an analysis for the current type of construction.

6.3 Modal Forms

In this section three modal forms will be discussed: Necessity (6.3.1), Possibility (6.3.2), Hypothetic Modality (6.3.3).

6.3.1 Necessity

(24) Aynı şaşkınlığ-ı o da benim göz-ler-im-de oku-yor ol-malı-ydı

same amazement-acc he too my eye-pl-ps1-loc read-pres2 *ol*-'must'-proj1 "He, too, must have been reading the same amazement from (in) my eyes"

As for (24), the interpretation of *oku-yor ol-malı* hardly poses any problems: *ol* can be seen as an auxiliary to which the modal suffix *-mElI* (necessitative) has been attached, because this is just another type of suffix that cannot directly follow any other form but a bare verb root. Compare: *git-meli* '(s)he has to/ must go' with *gid-iyor ol-malı* '(s)he must be going' in the sense of 'it must be the case that (s)he is going'. For the former construction we could stipulate that *-mElI* expresses an obligation that pertains to the subject proper, but for the latter construction the modality expressed is about the state of affairs designated by *gid-iyor* '(s)he is going' rather than about some subject. Hence, an interpretation along the lines of 'it must be so that...' seems very plausible, the more so as the connector *that* introduces an event or action (SoA) rather than a first order entity (here: the subject).

(25) Burada otur-uyor-sa-nız tanı-yor ol-malı-sınız here sit-pres2-cond2-agr2p know-pres2 ol-neces-agr2s "If (since) you sit here, you must know (her/him)"

A construction similar to that of (24) is found in (25), although in (25) we see that person agreement is expressed in the auxiliary ('carrier element'), *in casu* on *ol* as in *ol-mali-siniz*, and not on the verbal form that characterises the referent of the copular form *-siniz* 'you'.

6.3.2 Possibility

(26) Bu durum bebeklik-te başlı-yor ol-abil-ir this state 'babyhood'-loc begin-pres2 ol-pot-pres1 "This state may begin during babyhood"

What is expressed by (26) is two things: 1) *the fact that* some State of Affairs may hold, e.g. *olabilir* 'it may be so that'; and 2) a specification of that State of Affairs, e.g. *Bu durum bebeklikte başlıyor* 'this situation begins when they are a baby', leading to an overall interpretation "It may be the case that this situation is beginning when they are a baby". In (26) *ol* cannot be considered as a pure auxiliary in the sense that it functions as a mere carrier for grammatical material that cannot be combined with other suffixes, but here it clearly functions as a kind of independent construct, more so because it contains the tense

marker pres1 (*-Ir*). Typically, in (26) it is a proposition that is presented as being 'true' and therefore we may assume that the markers expressing possibility and present are applied on the propositional level and not on the level of the event (SoA) proper.

(27) "Numara yap-tyor ol-ama-z," de-di-m, "çok üzgün görün-üyor-du" pretend-pres-2 ol-negpot-pres2 say-past1-agr1s very sad look-pres2-proj1 "It can't be (the case) that he was pretending, I said, he was looking very sad"

The negative counterpart of *olabilir* is *olamaz* 'it cannot be (the case) that', and hence, for (27) we get an analysis very similar to that of (26). Again, a proposition is presented, *numara yapiyor* 'he is pretending' negated by *olamaz*.

6.3.3 Hypothetic Modality

(28) "Eğer kork-uyor ol-sa-ydı-m çukur-a atla-ma-z-dı-m" de-di if fear-pres2 ol-cond1-proj1-agr1s pit-dat jump-neg-pres1-1s say-past1 "If I would have been fearing I wouldn't have jumped into the pit, said he"

The italicised part of (28) is a so-called irrealis form: the State of Affairs described by *korkuyor* 'fearing' is presented as hypothetical, and it can only be interpreted as propositional in the sense of 'if it were the case (but it isn't), then' and, thus, the logical inference is that the relation between *korkuyor* and its subject is 'false'. The entire proposition 'if I was fearing' is projected in the past, which is expressed by the unstressed marker proj1 (-(y)DI). Similar to the case of previous examples expressing modality, the occurrence of *ol* can be seen as a propositional auxiliary.

(29) [...] *kent-in neresin-de otur-uyor ol-ur-sa-k* (ol-alım) city-gen where-loc live-pres2 *ol*-pres1-cond2-agr1p "[...] where-ever we are living in the city"

Example (29) represents a so-called 'realis' form and it can, roughly speaking, be analysed along the lines of (28), albeit that *ol-ur-sa-k* differs from *ol-sa-ydi-m* with respect to the internal order of suffixes: *ol-ur-sa-k* contains a tense marker (*-Ir* = pres1) followed by the unstressed modality marker *-ysE* (proj3), whereas *ol-sa-ydi-m* is built up by the stressed modality marker *-sE* (mod3) being followed by the unstressed marker proj1 (*-(y)DI*). The effect of having this particular ordering in (29) leads to an interpretation where the emphasis is not on the question whether 'we are living' or not – that is beyond any doubt the

case, but on what is expressed by *kent-in neresin-de* 'in what place of the city', a viewpoint that is corroborated by the occurrence of *ol-alum* 'let us be'. So, literally (29) reads as 'what ever we are as inhabitants of some place in the city, let us be (such inhabitants)'. Also here, *ol* can be regarded as a propositional auxiliary.

6.4 Summary and Analysis I

Ad 6.1: Tensed forms. The verbal form represented in (20), *bekl-iyor ol-acak*, can be considered as a compositional tensed form, comparable to those discussed in section 2 (cf. (14)). For each of the tense markers we assume an underlying operator, which is applied at level 2: FUT PRES2 *bekle*.

Ad 6.2: Aspectual forms. The form in (21), geçir-iyor ol-abil-ecek, contains the modal element –*Ebil* which can be regarded as expressing Epistemic Objective Modality, leading to an interpretation along the lines of 'it may be the case that...' or 'it is possible that...'. Besides a pure temporal element, there is futhermore a clear aspectual element in (21): -*EcEK* shows that the SoA should be seen as a prospective (future) one, whereas –*Iyor* signals the actuality (progressive character) of what is designated by geçir 'to undergo'.

The constructions represented in (22) and (23) both express *Quantificational Aspect:* (22) signals a *Habitual, Repetetive,* or *Iterative* characterisation of *otur* 'to sit', and (23) expresses the *Continuity* (in the past) of an "ongoing" action (*otur-uyor*).

As for the expression of operators, we could of course assume that these are applied by stacking them to the verbal predicate. For the verbal construct in (21) we would get FUT POT PRES2 *geçir*, for (22) PAST PRES1 PRES2 *otur*, and for (23) PAST PRES2 PRES2 *otur*. Furthermore, the expression rules must contain a rule that prevents simultaneous expression of all operators on the verbal predicate, *ergo* this rule describes *ol*-support, that is the introduction of the auxiliary *ol* after the expression of "Pres2". On the other hand, whereas for constructions such as (21), all expressing some form of 'it is the case that...', it is clear that we are dealing with a sort of Polarity distinction (cf. Dik, 1997: 242) that expresses the logical extreme "certainty" of Epistemic Objective modality (level 2 - cf. section 4) and which is expressed through the auxiliary form *ol*, for (22) and (23) the question might be posed if the element *ol* could be considered an independent verb in the sense of 'to happen/occur'. An argument in favour of such a view would be the actual usage of *ol* in that particular

sense, as in *Kusursuz cinayet ol-ur mu? Türkiye'de ol-uyor*. 'Do perfect murders happen/occur? They do happen/occur in Turkey'. A counterargument, however, is provided by the general rule saying that the embedded verb (sentential object) of a verb that takes non-first order arguments, is nominalised, as can be demonstrated by: *Bazen oraya git-tiğ-im ol-uyor-du* 'It happened/ occurred that I went there sometimes'. Taking this factor as decisive, we assume that the forms of (22) and (23) are derived by the application of a series of operators as well.

Ad 6.3.1: Modal forms - Necessity. Applied to the bare verb root -mEll expresses Inherent Modality (level 1), but applied on level 2 it expresses Deontic Objective Modality, on or level 3 Subjective Modality, e.g. git-meli '(s)he must go' versus gid-iyor ol-mali '(s)he must be going' / 'it must be the case that (s)he is going'. However, for the examples in (24) and (25) it seems rather difficult to determine hat kind of modality is actually expressed. As Dik (1989: 205.206) states about Objective Modality that it "allows us to express what we think of the chances of occurrence of the SoA in terms of what we know about SoAs in general" and about Subjective Modality that "the speaker takes personal responsibility for the content of the proposition" (in terms of certainty, possibility, or likelihood of its truth), for both (24) and (25) readings are possible along the lines of both types of modality. (24) can equally well be interpreted as expressing "certainty" in the sense of 'it is (certainly-probably) the case that...', as well as in the sense that the speaker assumes that the proposition is holds, viz. is true. In (25) the assumption of the speaker is expressed somewhat more clearly, due to the logical inference that is made: 'if (since) it is the case that you are sitting here, then it must be the case that you know him/her'. In other words, for (25) it is quite certain that the speaker takes *tani-yor* 'know-pres2' for true. Hence, the necessity forms of (24) and (25) could be regarded as originating from level 3 (proposition), and for both cases an operator can be assumed and if applied after tense or aspect, the auxiliary ol must be introduced. With respect to the order of suffixes, two remarks are in place.

First, there is a general tendency across languages to order suffixes for tense, aspect, modality and copular forms in a 'centripetal' fashion (cf. Dik, 1989: 342) and furthermore, certain distinctions take others in their scope (cf. Dik, 1989: 252; Hengeveld, 1988). These 'principles' might explain that forms such as *ol-acak-lar* in (20), *ol-abil-eceğ-im* in (21), *ol-uyor-du-k* in (23), and *ol-mali-sınız* in (25) need not be taken as finite forms *per se*. A similar argument can be advanced for the unstressed suffix -(y)DI (glossed as proj1) which can be considered as an aspectual expression of 'perfective' (cf. 3.2) or 'perfect'

as a form of Phasal Aspectuality (cf. 3.3). In brief, modal and aspectual markers as well as copular elements have scope over what is 'embedded': *tani-yor ol-mali-siniz* can therefore be seen as ((*tani-yor*) *ol-mali*)-*siniz* which renders, reading from right to left, 'you must be knowing'.

Second, as we have seen in the discussion of (23) and (24), another angle from which an interpretation of ((*tani-yor*) *ol-mali*)-*siniz* can be approached is regarding *tani-yor* as a headless relative clause. As a matter of fact, the question underlying these deliberations is of course whether the complex constructions we have been dealing with so far are the result of a simultaneous and sequential application of a series of operators or that these constructions are based on some headless relative clause. As has been indicated in the discussion of (23) this heavily depends on secondary factors, such as morphological and syntactic indicators that make a 'nominal' viewpoint plausible. Therefore we will tentatively assume for all the examples discussed above that the 'necessitative' marker is the expression of an operator that is applied to the propositional layer (level 3).

Ad 6.3.1: Modal forms - Possibility. As we have seen in section 4, expressions for possibility, too, can be regarded as the formal expression of some operator being applied on either level 3 (proposition) or level 2 (predication). As is the case with the necessity-suffix, the suffix expressing possibility may be attached to a bare verb root at level 2: *başla-yabil* 'can / may begin'. Construction (26), however, can only be interpreted as signalling the possibility that some SoA obtains: 'it may be the case that...' / 'it is possible that...', due to the fact the preceding verb form expresses tense/aspect. Therefore, it is the likelihood that the SoA referred to by *başl-iyor* 'is beginning / begins' is true which is expressed by (24). A similar situation is found in (27), although this 'likelihood' is presented by means of a negative form: *numara yap-iyor ol-ama-z* 'it cannot be the case that [...] is pretending'. For both constructions we assume an operator at level 3 (proposition).

With respect to negated forms in which 'possibility' is involved, there is a number of combinations that may shed some light on the problem as to how various modality distinctions are related to some level of description (= structural level). Generally speaking, we may say that what *-Ebil* expresses is mostly a matter of (contextual) interpretation. It may express *Inherent Modal-ity* (ability or permission), as in *başla-yabil-ir* '(s)he is able to begin' / '(s)he may (is allowed to) begin'. On the other hand, taking the notions 'possible' and

'permissible', as related to Objective Modality, we might get an Epistemic and a Deontic Objective interpretation for such a construction as well.

Now, applying a negation operator at either level (1 or 2) requires the attachment of a suffix that differs in make-up from -Ebil: başla-ya-ma-z which expressed both the 'inverted' values of ability or permission ('(s)he is not able to begin' / '(s)he may not (is not allowed to) begin'. Clearly, the suffix -E-mE consists of a gerundial element (identical to the one in -E-bil. cf. Lewis, 1975: 174) plus the negator -mE. Reverse application of negation and modality is possible as well, which allows for both an 'ability' or 'permissive' reading, as in: yap-ma-yabil-ir-im 'I am able not to do (it)' and as attested in a recent newspaper: Din adamları: İyi olmayan depremzedeler oruç tut-ma-yabil-ir 'Religious experts: Victims of the earthquake who do not feel well are allowed not to fast'. As a matter of fact, also forms containing sequences such as *mi-yor ol-abil* are possible, as can be exemplified by Sen buna gereksinim duy-mu-yor ol-abil-irsin, ama benim için çok önemli 'It may be the case that you are not seeing/ feeling the necessity of it, but for me it is very important', and Yüzme bil-miyor ol-abil-eceğ-im-i aklına bile getirmiyor 'It does not even occur to him that it could be the case that I don't know how to (can't) swim'.

In sum, periphrastic forms in *ol-abil* are clearly distinct from simple forms in *-Ebil*, the former being represented at the propositional level and the latter at the level of the predicate/predication (level 1 / 2).

Ad 6.3.1: Modal Forms - Hypothetic. The two forms discussed in (28) and (29) are both 'hypothetical' in the sense that the proposition expressed by the verb form preceding the auxiliary *ol* is by definition 'false'. Thus, *kork-uyor* 'fear-pres2' in (28) is to be taken as 'not true', and hence, we include this kind of constructions into the types to be dealt with at level 3. The construction of (29), however, is a somewhat different case. This construction is not 'hypothetical' in a strict sense: the issue is not "whether we live but where (it is the case that) we live". For (29), then, we assume the predicational level to be associated with the corresponding operator.

7 Aspectual forms based on the Future Tense Marker

7.1 Some Data: -EcEk ol

(30) İlkin bıçağ-ı pantolon-un-a doğru götür-ecek ol-du, first knife-acc trousers-ps3-dat towards bring-fut ol-past1

ama sonra birden vazgeç-ti ve hızla yer-e sapla-dı, but then suddenly give up-past1 and fast floor-dat throw-past1

bıçağ-ın kan-ın-ı bu şekilde temizle-di knife-gen blood-ps3-acc this way clean-past1

"First he was about / wanted to bring / just brought the knife towards his trousers, but then he changed his mind and threw it on the floor, in this way he cleaned the blood from the knife"

In (30) both aspectuality as well as tense is expressed. In its entirety, the fragment *biçağı pantolonuna doğru götürecek oldu* 'he wanted/was about to bring the knife towards his trousers' relates to the past, signalled by the suffix *-du* (past1). The usage of *ol*, however, makes *götür-ecek ol-du* distinct from *götürecek-ti* which is a compositional tensed form expressing 'future in the past'. By means of the form *götür-ecek ol-du* some sort of aspectuality is expressed which, for the moment, at best can be described as conveying the idea of an SoA which is about to obtain (Phasal Aspectuality, see section 3.3). However, on the basis of the context it is not immediately clear whether the construction should be labelled 'prospective' or 'ingressive', since it cannot be determined to what degree of completeness the action intended has been performed. Although it is stated in the first coordinated sentence that the subject suddenly gave up his action, there are no clues whether it was initiated or not.

(31) Ben kendi sandalye-m-i uzat-acak ol-du-m: I own chair-ps1-acc hold out-fut ol-past-1s

> *"karış-ma sen!" de-di, "git, iki kahve söyle bize !"* mix-neg you say-past go two coffee order for us

"I wanted / was about to offer my own chair; "don't meddle in (these affairs)", he said, "go order two coffee for us!"

For (31) we may assume that we deal with an initiated action on the basis of what is said by *karışma sen!* 'Don't interfere', for it is not very likely that the person issuing this order would be aware of the intentions of the subject other than by (telepathy or) having seen what the other person (subject, narrator) was up to. So here an interpretation of 'ingressive' is possible.

(32) *Tüccar bir şey* söyli-yecek ol-du, merchant something say-fut ol-past1

> *fakat kadın sözünü kes-ti: Yok, yok! Geç-ti bunlar artık!* but woman interrupt-past1 No, no! pass-past1 all this by now

"The merchant wanted / was about to say something but the woman interrupted him (saying): No, no, that's all over now"

(33) *Pozdnişev kötü bir şey söyli-yecek ol-du*, Pozdnişev bad thing say-fut *ol*-past1

> *fakat kendini tut-tu ve aceleyle:* but himself hold-past and hastily

Orada nasıl yaşa-dığ-ın-ı, ne yap-tığ-ın-ı bil-mi-yor-um, dedi there how live-prt-ps3-acc what do-prt-ps3-acc know-neg-pres2-1S say-past

"Pozdnişev was about to say something bad, but he held himself back and said hastily, I don't know how he lives there and what he does"

A similar difference between two interpretations can be revealed by contrasting (32) with (33), which run parallel with respect to *bir şey söyliyecek oldu* 'was about to say something'. For (32) it cannot be determined whether the act of saying had been initiated (lest how much the merchant had been able to utter), but for (33) it may be assumed on the basis of *kendini tuttu* 'he held himself back' that Pozdnişev has not even produced a single sound.

(34) *Mektub-a bir daha* **bak-acak ol-du**, letter-dat once more look-fut *ol*-past1

> *ceb-in-de bul-ama-dı mektup yok ol-muş-tu!* pocket-ps3-loc find-negpot-past1 letter dissappear-past2-proj1

"he wanted to look at the letter once more but he couldn't find it in his pocket, the letter had disappeared"

The context of (34), then, makes pretty clear that the action of looking at the letter can not have been possibly initiated, since in the coordinated sentence it is stated that the subject could not even find this letter. Here we get at best an 'immediate prospective' type of interpretation.

(35) Fuschia karşı koy-mak için ağz-ın-ı aç-acak ol-du, oppose-inf to mouth-ps3-acc open-fut ol-past1

> *ama yap-abil-eceğ-i bir şey yok-tu* but do-pot-fut-ps3 a thing negex-proj1

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"He wanted to open his mouth in order to oppose to Fuschia, but there was nothing he could do"

Also the aspectuality expressed in (35) can be interpreted as 'immediate prospective' or 'ingressive', since the context does not give any clue with respect to the stage to which the act of speaking has developed.

(36) Fuschia konuş-mak için ağz-ın-ı aç-acak ol-du, ama talk to mouth-ps3-acc open-fut ol-past1 but

Malko-nun yüz ifade-sin-igörünce konuş-mak-tan vazgeç-tiMalko-gen face expression-ps3-acc seeingspeak-inf-ablrefrain-past1

"Fuschia wanted to open her mouth in order to speak, but when she saw Malko's face she refrained from talking"

The verbal complex of (36) can only be regarded as 'immediate prospective' because *vazgeçti* in the coordinate clause signals that the act of speaking has not even been initiated.

7.2 Summary and Analysis II

What all constructions in section 7.1 share is the element -EcEk which often expresses 'intention' rather than sheer 'future'. A second common factor is that this type of construction is obviously restricted to [+animate] first arguments (subjects), which implies that the distribution of this construction is limited to verbs having the feature [±Control]. For this reason constructions such as **Agaç düş-ecek ol-du* 'The tree was about to fall' can be expected to be nonexistent, because 'intention to do something' presupposes the possibility to exercise control over the action (including its initiation, duration, termination).

A second shared property of these constructions is that they, at least at first glance, express some type of Phasal Aspectuality that is centred around or ori-

ented towards the initial phase of the action described. In a number of cases (cf. (30), (31)) there is indeed an indication that the action was initiated – leading to an *Ingressive* interpretation, whereas for others (cf. (33), (36)) its is clear that the action is not initiated but about to begin – leading to an *Immediate Prospective* reading; and in a limited number of cases (cf. (32), (35)) it is impossible to determine to what stage the action has been completed. I think that, as an old saying goes, appearances are deceptive, so that the factor that binds these constructions should not be sought in the initial phase of the action involved but at the termination. In other words, all these constructions (irrespective to the question whether they have been initiated) have not finished, so here we can say that all SoAs are [–Telic].

There are three possible scenarios to arrive at $-EcEk \ oldu$: First, to some verbal [±Control] predicate, which expresses change/transition and which hence has a natural end point [+Telic], some 'Imperfective' (? Future) operator is applied, which leads to an incompatibility: 'incomplete' versus 'end point'. This can be resolved by a re-interpretation along the lines of 'action attempted (conative) but not finished'. This analysis would work well if we had an 'imperfective', but we don't have one since 'Future' as a Tense marker can hardly be associated with 'Perfective' (external viewpoint, action completed) or 'Imperfective' (internal viewpoint). Furthermore, also *oldu* will be left unexplained.

Second, perhaps a better, but still insufficient solution would be to assume an operator that expresses the Phasal Aspect 'Prospective' directly as -EcEk*oldu* 'going to', which is the closest we can get in terms of a general interpretation. An important point, however, is that 'Prospective' only, in the sense of 'going to', may be too narrow, because it gives no explanation for those cases in which the feature [+Telic] is converted into [-Telic]. In other words, Prospective entails "action not (even) started let alone finished", and leaves no room for an interpretation like "the action has been started BUT not finished.

Third, an approach that does not have the aforementioned shortcomings could be found in assuming an operator denoting 'Conative', which by means of the expression rules provides for the 'fixed' sequence $-EcEk \ oldu$. It should be noted that this sequence is indeed fixed: other markers than -du do not occur.

8 Aspectual Forms based on the Negative Present Tense Marker

8.1 Some Data: -mEz ol

(37) *Uyku-lar tut-ma-z* ol-du son gece-ler, sleep-pl 'hold'-neg-pres2 ol-past1 last evening-pl

> *uyanık gör-ül-en düş-ler de var,* awake see-pass-prt dream-pl too existent

düş-ler birbirinin ardına takılmış, gel-iyor dream-pl each other after 'hooked', come-pres2

"During the last nights I couldn't catch any sleep and there were dreams that I could see while awake, the dreams came chained one after another"

The situation described in (37) is of a somewhat complex nature: *uyku-lar* 'sleep-plur' denotes several, individuated instances of 'falling asleep/being asleep'. About the latter 'states' or 'events' it is predicated that they did not obtain, not as such (which is of course implied) but rather from the perspective of a possibly gradual decrease of its coming about. The situation is obviously contrasted with previous situations which, in a highly implicational way, cannot be characterised by *tut-ma-z ol-du*. What is described here is a gradual change of the frequency, intensity, quickness, or easiness with which 'falling asleep/being asleep' takes place, and hence, (37) basically expresses some sort of quantitative aspectuality'.

(38) *Gene birbiri-miz-e ihtiyaç duy-ma-z ol-du-k*, yet one-ps1p-dat need feel-neg-pres1 *ol*-past1-agr1p

> *arkasından da kavga patlak ver-di* afterwards and quarrel break out-past1

"They gradually felt less and less need for one another, and afterwards quarrels broke out too"

In (38) some gradual decline with respect to *ihtiyaç duy* 'feel (experience) the need' is described. Again an example of Quantificational Aspectuality is represented, although it is hard to determine on the basis of the context alone whether the State of Affairs must be thought to be modified for Frequency, Frequentative, Continuity, or Intensity – to mention only the most likely ones.

A characteristic of the constructions in -mE-z ol-du is that the morpheme -z and its affirmative counterpart -Ir (both 'pres1') may express 'habituality' when used independently.

(39) En sonra bun-a aldırış et-me-z ol-du-lar
 finally this-dat pay attention-neg-pres1 ol-past1-agr3p
 "And eventually they started to pay less and less attention to this"

Quantificational aspect is also expressed in (39), where reference is made to *Intensity* (the 'degree or extent to which' attention is being given, *aldurış et*, as represented by *less and less* in the translation), its *Frequency* ('less often') or its *Continuity* ('not all the time').

(40) Mustafa'-nın şiddet-i-nin neden-ler-i konusunda
 M.-gen violence-ps3-gen reason-pl-ps3 with respect to kendi kendim-e soru sor-ma-z ol-du-m
 myself-dat question ask-neg-pres1 ol-past-agr1s

"With respect to the reasons of Malko's violence, I stopped asking myself questions"

A total termination of some habitual action is expressed in (40). The following sequence of aspectuality may be involved to arrive from 'habitual' to 'not any more': habitual – less frequent – termination'. In that respect an interpretation based on *Quantificational Aspectuality* (habitual, frequency) evolves into (and eventually overlaps with) in a terminal point which falls under *Phasal Aspectuality* (cf.3.3): 'Egressive' – 'stops to ask' in (40).

(41) Yaşa-mak artık ilgi-m-i **çek-me-z** ol-du, live-inf part interest-ps1-acc draw-neg-pres1 ol-past1

güçlü ilaç-lar sayesinde ayak-ta dur-abil-iyor-um strong drug-pl thanks to foor-loc stand-pot-pres2-agr1s

Mustafa durum-un fark-ın-da bile değil M. situation-gen notice-ps3-loc even neg

"I lost my interest in living, thanks to strong drugs I am able to remain standing, (but) Mustafa does (is) not even notice (aware of) the situation"

For (41) an interpretation similar to that of (40) can be given, since what is expressed is a total termination of a previous habitual State of Affairs. This is represented in the translation by *I lost my interest in living (yaşa-ma-k ilgi-m-i çek-mez ol-du* 'life ceased to draw my attention').

(42) Bu hem çılgın hem de iddialı tasarı-nın girdab-ın-da sürüklen-ir-ler-ken, this both mad and pretentious plan-gen whirlpool-ps3 go on-pres1-r3p-sim

kork-ar-ım ki gitgide ayak-ları yer-e **bas-ma-z ol-du** fear-pres1-agr1s that gradually feet-ps3p ground-dat press-neg-pres1 *ol*-past1

"While they went on in the whirlpool of a both frenzy and pretentious plan, I'm afraid that they gradually lose contact with reality"

In (42) the adverb *gitgide* 'gradually / more and more' is used to reinforce what is expressed by *ayakları yere basmaz oldu*, literally: 'their feet stop touching (stepping on) the ground' \rightarrow "they lost contact with reality".

(43) Beyn-im çalış-ma-z ol-du, brains-ps1s work –neg-pres1 ol-du

> *zihinsel açı-dan ciddi bir biçim-de tüken-di-m* intellectual viewpoint serious a form-loc wear out-past1-agr1s

"My brains started to function less and less, from an intellectual point of view I am worn out in a serious way"

Roughly speaking, the interpretation of (43) runs along the lines of (39). The functioning of the brains is referred to in the sense of its *Intensity* ('less clear(ly)/ good/efficient/productive'), its *Frequency* ('less often'), or its *Continuity* ('not all the time'), all with the same obvious result. Given a situation to be described by either (a) 'my brain works (as a rule)' or (b) 'my brain is working (just now or accidentally'), it remains to be seen whether (43) can be interpreted as 'my brain stops working' as the inverted value of (a) and (b).

(44) Artık iş-in-den zevk al-ma-z ol-du any more work-ps3-abl enjoy-neg-pres1 ol-past1 "(S)he doesn't like her/his work any more" "(S)he began to enjoy her/his work less and less"

Finally, (44) is ambiguous with respect to its overall interpretation. Due to the occurrence of the adverb *artık*, which means 'not any more' in a negated context and which functions as an indicator of some 'starting point', two interpretations are possible. 1) a gradual decrease of the degree (in terms of *Intensity*, *Frequency*, or *Continuity*) to which *zevk al* 'to enjoy' applies, so that it is expressed that a termination point has been reached, and 2) taking the adverb *artık* as a 'starting point', (44) can be interpreted as the beginning of a new situation which is characterised as 'less and less enjoying his work'. In this respect, (44) is an example of a construction where Quantificational Aspectuality 'overlaps' with *Phasal Aspectuality* (cf. 3.3) in the sense that the aspect 'Ingressive' (begins to (less) enjoy) is expressed.

8.2 Summary and Analysis III

Contrary to the constructions of section 7, all expressing *Phasal Aspectuality*, the constructions related to section 8 express *Quantificational Aspectuality*.

In a number of constructions (cf. (37), (38), (39), (43), (44)) an interpretation in terms of a (gradual) decrease of 'Frequency/Intensity/Speed' with which some SoA occurs (used to occur) is possible, whereas in others (cf. (40), (41), (42)) it is rather the total termination of some previously 'Habitual' action that is emphasised. Generally speaking, for this type of construction we can say that *-mEz oldu* signalls the 'egressive' ("stops to") nature of some (repeated, regular, habitual) SoA. Similar to the case of *-EcEk oldu*, it would again be very attractive to assume an operator denoting: 'Egressive Habitual', which by means of the expression rules provides for the 'fixed' sequence *-mEz oldu*. Also for this sequence it should be noted that the number and type of suffixes is indeed fixed: other markers than *-du* do not occur. (cf. (10) – constructions in *-mEz ol-abil-ir* can be accounted for in terms of modality, cf. section 4-6).

9 Aspectual Forms with the Affirmative Present Tense Marker

9.1 Some Data: -Er ol

Whereas the constructions in (37)-(44) all have in common that they express, in one way or another, that some aspectual characterisation (not overtly expressed) of some event has the propensity to decrease (in terms of *Habituality, Frequency, Intensity* etc), thereby reaching some (prospective) termination point, the constructions of (45)-(50) show something in an opposite direction.

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(45) Bu arada hiç beklenmedik başka pürüz-ler, içten içe geliş-ip in the meantime emph unexpected other problem-pl secretly develop-ing

birden patlak veren pürüz-ler **çık-ar ol-du** ortaya suddenly be discovered problem-pl emerge-pres1 *ol*-past1

"In the meantime other, totally unexpected problems secretly developed, (and) problems that were suddenly discovered began to appear / pop up"

In (45) (ortaya) çıkar oldu can be seen as the expression of the beginning of some (new) situation. Although ortaya çık is strictly speaking neutral with respect to the Aktionsart $[\pm Momentaneous]^5$, some sense of this feature is conveyed by the usage of the adverbial phrase birden 'suddenly'. Yet, the central point here is the beginning of a new State of Affairs, a view which is corroborated by the fact that additional information provided by the context gives a clue with respect to a previous situation. The clause immediately preceding the main clause tells us about hiç beklenmedik pürüzler 'problems that were not expected at all' have developed, so by logical inference we may conclude that the problems referred to and specified in the main clause were not present in the previous situation. The fact that pürüz-ler 'problems/ all kind of problems' is used as a plural form gives the whole a flavour of 'at several moments'/ 'at intervals'. This 'iterative' character of 'the popping up of the problems' is of course not expressed as such, but may be part of an overall interpretation on the basis of the plural.

(46) Ev-de gene civildayan, şarkı söyleyen ses-in-i duy-ar ol-du-k house-loc again chirping, singing voice-ps3-acc hear-pres1 ol-past1-1p "And at home we began to hear again her chirping voice singing (songs)"

Also in (46) the role of an adverbial expression (*gene* 'again') gives a clue with respect to the kind of situation preceding the present one. In its entirety, (46)

⁵ Usually, a verb describing a [+Momentaneous] event cannot be combined with an aspectual verb signalling the beginning, continuation or end of that Event (cf. Dik, 1997:111). From the example below it follows that *ortaya çıkmak* 'to appear/pop up/emerge' is not specified for this feature.

Haliyle bu durum-da da kırışıklık-lar ortaya çık-ma-ya başlı-yor consequently this state-loc too wrinkled spot-pl appear-inf-dat begin-prog2 "And thus, in this situation too all kind of wrinkled spots begin to appear"

tells us that 'we started to hear some voice', not 'out of the blue' so to speak but rather, in the context of a recent, immediately preceding absence of a State of Affairs that could be described by *duy* 'hear/feel/perceive' plus its complement containing *şarkı söyle* 'sing (a song)'. The occurrence of *gene* 'again', however, points out that this situation has been existent some time before but that it was non-existent (interrupted) at the moment that represents the perspective from which the new situation is described. The emphasis, of course, is on the transition from one situation to another, possibly with some 'habitual' or 'iterative' associations (*singing* regularly, at certain intervals, but note that these aspectual properties are 'commanded' by *duyar olduk*).

(47) *Öyle ki, devamlı söylenme-ler-i sona er-di* thus that continuous grumble-pl-ps3 stop-past1

> *ve ev-de kıyısından köşesinden iş bile yap-ar ol-du* and house-loc out-of-the-way places-abl work even do-pres1 *ol*-past1

"And so it happened that his continuous grumbles came to an end and that he even started to do something at home in out-of-the-way places"

A transition from one situation to another one is also expressed in (47) by the opposition between *devamlı söylenme-ler-i sona er-di* 'his continuous grumbles came to an end', a situation that lasted for some time (*Quantificational Aspectuality* expressing *Continuity*, as can be inferred from the adjectival *devamlu* 'continuous'), and what is said by *iş bile yapar oldu* 'he even started to do something'. The latter expression contains the modal adverb *bile* 'even' which may be regarded as having *iş* 'work; here: something' in its scope. This entails that a situation to be characterised by *iş yap* did not obtain before, and hence an interpretation of *iş yapar oldu* as 'ingressive' ('start to ...') is achieved through the domain of Phasal Aspectuality.

(48) Deniz kenar-ın-a gitgide seyrek in-er ol-du-k
 sea side-CM-dat gradually seldom go down-pres1 ol-pres1-agr1p
 "We went down to the sea side more and more infrequently"

The fragment in (48) allows for an interpretation in which the most important key words are: *Frequency* and *Ingressive*. The ingressive interpretation is due to the fact that *in-er ol-du* is used, which signals a new situation at the background of a preceding one. The aspect of *Frequency* is expressed as such by means of the adverbial expressions *seyrek* 'seldom/rarely', and the speed (*Inten*-

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sity) with which the process of change took place is specified by *gitgide* 'gradually'. In fact, (48) could be seen as the expression for the initialisation of a series of States of Affairs which in its entirety is described by *denize in* 'to go down/descent to the sea', but for which it is highlighted that its frequency is (gradually) decreasing.

(49) Bun-lar-ı gören anne-m yüz ört-mek-ten yüksün-ür, this-pl-acc seeing mother-ps1s face cover-inf-abl regard as a burden-pres1

babaanne-m-den bu konuda destek **ar-ar ol-du** grandmother-ps1s-abl this respect support seek-pres1 *ol*-past1

"My mother, seeing all this, regarded covering her face as a burden, (and) sought more and more support from my grandmother"

In contrast to (48), in (49) an increase of *Frequency* or *Intensity* is expressed, although there are no adverbial expressions that support this view. Again, the basic aspectual feature is initialisation ('ingressive') of some (repetitive, iterative) SoA.

 (50) Yemek-ler-in-i yalnız ye-r ol-du food-pl-ps3-acc alone eat-pres1 ol-du
 "S/he ate his food more and more often alone"

The only possibility for (50) is that *yer oldu* expresses aspectuality with respect to *Frequency*, rather than anything else, an interpretation which is more or less determined by the occurrence of *yalnız* 'alone'. Leaving out this (circumstantial) adverbial phrase would lead to an odd type of sentence. Furthermore, *yalnız* 'alone' bears some emphasis since it is placed in pre-verbal position and therefore it can be said to attract aspectual connotations. A precise interpretation without a richer context is rather difficult. The interpretation represented by the translation is more or less affected by the interpretations given for the examples discussed previously, but as a matter of fact the *Frequency* in (50) can also be regarded as 'zero', leaving room for interpretations such as 'all of a sudden' / 'completely'.

9.2 Summary and Analysis IV

A construction type related to the one represented in section 8 is exemplified in section 9: the -mE-z in section 8 is the negative ("mirror image") of -Er in 9. Assuming that the overall interpretation of the sequence -mE-z ol-du is 'stops to' (egressive), it is safe to assume that -Er ol-du marks the opposite 'starts to' (ingressive) for it marks that a new period is entered for which some action is performed at the background of a regular or habitual basis (*Quantificational Aspectuality*). This is most clearly shown by (45), (46), (47), (49), whereas somewhat more emphasis on 'frequency' is expressed by (48) and ((50). Also for these constructions an operator could be assumed; besides the operator 'Egressive Habitual', expressed as the fixed sequence -mEz oldu, we would have 'Ingressive Habitual' as well, leading to the sequence -Er oldu.

10 Conclusions

With respect to semantic interpretation, the analyses given so far do not drastically deviate from those of Mixajlov (1961: 77). For the constructions in *-EcEk oldu* he describes their overall meaning as "Перифрастическая форма на *-(y)acak oldu* выражает *попытку* [italics are mine] совершения действия в отдаленном прошлом", that is, "The periphrastic form in *-(y)acak oldu* expresses an attempt to finish an action in the remote past". Indeed, in many of the Russian translations of his examples it is reflected that the key notion is 'attempt' or 'volition', witness the usage of verbs such as попытался; (по)пробывал 'tried' and хотел было 'wanted' respectively.

A similar conclusion can be drawn for the constructions in $-Er \ oldu$ and $-mEz \ oldu$. As Mixajlov (1961: 31,32) states, the former "выражают начало [italics are mine] действия в прошлом с оттенком обычности", that is, "[it] expresses the beginning of an action in the past with a shading of habituality", which is in many a case rendered in translation as forms of стать + infinitive 'to begin to'; whereas the latter conveys the opposite idea: "выражают *полную завершенность* [italics are mine] действия", that is, "[it] expresses a total completion of the action", which in turn is translated on the basis of forms of перестать + infinitive 'to stop to'.

The expression of these three aspectuality markers can be accounted for in terms of operators to be applied at the level of the predication (level 2). Since each of the aspectual interpretations cannot be attributed to individual contributions of (other) operators/markers for tense or aspect, the type of aspectuality expressed by *–EcEk oldu, -Er oldu*, or *-mEz oldu* cannot be predicted in a decompositional way. This is most clearly revealed by opposing for instance

the compositional form *gid-ecek-ti* '(s)he would go' (= futurum praeteriti) with the periphrastic form *gid-ecek ol-du* '(s)he wanted to go (but didn't)'. Both forms, of course, relate to the 'past' which is expressed by -ti and -du respectively, but what the *semantic* contribution of *ol* is in the latter form remains unclear. Therefore, the easiest way to account for the periphrastic form as a whole is to assume an operator 'Conative' which triggers the attachment of the 'suffix sequence' -EcEk oldu when applied to [+Control] verbs.

Since the periphrastic forms *-Er oldu* and *-mEz oldu* are not decompositional either, the operators 'Ingressive (Habitual)' and 'Egressive (Habitual)' could be assumed, to be applied on level 2 (predication) in such a way that the expression rules generate these suffixes in their entirety.

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