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**THE SYNTACTIC AND SEMANTIC ANALYSIS OF TURKISH TEMPORAL
CONVERBS**

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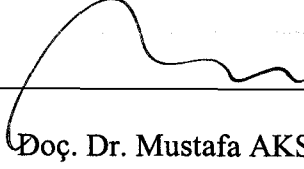
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Bu çalışma jürimiz tarafından İngiliz Dili ve Edebiyatı Anabilim Dalı'nda
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Onay

Yukarıdaki imzaların adı geçen öğretim elemanlarına ait olduklarını onaylarım.


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ÖZET

Bu çalışmada, Türkçede ulaç olarak adlandırılan ve tümce bağlama görevini üstlenen eklerin sözdizim ve anlam özellikleri betimlenmiş ve çözümlenmiştir.

Türkçede ulaçlar tümce bağlama işlevleri açısından önemli bir yer tutmaktadır. Bu ulaçlar iki ayrı tümceyi birbirine zaman, tarz gibi farklı anlam ilişkileri kurarak bağlarlar. Bu çalışmada tarz anlatan ulaçlar inceleme dışı tutulmuş, yan ve temel tümce ile anlatılan olayları, yalnızca zaman doğrusu üzerindeki sıralanışlarına göre bağlayan ulaçlar çözümlenmiştir. Çalışma kapsamında tutulan ulaçlar *-(I)p*, *-ArAk*, *-Inca*, *-ken*, *-A...-A*, *-(I)r...-mAz*, *-All*, *-DIğIndAn beri*, *-DIkça*, *-DIğIndA*, *-DIğl zaman*, *-DIktAn sonra* ve *-mAdAn (önce)*'dir.

Belirtilen ulaçların yan ve temel tümce eylemlerinin görünüş özellikleriyle olan etkileşimleri, yalın ve çekimli (edilgen ve ettirgen yapılı) eylemlerle birlikte kullanımları, tümce işlemcileriyle (olumsuzluk, kip, zaman, görünüş ve uyum ekleri) olan etkileşimleri; zaman ulaçları ile kurulan karmaşık tümcelerdeki sözdizimi özellikleri, yan ve temel tümce öznelerinin eşdizinliliği incelenmiştir. Karmaşık tümce yapısında bu ulaçlarla kurulan yan tümcelerin yeri belirlenmeye çalışılmıştır.

Sözdizim özelliklerinden ayrı olarak, bu ulaçlar anlam özellikleri açısından da incelenmişlerdir. Üç temel zaman anlatımı (öncelik, sonralık ve eşzamanlılık) yaptığı belirlenen zaman ulaçlarından, anlam yorumu açısından örtüşenlerin arasındaki farklar betimlenmiştir. Yukarıda adı geçen ulaçların zaman anlatımı dışındaki anlatımlarına da değinilmiştir.

ABSTRACT

In this study, the syntactic and semantic properties of Turkish temporal converbs are analyzed and described.

In Turkish, converbs are very fertile in terms of clause-linking. Converbs link two independent sentences to each other by providing different meaning relationships among these sentences such as time and manner. In this study, the converbs which denote non-temporal meaning relationships among sentences are kept out of concern, and only the temporal converbs are analyzed. The converbs which are in the scope of this study are –*(I)p*, –*ArAk*, –*IncA*, –*ken*, –*A...-A*, –*(I)r...-mAz*, –*All*, –*DIđIndAn beri*, –*DIkçA*, –*DIđIndA*, –*DIđl zaman*, –*DIktAn sonra* and –*mAdAn (önce)*.

The interactions of these converbs with the aspectual properties of converb and matrix clause verbs, the co-occurrences of these converbs with bare and inflected verbs (passive and causative constructions), the interaction of these converbs with sentential operators (negation, modality, time and agreement); word order restrictions in temporal converb clauses, and the co-indexation of converb and matrix clause subjects are analyzed. The adjunction site in the complex sentences which are formed with these converbs are tried to be determined.

Apart from their syntactic properties, these converbs are analyzed and classified in terms of their semantic properties. Among the converbs which denote three main temporal meaning relationships (anteriority, posteriority and simultaneity) between converb and matrix clause events, the ones which have overlapping temporal meanings are analyzed, and their distinctive features are described. The non-temporal meaning relationships conveyed by the above mentioned converbs are also described.

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INTRODUCTION

All languages express facts by making use of clauses and sentences, and constitute different connections and meaning relations between the facts. These connections are generally managed by two types of clause-linking devices. The first clause-linking type includes the constructions that are formed by coordinators. In these constructions, two equally structured clauses, (i.e., full-inflected, having operators like aspect, negation and modality markers on their verbs), are connected to each other by the use of different coordinators. Longacre (cited in Verhoeven, 1992: 153) terms this kind of forms as “co-ranking structures”. In these structures, clauses are conjoined by juxtaposing the verbs of equal rank. Turkish does not have such co-ranking structures. These structures were borrowed from other languages and adapted into the system of Turkish in the course of time. Words like ‘ve’ and ‘ama’ are some of the coordinators of Arabic origin which are used widely in Turkish. The other clause-linking type that is used for linking clauses is, in Longacre’s terms, “chaining structures”. These forms consist of a matrix clause and nonfinite subordinate clauses which are dependent on the matrix clause. The subordinate clauses are linked to the matrix clause with specialized grammatical elements which give them different meanings such as cause/effect, condition, temporal relations and so on. In addition to Longacre’s classification, Csató and Johanson (1993:134-135), differentiate two fundamental concepts in clause-linking in Turkic languages. The first one is called a *predicate* which consists of a predicate core. The other one is called a *predication* which is formed by a predicate and an optional subject. Due to this description, Csató and Johanson recognize three kinds of converb functions which are described below as “predication function”, “predicate function” and “predicate nucleus function”.

1. Predication Function: All of the predications has its own subject.

Bashkir:

(1) “Qış ütöp, yâd yětě.”

‘Winter passed and summer came.’

2. Predicate Function: The existing subject is shared.

Bashkir:

(2) “Qız [čikïp + ket] ti.”

‘The girl came out and went away.’

3. Predicate Nucleus Function: The embedded clause meaning has scope over the matrix clause. In this case, the matrix clause predicate behaves like a kind of supportive element.

Bashkir:

(3) “(yaz-ip tur) –”

‘To write continuously’

As it was mentioned before, clause-linking devices provide a propositional link among the conjoined clauses. Csató and Johanson (1993:135) state that this propositional relationship between the embedded and the matrix clauses is examined in two main categories as it is stated below.

1. Succession: There is a temporal relation between the two clauses.

2. Semantic Modification: The embedded clause puts some kind of restriction on the proposition on the matrix clause.

As Koç (1988:581) states, “..., a compound sentence containing an adverbial clause in the surface structure is derived from two sentences in the deep structure which have an abstract time element in common.” He exemplifies this by stating the following sentences.

Surface structures:

(4)a. "Eve geldiğimde annem uyuyordu."

'My mother was sleeping when I went home.'

(5)a. "Güneş doğunca her taraf aydınlandı."

'Everywhere brightened up when the sun rose.'

Deep structures:

(4)b. "Ben eve geldim. Annem uyuyordu."

'I came home. My mother was sleeping.'

(5)b. "Güneş doğdu. Her taraf aydınlandı."

'The sun rose. Everywhere brightened up.'

Such relations among two sentences are provided by a special kind of clause-linking device which is termed as 'ulaç', 'zarfiiil' and 'bağeylem' in Turkish and 'converb' in English, and they make subordinate clause verb function as an adverb which modifies the matrix clause verb. In this respect, converbs are differentiated from participles. Participles form subordinate clauses from nominalized subordinate clause verbs which behave like adjectives in matrix sentences.

A syntactic theory which was developed Foley and Van Valin (1984) can be considered if the effect of sentence structure on clause linkage is examined. According to this theory, there are three layers of clause structure named as 'nucleus', 'core' and 'periphery', and different clause linkage processes are applied at different layers. In nuclear level two (or more) predicates, in core level two (or more) clauses and in peripheral level two (or more) sentences are conjoined. Turkish converbs link clauses at all three levels.

In the next section, the research questions of this study will be stated. The questions will be mainly directed towards to explore the basic syntactic and semantic properties of temporal converbs in Turkish.

Research Questions

1. How do converb clause operators affect the meaning relationship conveyed by Turkish temporal converbs?
2. To what extent does the scope of matrix clause verb operators cover temporal converb clauses?
3. How do changes in word order in complex sentences formed with temporal converbs affect the meaning interpretations of these converbs?
4. According to Foley and Van Valin's (1984) Juncture and Nexus Theory, clauses are linked at different layers. How does the principle of interclausal syntactic relations function in complex sentences formed with temporal converb clauses? In what layer(s) are converb and matrix clauses conjoined?
5. According to Chomsky's Government and Binding Theory, subordinate clauses which contain the empty category element PRO have particular subject control structures. How does this principle function in temporal converb clauses?
6. How do temporal converbs restrict the meaning of matrix clause verb?
7. Some of the converbs like *-All*, *-DIđIndAn beri*; *-InA*, *-DIđIndA* and *-DIđI zaman* construct overlapping temporal meaning relations between subordinate and matrix clauses. To what extent do these converbs overlap? What kind of differences are observed when these converbs are used interchangeably?

Hypotheses

1. The converb clause operators like negation affect the meaning relationship conveyed by temporal converbs.
2. The operators of the matrix clause verb restrict the meaning relationship, the subject reference and the time of the temporal adverb clauses.
3. Changes in word order in complex sentences formed with temporal converbs do not affect the meaning interpretations of these converbs. Temporal converb clauses can be placed in topic, focus and backgrounding positions in a complex sentence.
4. In complex sentences, temporal converb clauses and matrix clauses are conjoined in the core-level layer, and the nexus relations among converb and matrix clauses are coordination and cosubordination.
5. Apart from the ones constructed with *-(Ip, -A...-A* and *-ArAk* temporal adverb clauses may have both coreferential and non-coreferential subjects with matrix clause subjects. Thus, only these three converbs may have the empty element PRO and undergo obligatory subject control.
6. Although most of the temporal converbs like *-All* and *-DIğIndAn beri* convey only temporal relations, the other converbs may also convey non-temporal meaning relations such as *condition, manner* and so on.
7. Temporally overlapping converbs like *-All, -DIğIndAn beri; -Inca, -DIğIndA* and *-DIğI zaman* have similar meanings. Yet, *-All* prefers stative reading in the matrix clause, and *-Inca* prefers eventive reading in the matrix clause.

Purpose and Significance of the Study

This study aims to carry out a detailed investigation of Turkish temporal converbs. The syntactic properties of converbs such as subject control and dependency on the matrix clause proposition are going to be dealt with. This study is also going to focus on the meaning relations denoted by Turkish temporal converbs.

There are a great number of studies on adverbial subordination and converbs in the literature. This study is going to demonstrate the syntactic and semantic properties of temporal converbs in Turkish by considering the previous findings.

Data Collection Technique

As the nature of the study requires the data to be in sentential form, the data is gathered by the method of scanning the written texts containing natural language use. The texts are mostly chosen from Turkish written literature and media. The researcher may also create some superficial data in order to emphasize the discussed issue.

Method of Analysis

In this study, the syntactic and semantic analyses of Turkish temporal converbs will be made on the Turkish temporal converbs. The syntactic realizations of temporal converbs in complex sentence structures, the effects of matrix clause operators and control structure on converbs, the effects of converbs on the matrix clause verb, and the semantic distributions of temporal converbs will be discussed. That is to say, this study is a

descriptive analysis of the syntactic and semantic properties of Turkish temporal converbs, *-(I)p*, *-IncA*, *-ArAk*, *-ken*, *-All*, *-A...-A*, *-(I)r...-mAz*, *-DIđIndA*, *-DIkça*, *-mAdAn önce*, *-DIktAn sonra*, *-DIđIndAn beri* and *-DIđI zaman*.

Limitations

In this study, the matter of concern will be only the converbs which convey temporal meaning relations. The other groups of converbs that express manner relations and the like are going to be kept out of concern.

Organization of the Study

In section I of this study, the identifications and classifications of Turkish temporal converb clauses made by descriptive grammarians and the typological approaches to adverbial subordination and converbs in different world languages will be scrutinized and summarized.

In section II, the data from which the sample sentences are chosen will be identified. The data collection procedure and the representation of the data in the study will be described.

Section III will present the syntactic analysis made on the Turkish temporal converbs. Co-occurrences of Turkish temporal converbs with bare verbs, and with passive and causative constructions, the co-occurrences of these converbs with the negation marker, the modality and subject agreement markers; the word order coding of information structure, the scope of operators and the control structure in temporal converb clauses will

be analyzed and described. Section IV will demonstrate the semantic realizations of Turkish temporal converbs. The temporal and non-temporal meaning relations conveyed by these converbs, and the converbs which overlap in their temporal meanings will be analyzed. Interactions of Turkish temporal converbs with converb clause verbs will be observed.



I. REVIEW OF LITERATURE

Up to this day, great many researchers and authors of descriptive grammar books have defined Turkish converbs as clause linkage devices and classified them in terms of the meaning relationships denoted by these converbs. Aksan (2000:91) mentions in his book “Türkiye Türkçesinin Dünü, Bugünü, Yarını” that two clauses are linked to each other syntactically by the help of coordinators and subordinators (or relative pronouns) in Indo-European languages. On the other hand, in Turkish, two independent sentences can be combined to form a complex sentence by the use of participles and converbs. According to Aksan, the use of coordinators in Turkish decreases with the use of adverbialization markers such as converbs.

It can be summarized from the definition of Aksan that converbs conjoin two (or more) propositions without entailing the use of coordinators and subordinators. What can be added to his definition is that converbs can also constitute different meaning relations between clauses. At this point, it can be more explanatory to mention different types of converbs that are classified by authors of descriptive grammar books.

I.1. Turkish Temporal Converbs in Descriptive Grammar Studies

In the literature, Turkish temporal converbs were examined in detail, and were classified into different categories. In this section, the descriptions of temporal converbs will be scrutinized.

Kutluk (1983:112) states that suffixes like *-meye*, *-mesine* form adverbs by being added on the verb of a clause and convey *possibility*.

(1) “Söylemesine söyledim; ama dinler mi?”

‘I talked about it, that’s right, but did s/he pay attention to?’

At the same time, the adverbialized clause denotes the *contrast* between the subordinate and the superordinate clauses. In Kutluk (1983), there is not any additional explanation on converbs.

The other definitions and classifications of converbs by other researchers can be summarized as below. Gencan (2001; 423-441), Koç (1990; 316-333), Kornfilt (1997; 66-76), Lewis (1986; 174-192) and Sezer (1995; 70-71) discuss converbs in lists which are formed according to the meanings of those converbs. At this point, converbs are divided into two main groups: *Temporal* and *manner converbs*. Manner converbs are classified into a further division as converbs which denote the meanings of cause, negation, certainty, condition, comparison, measurement, contrast and completion.

1. Temporal converbs are listed basically as *-A...-A*, *-All*, *-(I)r... -mAz*, *-AndA*, *-DImI*, *-DIkçA*, *-DIğIndA*, *-DIğI sırada/zaman*, *-DIktAn sonra* and *-mAdAn* which are constituted by nominalized structures and/or adpositions.

(2) “Bu konuyu akşam bize geldiğinde konuşuruz.”

‘Let’s talk about this subject when you come to us this evening.’

(3) “Sizi görmeyince pek üzüldü.”

‘S/he felt sorry very much when s/he did not see you.’

2. The subordinate clause verbs which are added *-A...-A*, *-ArAk*, *-AsIyA*, *-DI... -All*, *-DIğIndA*, *-ken* and *-mAdAn* demonstrate the manner of matrix clause verb. The other manner converbs are divided as below.

2. 1. *-AcAğInA* and *-AcAğI yerde* express comparison.

(4) “Ders çalışacağı yerde uzanmış müzik dinliyor.”

‘Lying down, s/he is listening to the music instead of studying.’

2. 2. *-cAsInA* and *-DIğIncA* express measurement.

(5) “Ölürcesine çalışıyordu.”

‘He was working almost to death.’

2. 3. –*DIğInA...-AcAğInA*, –*mAktAn/-mAktAnsA* and –*mAksIzIn* express negation.

(6) “Onu sevdiğine seveceğine pişman olabilirsin.”

‘You may be regretful ever to love him/her.’

2. 4. –*DIğI biçimde/şekilde/halde* express condition.

(7) “Odanı istediğin biçimde düzenleyebilirsin.”

‘You can arrange your room in every way you want.’

2. 5. – (*I*)*p* expresses manner and coordination.

(8) “Kapıyı açıp içeri girdi.”

‘S/he opened the door and came in.’

According to Banguoğlu (2000:427-440) some generalizations should be made about Turkish converbs. He divides converbs into six groups as conveying the meaning relations of *coordination*, *manner*, *comparison*, *contrast*, *cause* and *time*.

1. The converbs which coordinate (conjoin) two clauses are – (*I*)*p* and –*ArAk*.

(9) “Bırakıp gitti.”

‘S/he left and went.’

2. The manner converbs, –*A...-A*, –*ArAk* and –*ken*, demonstrate the way in which the matrix clause event occurs.

(10) “Çıkarken paltonu al.”

‘Take your coat when you leave.’

3. The suffixes of –*mAdAn* and –*mAksIzIn* constitute converbs of contrast, and they link the two clauses with a meaning of negation.

(11) “Çekinmeden söyleyebilirsin.”

‘You can say it without hesitation.’

4. Temporal converbs are subdivided into seven classes:

4. 1. *-Inca* and *-Anda* are the two converbs which convey the meaning of succession. These converbs emphasize that the subordinate clause proposition occurs before the matrix clause proposition.

(12) “Yağmur başlayınca kaçıştık.”

‘We ran away when it started raining.’

4. 2. With the presence of the converb *-Dikça*, which is termed as converb of repetition, the subordinate clause becomes, in one respect, the reason of the matrix clause. That is to say, the subordinate clause can be regarded as a preparatory condition for the matrix clause.

(13) “Ankara’ya geldikçe bize uğra.”

‘Visit us whenever you come to Ankara.’

4. 3. When the two clauses are conjoined with converbs of simultaneity (*-DiktA*, *-Diğl zaman/sırada*), the propositions conveyed by the subordinate clause verb and the matrix clause verb are realized simultaneously.

(14) “Dün aradığımda sizi bulamadım.”

‘I could not find you when I called you yesterday.’

4. 4. The suffixes *-AlI*, *-Diktan beri* and *-DiğIndAn beri* constitute converbs of initial point and when they are added on the subordinate clause verb they convey the beginning point of time of the matrix clause verb.

(15) “Ağam sen gideli yedi yıl oldu.”

‘It has been seven years since you have gone, my master.’

4. 5. The end point converbs (*-Inca*, *-An*, *-AsIyA*, *-IncaYA dek/değin*) express the ending point of time of the matrix clause verb.

(16) “Hava açıncaya kadar yola çıkamayız.”

‘We can not leave until it becomes sunny.’

It should be noted that the converb clause in this example also has the meaning

of *condition*. The converb clause proposition is given as a condition for the realization of the matrix clause proposition.

4. 6. The converbs of precedence (*-mAdAn* and *-mAz*) express that the matrix clause event occurs before the subordinate clause event.

(17) “Hareket etmeden önce görüşelim.”

‘Let us meet before you leave.’

4. 7. The converbs of succession (*-DIktAn sonra*), on the other hand, express that the matrix clause event occurs after the subordinate clause event.

(18) “Emekli olduktan sonra Gelibolu’da yerleşti.”

‘After s/he retired, s/he settled in Gelibolu.’

5. Some of the converbs which are derived from nominalized structures or which form phrases by the help of adpositions, such as *-mAklA*, *-DIğIndAn*, *-AcAğIndAn*, *-DIğI için* and *-DIğIndan dolayı*, link the two clauses with the meaning relation of cause/effect, and thus, they constitute the group of converbs of cause.

(19) “Misafir geldiğinden sinemaya gidemediler.”

‘They could not go to the movies because the guests had arrived.’

6. Converbs of contrast are divided into two categories:

6. 1. When the converbs of *-DIk* and *-AcAk* are attached to the subordinate clause verb, the subordinate clause and the matrix clause are directly contrasted or compared. These converbs are termed as converbs of ‘real contrast’.

(20) “Yarın göreceğiniz gibi bahçemiz bakımsız.”

‘Our garden is in a neglected situation as you will see tomorrow.’

6. 2. The meaning relation between the two clauses which is conveyed by the operators *-mIş*, *-(I)r*, *-(Iyor)ca/casına* convey ‘unreal contrast’. These converbs falsify the meaning of the subordinate clause verb.

(21) “Bilirmişçesine söze karışma.”

‘Do not interrupt the conversation as if you knew something.’

Up to this point, the definitions and classifications of Aksan, Banguoğlu, Gencan, Koç, Kornfilt, Lewis and Sezer are exemplified. Thus, a general explanation on the basic properties of Turkish converbs is presented.

I.2. Typological Approaches to Adverbial Subordination and Converbs

More recent studies on adverbial subordination and, on converbs, as a grammatical element which is examined under adverbial subordination, are focused on clause structure. Converbs are included in the category of adverbial subordination, however, they do not have all of the qualifications to be considered as adverbial subordinators. Kortmann (1998: 457-561) examines the characteristics of adverbial subordinators in European languages and differentiates converbs from these forms. According to Kortmann’s identifications, there are seven criteria for an item to be identified as an adverbial subordinator.

1. The predicate of the matrix clause does not assign case to adverbial subordinators. Adverbial subordinators are considered as uninflected free forms.
2. Adverbial subordinators can be used with finite subordinate clauses.
3. Adverbial subordinators do not have a syntactic function in the subordinate clause.
4. Adverbial subordinators have a strict position in the subordinate clause.
5. Adverbial subordinators are not peculiar to a regional dialect, etc.
6. A subordinate clause can precede the matrix clause in the languages which do not have a restriction on the place of adverbial subordination.

7. Some adverbial subordinators may be complex expressions and these subordinators undergo some other criteria as that they do not have fusion, that they should not have features of the original phrase and that they should have adverbial readings that can not be reconstructed from its parts.

In the light of these criteria, Kortmann excludes some forms of adverbial subordination from consideration as adverbial subordinators. The excluded forms include converbs which are the matter of concern in this study. In his view, converbs can be presented in adverbial subordination, but they can not be regarded as adverbial subordinators.

As it is mentioned in the definition of adverbial subordination, adverbial subordinators establish some meaning relations between subordinate and superordinate clauses. Adverbial subordinators are distinguished in two groups which express the major interclausal relations of *temporal* and *manner* relations. Kortmann further divides adverbial clauses into four, considering their meaning relations. In order to display these relations he assigns a 'p' for the proposition expressed by the subordinate clause and a 'q' for the proposition expressed by the superordinate clause.

According to Kortmann there are nine temporal relations between the two clauses.

- Simultaneity overlap : when p, q
- Simultaneity duration : while p, q
- Simultaneity co-extensiveness : as long as p, q
- Anteriority : before p, q
- Immediate anteriority : as soon as p, q
- Terminus a quo : since p, q

- Posteriority : after p, q
- Terminus ad quem : until p, q
- Contingency : in cases when p, q, whenever p, q

In the second class of causal and conditional relations, Kortmann divides eleven subclasses.

- Cause/reason : because p, q
- Condition : if p, q
- Negative condition : unless p, q; if not p, q
- Concessive condition : even if p, q
- Concession : although p, q
- Contrast : q, whereas p
- Result : q, so that p
- Purpose : in order to p, q
- Negative Purpose : q in order that not p
- Degree/extent : q, to the extent that/insofar as p
- Exception/restriction : except that p, q; q only that p

In addition to the preceding two classes which are also described by other linguists, Kortmann further divides modal relations. These relations are of six kinds.

- Manner : English does not have an adverbial subordinator indicating this relation. So, Kortmann gives the German 'indem' as an example. Indem p, q
- Similarity : q just as p
- Comment/accord : as p, q
- Comparison : q as if p; q as though p
- Instrument/means : by p, q

- Proportion : the p, the q

Kortmann identifies four other relations as place, substitution, preference and concomitance relations.

- Place : where p, q
- Substitution : instead of p, q
- Preference : rather than p, q
- Concomitance : again, Kortmann gives an example from German to illustrate this relation. Q, wobei p

All of the adverbial subordinators which express the identified meaning relations so far were compiled from a number of languages spoken in Europe (actually forty-nine languages including Turkish). Thus, the total inventories of adverbial subordinators of these languages were reflected.

Adverbial subordinators have three morpho-semantic properties in the languages of Europe.

1. A common noun becomes the complement of an adposition and this formation may be followed by a complementizer or a relativizer. This phenomenon can be formulated as P +NP (COMP/REL). An instance for this formulation would be “on condition (that)”.
2. A demonstrative or a definite article is used as the complement of an adposition and then a complementizer or a relativizer may follow this formation.
P + ART def/dem (COMP/REL). Kortmann gives a Yiddish example to illustrate this formation as “*nokh dem vos*” (afterDEM:DAT:SG COMP ‘after’).
3. Some quantifying expressions can also form adverbial subordinations. In English such a formation as “in as much as” is used as an adverbial subordinator.

Kortmann proposes that European languages can be divided into two as core and periphery languages by considering the syntactic and semantic properties of their adverbial subordinators.

The division of European languages into two as core and periphery languages is grounded on some criteria. These criteria can be summarized as below.

- The word order of core languages is mostly SVO word order, but it is SOV or VSO in periphery languages.
- When the adposition types are considered, it can be said that core languages have prepositions but periphery languages have postpositions.
- The position of adverbial subordinators is clause-initial in core languages but clause-final in periphery languages.
- The position of adverbial clauses is not fixed in core languages. However, their position is fixed in periphery languages.
- Adverbial subordinators operate on finite predicates in core languages, but they operate on nonfinite verb forms in periphery languages. Desententialization (i.e., subordinate clause is dependent on the superordinate clause), integration (i.e., subordinate clause becomes a part of the superordinate clause) and interlacing (i.e., the subordinate clause shares at least some of its TAM and/or agreement markers with the superordinate clause) are common in periphery languages.
- In core languages, the clause-linking process is elaborate. That is to say, the clauses are linked to each other with all of their accessories. On the other hand, periphery languages compress the two forms. Most of the operators of the subordinate clause

are determined by the superordinate clause. So, that clause becomes nominalized or adverbialized.

- The type of adverbial subordinators in core languages is free, but in periphery languages it is bound.
- Core languages incorporate complementizers, interrogative elements, relativizers and adpositions. The reverse is true for periphery languages. Incorporation of quantifying expressions has little importance for both core and periphery languages. The most important device for forming adverbial subordinators in periphery languages is incorporation of nouns and coordinators.

All of the criteria for the distinction of European languages as core and periphery were listed above. Kortmann gives evidence for all of these phenomena and thus verifies his hypothesis about this division of European languages in his article (For a more detailed exploration on adverbial subordinators in European languages, see Kortmann, 1997).

When the above mentioned criteria are considered, it can be said that Turkish is a peripheral language. Although word order is flexible in Turkish, the basic sequence is SOV. Like most of the peripheral languages, Turkish employ postpositions. Unlike core languages, in Turkish, adverbial subordinators (i.e. converbs) are clause-final, the position of adverbial clauses are fixed in Turkish. That is to say, adverbial (converb) clauses mostly precede matrix clauses (yet, converb clauses may also appear in focus and backgrounding positions in a complex sentence, but not as frequently as the topic position). It is seen that converbs operate on nonfinite verb forms in Turkish. They are added on bare verbs, and most of their operators are determined by matrix clause. As a consequence, it is observed that Turkish employs the properties of peripheral languages.

Due to Kortmann's arguments, converbs are not adverbial subordinators, but are some other kind of adverbialization forms. It may be useful, at this point, to touch on Kornfilt's proposals in order to see different kinds of adverbialization forms in Turkish. According to Kornfilt (2001:63-66), adverbialization in Turkish is a phenomenon which is totally realized in nonfinite constructions. Kornfilt identifies four different nonfinite clausal constructions. Argument clauses are the ones which are theta-marked by the matrix clause verb. Modifier clauses are included in participles, whereas complement clauses are a part of adpositional phrases. All of these three constructions are governed by the matrix clause verb, and they are assigned theta-roles. However, adverbial clauses modify the matrix clause verb with or without the use of an adposition and they are neither governed by the matrix clause, nor assigned a theta-role. Thus, as not being complement clauses in the complex sentence, they are optional elements, i.e., they are adjunct clauses in a complex sentence. In addition, adverbialized structures do not carry subject agreement, and generally do not have their own subjects. The subject reference of these embedded clauses are mostly determined according to the matrix clause subject.

Right along with the productive use of converbs in Turkish, their structures and functions in clause-linking are equally complicated. In order to analyze the place of converbs among other verb forms, firstly the clause structure has to be examined properly. According to Erguvanlı Taylan (1988:336), who follows Foley and Van Valin's theory of juncture, the morphosyntactic form of a clause has a layered structure in which the clause consists of a nucleus, a core or a periphery. A nucleus is the innermost layer of the clause which contains the predicate itself. A core consists of the predicate and one or two obligatory arguments of the predicate. A periphery, on the other hand, contains arguments expressing the spatial and/or temporal setting of the event, and any optional arguments in

addition to the predicate. The following figure drawn by Foley and Van Valin (1984) illustrates her discussion.

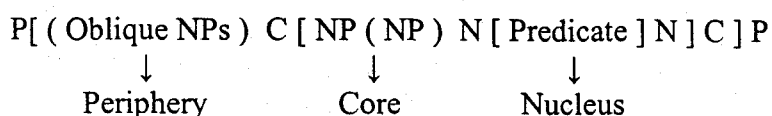


Figure 1 : Layers in a clause (Erguvanlı Taylan, 1988:334)

Erguvanlı Taylan also states that the determining factor of the level of juncture is the scope of operators.

Most of the linguists who analyze clause structure draw attention to some juncture and nexus types in relation to this layered structure. La Polla (2003:1-8) also touches on the layered structure of clauses and nexus types. Figure 2 demonstrates her “Interclausal Relations Hierarchy” (8).

She exemplifies all of these juncture types by considering statements from a number of different languages. It is considered as useful to state one of her examples for each of the relations mentioned above.

Nuclear Cosubordination:Barai

- (1) “Fu fase fi isoe.”
 3S letter sit write
 ‘He sat writing the letter.’

Nuclear Subordination:French

- (2) “Je ferai manger les gâteaux à Jean.”
 1S make.fut eat the cakes to John
 ‘I will make John eat the cakes.’

Nuclear Coordination:English

- (3) “John painted the table red.”

Core Cosubordination:Barai

- (4) “Fu fi fase isoe.”
 3S sit letter write
 ‘He sat (down) and wrote a letter.’

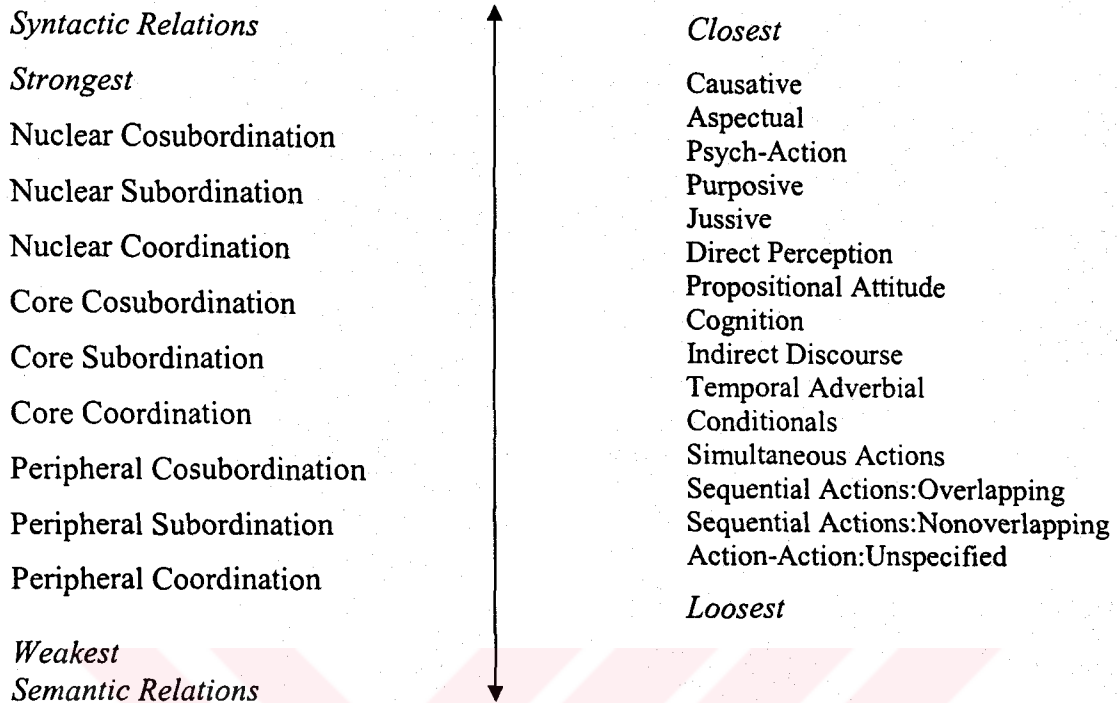


Figure 2 :Interclausal Relations Hierarchy

Core Subordination:Jacalteco

(5) "X-Ø-w-ilwe hin-watx'en kap camixe."
 Pst-3Abs-1SErg 1SErg-make-Suff CL shirt

'I tried to make the shirt.'

Core Coordination:English

(6) "John forced Bill to leave the party."

Peripheral Cosubordination:Kewa

(7) "(Ní) Épo lá-ri épa-wa."
 1S whistle say-Sim.SS come-1SPst

'I came whistling.'

Peripheral Subordination:Kewa

(8) "(Ní) Épo lá-lo-pulu irikaí épa-lia."
 1S whistle say-1SPres-Caus. "dog come-3SFut

'Because I am whistling, the dog will come.'

Peripheral Coordination:Kewa

- (9) “Nípú ípu-la pare ní paalá na-pía.”
 3S come-3SPres but 1S afraid Neg-be.1SPres
 ‘He is coming, but I am not afraid.’

When Erguvanlı Taylan’s and La Polla’s classifications about clause-linkage are taken into consideration, it is observed that Erguvanlı Taylan discusses only about on which level clauses are linked, i.e., whether clauses are linked in nuclear or core or peripheral level (that is to say, in nuclear juncture of clauses, predicates of two or more clauses are linked and form a complex core, which share the operators of core and periphery such as tense, status, evidentials and illocutionary force. In core-level juncture of clauses, two or more cores are linked and share the same peripheral operators like tense and illocutionary force. In peripheral juncture, two or more peripheries are linked by their own peripheral operators, i.e., each clause has its own tense and illocutionary force). On the other hand, La Polla identifies the nexus types other than the juncture types and joins these two phenomena to form nine different clause-linkage types as illustrated in Figure 2.

The nexus types are determined according to two concepts which are termed as *embeddedness* and *dependency*. In order to be regarded as *embedded*, a clause should be a part of the superordinate clause, i.e., it should be an argument of the superordinate clause verb or the two clauses should complete each other. In the meantime, a clause is dependent on the other clause if it is bound to the other clause in terms of temporal reference and subject agreement. Table 1 illustrates these three kinds of nexus types by considering the features of embeddedness and dependency.

The juncture and nexus types which are mentioned and classified by La Polla can be applied to all clause-linking devices in both core and peripheral languages. In

Turkish, also, different types of linking are observed in different layers. Verhoeven (1992:155-158) mentions six different types of clause-linkage that are realized in Turkish.

1. Independent Nexus with Peripheral Juncture: Clauses are conjoined along with their peripheral operators.
2. Independent Nexus with Core Juncture: Two or more cores are linked to each other to form a single core. However, the two cores do not share their operators.
3. Dependent Nexus with Peripheral Juncture: Both of the clauses share each other's peripheral operators but none of them is embedded in the other.
4. Dependent Nexus with Core Juncture: All of the operators are shared by the two cores.
5. Embedded Nexus with Peripheral Juncture: In these constructions, the embedded clause is in the position of a peripheral argument of the matrix clause. There may not be a propositional coreference between the clauses.
6. Embedded Nexus with Core Juncture: The embedded clause behaves like a core argument of the matrix clause. This type of constructions may permit the embedded clause subject to bear genitive case.

When examined in detail, it is observed that clause-linking by the means of converbs is mostly related to the nexus types. As it was stated in the introduction of this study, there is a distinction as coordination and subordination in clause-linking devices. However, it is hard to include converbs in one of these types. So, nexus types necessitates a detailed explanation when Turkish converbs are taken into consideration. Erguvanlı Taylan (1988:336) deals with clause-linkage, and states that a kind of parameter in determining between clause-linkage devices is the nexus relations. Due to Erguvanlı Taylan's observations, there are three types of nexus as coordination, subordination and cosubordination. Table 1 illustrates the features of these three nexus types.

	Coordination	Subordination	Cosubordination
Embedded	-	+	-
Dependent	--	+	+

Table 1 : Nexus types

Other than Erguvanlı Taylan, a great deal of other linguists differentiate between the nexus types of coordination, subordination and cosubordination. Verhoeven (1992:153-154) states that coordinate clauses are independent from each other and conjoined with or without the help of coordinators. He also mentions that dependency and embeddedness among the subordinate and superordinate clauses also differentiate the notions of coordination and subordination. Subordinate structures are embedded, whereas coordinate structures are not. In subordination, embedded clauses modify matrix clauses or the whole complex sentence. Embedded clauses are presented with special kinds of suffixes which are added to embedded clause verb. These embedded clauses are dependent on matrix clauses. In addition to Verhoeven's observations on the nexus types, Haspelmath (1995:25-26) also identifies the concepts of coordination, subordination and cosubordination, and demonstrates the differences among them. As he claims,

Cosubordination is like subordination in that it is structurally asymmetric: there is an independent clause and cosubordinate clause. The subordinate clause can not stand alone as an independent clause and may depend on the independent clause for its tense, mood and subject reference. However, cosubordination is like coordination in that there is no embedding of one clause into the other clause. The cosubordinate clause is not a part of the independent clause.

It is clear that subordination is the most identified nexus type among the other ones. As Erguvanlı Taylan (1988:338) says, when subordination is present between an embedded clause and a matrix clause, the two clauses are both dependent on and embedded in each other. There is also a propositional relationship between them. In

addition, Haspelmath (1995:12-17) determines five essential criteria for a clause to be subordinate clause. These criteria can be listed as,

- i. clause-internal word order
- ii. variable position
- iii. possibility of backwards pronominal anaphora and control
- iv. semantic restrictiveness, hence focusability
- v. possibility of extraction

1. Clause Internal Word Order: Basically, a subordinate clause is embedded in the matrix clause. Subordinate clauses can be placed among the constituents of matrix clauses, i.e., they are not continuous like coordinate clauses. Example (10) illustrates this.

Japanese:

- (10)a. "John wa Mary ni boosi o nui-de aisatu si-ta."
 John TOP Mary DAT hat ACC take off CONV greet do PAST
 'John greeted Mary by taking off his hat.'

In this example, Haspelmath demonstrates that the subordinate clause 'boosi o nuide' (taking off his hat) is placed among the constituents of the superordinate clause 'John wa Mary ni aisatu si-ta.' (John greeted Mary.)

2. Variable Position: Subordinate clauses may precede or follow superordinate clauses without a change in their meaning. However, in coordination there is "tense iconicity" (Haspelmath, 1995:14). That is to say, the event in the preceding clause occurs earlier than the event in the following clause. Thus, a change of place creates differences in meaning. As the sentences below demonstrate, there is not any meaning difference when the place of the subordinate clause is changed in the sentence.

Russian:

- (11) a. “Vernuvšis’ domoj, Xévgun načal novuju žizn’.
 returnPFVCONV home Khevgun began new life
 ‘Having returned home, Khevgun began a new life.’
- b. “Xévgun načal novuju žizn’, vernuvšis’ domoj.”
 Khevgun began new life returnPFVCONV home
 ‘Khevgun began a new life (after) returning home.’

3. Possibility of Cataphora: When compared to coordinate clauses, it is seen that only subordinate clauses can have pronominal cataphora. Since a cataphoric pronoun must be commanded by its antecedent, backwards control becomes impossible in coordinate clauses.

English:

- (12)a. “Talking to him, she solved all of Pedro’s problems.”

Haspelmath states that converb constructions like the one above have “referential control of the implicit converb subject”. The following sentence is again given in order to exemplify backwards pronominal control which is a property of subordination.

Udmurt:

- (13) “PRO_i Tulys šundy-ly šumpoty-sa, bydes ludvyl_i serekja.”
 spring sunDAT rejoiceCONV whole field laugh(PRES3S)
 ‘Rejoicing over the spring sun, the whole field is laughing.’

In this Udmurt sentence the empty element PRO is co-indexed with the subject of the matrix clause. It is clear that the implicit subject of the subordinate clause is controlled by the subject of the superordinate clause, and there is backwards pronominal anaphora and control in the subordinate clause.

4. Restrictiveness and Focusability: Only subordinate clauses can restrict the meaning of matrix clauses. Coordinate clauses do not have such a function. Thus, while subordinate clauses are focusable, coordinate clauses are not.

Kumyk:

(14)a. “Onu görüp mü, sen beri bağıp gelegening?
heACC seeCONV Q you there lookCONV goFUT2S

‘Are you going in that direction after seeing him?’

5. Possibility of Extraction: Although subordinate clauses can be omitted from the sentence in which they are embedded, coordinate clauses do not allow omission.

English:

(15) “Alexis sold his car and bought a bicycle.”

- a. * “What did Alexis sell his car and buy?” (Coordination)
- b. “What did Alexis buy, having sold his car?” (Subordination)
- c. “What, having sold his car, did Alexis buy?” (Converbal Construction)

Example (15)a displays that coordinate clauses can not undergo extraction, but as it is seen in example (15)b and c, converbal constructions like other subordinate clauses constructed with adverbial subordinators, can have the possibility of extraction.

Turkish converb clauses meet the criteria mentioned above. The complex sentences below are formed with converbs, and it is observed in these sentences that converb clauses in Turkish are subordinate clauses.

(10)b. John Mary’i [şapkasını çıkararak] selamladı.

‘John greeted Mary by taking off his hat.’

(11)c. [Evine döndükten sonra] Khevgun yeni bir hayata başladı.

‘Having returned home, Khevgun began a new life.’

d. Khevgun yeni bir hayata başladı [evine döndükten sonra].

‘Khevgun began a new life (after) returning home.’

(12)b. [Onunla konuşarak] Pedro’nun bütün sorunlarını çözdü.

‘Talking to him, she solved all of Pedro’s problems.’

(14)b. [Onu gördükten sonra] mı sen oraya gidiyorsun?

‘Are you going in that direction after seeing him?’

(15)d. Alexis ne aldı [arabasını sattıktan sonra]?

‘What did Alexis buy, having sold his car?’

Toratani (2003:18) excludes cosubordination from coordination and subordination by stating that “the distinguishing feature of cosubordination is operator-sharing.” Erguvanlı Taylan (1988:337-338) observes the realization of nexus types in Turkish and points out the distinctive features of cosubordination from subordination. She mentions that nominal inflectional endings (such as case endings, possessives and postpositions) characterize subordinate nexus, but single bound forms (such as -(I)p, -ken, and -ArAk) characterize cosubordinate nexus, and converbs can be included into the nexus type of cosubordination. However, other studies on converbs as a kind of verb form include converbs in the category of subordination (see Figure 3). Haspelmath (1995:3-10) reports that the term of ‘converb’ was first proposed by Nedjalkov and Nedjalkov (1987). He defines converb as “a nonfinite verb form whose main function is to mark adverbial subordination.” According to Haspelmath, converbs are not such forms generated from a verb plus a complementizer. They inherently have the property of creating adverbial clauses and thus, they are included in the paradigm of inflection, not in the paradigm of derivation. On the other hand, in Koç’s (1990:22) view, contrary to the nominalization processes, in adverbialization, the converb clauses are not embedded in the matrix clause. So, converbs seem to be included into the cosubordinate nexus type.

Haspelmath (1995:12-17), while stating the criteria for assuming a certain kind of construction as subordination, points out that converbs also meet these criteria and thus, should be regarded as subordinate constructions.

Just like converbs, medial verbs can not constitute independent sentences and they are dependent on the superordinate clause in terms of their mood, tense and subject agreement. However, medial verbs are, as differentiated from converbs, are cosubordinate.

Haspelmath differentiates 'medial verbs' as the

verb forms which can not be used in isolated independent sentences but have to be used together with another verb (the controlling verb) on which they depend in that they share (at least) the mood and tense of the controlling verb, and in that the reference of their subject is often determined by the controlling verb. The notion of medial verb has especially been used in Papuan languages, whose basic word order is almost universally verb-final, so that the controlling verb is the final verb and the medial verb comes between its own dependents and the controlling verb.

Haspelmath (1995:24-25) states that, medial verbs do not meet three of the criteria necessary for being in the category of subordination. The following examples illustrate this issue.

Amele:

(16) "Dana age ho qo-qa-gan nu ho-i-ga."
 man they [pick kill-3PL-FUT PURP] come-3PL-HOD

'The men came to kill the pig.'

According to Haspelmath, subordinate adverbial clauses like converbs can occur at the clause-internal position. Yet, medial verbs can not appear among the immediate constituents of the superordinate clause. Consider the example below.

Amele:

(17) * "Dana age ho busale-ce-b qo-i-ga."
 man they pig run.out-MED.DS-3SG kill-3PL-HOD

'The men, the pig having run out, killed it.'

Medial verbs, unlike converbs, can not be in the clause-final position.

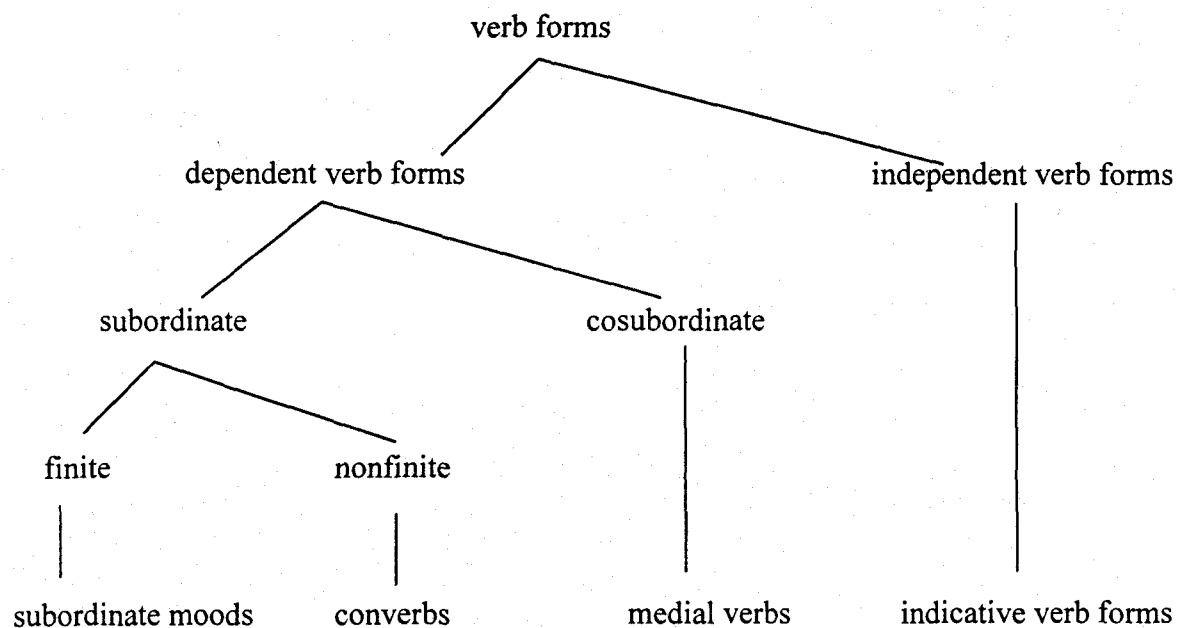


Figure 3 :The classification of verb forms (Haspelmath, 1995:26)

Amele:

(18) "Uqa sab man-igi-an i ja ja hud-ig-en fi."
 she food roast-3SG-FUT [I fire open-3Sg-FUT if]
 'She will cook the food if I light the fire.'

(19) * "Dana age qo-i-ga ho busale-ce-b."
 man they kill-3PL-HOD pig run.out-MED.DS-3SG
 'The men killed it, the pig having run out.'

Example (18) demonstrates the subordinate clause in the clause-final position.

However, the clausal construction formed by a medial verb can not appear in clause-final position as it is demonstrated in example (19).

Cataphoric pronouns which are c-commanded by the superordinate clause constituents can appear only in subordinate clauses such as the ones constructed by converbs. Medial verb constructions can not have cataphoric pronouns. This phenomenon, again, demonstrates that medial verb clauses are cosubordinate.

Amele:

- (20) “(Uqa)_i sab j-igi-an nu Fred_i ho-i-a.”
 [he food eat-3SG-FUT PURP] Fred come-3SG-HOD
 ‘While he sat, Fred ate.’

By considering Haspelmath’s discussion about the different types of nexus, as coordination, subordination and cosubordination, it can be concluded that converb clauses are constructions which have the features of [+] embedded and [+] dependent and thus, can be regarded as forms of adverbial subordination.

Bisang (1995:139-141) concerns himself with the phenomenon of verb serialization and attempts to draw the similarities and differences between this type of constructions and converbs. Due to his claims, autonomous predications which can be considered as full sentences by themselves can follow each other and form a more complex construction.

(NP) V (NP) V (NP) V (NP) V ...

Figure 4 :A verb serialization construction (Bisang,1995:139)

On the other hand, converbs can not construct independent sentences by themselves. They are restricted in means of agreement, TAM markers and voice.

Linguists classify Turkish converbs in terms of their syntactic structures. Due to Johanson’s (1995:313-315) description, converb clauses are a kind of nonfinite elements which can be placed structurally in the matrix clauses. He proposes four different kinds of linking in four layers among converb and matrix clauses.

1. Both converb and matrix clauses have their own subjects.

- (21) “Ali gelince Osman şaşırđı.”
 ‘When Ali came Osman was surprised.’

2. The two clauses are dependent on each other. So, they share the same subject.

(22) “Ali gelince şaşırđı.”

‘Ali was surprised when he came.’

3. The two clauses form a verb phrase with a single subject.

(23) “alıp gel-”

‘take and come’

Nothing can be added among the converb and matrix clauses in this kind of constructions.

The two events are joined to form a single event and thus, the complex construction is lexicalized.

4. The matrix clause behaves like a periphrastic element. It is observed that converbs employ aspectual properties in such forms.

Kirghiz:

(24) “Oqup turdu.”
readCONV standTRMPAST3S

‘He kept reading.’

On the other hand, when their functions in conjoined sentences are examined, different classifications emerge. Nedjalkov (1995:98-99) claims that converbs consist of three main categories as “converbs proper” (exemplified by sentence 25) which are used basically as adverbials in the sentence, “coordinative converbs” (exemplified by sentence 26) which function as a secondary or a coordinative verb in the sentence and “conjunctive converbs” (exemplified by sentence 27) which function as subordinating conjunctions. In this kind of constructions, the converb clause has its own subject. Converbs proper are going to be the main matter of concern in this study. The converbs with adverbial functions and temporal meaning relationships are going to be investigated according to their syntactic and semantic realizations in Turkish clause-linkage.

Bashkir:

(25) “Apak zur paroxod sajkalyp jözop bara.” (Nedjalkov, 1995:98)
 very white big steamer rockCONV floatCONV goPRES

‘The big white steamer floats, rocking to and fro.’

Turkmenian:

(26) “Ol gapa jakynlaşyp gapany dyrkyldatyp, gupun deşeginden seredip, bir iki minut
 he door approachCONV doorACC knockCONV lockGEN holeABL lookCONV one two minute
 xaç zatsyz gitdi.
 nothing without go awayPAST

‘He appraoached to the door, knocked the door, looked from the hole of the lock, stood for one or two minutes and (then) went without doing anything.

Bashkir:

(27) “Ul qapqany şyğyrdatyn asyp ingänse, Salix dudğalmaj baθyp torzo.”
 he gateACC creakCONV openCONV go in CONV Salix moveCONV pressCONV standPAST

‘Until he went inside, opening the gate with a creak, Salix stood motionless.’

II. METHODOLOGY

The naturally occurring data is mostly collected from conversations or written texts (especially for the studies which analyze sentence structure rather than lexicon). In order to demonstrate the data which is going to be used in this study, it is considered to be useful to state the data collection procedure and the representation of the data.

II.1. Data Collection Procedure

Some Turkish written texts were scanned in order to provide a data base for this study. The texts were chosen from the Turkish literature and media. Nine different literary works were scanned, and sentences which constitute appropriate examples for the study were noted down. These works include *Doğum/Limon/Yalnızlığın Oyuncakları/Kadın İstasyonu* by Memet Baydur, *Sinekli Bakkal* by Halide Edip Adıvar, *İsmet İnönü'nün Anıları*. *Lozan Antlaşması I* by İsmet İnönü, *Dede Korkut Kitabı* by Muharrem Ergin, *Yıl:2046 Uzay Anıları "Gelecek Zaman Masalı"* by Aydın Boysan, *Başka Karşılaşmalar* by Adalet Ağaoğlu, *Pijamalılar (Bizim Koşuş)* by Rifat Ilgaz, *Eski Fotoğraflar/Gül Satardı Melek Hanım/Kâtip Çıkmazı/Maviydi Bisikletim* by Dinçer Sümer and *Toplu Oyunlar* by Adalet Ağaoğlu. In addition to the literary works, a part of the data was also formed by daily electronic newspaper articles. Along the dates of 28.01.2003 and 17.04.2003, two hundred and fifty articles from the electronic newspapers of Milliyet, Sabah, Hürriyet, Akşam, Radikal, Güneş and Vatan were scanned. The relevant samples of these downloads were noted down. The total number of the sentences to be analyzed in this study is seven hundred and eighty four.

II.2.Representation of the Data

All of the examples examined in this study are going to be given a number enclosed in parenthesis. Because a great deal of examples will be examined in the study, the numbers will begin from (1) in each section of the study in order to facilitate reading. To prevent misunderstanding, the sample statements which are quoted from the studies of other linguists are going to be given in quotation marks.



III. SYNTACTIC REALIZATIONS OF TURKISH TEMPORAL CONVERBS

In this section, the syntactic realizations of temporal converbs in Turkish are going to be examined in detail in terms of their co-occurrences with tense, aspect and modality (TAM), negation and subject agreement markers; co-occurrences of these temporal converbs with passive and causative verbs and with bare verbs.

First of all, an investigation of the internal structures of temporal converbs should be made by referring to the descriptions of Turkish temporal converbs made by descriptive linguists (Johanson, 1995; Haspelmath, 1995; Erguvanlı Taylan, 1993; Kortmann, 1998). According to Johanson (1995: 316), some converbs can not be analyzed in terms of their morphology (i.e., they are simple converbs). Yet, some of them are formed by the use of the nominalizers *-DIK* and *-mA* together with the adpositions like *sonra*, *önce* and *beri*. In the light of this explanation, it is observed that converbs such as *-Inca* and *-ArAk* can not be broken into meaningful subparts. On the other hand, converbs such as *-DIğIndA* and *-DIktAn sonra* can be analyzed in their subparts as *nominalizer + case marker (+ postposition)*. As Haspelmath (1995:17) points out,

Converbs seem to arise from two main types of sources: (a) adpositional or case forms of masdars/verbal nouns which have become independent from their original paradigm; and (b) (Co-predicative) participles (...) which lost their capability for agreement. The first type is much more common, but the second type is well known from some European languages.

Erguvanlı Taylan's (1993:164-165) observations can be said to exemplify Haspelmath's explanation. As she mentions, converb clauses are formed by either simple bound converbs

such as *-(I)p*, *-ArAk* and *-Inca* or nominalizers such as *-DIK* and *-mA* plus postpositions. Among these postpositions, *sonra* (after) follows *-DIK* and *önce* (before) follows *-mA*.

Therefore, the temporal converbs can be divided into two as simple bound converbs and converbs originated from nominalizers plus case endings (plus postpositions) considering the above explanations and the relevant evidence obtained from the sentences below.

- (1) [Oğlanı al-ı**p**] babasına vardı.
 boyACC takeCONV fatherPOSS3SDAT arrivePST3S
 ‘Having taken the boy with her/him, s/he came to his father.’
- (2) [Savaş çık-**ınca**] Almanya’ya geri dönmek istiyorlar.
 war beginCONV GermanyDAT back returnINF wantPREPROG3P
 ‘When the war begins, they want to return to Germany.’
- (3) [Evden gel-**eli**] sadece bir gece oldu değil mi?
 houseABL comeCONV only one night bePST3S not INT
 ‘It has been only a night since I/we/she/... came from home, hasn’t it?’
- (4) Sevda [o bildik şarkıyı mırıldan-**arak**] örgü örüyordu.
 Sevda that well-known songACC murmurCONV knitPRESPROGPST3S
 ‘Murmuring that well-known song, Sevda was knitting.’
- (5) [Gün doğar-**ken**] geldim.
 day riseAORCONV comePst1S
 ‘I came here while the sun was rising.’
- (6) Tevfik, [tırabzanlara tutun-**a** tutun-**a**] kendini üç kat merdivenlerden zorla yukarıya sürükledi.
 Tevfik stair railPLUDAT hold onCONV hold on CONV himself three floor stairPLUABL
 difficultINS upDAT dragPST3S
 ‘Holding on to the stair rails, Tevfik dragged himself up to three floors from the stairs with difficulty.’
- (7) [Yerime dön-**er** dön-**mez**] yorgunluktan gözlerim kapanıverdi.
 placePOSS1SDAT returnCONV returnCONV wearinessABL eyePLUPOSS1S closegiveAUXPST3S
 ‘As soon as I returned to my place, my eyes closed from weariness.’

All of the simple bound converbs represented above can not be subdivided morphologically. However, the two temporal converbs, *-(I)r ... -mAz* and *-A... -A* are

basically consisted of reduplications, i.e., the converb clause verb which is added to these converbs is copied. It can be hypothesized that the manner relation of *-A...-A*, which is observed as being superior to its temporal relation, requires such a reduplicated form of the predicate. The manner of the action mentioned by the converb clause is reinforced by reduplication. The same hypothesis is valid for *-(I)r ...-mAz*. The temporal meaning relationship (i.e. immediate precedence of the converb clause event) conveyed by this converb is reinforced by its reduplicated form.

After touching on the syntactic structures of simple bound converbs, the second type of converbs constructed by the nominalized structures are going to be dealt with.

- (8) [Işıklar yan-**dığ**-**m**-**da**] resepsiyonda kimse yoktur.
lightPLU be onNOMPOSS3S reception deskLOC nobody nonexistentCOP
'There is nobody at the reception desk when the lights are on.'
- (9) [Balık ağa gir-**dik**-**ten** sonra] aklı başına gelir.
fish netDAT enterNOMABL after mindPOSS3S headPOSS3SDAT comeAOR3S
'A fish comes to its senses after it is trapped in the net.'
- (10) [Sen eve gel-**diğ**-**in** zaman] yürüyüşe çıkacağım.
you house comeNOMPOSS2S walkNOMDAT go outFUT1S
'I will go out for a walk when you come home.'
- (11) [Yeni kanun çık-**tığ**-**m**-**dan** beri] herkes ağır vergiler veriyor.
new law enactNOMPOSS3SABL since everybody heavy taxPLU givePRESPROG3S
'Everybody is paying heavy taxes since the new law has been enacted.'
- (12) Bağırır, [bağır-**dık**-**ça**] yüzü kızarır, gözleri büyür, boyun damarları atar.
yellAOR3S yellNOMDER facePOSS3S blushAOR3S eyePLUPOSS3S widenAOR3S neck vesselPLUPOSS3S beatAOR3S
'S/he yells, as s/he yells, her/his face blushes, eyes widens, vessels in her/his neck beats.'
- (13) ..., [oğlun seni öldür-**me**-**den**] sen oğlunu öldürmeğe bak dediler.
sonPOSS2S youACC killCONV you sonPOSS2S killNOMDAT look sayPST3P
'..., they said "try to kill your son before he kills you."'

It is observed in examples (8)-(13) that the basic structure of the converb clause verb is formed by a nominalizer, a possessive marker, a case marker and a postposition as it is in *-DIktAn sonra*, *-DIđI zaman*, *-DIđIndAn beri* and *-mAdAn önce* ('önce' can be omitted from the converb clauses which are constructed with this converb). In addition, there are some other converbs that consists of a nominalizer, a possessive marker and a case marker without necessitating the use of a particular postposition as it is in the case of *-DIđIndA*. The last construction is obtained by the co-occurrence of a nominalizer with the derivational suffix *-CA* as it is seen in *-DIkçA*. In considering the syntactic properties of Turkish temporal converbs, it should be noted that *-DIđI zaman*, *-DIđIndAn beri* and *-DIđIndA* bear subject agreement on themselves. However, converbs are supposed to be non-finite in Turkish, i.e., converb clauses do not have tense, aspect or subject agreement. Converb clauses obtain their temporal meaning and (sometimes) subject references from the matrix clause operators. According to Johanson's (1995:313-315) conclusions, converb clauses are nonfinite and "the converb segments, minimally consisting of a verb-form, but expandable to full-fledged clauses, are provided with suffixed subjunctors, used much like subordinative conjunctions in European languages." Kortmann (1998:461) states that the verbal forms which have finite structures are termed as *adverbial subordinators* and which have nonfinite structures are termed as *converbs*. So, considering Kortmann's classification, it is reasonable to assume that temporal converb constructions which are formed by nominalizers are adverbial subordinators. However, it should not be forgotten that these constructions do not bear tense and aspect markers. They are marked only for subject agreement. In this respect, there is not a clear-cut way for determining to which category these constructions belong. In this study, Erguvanlı Taylan's identifications and classifications for converbs are adapted. That is to say,

converbs which can not be analyzed in terms of their morphological structure are going to be referred to as *simple bound converbs* and the other converbs which can be analyzed morphologically are going to be referred to as *constructions formed by nominalizers*. Both of these forms are regarded as temporal converbs.

III.1. Co-occurrences of Turkish Temporal Converbs with Bare Verbs and with Passive and Causative Constructions

Having examined the morphological structures of temporal converbs in Turkish, the co-occurrences of these converbs with sentence operators are going to be analyzed. The following sample sentences display detailed information about the realizations of these converbs with bare roots of verbs and on passivized and causativized verbs, and with negation, modality and subject agreement markers. First of all, the realizations of Turkish temporal converbs on bare verbs, and passive and causative constructions are going to be discussed.

- (1) Ben biraz [çık-ıp] yürüyeceğim.
I a bit go outCONV walkFUT1S
'I will go out and walk for a while.'
- (2) [Kapıyı kapat-ıp] paketi yere bırakır.
doorACC closeCONV packetACC floorDAT leaveAOR3S
'S/he closes the door and puts the packet on the floor.'
- (3) [Bugüne kadar harcamalar tespit ed-il-ip] gelir ihtiyacı bulundu.
todayDAT until expensePLU fixPASSCONV income needPOSS3S findPASSPST3S
'The income need was detected by fixing the expenses until today.'
- (4) [Söz ve müziğimi yaz-dır-ıp] yeniden gidiyorlar.
word and tunePOSS1SACC writeCAUSCONV again goPROG3P
'They have my words and tune written and go again.'

It is clear from examples (1)-(4) that the temporal converb *-(I)p* can be attached to bare verbs and passive and causative forms of verbs. As well as bare verbs like *çık-* (to go out) and *kapat-* (to close), the verbs which take the voice suffixes *-II* and *-DIR* may have this converb to express a temporal meaning in relation with the matrix clause.

- (5) [Rabia'yı gör-**ünce**], mezardan kalkan bir ölü gibi minderden fırladı.
 RabiaACC seeCONV graveABL raiseCOMPone dead like cushionABL jump outPST3S
 'When s/he saw Rabia, s/he jumped from the cushion like a dead raised from the grave.'
- (6) [Fikir gid-**ince**] insan da kağıt gibi cansız, manasız oluyor.
 thought goCONV human PART paper like lifeless senseless bePROG3S
 'When thought is absent, a humanbeing also becomes lifeless and senseless like a blank paper.'
- (7) [İlk toplantı aç-**ıl-ınca**], bu nizamnamenin kabulü görüşüldü.
 first assembly openPASSCONV this regulationGEN acceptancePOO3S discussPASSPST3S
 'When the first assembly opened, the acceptance of this regulation was discussed.'
- (8) [Adama son imzayı da at-tır-**ınca**] rahat bir nefes aldı.
 manDAT last signatureACC PART signCAUSCONV comfort one breath takePST3S
 'When s/he made the man sign the last signature, s/he felt at ease.'

Examples (5)-(8) demonstrate that the converb clause verb which is followed by *-Inca* can be both bare and inflected by voice.

- (9) Koca bir tabur [marş söyle-**yerek**] yürüyordu.
 big one battalion march singCONV walkPROGPST3S
 'A huge battalion was walking, singing a march.'
- (10) Adam [ıslık çal-**arak**] önündeki salatalık malzemeyi doğruyordu.
 man whistleCONV in frontPOSS3SPART saladDER stuffACC cutPROGPST3S
 'The man was cutting the material for making salad, whistling.'
- (11) Kadınlar matinesi [gündelik dedikodular yap-**ıl-arak**] sürüyordu.
 womanPLU matinéeACC daily gossipPLU doPASSCONV continuePROGPST3S
 'The matinée for women continued, while the daily gossips were being whispered.'

- (12) Komutan [askerlere en güzel marşları söyle-t-erek] uygun adım yürüyor.
commander soldierPLUDAT most beautiful marchPLUACC singCAUSCONV appropriate step walkPROG3S

'The commander is marching, making soldiers sing the most beautiful marches.'

-*ArAk* also follows bare roots of verbs and passivized and causativized verbs.

In examples (9) and (12), bare verbs *söyle-* (to sing) and *çal-* (to play), and in examples (11) and (12), the passive and causative verbs *yapıl-* (to be made) and *söylet-* (to make somebody sing) are followed by this converb.

- (13) [Manastırdan kaç-alı], [Papa'nın aforozuna uğra-yalı] on beş yıl oluyor...
monasteryABL escapeCONV PopeGEN excommunicationDAT exposeCONV fifteen year bePROG3S

'It has been fifteen years since I escaped from the monastery and since I am exposed to the excommunication of Pope.'

- (14) [Evden gel-eli] sadece bir gece oldu değil mi?
houseABL comeCONV only one night bePST3S NEG INT

'It has been only a night since I came from home, hasn't it?'

- (15) [Anlaşma yap-ıl-alı] bayağı oldu.
agreement doPASSCONV long time bePST3S

'It has been a long time since the agreement is realized.'

- (16) [Evi temizle-t-eli] on beş gün oluyor.
houseACC cleanCAUSCONV fifteen day bePROG3S

'It has been fifteen days since I have my house cleaned.'

It is seen in examples (13)-(16) that the use of *-All* with bare, passivized and causativized verbs form grammatical sentences.

- (17) [Bir ayağını sürü-ye sürü-ye] geçti yatağına.
one footPOSS3SACC dragCONV dragCONV passPST3S bedPOSS3SDAT

'S/he went to her/his bed, dragging one of her/his feet.'

- (18) Beyrek kalktı, [ağla-ya ağla-ya] kırk yiğidin yanına geldi.
Beyrek get upPST3S cryCONV cryCONV forty heroGEN sidePOSS3P comePST3S

'Beyrek got up, came beside the forty heroes, crying.'

- (19) Belki de [çok kullan-ıl-a kullan-ıl-a] aşınmış sözcükleri, deyişleri
 maybe PART a lot usePASSCONV usePASSCONV erodeCOMP wordPLUACC aphorismPLUACC
 sadece kodlayacağız.
 only encodeFUTIP

‘Maybe we will only encode the words, the aphorisms which are eroded by being used a lot.’

- (20) Komutan askerleri [marş söyle-t-e söyle-t-e] yürütüyordu.
 commander soldierPLUACC march singCAUSCONV singCUSCONV walkCAUSPROGPST3S

‘The commander was making soldiers walk, singing a march.’

The converb *-A...-A* which has a reduplicated structure and conveys both temporal and manner relationships and it can be added on bare, passivized and causativized verbs. However, it is observed that this converb mostly has manner reading in all of the constructions. In example (19), the use of this converb with the passive verb creates a sense of *cause and effect* relationship of a certain state of affairs. In (19), the reason of the erosion of clichés is stated as their repetitive use. That is to say, the converb clause is given as the result of the matrix clause. Consider the example below.

- (21) ABD ile yapılan bütün görüşmeler, bütün dolar pazarlıkları, [gerek Türk
 USA with doPASSCOMP all meetingPLU all dollar bargainPLUACC both Turkish
 gerekse yabancı medyada yaz-ıl-a söyle-n-e] kevgire dönmedi mi?
 and foreign mediaLOC writePASSCONV sayPASSCONV sieveDAT turnNEGPST3S INT

‘Did not all of the meetings done with USA and all of the bargains on dollar transform into a sieve-like situation, by having been written and spoken in both Turkish and foreign media.’

In this example, again, the converb clause event is given as the cause of the matrix clause event. The recent situation of the meetings is created by the continuous scrutiny of local and foreign media. It is observed in example (21) that *-A...-A* conveys a cause and effect relationship between the subordinate and the superordinate clauses when it is used in passive constructions. Just like in example (19), the converb clause proposition is given as the reason of the occurrence of the matrix clause proposition.

- (22) [Duy-**ar** duy-**maz**] kim cevap verecek diye sordum.
hearCONV hearCONV who answer giveFUT3S COMP askPST1S
'As soon as I heard about it, I asked who will answer.'
- (23) [Uyan-**ır** uyan-**maz**] ağızda sıcak sıcak birşeyler sezdim.
wake upCONV wake upCONV mouthPOSS1SLOC hot hot somethingPLU feelPST1S
'I felt something warm in my mouth as soon as I woke up.'
- (24) ..., [sulh anlaşması imza ed-il-ir ed-il-mez] İstanbul'un müttefik
peace pact signature doPASSCONV doPASSCONV İstanbulGEN allied
kuvvetlerden ve idaresinden tahliyesi aramızda konuşuldu.
forcePLUABL and administrationPOSS3P releasingPOSS3S amongPOSS1PLOC talkPASSPST3S
'As soon as the pact of peace was signed, the releasing of Istanbul from the allied forces and from their administration was discussed among us.'
- (25) [Badanayı yap-tır-ır yap-tır-**maz**] yeni evime taşınacağım.
whitewashACC doCAUSCONV doCAUSCONV new housePOSS1SDAT moveFUT1S
'As soon as I have the whitewash finished, I will move to my new house.'

In examples (22)-(25), it is observed that the co-occurrence of *-(I)r...-mAz* is acceptable both with bare verbs and with verbs which are inflected by voice.

- (26) O gün içerdeydi, [sen kapıya dayan-**dığında**].
that day inPST3S you doorDAT arriveCONV2S
'S/he was in that day, when you arrived at the door.'
- (27) [Haftasonu gel-**diğinde**] de kraliçe ben olacağım.
weekend comeCONV3S PART queen I beFUT1S
'When the weekend comes, I will be the queen.'
- (28) [Yukarıdan bak-ıl-**dığında**] ise bu çatıda, yapay malzeme
upABL lookPASSCONV 3S COMP this roofLOC superficial stuff
görülüyordu.
seePASSNEGPROGPST3S
'No superficial stuff was seen in this roof when it is examined from above.'
- (29) [Ali'yi ameliyat et-tir-**diklerinde**] çok gençti.
AliACC operation doCAUSCONV3P too youngPST3S
'Ali was very young when they made him get the operation.'

-Diğİnda can be used with bare, causativized and passivized verbs. Its co-occurrence with these constructions do not make any restrictions on its temporal meaning or on its morphological structure.

- (30) [Yaşlan-**dıkça**] yumuşuyor tavırlarım ne yapayım.
get olderCONV be softPROG3P attitudePLUPOSS1S what doMOD1S
'My attitudes are getting softer as I am getting older, what am I to do?'
- (31) Ancak [bu tarihler yaklaş-**tıkça**] Türkiye üzerindeki baskının artabileceği
but these datePLU approachCONV Turkey onLOCCOMP pressureGEN increaseMODFUT3S
anlaşıyor.
understandPASSPROG3S
'But as these dates are approaching, it becomes clear that the pressure on Turkey may increase.'
- (32) [Fikirler değiştir-il-**dikçe**] herşey daha çok çıkmaza sürükleniyordu.
ideaPLU changePASSCONV everything more lot dilemmaDAT driftPROGPST3S
'Everything was drifting into a dilemma as ideas were changed.'
- (33) Bu adam [işlerini başkalarına yap-tır-**dıkça**] tembelleşiyor.
this man dutyPLUPOSS3SACC otherPLUDAT doCAUSCONV be lazyPROG3S
'This man becomes lazier as he makes others do his duties.'

As examples (30)-(33) demonstrate, it is not ungrammatical to use *-Dikça* on bare, passivized and causativized verbs.

- (34) Cemil diyordum, [intihar et-**meden önce**] bana birşey söylemişti.
Cemil sayPROGPST1S suicide commitCONV IDAT something sayPERFPST3S
'I said that Cemil, he told me something before committing suicide.'
- (35) [Duasını al-**madan**] gidemem.
prayerPOSS1SSACC takeCONV goMOD1S
'I can not go before taking her/his good wishes.'
- (36) [Mutfak dolapları yap-ıl-**madan önce**] burası çok kötüydü.
kitchen cupboardPLUACC doPASSCONV here too badPST1S
'This place was looking very bad before cupboards in the kitchen were fixed.'
- (37) [Mutfak dolaplarını yap-tır-**madan önce**] bir iç mimarla anlaştım.
kitchen cupboardPLUACC doPASSCONV one decoratorINST agreePST1S
'I agreed with a decorator before having the cupboards in the kitchen fixed.'

Both bare roots of verbs and passive and causative constructions may be followed by *-mAdAn önce*.

- (38) Bu haberi Emine, [babasının evine dön-**dükten sonra**] aldı.
this newACC Emine fatherPOSS3SGEN housePOSS3SDAT returnCONV takePST3S
'Emine heard about this new after she returned to her father's house.'

- (39) [Kartı oku-**duktan sonra**] yüzüne yapma bir gülümseme yayıldı.
 cardACC readCONV facePOSS3SDAT superficial one smile spreadPST3S
 'A superficial smile spreaded to her/his face after he read the card.'
- (40) Ben [Hariciye Vekili seç-il-**dikten sonra**], bu temasların devamı
 I foreign affairs minister electPASSCONV these contactPLUGEN continuationPOSS3S
 olarak Rus Büyükelçisi ile görüştim.
 as Russian ambassador with meetPST1S
 'I met with the Russian Ambassador as the continuation of these contacts after
 being elected as the Minister of Foreign Affairs.'
- (41) [Arabayı da yıka-t-**tıktan sonra**] keyifle yola çıkabilirim.
 carACC PART washCAUSCONV comfortINST roadDAT leaveMOD1S
 'I can leave with comfort after having the car washed.'

It is understood from examples (38)-(41) that the converb *-DiktAn sonra* is also used with the passive and causative constructions as well as it is used with bare roots of verbs.

- (42) [Buradan git-**tiğinden beri**] her yer çok sessiz.
 hereABL goCONV2S every place very silent
 'Everywhere is very silent since you have gone from here.'
- (43) [Ayşe bana hakaret et-**tiğinden beri**] onunla konuşmuyorum.
 Ayşe IDAT insult doCONV3S sheINST speakNEGPROG1S
 'I am not talking to Ayşe since she has insulted me.'
- (44) [Barış anlaşması yap-ıl-**dığından beri**] barış ve huzur içinde yaşıyoruz.
 peace pactACC doPASSCONV3S peace and quiet inLOC livePROG1P
 'We are living in peace and quiet since the pact of peace has signed.'
- (45) [Müdür bey okulumuzun çatısını yap-tır-**dığından beri**] yağmurlu
 manager mister schoolPOSS1PGEN roofPOSS3SACC doCAUSCONV3S rainy
 havalarda rahat ediyoruz.
 weatherPLULOC comfort doPROG1P
 'We feel at ease in rainy weather since the manager have had the roof of our
 school fixed.'

-Diğİndan beri can also follow bare roots of verbs and passive and causative constructions as it is seen in examples (42)-(45).

- (46) [Okula gel-**diği zaman**] tam bir bayram havası yaşandı.
 schoolDAT comeCONV3S exactly one festival atmosphere livePASSPST3S
 'There was exactly an atmosphere of a festival when s/he came to school.'

- (47) [Yemek piş-tiği zaman] herkesi sofraya buyur ettim.
 meal cookCONV3S everybodyACC dinner table show inPSTIS
 ‘I showed in everybody to the dinner table when the meal was cooked.’
- (48) [Sınav yap-ıl-dığı zaman] bütün okul insan dolmuştu.
 examination doPASSCONV3S whole school human fillPERFPST3S
 ‘The school was full of people when the examination was done.’
- (49) [Zeytinleri topla-t-tığımız zaman] komisyoncular geldi.
 olivePLUACC pickCAUSCONVIP commission agentPLU comePST3P
 ‘The commission agents came when we had the olives picked.’

The converb *-DIĞI zaman* can be used in passive and causative constructions and with bare roots of verbs.

With one exception, all of the temporal converbs, as observed in examples (1)-(49), are added on bare verbs and passive and causative constructions. Only the temporal converb *-ken* constitutes an exception to this generalization in that it can not be attached to bare roots of verbs. The interesting thing about this converb is that it necessitates tense-aspect markers before itself on the converb clause verb. If the etymology of this converb is examined, it is seen that *-ken* was attached only on nominal constructions in the form of *-kän*. It was only used with the auxiliary verb *är-* (to be) (Gabain, 2000:87).

- (50) “Anası idiz alıta yatıp uđıyur rn, tl tşdi.”

‘Annesi yksek kulede yatıp uyurken, dş grd.’

‘Her/his mother dreamt while she was sleeping in the high tower.’

This converb can also be used with the adverbial constructions negated by *-maz* and conveys the anteriority of the converb clause event.

- (51) “Bo saw taı kmzkn, bir buyruk trkin tawratı klip...”

‘Bu sz geip gitmeden nce (bu sz sylenirken), hemen bir nazır gelip...’

‘Before this word has faded away (while this word was being said), one minister came immediately and ...’

The historical background that *-ken* is widely used with the aorist (*-Ir*) can lead the researcher to an assumption that this converb can not be added to bare verbs, and it always follows the aorist (which is like the auxiliary *är-* [to be]in transcripts).

More recent studies on this converb shows that the contemporary use of *-ken* is mostly with nouns and nominal constructions. When it co-occurs with verbs it becomes *-ken* or *-yken* (Lewis, 1986:190).

The following examples (52 and 53) are given in order to examine the application of *-ken* on the verbs of converb clauses which are inflected with different tense and aspect markers.

(52) a. * Onu [şehre in-ken] gördüm.

In this example, the sentence becomes ungrammatical when the bare verb *in-* (go downwards) is followed by *-ken*. Only when the verb is inflected by a tense-aspect marker, the sentence becomes grammatical.

(52) b. Onu [şehre in-er-ken] gördüm.
 S/heACC cityDAT goAORCONV seePST1S
 'I saw her/him, going to the city.'

(52) c. Onu [şehre in-iyor-ken] gördüm.

Examples (52) a, b and c above clearly demonstrate that *-ken* can only follow inflected verb stems. In the following examples, various tense-aspect markers are used before *-ken* in order to see what meaning relations their co-occurrences create.

(53) a. [Devlet yeni demiryolunu kur-ar-ken] savaş çıktı.
 government new railwayACC constructAORCONV war beginPST3S
 'The war began while the government was constructing the new railway.'

b. [Devlet yeni demiryolunu kur-uyor-ken] savaş çıktı.
 constructPROGCONV
 'The war began while the government was constructing the new railway.'

c. * [Devlet yeni demiryolunu kur-du-**yken**] savař çıktı.
constructPSTCONV

‘The war began while the government constructed the new railway.’

d. [Devlet yeni demiryolunu kur-muř-**ken**] savař çıktı.
constructPERFCONV

‘The war began while the government had constructed the new railway.’

e. [Devlet yeni demiryolunu kur-**acak-ken**] savař çıktı.
constructFUTCONV

‘The war began while the government would construct the new railway.’

When all of the five varieties of example (53) are considered, it is seen that the converb clauses constructed by *-ken* in a and b convey exact simultaneity. That is to say, when the temporal converb *-ken* is used with the progressive aspect marker *-(I)yor* and the Turkish aorist *-(I)r*, it indicates that the converb clause proposition is in progress when the matrix clause proposition occurs. This relation can be illustrated on the time line below.

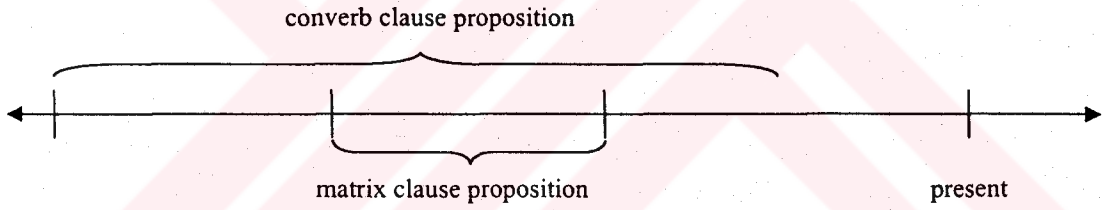


Figure 5: Simultaneity denoted by *-ken*

Kornfilt (1997:356) also touches on the use of *-ken* with the aorist and says that aorist has an imperfective function if it is followed by the cliticized form of the converb as *-(y)ken*. Consider her example stated below.

(54) ‘Dün odamı toplarken telefon çaldı.’

‘The phone rang while I was cleaning my room yesterday.’

The event in the converb clause was continuing when the event in the matrix clause happened. The former proposition did not come to its end, i.e., *-(I)r* expresses an imperfective reading with the sense which is added to it by the temporal converb *-ken*.

Example (53) c and d demonstrate the use of this converb with the past tense marker, *-DI* and the perfect aspect, *-mİş*. In these constructions, the proposition of the matrix clause is located on the time line according to the realization of converb clause proposition. The event which is conveyed by converb clause is realized and finished when the event conveyed by matrix clause is initiated. So, when the sentences in (53)c and d are considered, it can be said that the construction of the new railway was finished before the war began. *-ken*, at this point, conveys a sense of immediate anteriority with the effect of the past tense marker and the perfect aspect, which indicates that the proposition is given with its result (or end point). However, note that the sentences in (53)c and d can not be considered as grammatical easily. So, it should be presented with a question mark.

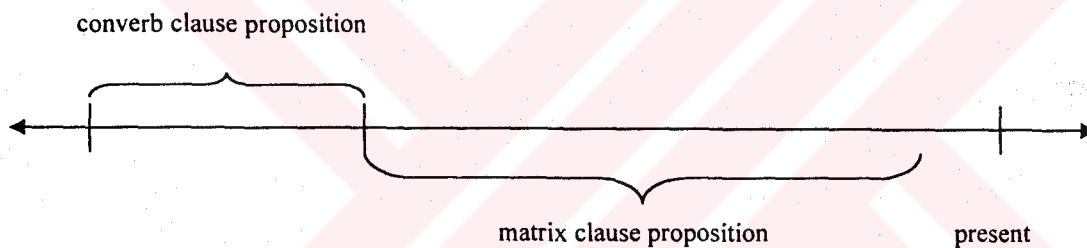


Figure 6 : Immediate anteriority denoted by *-ken*

As the time line above demonstrates, the event of the converb clause was realized and reached to its end (and maybe it has some effects after its end, i.e., the construction of a new railway can be a great development for a nation and the occurrence of following events can be identified by referring to the time of this important development) when another event, which is conveyed by the matrix clause, takes place. It should be noted that these two constructions (the use of *-ken* with TAM markers of *-DI* and *-mİş*) are regarded as odd by native speakers of Turkish. Considering native speaker judgement, it can be said that both forms are grammatical and comprehensible, but they are not used frequently to indicate temporal relationships. For instance, the form *[mİş+ken]*

indicates another meaning relationship other than temporal relation. Consider the examples below.

(55) [Devlet yeni demiryolunu kur-muş-ken] yeni vagonlara yatırım yaptı.
 government new railwayACC constructPERFCONV new railay carPLUDAT investPAST3S
 ‘The government invested in new railway cars by evaluating the opportunity of constructing the new railway.’

(56) [Elime örgü şişlerini al-mış-ken] ona da bir kazak öreyim dedim.
 handPOSS1SDAT knitting needlePLUACC takePERFCONV her/himPART one pullover knitMOD sayPAST3S
 ‘I intended to knit him/her a pullover by taking the knitting needeles in my hand.
 (by considering taking the knitting needles in my hand as an opportunity).

The use of *-ken* with the perfect aspect marker *-miş* in these two examples demonstrates that the proposition of the converb clause is seen as an opportunity for the realization of the matrix clause proposition. The government had constructed the new railway and this created the opportunity for buying new railway cars. Similarly, in example (56), the person had begun to knit and thus, s/he thought that this is an opportunity for knitting a pullover for the other person in consideration.

On the other hand, when example (53)e is examined, it is observed that the proposition of converb clause has not realized yet when the proposition of matrix clause took place. In this sentence, *-ken* loses its meaning of simultaneity and conveys a sense of incomplete action. The reason for this is the co-occurrence of this converb with the prospective aspect marker *-AcAk*, which gives the verb to which it is attached the meaning of unfinished or unrealized activity. The event indicated by the converb clause verb in the sentence ‘[Devlet yeni demiryolunu kur-acak-ken] savaş çıktı’ is going to be realized or come to its end in some point of time in the future. Thus, the war began before the new railway would be constructed. In other words, the new railway was planned to be constructed but the war interrupted the process of construction. This temporal relationship can be illustrated by the following figure.

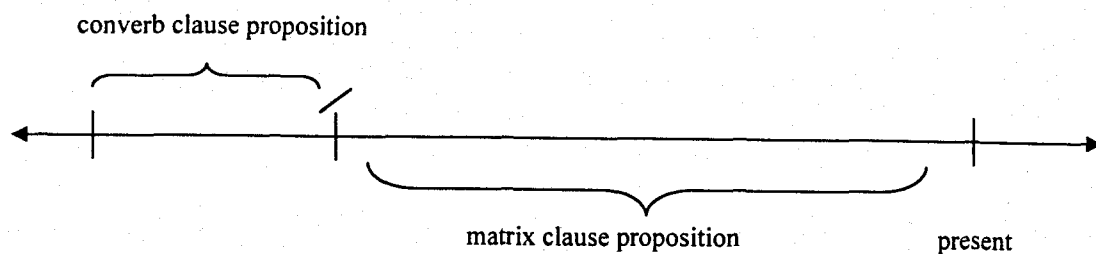


Figure 7: Incomplete action denoted by *-ken*

To sum up all of the discussion about the use of the temporal converb *-ken* on the bare roots of verbs, it can be said that *-ken*, in fact, does not have the inherent meaning of *simultaneity* as it is claimed in Kornfilt (1997:72) and Lewis (1986:190). The two events indicated by converb and matrix clauses may not occur at the same time, i.e., simultaneously. The converb clause proposition may precede the matrix clause proposition or it may not be realized at all when the event conveyed by the matrix clause takes place. So, it can be asserted that the basic meaning relationship conveyed by this converb is the *exact point of time* in which the converb clause proposition is realized or is going to be happen. Different temporal meaning relationships such as simultaneity and anteriority are assigned to this converb in relation with the tense-aspect markers attached to the converb clause verb.

In the examples (53a-e), the uses of *-ken* with tense and aspect markers *-(I)r*, *-(I)yor*, *-DI*, *-mİş* and *-AcAk* are demonstrated, and it is observed that the temporal converb *-ken* does not have simultaneous meaning relationship by itself, but it is loaded with different meaning relationships by its interaction with the tense and aspect markers of the converb clause verb. The aorist *-(I)r* and the progressive aspect marker *-(I)yor* assign this converb the meaning of simultaneity, because these two markers inherently convey a sense of continuity, but not completeness. *-ken* refers to the exact point of time of the occurrence of the matrix clause proposition when the converb clause proposition is still in progress. The two events take place at the same time for a specific duration on the time line. These

two markers (which indicate incomplete action), thus, gives *-ken* the meaning of simultaneity. On the other hand, the aspectual markers *-DI* and *-mİş* convey the meaning of completeness of an action. Contrary to *-(I)r* and *-(I)yor*, these two markers indicate that at the exact point of time (conveyed by *-ken*) when the matrix clause proposition is realized, the converb clause proposition has reached to its end. Meanwhile, when this converb co-occurs with the prospective aspect marker *-AcAk*, it denotes that the converb clause event is an unrealized activity. The reason for this is that *-AcAk* indicates incomplete action which is going to be realized in some point of time in the future. The matrix clause proposition occurs when the converb clause proposition seems or is planned to happen in a specific time in the future. *-ken*, again, does not express the meaning of simultaneity in this situation, and, this demonstrates that *-ken* does not inherently have a simultaneous meaning relationship, but it acquires its meaning relation from the tense and aspect markers that are attached to the converb clause verb.

In addition to the discussion about its application on bare roots of verbs, *-ken* also necessitates tense-aspect markers on the verb of the converb clause when the verb is a passive or causative construction. Consider the examples below.

- (57) a. [Bağdat Demiryolu kur-ul-ur-ken] sen doğmamış mıydın?
 Bagdat Railway constructPASSAORCONV you bornNEGPERF INTPST2S
 ‘Were not you born when the Bagdat Railway was being constructed?’
- (58) a. [Camları temizlikçi kadına sil-dir-ir-ken] keyfiniz yerinde
 glassPLUACC servant womanDAT rubCAUSAORCONV comfortPOSS2P placePOSS3SLOC
 görünüyordu.
 seemPROGPST3S
 ‘You seemed very comfortable when you were making the servant clean the windows.’

Examples (57)a and (58)a give evidence for the use of the temporal converb

-*ken* on passivized and causativized verbs. However, it should be mentioned that -*ken*, again, necessitates one of the tense and aspect markers on the converb clause verb. When the aorist is omitted from the sentences both of the sentences become ungrammatical.

(57) b. * [Bağdat Demiryolu kur-ul-**ken**] sen doğmamış mıydın?

(58) b. * [Camları temizlikçi kadına sil-dir-**ken**] keyfiniz yerinde görünüyordu.

So, it is not wrong to say that -*ken* can not be added on bare roots of verbs . -*ken* can also be added on verbs which are passive and causative constructions but it necessitates tense-aspect markers on the converb clause verb.

III.2. The Co-occurrences of Turkish Temporal Converbs with the Negation Marker

The use of Turkish temporal converbs with the negation marker will be discussed in this section. Consider the following examples.

(1) [Sev-me-**yip**] giderseniz, pişman olmazsınız, gitmezseniz bir şey kaybetmezsiniz.
loveNEGCONV goAORCOMP2P regret beNEGAOR2P goNEGAOR2P one thing loseNEGAOR2P

'If you leave by not loving it, you do not regret, if you do not go you do not lose anything.'

(2) [Onda hiçbir kıpırtı algıla-ma-**yınca**], belli etmeden, ama daha alıcı gözle bakıyorum.
he/sheLOC any movement percieveNEGCONV evident doNEGABL but more carefully lookPROG1S

'I am looking at her/him secretly but more carefully when I do not percieve any movement at him/her.'

(3) [Bu konuları gözden geçir-me-**yeli**] çok oldu.
these subjectPLUACC eyeABL passNEGCONV very bePST3S

'It has been along time since I have not gone over these subjects.'

- (4) Ev sahibi [ilk içkiler yudumlanırken bir konuşma yap-ma-dığında]
 house ownerPOSS3S first drinkPLU sipPASSAORCONV one speech doNEGCONV
 ayıplanırdı.
 blamePASSAORPST3S
 ‘The house owner was blamed when s/he did not make a speech when the first drinks were sipped.’

- (5) Sizler; [kan ak-ma-dıkça], [cana kıyıl-ma-dıkça] yaşayamazsınız ki.
 youPLU blood pourNEGCONV lifeDAT killNEGCONV liveNEGMOD2P PART
 ‘You can not live until blood is poured, lives are killed.’

- (6) ?? [Hemşire kan tahlilimi yap-ma-dığından beri] kendimi huzursuz
 nurse blood analysisPOSS3SACC doNEGCONV myself uneasy
 hissediyorum.
 feelPROG1S
 ‘I feel uneasy since the nurse have not done my blood analysis.’

The Turkish temporal converbs *-(I)p*, *-IncA*, *-AlI*, *-DIğIndA* and *-DIkça* above can be used with negation marker. They do not have any change in their meaning when they are attached to negated verbs. Yet, it is observed that the converb clause constructed by *-DIğIndan beri* can not co-occur with the negation marker. As *-DIğIndAn beri* necessitates the converb clause event to be a completed act, to negate the occurrence of the converb clause event becomes impossible. Hence, the complex sentence in example (6) is considered as odd.

In addition to *-DIğIndAn beri*, there are two other converbs which can not co-occur with the negation marker *-mA*, because they are structurally negated. These converbs are *-(I)r...-mAz* and *-mAdAn*.

- (7) * [Badanayı yaptır-maz yaptır-ma-maz] yeni evime taşınacağım.
 whitewash doCAUSNEGCONV doCAUSNEGCONV new housePOSS1SDAT moveFUT1S
 (8) * Ancak, [kapılar açıl-ma-madan önce] bir buçuk saat kuyrukta
 but doorPLU openPASSNEGCONV one half hour lineLOC
 bekleyeceksiniz.
 waitFUT2S

It is understood from examples (7) and (8) that these two converbs are already negated inherently, and they do not accept the negation marker on the converb clause verb. When they co-occur with the negation marker, the complex sentence becomes ungrammatical.

The following examples demonstrate the correlation of the negation marker with the converbs *-ArAk*, *-ken*, *-A...-A*, *-DIktAn sonra* and *-DIđl zaman*.

(9) [Çevredekilere yüzünü göster-me-yerek] yürüdü.
 people aroundPLUDAT facePOSS3SACC showNEGCONV walkPST3S

'S/he walked without showing her/his face to the people around.'

When the temporal converb *-ArAk* which conveys the meaning of *simultaneity* is added on a negated verb, it loses its temporal meaning. In example (9), the converb clause verb describes the manner of action conveyed by the converb clause. The temporal relationship of *-ArAk* no longer exists in this example, and what is expressed by the converb is the manner relationship.

(10) [Nurgül içki iç-mez-ken] diğerleri şişeleri deviriyorlardı.
 Nurgül drink drinkNEGAORCONV otherPLU bottlePLUACC fallPROG3PPST

'Nurgül did not drink but others were drinking madly.'

As *-ken* can not be added on bare verbs and necessitates tense and aspect markers on the converb clause verb, the negative form of the aorist precedes *-ken* in example (10), and creates a difference in the temporal reading of this converb. In this example, *-ken* conveys a kind of *opposition* between the propositions of the converb and the matrix clause. The opposition is that Nurgül did not drink but others drank too much. The converb clause event is negated by *-mA*; and *-ken* denotes that the matrix clause event occurs at the same time with the converb clause event, and that the matrix clause event is contradictory to the converb clause event.

(11) Fatma Kadın [iste-me-ye iste-me-ye] dipteki kapıya yönelir.
 Fatma woman wantNEGCONV wantNEGCONV cornerLOCCOMP doorDAT directAOR

'Fatma, the woman, turned towards the door at the corner, unwillingly.'

It is clear in example (11) that the converb *-A...-A* denotes manner relation. *-A...-A* expresses the manner in which the matrix clause event is realized. At this point, it is hypothesized that when *state verbs*, which form the converb clause, such as *iste-* (to want) and *sev-* (to love) are negated, they ascribe *-A...-A* the manner reading. When the converb is used with a *motion verb* such as *sürü-* (to drag), it can not be negated, and the sentence becomes ungrammatical as in the following example.

- (12) * [Bir ayağını sürü-me-ye sürü-me-ye] geçti yatağına.
 one footPOSS3SACC dragNEGCONV dragNEGCONV passPST3S bedPOSS3SDAT
 ‘S/he went to her/his bed without dragging one of his/her feet.’

However, when the same formulation is adapted to another psychological verb as *kork-*, the hypothesis fails in explaining the reasons of the ungrammaticality of the sentence in example (13).

- (13) a. * Fatma Kadın [kork-ma-ya kork-ma-ya] dipteki kapıya yönelir.
 Fatma woman be afraidNEGCONV be afraidNEGCONV cornerLOCCOMP doorDAT directAOR
 ‘Fatma, the woman, turned towards the door at the corner without being afraid.’

At this point, it can be hypothesized that the lexical aspectual properties of verbs may have an effect on the use of the converb *-A...-A* with the negation marker. The verb of the converb clause in example (11), i.e. *iste-* (to want), which is used with the negation marker *-mA* grammatically, is a volitional verb, i.e., it indicates the willful act of the agent of the clause. On the other hand, in example (13), the converb clause verb indicates the psychological state of the agent, i.e., *kork-* (to be afraid) indicates a phenomenon which is realized outside the will of the agent. Therefore, when converb clauses, which are constructed with *-A...-A*, have *volitional verbs*, they can be negated. But when they have verbs expressing psychological states (verbs which express non-volitional activities), they can not be negated.

The converb constructions with *-A...-A* which convey temporal meaning relation can not be negated. The negation marker absorbs the temporal meaning relationship of *-A...-A* and ascribes it manner reading. Actually, the manner relation, which can not be conveyed by the converb clause in example (13) a, can be conveyed by lexical adverbs like the one in the following example.

(13) b. Fatma kadın **korkusuzca** dipteki kapıya yönelir.

The manner adverb, *korkusuzca* (without being afraid of) in (13) b denotes the negative form of the converb clause *korka korka* (by being afraid of). Thus, it can be said that the temporal converb *-A...-A* does not have a negated form.

In example (14), *-DIktAn sonra* can co-occur with the negation marker, and it is observed that *-DIktAn sonra* does not denote temporal relations, but it denotes *condition* under which the matrix clause event is realized.

(14) [Odamdaki sesler buraya gel-me-dikten sonra] sanki ne önemi
 roomPOSS1SLOCCOMP voicePLU hereDAT comeNEGCONV what if what importance

var?
 there

‘What does it mean if the voices in my room can not be heard from here?’

(15) [Ders çalış-ma-dığımız zaman] sokakta ip atlardık.
 lesson studyNEGCONV streetLOC rope skipAORPST1P

‘We were accustomed to skip rope in the street when we were not studying.’

When the converb *-DIğI zaman* is used with the negation marker, it does not convey the meaning of *anteriority*. In the example (15), the converb clause event does not occur before the matrix clause event. In this case, *-DIğI zaman* links the two propositions by conveying a sense of *habituality*.

So far, it is observed that, excluding *-A...-A*, *-(I)r...-mAz* and *-mAdAn (önce)*, all other Turkish temporal converbs can be preceded by negated verbs in the converb clauses.

III.3. Co-occurrences of Turkish Temporal Converbs with Modality

Markers

The Turkish temporal converbs can only co-occur with the modality marker of ability, potentiality and possibility *-(y)Abil*. The other modal markers such as *obligation* and *condition* can not be used with temporal converbs in Turkish. Lewis (1986:151), Kornfilt (1997:374) and Gencan (2001:340) mention that the combination of the modality marker – *(y)Abil* is consisted of the harmonizing vowel ‘A’ and the verb *bil-* (to know), which loses its original meaning and use. This modality marker gives the verb to which it is affixed the meanings of *potentiality, possibility and capability*. Kornfilt (1997:381) states that *-(y)Abil*, being different from all the other modal markers, can be added on nonfinite verb forms. She exemplifies her proposal with the following sentence.

(1) “[Hasan’ın hızlı koşabildiğini] bilmiyordum.”

‘I did not know that Hasan can run very fast.’

She also states that the second vowel of this suffix does not undergo Turkish vowel harmony because of the existence of a separate verb, *bil-* (to know) in the formation of this modal marker. Only the harmonizing vowel undergoes vowel harmony as it is exemplified below.

(2) Yap-**abil**-ir-im
doMODAORIS

‘I can do it.’

(3) Gel-**ebil**-ir-im
comeMODAORIS

‘I can come.’

Moreover, as Kornfilt (1997:374) points out, “because the potentiality suffix is the only one among the mood suffixes that consists (in part) of a verb, it is also the only

one that can be followed by the full range of tense/aspect suffixes, including the progressive and the future.” Consider the following examples.

(4) Oku-**yabil**-eceğ-im.
readMODFUT1S

‘I can read it (in the future).’

(5) Oku-**yabil**-iyor-um.
readMODPROG1S

‘I can read it (at the moment).’

As it is mentioned above the potentiality and possibility marker *-(y)Abil* is the only modal marker that can be added on nonfinite verb forms including Turkish temporal converbs. The use of all of the other modal markers in nonfinite verbal constructions (and also with temporal converbs) is ungrammatical. In the following discussion, it is going to be explored whether or not all of the temporal converbs in Turkish can co-occur with this modal suffix.

(6) [Cesaret ed-ebil-**ip**] meseleyi açmıştı.
courage doMODCONV issueACC openPERFPST3S

‘S/he could dare to talk about the issue.’

(7) [Cesaret ed-e-me-**yip**] meseleyi açmamıştı.
courage doMODNEGCONV issueACC openPERFPST3S

‘S/he could not dare to talk about the issue.’

(8) [Ona verilen bu görevi de başarıyla yerine getir-ebil-**ince**]
s/heDAT givePASSCOMP this missionACC PART successINST placeDAT takeMODCONV

kendi içindeki gücün farkına vardı.
him/herself inLOCCOMP forceGEN realizePST3S

‘S/he realized the power in her/himself when s/he was able to be successful in achieving this mission given to him/her.’

(9) [Sorunun çözümünü nerede arayacaklarını bil-e-me-**yince**], birbirlerine
problemGEN solutionPOSS3SACC where look forFUT3PACC knowMODNEGCONV each otherPLUDAT
girerlerdi.
enterAOR3PPST

‘They were used to quarrel with each other when they could not predict where they should look for the solution of the problem.’

- (10) [Yürü-yebil-iyor-ken] çok neşeli bir çocuktur. Başına bu kaza gelip felç olduktan
walkMODPROGCONV very joyINST one childPST3SHead3SDATthisaccidentcomeCONV paralyzeCONV
sonra hayata küstü.
after lifeDAT put out withPST3S
'S/he was a child full of joy when s/he was able to walk. S/he is fed up with it all
after s/he became paralyzed in the accident.'
- (11) [İsteklerimi dile getir-e-mez-ken] çok sinirli olurum.
wishPLUPOSS1SACC expressMODNEGCONV very angry beAOR1S
'I feel very angry when I can not express my wishes.'
- (12) [Eve gel-ebil-eli] kendimi çok iyi hissediyorum.
houseDAT comeMODCONV myself very good feelPROG1S
'I feel very good since I have been able to come home.'
- (13) [Evi temizle-ye-me-yeli] bayağı oldu.
houseACC cleanMODNEGCONV long time bePST3S
'It has been a long time since I have not been able to clean the house.'
- (14) [Buraya gel-ebil-diğimde] vakit epeyce geç olmuştu.
hereDAT comeMODCONV time very late bePERFPST3S
'It was too late when I was able to come here.'
- (15) [Okulunu bitir-e-me-diğinde] bir iş bulup çalışmaya karar verdi.
schoolPOSS3SACC finishMODNEGCONV one job findCONV workDAT decidePST3S
'S/he decided to find a job and work when s/he can not finish his/her school.'
- (16) [Planlar gerçekleştiril-ebil-dikçe] ofisteki bayram havası artıyordu.
planPLU fulfilPASSMODCONV officeLOCCOMP festival atmosphere increasePROGPST3S
'The atmosphere of joy was increasing in the office as the plans could be fulfilled.'
- (17) [Planlar gerçekleştiril-e-me-dikçe] ofisteki hüznün artıyordu.
planPLU fulfilPASSMODNEGCONV officeLOCCOMP sadness increasePROGPST3S
'The sadness was increasing in the office as the plans could not be fulfilled.'
- (18) [Ödevini bitir-e-meden önce] zil çaldı.
homeworkPOSS3SACC finishMODNEGCONV bell ringPST3S
'The bell rang before he/she could not finish his/her homework.'
- (19) [Evlerine sağ salım dön-ebil-dikten sonra] uzun bir istirahate çekildiler.
housePLUPOSS3PDAT alive healthy returnMODCONV long one restDAT havePST3P
'They had a long rest after they have been able to return home alive and healthy.'

- (20) [Huzurlu ol-a-ma-**dıktan sonra**] yaşamanın ne anlamı var?
 peaceINST beMODNEGCONV liveGEN what meaningPOSS3S there
 ‘What is the meaning of life without being able to live in peace?’
- (21) [Mesut oraya gid-ebil-**diğinden beri**] işlerin yolunda gittiğini söyledi.
 Mesut there goMODCONV thingPLU wayPOSS3SLOC goNOMACC saidPST3S
 ‘Mesut said that everything is okey since he had been able to go there.’
- (22) ? [Ona yardımcı ol-a-ma-**duğımdan beri**] kendimi suçlu hissediyorum.
 he/sheDAT helpMODNEGCONV myself guilty feelPROG1S
 ‘I feel guilty since I could not be able to help him/her.’
- (23) [Zeytinleri topla-yabil-**duğumuz zaman**] hepsini komisyoncuya satacağız.
 olivePLUACC pickMODCONV allACC commission agentDAT sellFUT1P
 ‘We are going to sell all of the olives to the commission agent when we are able to pick them.’
- (24) [Sınavı geç-e-me-**duğumuz zaman**] çok üzülürdük..
 examinationACC passMODNEGCONV very be distressedAORPST1P
 ‘We were used to be distressed when we could not be able to pass the examination.’

All of the sentences above illustrate the use of temporal converbs with the modal marker *-(y)Abil* and its negative forms. It should be noted here that in example (18), only the negative form of the modal marker can be used with the converb *-mAdAn*. The reason for this is that this converb is negated inherently. The modal expression is automatically negated when it co-occurs with this converb. In addition to the case about *-mAdAn*, in example (19), when the modal expression in the converb clause which is constructed by *-DıktAn sonra* is negated, it is observed that the converb loses its temporal meaning, and it is ascribed the meaning of *condition*. When the proposition of the converb clause is considered, it can be said that the condition of a good life is to live in peace. So, the converb clause proposition is given as a prerequisite of the matrix clause proposition.

Except from the temporal converbs stated in examples (6)-(24), there are three other temporal converbs in Turkish which can not take the modal marker of potentiality. These converbs are displayed in (25)-(27) below.

- (25) * Reyhan [gözlerinden yaşlar ak-abil-erek] yaklaştı.
 Reyhan eyePLUPOSS3SABL tearPLU pourMODCONV approachPST3S
- (26) * [Bir ayağını sürü-yebil-e sürü-yebil-e] geçti yatağına.
 one footPOSS3SACC dragMODCONV dragMODCONV passPST3S bedPOSS3SDAT
- (27) * [Bu işi yap-abil-ir yap-a-maz] ona başka bir iş vereceğim.
 this dutyACC doMODCONV doMODCONV him/her other one duty giveFUT1S

The converbs *-ArAk*, *-A...-A* and *-(I)r...-mAz* can not co-occur with the modality marker *-(y)Abil*. The manner relationships conveyed by both *-ArAk* and *-A...-A* can be regarded to override their temporal relationships. Thus, there can not be another modal marker before them on the converb clause verb. On the other hand, in example (27), the reason for the ungrammatical outcome, which is obtained by the use of *-(I)r...-mAz* with a verb with *-(y)Abil*, is that this converb loses its meaning of immediate precedence when it co-occurs with the modal marker, and since this converb has no other meaning relationship than its temporal meaning, the sentence becomes ungrammatical.

III.4. Co-occurrences of Turkish Temporal Converbs with Subject Agreement Markers

After discussing the co-occurrences of temporal converbs with *-(y)Abil*, the last point that is going to be considered in this section is whether or not Turkish converbs can be followed by subject agreement markers. When the data is examined, it is observed that the converb *-ken* can take subject agreement marker before itself.

- (1) [Konusur-lar-ken] kapıdan dinledim.
 speakAORAGR3PCONV doorABL listenPST1S

'I listened to their talk secretly behind the door when they are talking.'

The converbs *-DIğIndA*, *-DIğIndAn beri* and *-DIğl zaman* have subject agreement on themselves morphologically. That is to say, these nominalizers are followed by subject agreement markers. Consider the examples below.

- (2) [Nöbeti bırak-**tığ-ım-da**] gidebilirdik.
 turnACC leaveCONV1S goMODAORPSTIP
 ‘We could go when I left my turn in duty.’
- (3) [Buraya gel-**dik-ler-inden beri**] herşey ters gidiyor.
 hereDAT comeCONV3P everything reverse goPROG3S
 ‘Everything is going wrong since they have been come here.’
- (4) [Buralara yeniden gel-**diğ-in zaman**] bize de uğra.
 herePLUDAT again comeCONV2S us PART see2S
 ‘See us when you come here again.’

In example (2), the converb *-DiğIndA* is inserted the first person singular agreement. Otherwise, it becomes meaningless. The other converb, *-DiğIndAn beri* in example (3), in which it has third person singular agreement, is again marked for subject agreement morphologically. Lastly, the converb *-DiğI zaman* necessitates the subject agreement marker in its morphology as it is seen in example (4) in which it is marked with the second person singular agreement.

All of the other temporal converbs in Turkish construct unacceptable converb clauses when subject agreement markers are attached to them. Some of the ungrammatical outcomes may be exemplified as below.

- (5) * [Ben biraz çık-ım-**ıp**] yürüyeceğim.
 (6) * [Eve gel-im-**eli**] kendimi çok iyi hissediyorum.
 (7) * [Buralara geldi-m-**dikçe**] size uğrarım.

In order to conclude all of the discussion above about the co-occurrences of Turkish temporal converbs with tense-aspect, modality, negation and subject agreement markers, the following summary can be made.

- All of the Turkish temporal converbs can be added to bare roots of verbs except for *-ken*, and all of them can be attached to passivized and causativized verbs.

- All of the temporal converbs can be used with the negation marker with the exceptions of *-(I)r...-maz*, *-mAdAn -A... -A* and *-DIğIndAn beri*.
- Except from *-ArAk*, *-A...-A* and *-(I)r...-mAz*, all of the temporal converbs can co-occur with the modal marker, *-(y)Abil*.
- The converbs which have subject agreement morphology on themselves are *-DIğIndA*, *-DIğIndAn beri* and *-DIğI zaman*. The converb *-ken* may take subject agreement markers before itself. The other temporal converbs can not be added to verbs which are marked by subject agreement.

Table 2 summarizes the discussion and the conclusions drawn above.

III.5. Word Order in Temporal Converb Clauses

As has been mentioned in the introduction of this study, complex sentences are formed in languages by embedding one clause into another by using a particular clause-linking device. So, this complex structure have a basic word order in which the embedded clause behaves like a complement of the matrix clause verb. Verbal nouns, infinitives, participles and nominalizations are examples of complex constructions in which the embedded clause is a constituent of the matrix clause. However, this may not be the case in gerundial constructions such as the ones which are formed by temporal converbs. It was stated that temporal converb clauses are adjuncts in complex structures and they have their own propositions; they may have their own subjects and thus, it was hypothesized that temporal converb clauses can be omitted from the complex sentence. On the other hand, it

	Bare Roots	Voice	Negative	Modality	Subject Agreement Marking
-(I)p	+	+	+	+	-
-IncA	+	+	+	+	-
-ArAk	+	+	+	-	-
-ken	-	+	+	+	+
-All	+	+	+	+	-
-A...-A	+	+	-	-	-
-r...-mAz	+	+	-	-	-
-DiğIndA	+	+	+	+	+
-DikçA	+	+	+	+	-
-mAdAn önce	+	+	-	+	-
-DiktAn sonra	+	+	+	+	-
-DiğIndAn beri	+	+	-	+	+
-Diğl zaman	+	+	+	+	+

Table 2: Co-occurrences of Turkish temporal converbs with inflected and bare verbs

is clear that temporal converb clauses have some temporal references (the location on the time line) in relation with the tense (temporal operators) of matrix clauses. In addition, as temporal converb clauses are verbal forms, they have their own internal word order.

Thompson and Longacre (1985:174) state that “a characteristic of adverbial subordinate clauses in some languages is their position. For example, in Mandarin, Ethiopian Semitic, Turkish, and many other languages, adverbial clauses must precede the main clause”. This idea is partially valid, i.e., the unmarked position of a converb clause in a complex sentence is the position in which the converb clause precedes the matrix clause. However, the converb clause can be placed among the constituents of the matrix clause or can follow the matrix clause.

(1) [Gün ağarınca], aşağıda, alanda binlerce kişi olacak.

‘There will be thousands of people down in the openfield when the sun rises.’

(2) [Paris’te birkaç gün kaldıktan sonra] Lozan’a döndüm.

‘I returned to Lozan after staying in Paris for a few days.’

(3) Fatma Hanım, [ışıklar yavaş yavaş kararırken] başını iki eli arasına alır.

‘Miss Fatma puts her head on her hands while the lights are getting darker.’

(4) Bekçi Ramazan Ağa [kaldırımları döve döve] yaklaştı.

‘Ramazan, the watchman, approached, hitting his heels to the sidewalks.’

(5) Eleniyorum [onlar yürüdükçe].

‘I am tossing to and fro while they are walking.’

(6) O gün içerdeydi, [sen kapıya dayandığında].

‘S/he was in that day, when you raided on.’

When the examples are considered, it is observed that the converb clauses in (1) and (2) are clause-initial. This is the unmarked position for adverbial clauses in Turkish. In (3) and (4), on the other hand, the converb clauses are placed among the constituents of the matrix clause. The subject of the matrix clause precedes the converb clause. The converb clauses in (5) and (6) are located at the end of the complex sentence.

By having this information, it can be stated that it is not obligatory to place converb clauses in sentence-initial position in Turkish. Although this is the unmarked position for these clauses, their location of the converb and the matrix clauses in the complex sentence may vary. This issue is going to be considered in following phases of this section.

In this section of the study, which is based on the analysis of temporal converb clauses in terms of word order restrictions and information structure, the matter of concern is going to be primarily on three different phenomena which are identified by considering the position of the constituents of a sentence with respect to the verb of the matrix clause. These concepts are termed as topic (T), focus (F) and backgrounding (B). The T is an element of a sentence which is presented as already existing in the discourse and which the rest of the sentence (the comment) is in some sense 'about'. The topic is most often realized as the grammatical subject in the unmarked case. The T of a sentence is mostly the subject of a sentence and this is also true for Turkish. The T of a sentence, however, in most cases is identified by considering the discourse. The T can be other elements in a sentence, apart from the subject of a sentence, when sufficient evidence is obtained from the relevant discourse. F, on the other hand, presents new information in a sentence. This new information is mostly considered as important information which should be focused on. B is the discourse phenomenon by which some element of an utterance is marked to indicate that it is to be interpreted as part of the context in which the rest of the utterance is made.

Having defined the concepts of T, F and B in information structure, their potential location in sentences can be analyzed. Erguvanlı Taylan (1984:72) presents a table in which the *syntactic position* of some kind of element in a sentence is marked with *pragmatic function*. Consider the following table.

<i>Syntactic Position</i>	<i>Pragmatic Function</i>
S-initial	topic
Immediately preverbal	focus
Post-predicate	backgrounding

Table 3: The syntactic position and the pragmatic function of clause constituents

The potential positions of T, F and B in a sentence which are indicated in this table is valid for Turkish. So, the information structure of a Turkish sentence like the one in example (7) can be analyzed as below.

- (7) Ben Ankara'ya gidiyorum bu akşam.
 I AnkaraDAT goPROG1S this evening
 'I am going to Ankara this evening.'

In this example, according to above mentioned identification, the grammatical subject *ben* (I) is the T of the sentence. In discourse, this element demonstrates the old/given information. The T of the discourse is the subject of the sentence. The element which is located in the immediately preverbal position in this sentence is *Ankara'ya* (to Ankara), so, it is the focused element which gives the newest and most important information in the sentence. The time adverb, *bu akşam* (this evening), is located in post-predicate position and thus, it is the backgrounding element.

Erguvanlı Taylan (1984:100-113) analyzes the possible word orders in gerundial clauses and their effects on the information structure of the whole sentence by examining two different converb constructions which are formed by *-IncA* and *-All*. In order to review her claims, the following sentences can be observed.

- (8) a. "[Ali Ankara'ya gidince] ben sizde kalabilirim."
 Ali AnkaraDAT goCONV I youLOC stayMODAORIS
 'I can stay with you when Ali goes to Ankara.'
- b. "[Ankara'ya Ali gidince] ben sizde kalabilirim."
- c. "Ben sizde [Ali Ankara'ya gidince] kalabilirim."

- d. “[Ali gidince Ankara’ya] ben sizde kalabilirim.”
- e. “Ben sizde kalabilirim [Ali Ankara’ya gidince].”
- f. * “[Ali gidince] ben sizde Ankara’ya kalabilirim.”
- g. * “[Ali gidince] ben sizde kalabilirim Ankara’ya.”
- h. * “Ankara’ya ben sizde [Ali gidince] kalabilirim.”
- (9) a. “[Biz bu şehre geleli] üç ay oldu.”
 we this cityDAT comeCONV three month be PAST3S
 ‘It has been three months since we came to this city.’
- b. “[Bu şehre biz geleli] üç ay oldu.”
- c. “Üç ay [biz bu şehre geleli] oldu.”
- d. “[Biz geleli bu şehre] üç ay oldu.”
- e. “Üç ay oldu [biz bu şehre geleli].”
- f. * “[Biz geleli] üç ay bu şehre oldu.”
- g. * “[Bu şehre geleli] üç ay oldu biz.”
- h. * “Bu şehre üç ay [biz geleli] oldu.”
- i. “[Biz geleli] üç ay oldu bu şehre.”

Erguvanlı Taylan (1984: 102) points out that in examples (8) and (9), the varieties f, g and h are ungrammatical and states that the reason for this is that the constituents of an adverbial clause can not be extracted from the clause boundaries and be topicalized in the matrix clause. On the other hand, gerundial clauses can appear in the backgrounding position which distinguishes gerundial clauses from nominalizations, infinitives and participle constructions. The variety of examples in (8) and (9) which is marked with the letter ‘e’ illustrates this fact. The adverbial clause is located in a postverbal position which indicates that the adverbial clause is a backgrounding element.

It has been stated above that the elements in an adverbial clause can not be extracted from the clause boundaries. However, the sentence which is marked with the letter 'i' in example (9) is seen as a counter-example to this fact. The expression *bu şehre* (to this city) is extracted from the adverbial clause and it is used as a backgrounding element by being located in a postverbal position in the matrix clause. Erguvanlı Taylan (1984:102) explains this by stating that in adverbial clauses which are constructed with the converb *-InçA*, the adverb clause is dependent on the matrix clause syntactically but the matrix clause is not dependent on the adverb clause, and thus, there is "a one-way dependency relation" between the two clauses. So, the constituents of the adverb clause can not appear outside of the clause (but the word order of the elements of this adverbial clause can be changed in the boundaries of the clause). At the same time, the expression *bu şehre* is extracted from the adverbial clause and located in the backgrounding position in example (9)i because not only the adverbial clause but also the matrix clause is dependent on the other clause. It can be said that the sentence *üç ay oldu* 'it has been three months' is incomplete when the adverb clause is not embedded in it. So, it is observed that the adverb clause is one of the obligatory constituents of the matrix clause and thus, the dependence relation becomes mutual. After analyzing the examples above in terms of information structure, Erguvanlı Taylan (1984:103) comes up with the following three conclusions.

- In complex structures in which there is a mutual dependency relation between the adverb and matrix clauses, "backgrounding can operate across the clause boundaries with respect to the main verb".
- Because gerundial clauses are verbal forms, "backgrounding can operate within" the clause.

- In gerundial clauses, “topicalization is clause-bounded”.

When Erguvanlı Taylan (1984:112) considers word order in complex structures as a whole, she draws further conclusions as stated below.

- T, F and B operate only in the gerundial clauses in complex structures, “and can not cross clause boundaries”.
- The position of the verb in a sentence designates the F position, but T position is not fixed in a sentence. In addition, an element in the F position of a gerundial clause can not cross clause boundaries and become the F of the complex construction.
- Gerundial clauses, themselves, “may also be the topic, focus or background material of the main clause, ...”
- In complex constructions in which there are more than one embedded clause, only the most deeply embedded clause can topicalize across clause boundaries or be backgrounded in the main clause.

Having scrutinized the analysis of Erguvanlı Taylan on the word order restrictions in gerundial clauses, a detailed observation on word order in temporal converb clauses in Turkish can be made. *-InçA* and *-All* have been analyzed by Erguvanlı Taylan. In the rest of this section, the effects of word order on the information structure of temporal converb clauses constructed with other temporal converbs like *-ken*, *-ArAk*, *-DiğIndA* and *-DlkçA* are going to be analyzed.

(10) a. [Oğlunu öpüp] yatağına yattı.
 sonPOSS3SACC kissCONV bedPOSS3SDAT layPAST3S
 ‘S/he kissed his/her son and laid on his/her bed.’

b. Yatağına [oğlunu öpüp] yattı.

c. Yatağına yattı [oğlunu öpüp].

- (11) a. [Saçlarını savura savura] evden çıktı.
hairPLUPOSS3SACC throwCONV throwCONV houseABLget outPAST3S
'S/he got out of the house, throwing his/her hair.'
- b. Evden [saçlarını savura savura] çıktı.
- c. Evden çıktı [saçlarını savura savura].
- (12) a. [Yukarıdan atlar atlamaz] duvarın dibine çöker.
upABL jumpCONV jumpCONV wallGEN bottomPOSS3SDAT kneel downAOR3S
'S/he kneels down to the bottom of the wall as soon as s/he jumps from above.'
- b. Duvarın dibine [atlar atlamaz] çöker.
- c. Duvarın dibine çöker [atlar atlamaz].
- (13) a. [Bu şehre geldiğimden beri] kendimi yalnız hissediyorum.
this cityDAT comeCONV myself alone feelPROG1S
'I have felt myself alone since I came to this city.'
- b. Kendimi [bu şehre geldiğimden beri] yalnız hissediyorum.
- c. Kendimi yalnız hissediyorum [bu şehre geldiğimden beri].
- (14) a. [Elini sallayarak] uzaklaşıyordu buradan.
handPOSS3S waveCONV leavePROGPAST3S hereABL
'S/he was getting far away from here, waving his/her hand.'
- b. Uzaklaşıyordu [elini sallayarak] buradan.
- c. Uzaklaşıyordu buradan [elini sallayarak].
- (15) a. [Benimle konuşurken] sesini yükseltme!
IPOSS1SINS speakAORCONV voicePOSS2SACC raiseNEG
'Do not raise your voice while talking to me!'
- b. Sesini [benimle konuşurken] yükseltme!
- c. Sesini yükseltme [benimle konuşurken]!
- (16) a. [Ay doğmadan] kızını alır kaçarsın.
moon riseCONV girlACC takeAOR escapeAOR2S
'Before the moon rises, you may take the girl with you and escape.'
- b. Kızını alır [ay doğmadan] kaçarsın.
- c. Kızını alır kaçarsın [ay doğmadan].

Examples (10), (11), (12), (13), (14), (15) and (16) above demonstrate the use of temporal converb clauses in F and B positions. All of the sentences marked with an ‘a’ illustrate the unmarked position of the converb clause. On the other hand, in ‘b’ sentences converb clauses are located in F position, and they are the elements which convey the newest and the most important information in the sentence. In ‘c’ sentences, converb clauses are the B elements of the matrix clause.

(17) a. ..., [evine çıktığında] seni görmeye geldim.
housePOSS2SDAT moveCONV youACC seeNOMDAT comePAST1S

‘I came to see you when you had moved your house.’

b. Seni görmeye [evine çıktığında] geldim.

c. Seni görmeye geldim [evine çıktığında].

(18) a. [Elin boş kaldıkça] yukarı da çıkarsın.
handPOSS2S empty stayCONV upstairs PART comeAOR2S

‘You may come upstairs when you are free (when you have leisure time).’

b. Yukarı da [elin boş kaldıkça] çıkarsın.

c. Yukarı da çıkarsın [elin boş kaldıkça].

(19) a. [Otobüsten indikten sonra] size geleceğim.
busABL get offCONV youDAT comeFUT1S

‘I will come to your house after I get off the bus.’

b. Size [otobüsten indikten sonra] geleceğim.

c. Size geleceğim [otobüsten indikten sonra].

(20) a. [Ali geldiği zaman] bir kutlama yapılacak.
Ali comeCONV one party doPASSFUT3S

‘A party will be given when Ali comes.’

b. Bir kutlama [Ali geldiği zaman] yapılacak.

c. Bir kutlama yapılacak [Ali geldiği zaman].

In examples (17)-(20), it is observed that temporal converb clauses constructed with *-DIĞİnda*, *-DIKÇA*, *-DIktAn sonra* and *-DIĞİ zaman* can also be moved to F and B positions from T position. Yet, it should be noted that when these clauses are in F position

(as in the examples marked with ‘b’), they can have another interpretation apart from their temporal interpretations. That is to say, by the effect of being the focused element in a sentence, they may have the conditional reading. However, various other examples can be given to illustrate that the converb clauses with *-Diğİnda*, *-Dikça* and *-DiktAn sonra* do not obligatorily have a conditional reading when they are in F position. Consider the following sentences.

- (21) a. [Sofradan kalktığİmda] her yanım tutulmuştu.
 dinner tableABL stand upCONV every partPOSS1S get stiffPERFPAST3S
 ‘Every part of my body had got stiff when I left the dinner table.’
- b. Her yanım [sofradan kalktığİmda] tutulmuştu.
- c. Her yanım tutulmuştu [sofradan kalktığİmda].
- (22) a. [İndikçe] merdiven tahtalarının altını yoklar.
 go downCONV stair stepPLUPOSS3SGEN bottomPOSS3SACC inspectAOR3S
 ‘S/he inspects the bottom of every step of the stair as s/he goes down.’
- b. Merdiven tahtalarının altını [indikçe] yoklar.
- c. Merdiven tahtalarının altını yoklar [indikçe].
- (23) a. [Bir süre geçtikten sonra] birbirimizi anlayacağız.
 one time passCONV each otherACC understandFUT1P
 ‘We will understand each other better some time later.’
- b. Birbirimizi [bir süre geçtikten sonra] anlayacağız.
- c. Birbirimizi anlayacağız [bir süre geçtikten sonra].

All of the sentences marked with ‘b’ in examples (21)-(23) demonstrate the temporal converb clauses in F positions, but none of the clauses has a conditional meaning. These clauses merely convey a temporal meaning relation regardless of being located in T, F or B positions. Therefore, it can be concluded that the conditional reading that is attributed to the temporal converb clauses in (17)-(19)b is the result of the propositional contents of the clauses.

Moreover, when the converb clauses constructed with *-Diğl zaman* are located in F and B positions in different sentences, it is observed that the conditional reading is preserved.

(24) a. [Okulu bitirdiđi zaman] buradan tařınacak.
schoolACC finishCONV hereABL moveFUT3S

‘S/he will move from here when s/he finishes the school.’

b. Buradan [okulu bitirdiđi zaman] tařınacak.

c. Buradan tařınacak [okulu bitirdiđi zaman].

(25) a. [Yemeđini bitirdiđin zaman] tatlını yiyebilirsin.
mealPOSS2SACC finishCONV desertPOSS2SACC eatMODAOR2S

‘You can eat your desert when you finish eating your meal.’

b. Tatlını [yemeđini bitirdiđin zaman] yiyebilirsin.

c. Tatlını yiyebilirsin [yemeđini bitirdiđin zaman].

It should be mentioned that sentence stress plays a crucial role in interpreting the conditional reading of these converb clauses. As Erkü (1982:34) states, the element in the preverbal position (i.e., the F position) carries the sentence stress on itself. Moreover, *-Diğl zaman* seems to convey a sense of *condition* inherently. That is to say, this converb has a conditional meaning relationship in addition to its temporal meaning relationship. When the sentences in examples (24) and (25) are considered by native speakers, the conclusion that is drawn generally is that all of the varieties a, b and c convey a conditional reading, but by the effect of sentential stress, the conditional reading is emphasized in the ‘b’ sentences.

The location of temporal converb clauses as a whole unit in the complex sentences with respect to F and B was analyzed so far. It was mentioned that converb clauses also have F and B positions in their boundaries. The F and B positions in these clauses are going to be considered by analyzing the following examples.

- (10) a. [Ođlunu öpüp] yatađına yattı.
d. [Öpüp ođlunu] yatađına yattı.
- (11) a. [Saçlarını savura savura] evden çıktı.
d. [Savura savura saçlarını] evden çıktı.
- (12) a. [Yukarıdan atlar atlamaz] duvarın dibine çöker.
d. [Atlar atlamaz yukarıdan] duvarın dibine çöker.
- (13) a. [Bu şehre geldiđimden beri] kendimi yalnız hissediyorum.
d. [Geldiđimden beri bu şehre] kendimi yalnız hissediyorum.
- (14) a. [Elini sallayarak] uzaklaşıyordu buradan.
d. [Sallayarak elini] uzaklaşıyordu buradan.
- (15) a. [Benimle konuşurken] sesini yükseltme!
d. [Konuşurken benimle] sesini yükseltme!
- (16) a. [Ay doğmadan] kızı alır kaçarsın.
d. [Dođmadan ay] kızı alır kaçarsın.
- (17) a. ..., [evine çıktıđında] seni görmeye geldim.
d. ..., [çıktıđında evine] seni görmeye geldim.
- (18) a. [Elin boş kaldıkça] yukarı da çıkarsın.
d. [Boş kaldıkça elin] yukarı da çıkarsın.
- (19) a. [Otobüsten indikten sonra] size geleceđim.
d. [İndikten sonra otobüsten] size geleceđim.
- (20) a. [Ali geldiđi zaman] bir eğlence yapılacak.
d. [Geldiđi zaman Ali] bir eğlence yapılacak.

The complements of the converb clause verbs in examples (10)-(20) a above are moved to B positions and none of the sentences is unacceptable. Thus, it is seen that

backgrounding operates inside the clause boundaries in converb clause constructions as Erguvanlı Taylan (1984) hypothesizes.

In addition to backgrounding, the temporal converb clauses in examples (10)-(20) can be regarded as instances of topicalization. When the predicate of the clause is located in the sentence-initial position (i.e., T position), it is topicalized. By considering the sentences (10)-(20) d, it can be stated that the complement of the converb clause may be moved to B position and become the B element within the clause boundaries, or the verb of the clause may be moved to T position and become the T of the clause. For instance, in (10) d, the element may be the constituent of the converb clause predicate, *oğlunu* (his/her son) which is moved to B position in the clause, or may be the predicate of the converb clause, *öpüp* (by kissing) which is moved to T position in the clause. The predicate of the temporal converb clause does not become the T of the whole sentence because topicalization can not operate across the clause boundaries. An element in a clause may be the T of that particular clause only. If an entire converb clause is located in the T position in a sentence, the clause becomes the T element of the whole sentence.

Another hypothesis is that converb clause constituents can not be extracted from the boundaries of clauses and backgrounding can not operate outside the converb clause boundaries. In order to consider this hypothesis the following examples are going to be analyzed.

(10) e. *[Öpüp] yatağına yattı oğlunu.

(11) e. *[Savura savura] evden çıktı saçlarını.

(12) e. *[Atlar atlamaz] duvarın dibine çöker yukarıdan.

(13) e. *[Geldiğimden beri] kendimi yalnız hissediyorum bu şehre.

(14) e. *[Sallayarak] uzaklaşıyordu buradan elini.

- (15) e. *[Konuşurken] sesini yükseltme benimle!
- (16) e. *[Doğmadan] kızı alır kaçarsın ay.
- (17) e. *..., [Çıktığında] seni görmeye geldim evine.
- (18) e. *[Boş kaldıkça] yukarı da çıkarsın elin.
- (19) e. *[İndikten sonra] size geleceğim otobüsten.
- (20) e. *[Geldiği zaman] bir kutlama yapılacak Ali.

The complements of the converb clause verbs mentioned in the examples above can not be placed in B positions in matrix clauses. When the converb clause constituents are extracted from the boundaries of the clauses, the sentences become ungrammatical. So, it can be concluded that B can operate only in the converb clause boundaries but can not operate outside the clause boundaries. In addition, there is a one-way dependency relation between the converb and the matrix clauses. The converb clause is dependent on the matrix clause, whereas the matrix clause is not dependent on the converb clause. The observations that are made so far have demonstrated the validity of Erguvanlı Taylan's conclusions about the effects of locating the converb clause constituents in F and B positions both inside and outside the clause boundaries.

III.6. The Interclausal Syntactic Relations and the Scope of Operators in Turkish Temporal Converb Clauses

It was mentioned earlier in this study that as well as simple sentences with only one predicate, complex sentences which may contain more than two clauses have layered structures. These layers are termed as *junctures* by Foley and Van Valin (1984:187-234). A very brief introduction to both the juncture and the nexus types was made in section I of

this study. In this section, Turkish temporal converb clauses will be analyzed in terms of their layered structures.

First of all, two phenomena, *juncture* and *nexus*, will be defined. Juncture is the “theory of the units” in a clause, whereas nexus is “the theory of the relations” (Van Valin and La Polla, 1997:442) among clauses in the framework of Role and Reference Grammar. According to the juncture theory, proposed by Foley and Van Valin (1984:187-188), clauses have layered structures, and every clause consists of a particular clausal unit. The clausal units are divided into three in terms of the layered structure of clauses: the nucleus, the core and the periphery. The nucleus is the smallest unit in a clause, and it consists of a predicate. The core consists of a predicate and its complements. The nuclei which are joined at the core-level, then, share the same peripheral arguments. The periphery consists of the nuclear element, and the core arguments of a clause.

A sentence may be formed by joining the units of different layers. Two junctures (for instance, two core-level clauses) are joined and form a core-level juncture. Juncture types are also divided into three as nuclear juncture, core-level juncture and peripheral juncture. The nuclear juncture is “a construction with a complex nucleus. All core and peripheral arguments are arguments of this complex nuclear element” (Foley and Van Valin, 1984:188). In core-level juncture, the “cores, each with its own nucleus and core arguments, are joined together to form a larger complex core, and the peripheral arguments must be shared by both cores” (Foley and Van Valin, 1984:188). Peripheral juncture, on the other hand, “involves the joining of two clauses with independent peripheries” (Foley and Van Valin, 1984:188). Contrary to the core-level juncture, peripheral juncture has the secondary arguments of the nuclei.

[CORE ... [NUCPRED] ... + ... [NUCPRED] ...]	Nuclear Juncture
[CLAUSE ... [CORE ...] ... + ... [CORE ...] ...]	Core Juncture
[SENTENCE ... [CLAUSE ...] ... + ... [CLAUSE ...] ...]	Clausal (Peripheral) Juncture

Figure 8: Levels of juncture (Van Valin and La Polla, 1997:442)

Van Valin and La Polla (1997:442-448) exemplify nuclear, core-level and peripheral junctures by analyzing sentences from various different languages.

1. Nuclear Juncture: French

- (1) “Je fer-ai mang-er les gâteaux à Jean.”
 1sg make-3sgFUT eat-INT the.Mpl cakes DAT John
 ‘I will make John eat the cakes.’

2. Core-level Juncture: Mandarin

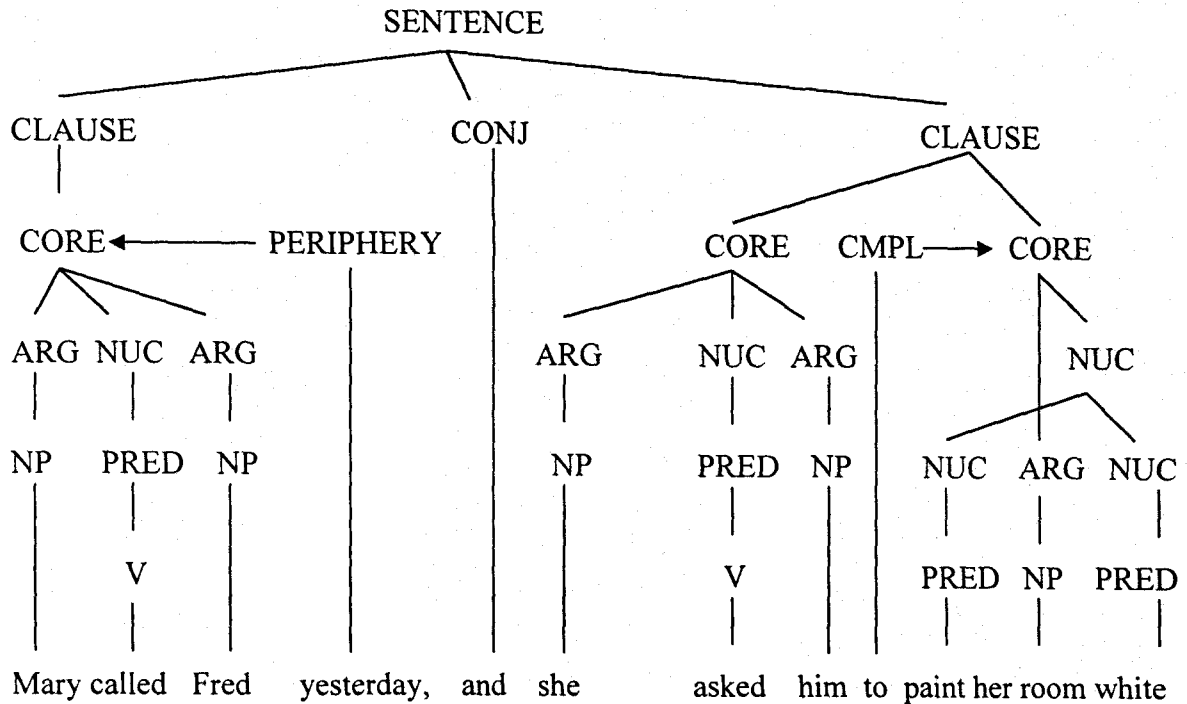
- (2) “Tā jiāo wǒ xiě zì.”
 3sg teach 1sg write characters
 ‘She teaches me to write characters.’

3. Peripheral Juncture: English

- (3) “Mary called Fred yesterday, and she asked him to paint her room white.”

The following tree diagrams illustrate the argument projections of the sentences in examples (1), (2) and (3). The first diagram demonstrates that two predicates, *ferai* (will make) and *manger* (to eat), form a complex nucleus and share the same core arguments. In the second diagram, two cores with different nuclei and core arguments form a clause in which the peripheral operators are shared by both cores. The last diagram illustrates that two clauses with their own nuclei, core-level and peripheral arguments are joined by the conjunction *and*.

Each of the layers mentioned above occupy different operators which have scope over that layer. Tense, aspect, directionals, status, evidentials and illocutionary force are operators over different layers.



Aspect is an operator over the nuclear level, and it is followed by *directionals* which indicate “the directional orientation” of the nucleus. *Modality* operates over the core-level in the clause. *Status* expresses the “actuality” (realization) of the proposition in the clause, i.e., whether or not the event is realized. After the innermost peripheral operator, *status*, comes another peripheral operator, *tense*. *Evidentials* have scope over other inner operators, and is followed by *illocutionary force* which has scope over both the entire periphery and the other peripheral operators. In complex constructions, the layers may be independent from each other in terms of their operators, i.e., they may not share any operator (in coordination) or they may be dependent on each other in terms of their operators (in cosubordination) or their structure (in subordination).

Van Valin and La Polla (1997:454) state that operator-sharing is a criteria for distinguishing these three nexus types from each other. Considering Van Valin and La Polla’s argument and operator projections for the layered structure in complex sentences as

a model, the interclausal relations of the sentences constructed with the Turkish temporal converbs will be displayed by the diagrams in (4)-(13).

The argument and operator projections of sentences (4)-(10) display that all of these sentences are instances of core coordination. As both nuclei in the clauses have their own core arguments, and as they share the outer peripheral arguments, the clauses are joined in the core layer. On the other hand, the clauses are instances of coordination when the operational projections of the sentences are considered. In examples (4), (6), (7), (9) and (10) the clauses share the peripheral (clausal) operators like *tense*, *agreement* and *illocutionary force*, but they do not share the nuclear and the core-level operators like *aspect*, *negation* and *modality*. In examples (5) and (8), the peripheral operators *tense* and *illocutionary force* are shared by the two clauses. On the other hand, the nuclear and core-level operators like *negation*, *aspect* and *agreement* are not shared by the clauses. The nexus type of coordination, which was displayed above with relevant examples, requires that the nuclear and the core-level operators should not be shared by both clauses.

In Turkish complex sentences, the layer in which agreement is located differs according to the subjects of the clauses. If the converb and the matrix clauses are non-coreferential, *agreement* is displayed in the core-level layer in the operator projections of the sentences. Yet, if the subjects are coreferential, agreement, in this case, is displayed in the peripheral (clausal) layer. So, it can be stated that *agreement* is an operator on both core-level and peripheral layers.

The operators and their relevant scopes can be summarized as below. The order is from outer to inner, i.e., the operator on the leftmost is the outer one, whereas the operator on the rightmost is the inner.

[IF [(AGR) [TNS [(AGR) [MOD [ASP [NEG]]]]]]]]

Figure 10: The sentential operators from outer to inner

The complex sentences given in examples (4)-(10) are said to be instances of core coordination. Yet, there are other instances in which the clauses are conjoined in core layer, but they are cosubordinate clauses. In cosubordinate type of nexus relation, the clauses in a complex sentence share all of the sentential operators.

(4) Barbaros [uzanıp] omzuma dokunuyor.

‘Barbaros reaches to me and touches my shoulder.’

(5) [Rabia’dan para kesilince] Ahmet sefalet çekmişti.

‘Ahmet suffered privation when his income from Rabia came to an end.’

(6) Mehmet sokaklarda [yıkıla yıkıla] dolaşiyor.

‘Mehmet is wandering in the streets, falling and standing.’

(7) Dalkavukları [parasını alıp] onu maskara etmiyorlardı.

‘His/her flatterers were taking his/her money, but they were not mocking him/her.’

(8) Ali [sevgilisi gittiğinden beri] kimseyle konuşmuyor.

‘Ali is not talking to anybody since his sweetheart has gone.’

(9) Ahmet [yemek yediği zaman] kendine gelebildi.

‘Ahmet was (able to be) conscious when he ate meal.’

(10) [Olanları açıklamadan önce] Kapo’yu biraz anlatmalıyız.

‘We should tell a bit about Kapo before explaining the events.’

The sentences in (11)-(13) illustrate core cosubordination in Turkish complex sentences formed by temporal converbs. In these sentences, the converb and the matrix clauses share the peripheral arguments *tense*, *agreement* and *illocutionary force*, and all of the operators have scope over both of the cores. So, in these three sentences, the necessary criterion for a clause to be a cosubordinate clause [“*the obligatory sharing of operators*”

(Van Valin and La Polla, 1997:455)] is met, and thus, the converb clauses in examples (11)-(13) are cosubordinate clauses.

(11) Barbaros [uzanıp] omzuma dokundu.

‘Barbaros reached and touched my shoulder.’

(12) Arzu [elini sallaya sallaya] uzaklaştı.

‘Arzu went away, vawing her hand.’

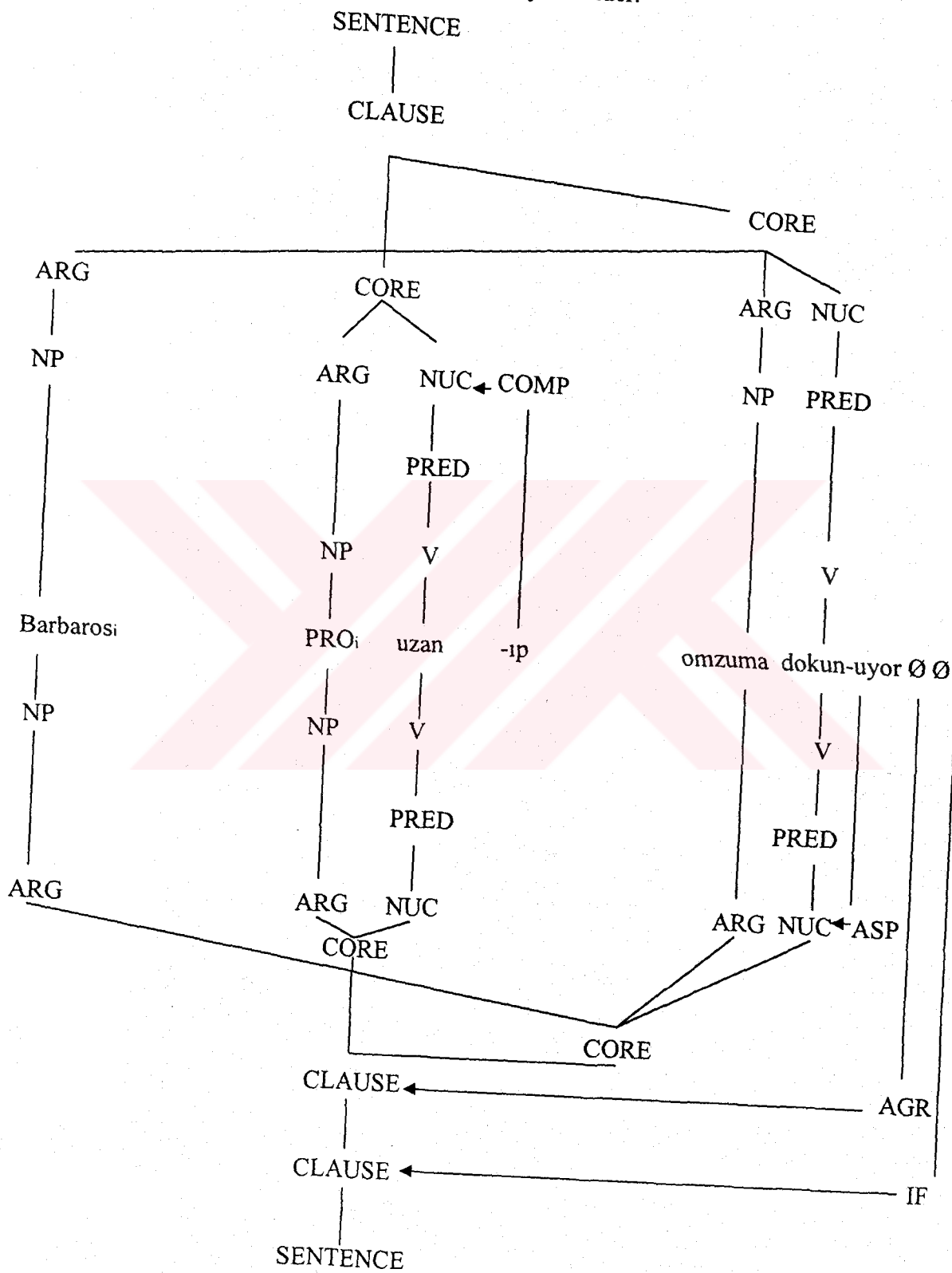
(13) Adam olanları [ağlayarak] anlattı.

‘The man told what had happened, crying.’

The data examined so far in this section demonstrates that the clauses of the Turkish complex sentences constructed by temporal converbs are conjoined with each other in the core-level layer, and they may be one of the nexus types of coordination or cosubordination with respect to the scope of operators. The temporal converb clauses are not subordinate clauses because they are not structurally dependent on the matrix clause. They are neither complements of the matrix clause, nor do they modify the matrix clause as subordinate clauses do. Therefore, Turkish temporal converb clauses can be represented under the category of core cosubordination and core coordination in terms of the interclausal relations hierarchy.

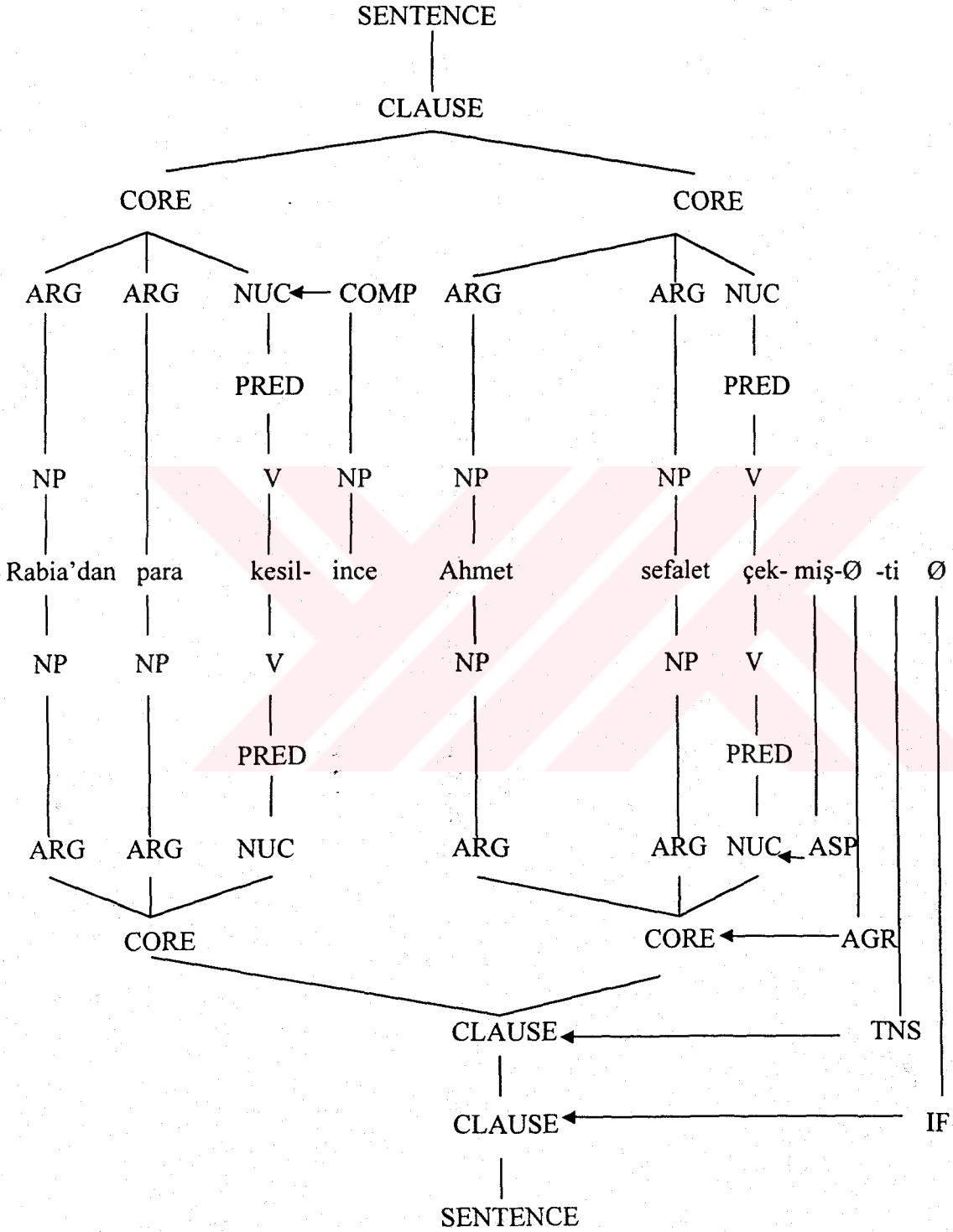
(4) Barbaros [uzanıp] omzuma dokunuyor.

'Barbaros reaches to me and touches my shoulder.'



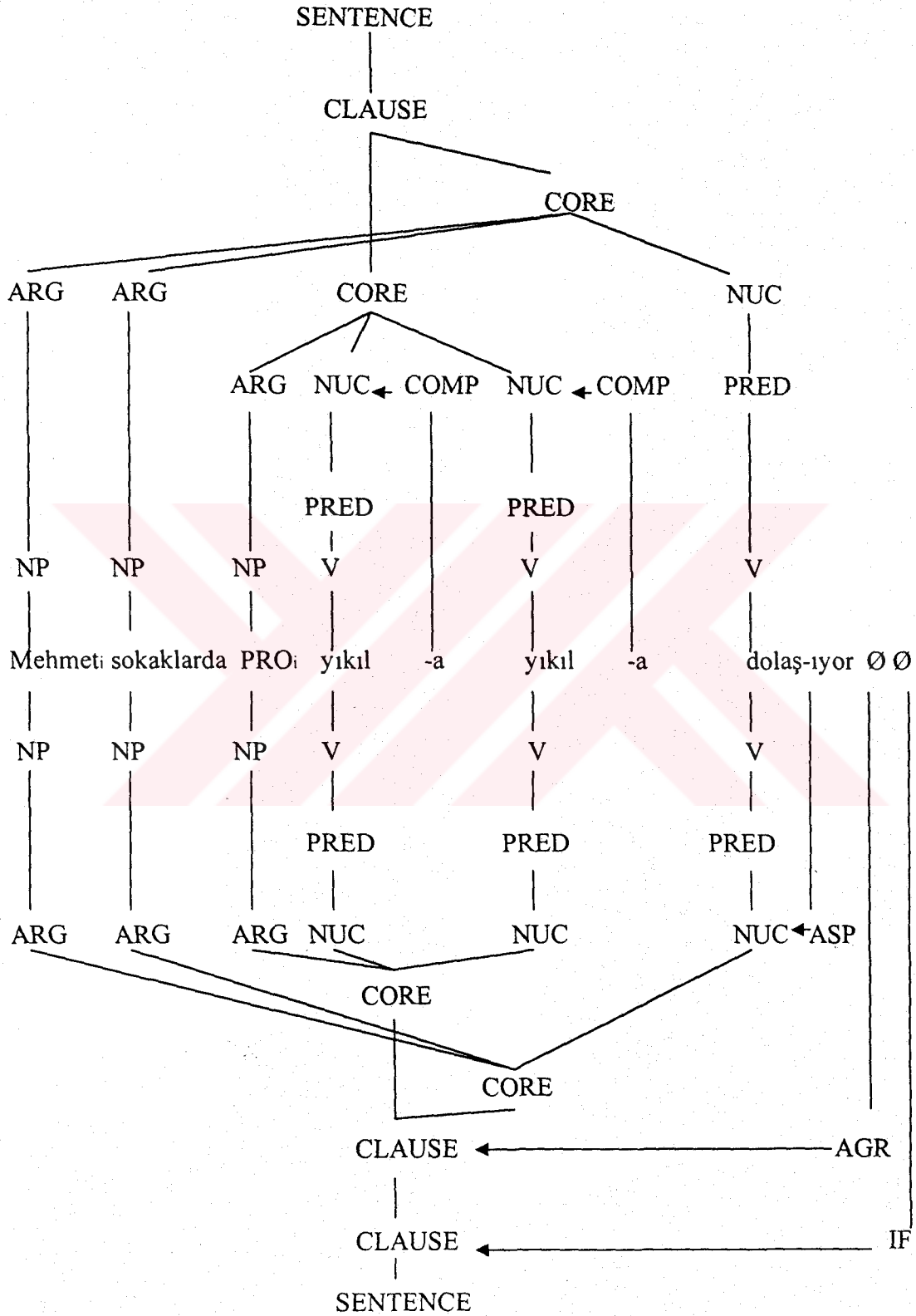
(5) [Rabia'dan para kesilince] Ahmet sefalet çekmişti.

'Ahmet suffered privation when his income from Rabia came to an end.'



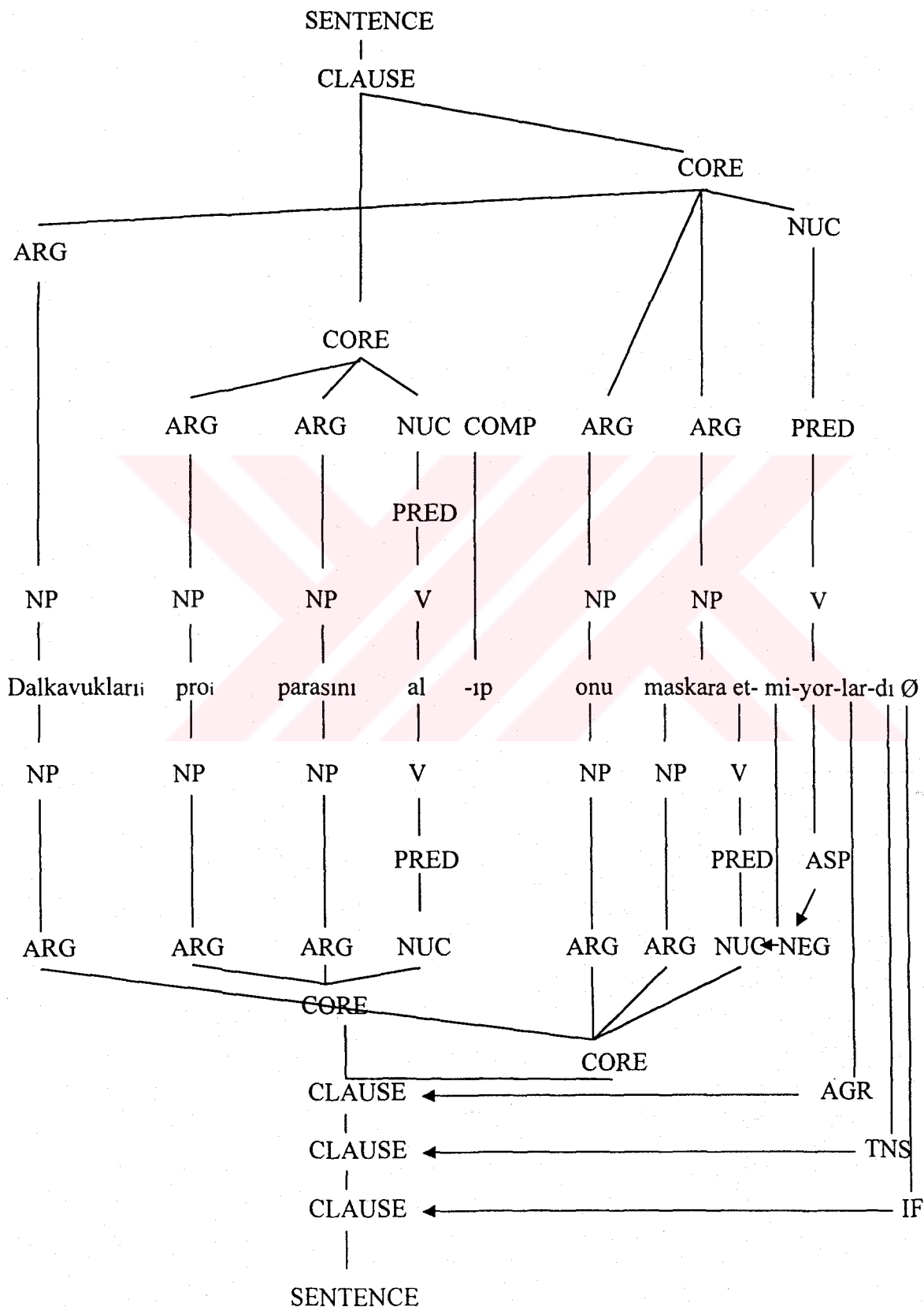
(6) Mehmet sokaklarda [yıkıla yıkıla] dolaşiyor.

'Mehmet is wandering in the streets, falling and standing.'



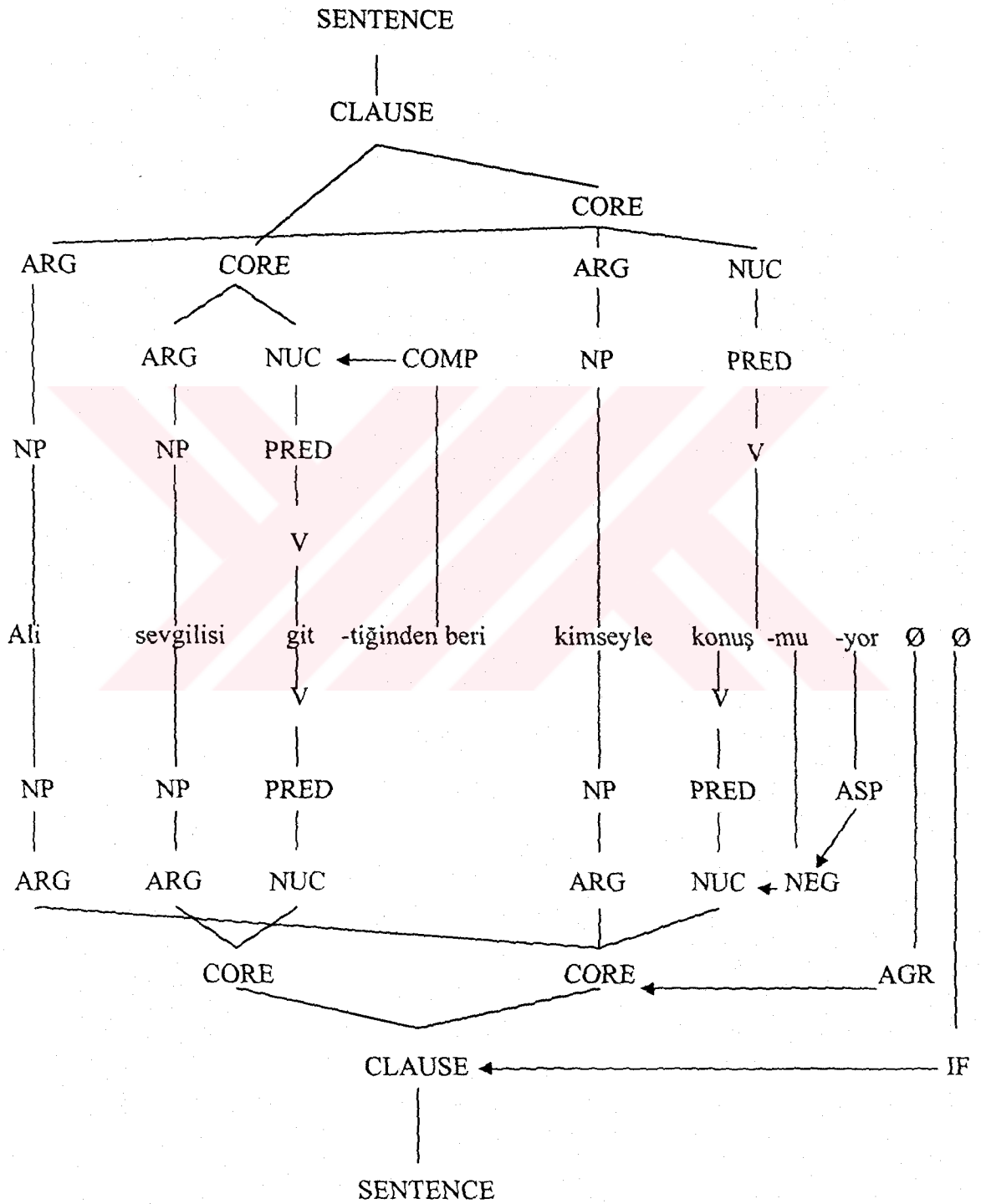
(7) Dalkavukları [parasını alıp] onu maskara etmiyorlardı.

'His/her flatterers were taking his/her money, but they were not mocking him/her.'



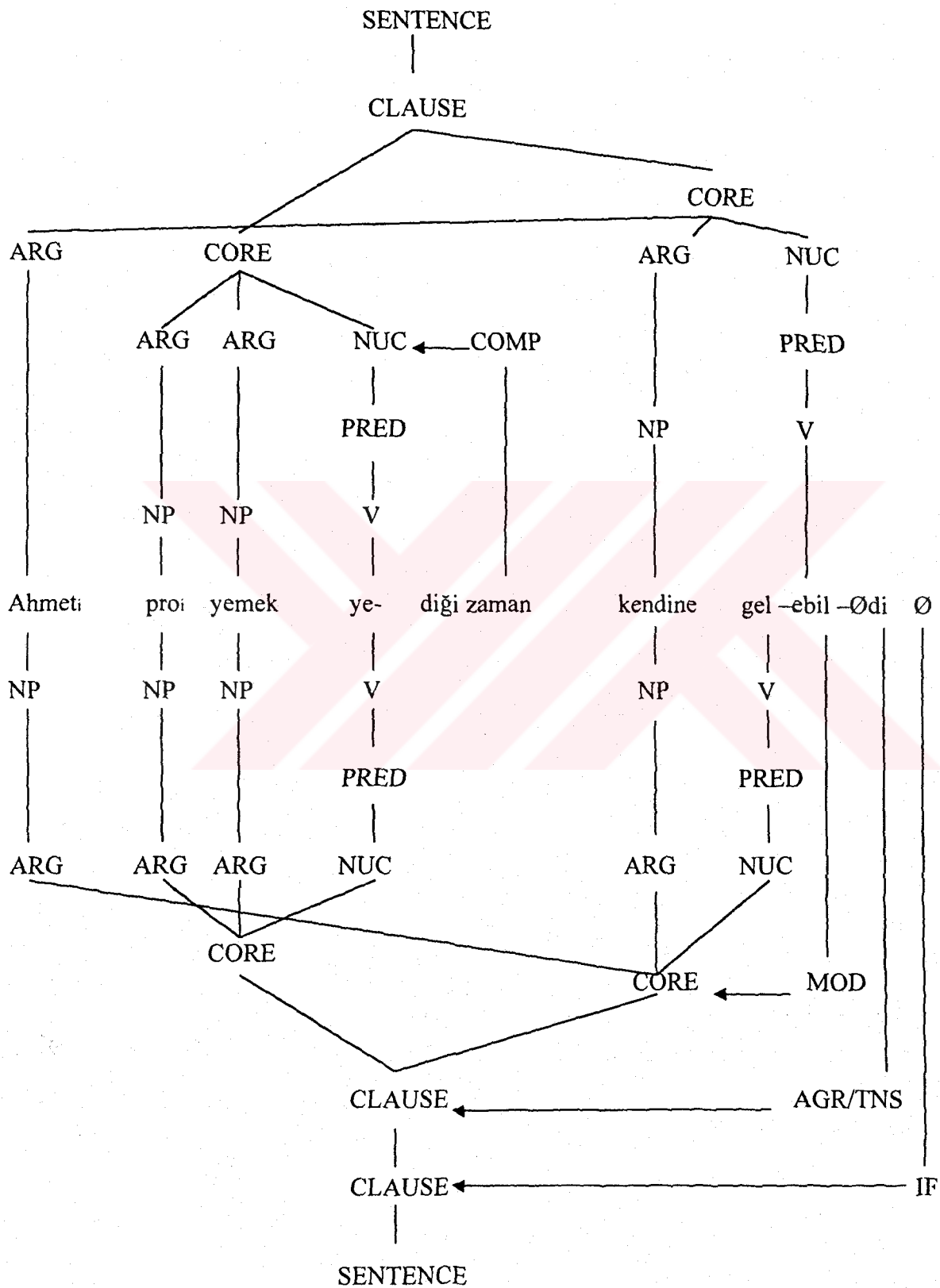
(8) Ali [sevgilisi gittiğinden beri] kimseyle konuşmuyor.

'Ali is not talking to anybody since his sweetheart has gone.'



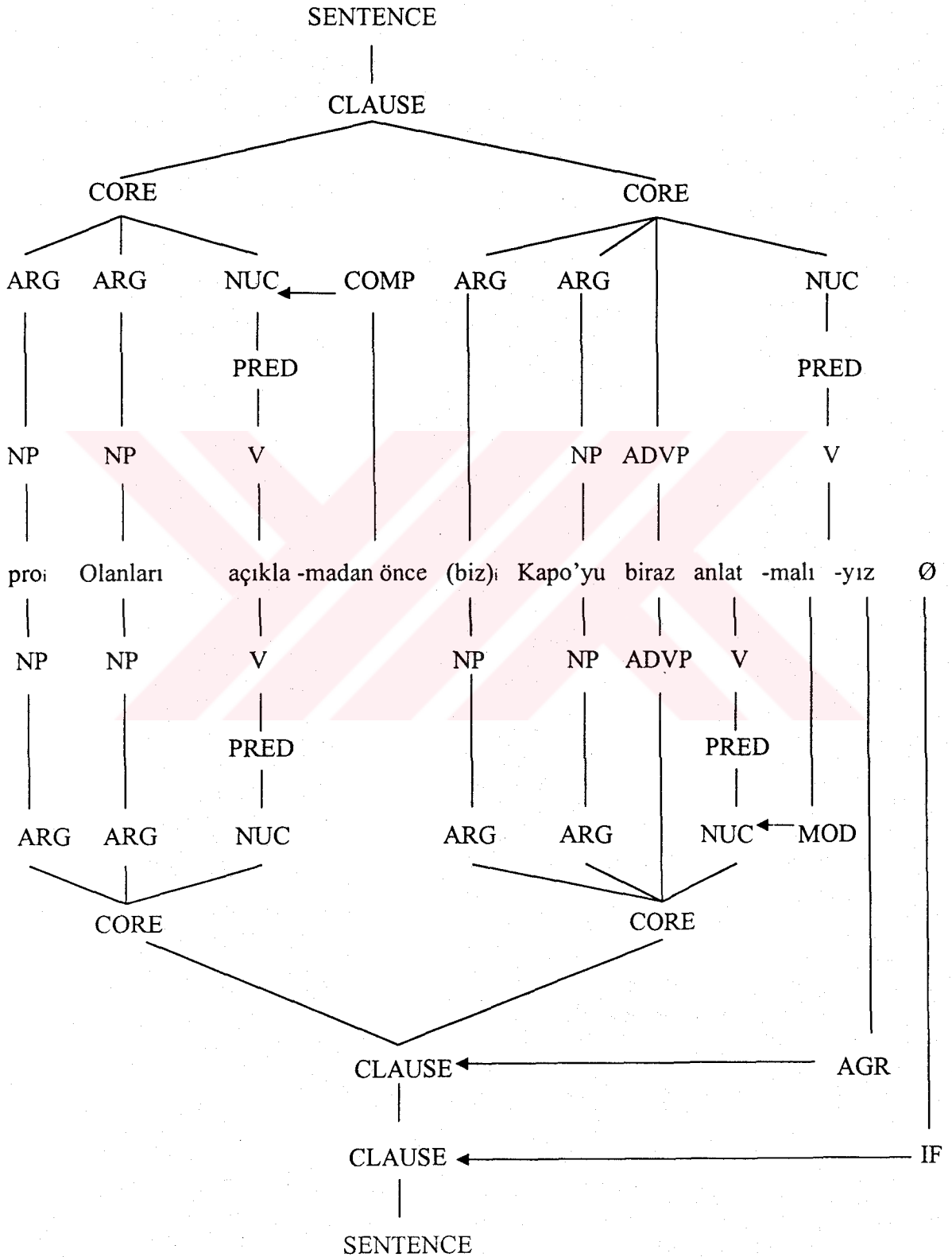
(9) Ahmet [yemek yediği zaman] kendine gelebildi.

'Ahmet was (able to be) conscious when he ate meal.'



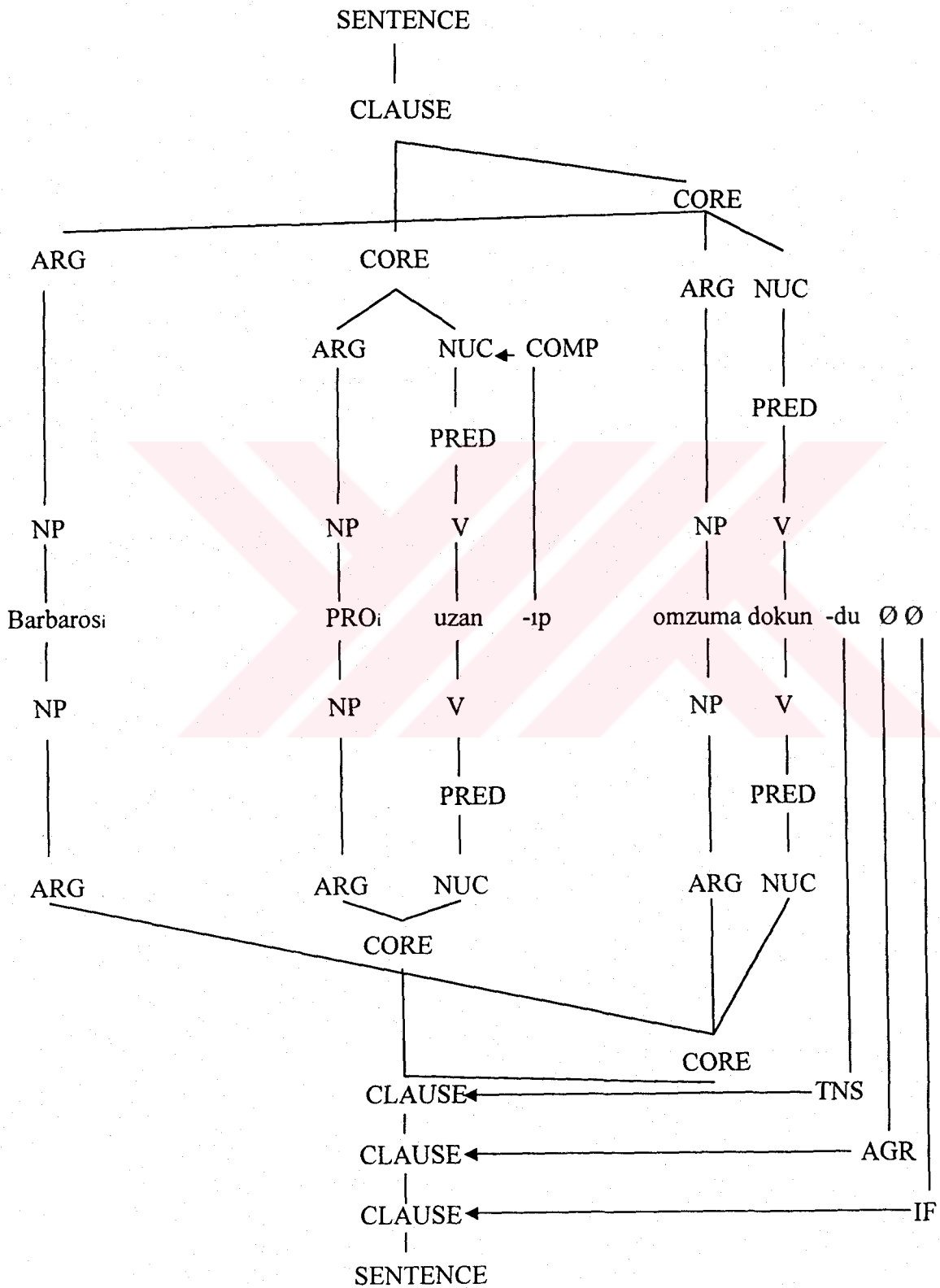
(10) [Olanları açıklamadan önce] Kapo'yu biraz anlatmalıyız.

'We should tell a bit about Kapo before explaining the events.'

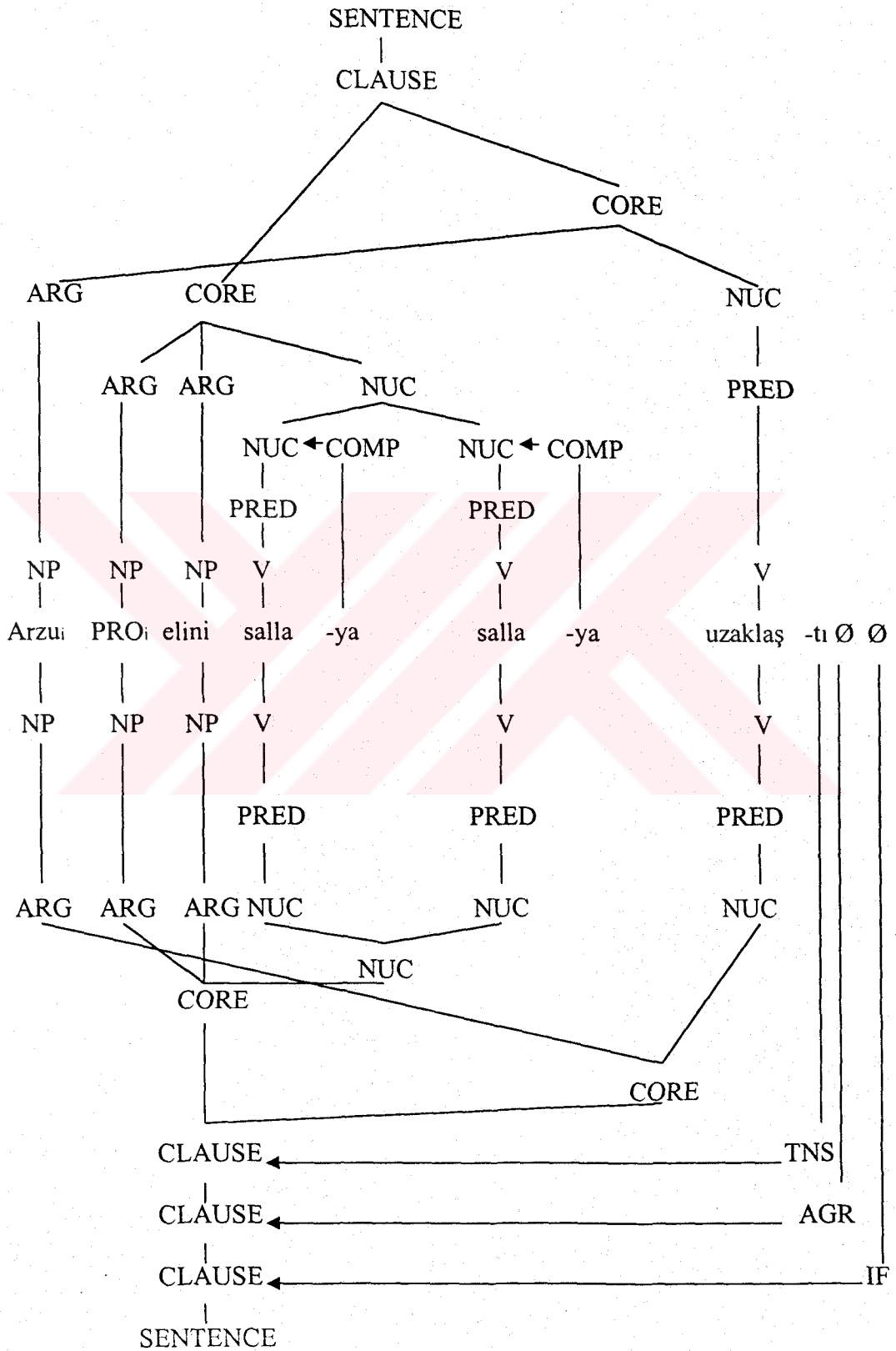


(11) Barbaros [uzanıp] omzuma dokundu.

'Barbaros reached and touched my shoulder.'

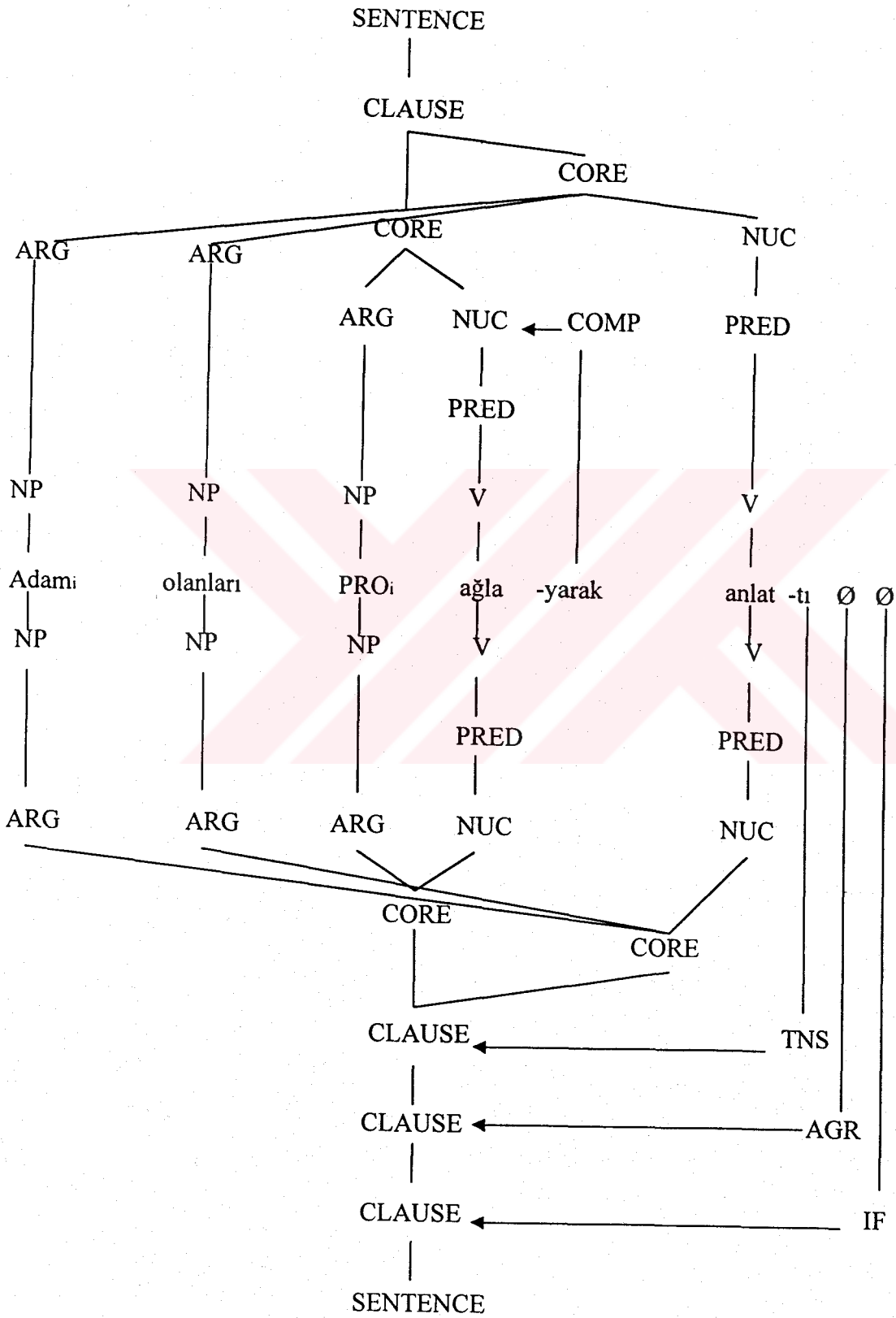


(12) Arzu [elini sallaya sallaya] uzaklaştı.
 'Arzu went away, vawing her hand.'



(13) Adam olanları [ağlayarak] anlattı.

'The man told what had happened, crying.'



III. 7. Control Structure in Temporal Converb Clauses

It was mentioned earlier in this study that in the process of adverbialization, a nonfinite clause is embedded in a full-inflected clause by restricting the matrix clause meaning in some way (i. e., by assigning a temporal or a manner relationship among the converb and the matrix clauses). The matrix clause has its own subject as it is a finite form. On the other hand, the converb clause may or may not have a subject of its own.

(1) [Ayşe elindeki tepsiyi düşürünce] Akif gülmeye başladı.

'When Ayşe dropped the tray in her hand, Akif started laughing.

(2) a. Ayşe [elindeki tepsiyi düşürünce] ağlamaya başladı.

'Ayşe started crying when she dropped the tray in her hand.

In example (1) both the converb and the matrix clauses have their own subjects; Ayşe is the subject of the converb clause and Akif is the subject of the matrix clause. In example (2 a), the converb clause subject is co-indexed with the subject of the matrix clause.

(2) b. Ayşe: [\emptyset elindeki tepsiyi düşürünce] ağlamaya başladı.

Since the converb clause does not have an overt subject, and its subject reference is interpreted as being co-indexed with the subject of the matrix clause, an empty element (displayed by \emptyset) is used as the location of the converb clause subject. According to Government and Binding Theory, this empty category is represented by PRO.

Not only converb clauses but also some other nonfinite clauses may have the empty category PRO. Erguvanlı Taylan (1996:48-49) displays that subject control occurs in four distinct nonfinite subordinate clause constructions.

1. Object Complements:

- (3) “Beni (Ø_i yüzmeğ)-e karar verdim.”
‘I decided to swim.’

2. Subject Complements:

- (4) “(Ø Burada durmak) tehlikeli.”
‘It is dangerous to stand here.’

3. Purpose Clauses:

- (5) “Beni (Ø_i derse başlamak için) seni bekliyordum.”
‘I was waiting for you to start the lesson.’

4. Gerunds:

- (6) “Çocukı (Ø_i koşup) kapıyı açtı.”
‘The child ran and opened the door.’

As it is observed, gerunds (converbs in this study) may have the empty category PRO and thus, they may have subjects which are co-indexed with the subjects of the matrix clauses.

Although most of the temporal converbs such as *-Inca*, *-All*, *-ken* and *-Diğİnda* allow both coreferential and noncoreferential subjects, some of them such as *-(I)p*, *-ArAk* and *-A...-A* do not allow noncoreferential subjects in some cases mentioned by Brendemoen and Csató (1987: 121-134). In their view, obligatory subject control is realized in constructions formed by these three converbs in deep structure level. Co-indexing takes place only if the converb clause subject is in theta-position. They also mention that converb clauses may either precede or succeed the matrix clause. Yet, this is a problematic situation in that there is not a clear-cut way to decide whether the subject belongs to the converb clause or to the matrix clause. In respect to this issue, Brendemoen and Csató identify two types of converb clauses in Turkish. The first type consists of the

clauses whose subjects are controlled and represented by PRO. On the other hand, the second type consists of the clauses whose subjects are not controlled and represented by a lexical item. Consider the following examples.

(7) “Bizi de [PRO_i gidip] şu hamamda yıkanacağız.”

‘We will also go and wash ourselves in that bath.’

(8) “[Silahları çekilip] kavga başladı.

‘The weapons were drawn and the fight began.’

The subject of the converb clause is represented by the empty category PRO, and co-indexed with and governed by the matrix clause subject in example (7). In example (8), however, the converb clause has a lexical subject, and this subject is not governed by the matrix clause subject.

Brendemoen and Csató (1987:122) observe that a *neutralization phenomenon* occurs in two types of converb clause constructions which have either a passive or an intransitive verb. The subjects of converb clauses are not in theta-positions in both of these constructions, and they do not necessitate obligatory subject control. Passive morphology absorbs the role of converb clause subject and thus, there is not a theta-marked argument to be co-indexed with the matrix clause subject as it is in example (8). In addition to passive constructions, some intransitive verbs (ergative verbs) do not allow theta-marked arguments in their subject positions. Therefore, co-indexing is not realized in deep structure level. Because the converb clause subject bears its theta-role in surface structure level, co-indexing occurs in this level.

(9) “Mehmeti, [dişij ağrıya ağrıya] sabahı etti.”

‘ Mehmet stayed awake all night with his tooth aching.’

Haspelmath (1995:10-32) divides converbs into three as implicit-subject, explicit-subject and free-subject converbs by taking into consideration their subject

reference. He states that the converb clause subject is generally implicit and it is controlled by the matrix clause subject. However, in Turkish, the dative or accusative experiencers or genitive constructions in converb clauses may indicate the referent of the converb clause subject. Haspelmath (1995: 32) terms this phenomenon as *pragmatically determined nonsubject control*. In some cases, the referent of the implicit subject can not be interpreted from the matrix clause. The controlling subject, then, is searched in the context. Apart from Haspelmath's division of subject reference in converb clauses, Nedjalkov (1995:110) divides converbs into three other referential types.

1. Same-subject converbs: The embedded clause and the matrix clause subjects are coreferential.
2. Different-subject converbs: The embedded clause and the matrix clause subjects are noncoreferential.
3. Varying-subject converbs: The embedded clause and the matrix clause subject may be both coreferential and noncoreferential.

Nedjalkov's classification is essentially a restatement of the classification proposed by Haspelmath.

Turkish has only varying-subject converbs. There is not an obligatory coreferentiality or noncoreferentiality between the converb and the matrix clauses in temporal converb clause constructions. In the light of the discussion of Brendemoen and Csató, Turkish temporal converbs can be considered as varying-subject converbs.

(10) [PRO_i Eve gelince] (ben)_i yemek yedim.

'I had dinner when I came home.'

(11) [Ayşe_i eve gelince] (ben)_j yemek yedim.

'I had dinner when Ayşe came home.'

(12) Kemali [PRO_i kasabadan ayrılalı] kendini yalnız hissediyordu.

'Kemal felt himself alone since he left the town.'

(13) [Kemali kasabadan ayrılalı] Ebruj kendini yalnız hissediyordu.

'Ebru felt herself alone since Kemal left the town.'

All the temporal converbs except *-(I)p*, *-ArAk* and *-A...-A* permit varying subjects. These three converbs basically require the subjects to be coreferential. In this respect, at first sight, they may be regarded as same-subject converbs. However, when the converb clause verb is a passive construction (as in example [8]) or when it is an intransitive verb (as in example [9]), there can be noncoreferential subjects in the converb and the matrix clauses.

When the converb clause subject is co-indexed with the matrix clause subject, the empty category PRO is located in the subject position of the converb clause. However, there must be a lexical subject in the converb clause when the subjects are not co-indexed. Compare examples (12) and (13) above.

It was stated so far that nonfinite structures like temporal converb clauses may have an overt lexical subject or they may have an empty category PRO in their subject positions which is co-indexed with the subject of the matrix clause. However, in some cases, the subject reference of the converb clause may be interpreted from the dative or accusative experiencers or from the genitive constructions which take place in the matrix clause.

(14) [Bütün gerçekleri öğrenince] ona sanki dünya başına yıkılmış gibi geldi.

'S/he felt very depressed when s/he learned all the truth.'

(15) [Bu mahalleden geçerken] onu bir hüznün bulutu sarıyordu.

'S/he was surrounded by a cloud of sadness while s/he was passing from that neighborhood.'

(16) Herifi [kadın kıyafetiyle Fransız Postahanesi'nden çıkarken] yakaladık.

'We caught the man while he was going out from the French Post Office, wearing a suit for females.'

(17) [Şaşırırken], [kızarken] ve [gülerken] çekiyorum fotoğrafını.

'I take his/her photos while s/he is surprized, angry, and s/he is smiling.'

(18) On üç yıl giydiği hasır şapka. [Kültür emperyalizmi ile dalga geçerken] de kafasındaydı.

'The straw hat which he weared for thirteen years. He was wearing it already while he was making fun of the Cultural Imperialism.'

(19) [Üniversiteyi bitirince] yolları Wall Street'e düşecek.

'They will set out for Wall Street when they finish the university.'

The subject referents of the converb clauses in examples (14), (15) and (17) are not directly expressed in the matrix clauses. However, there are some other clues in the matrix clauses about the subject referents of these converb clauses. In (14), the dative experincer *ona* (him/her) indicates that the subject of the converb clause is somebody who is a third person singular. The same is true for the converb clause in example (15). The accusative experincer in the matrix clause *onu* (him/her) indicates that the subject of the converb clause is third person singular. Example (17) demonstrates that the object of the matrix clause which is marked by genitive case *fotoğrafını* (his/her/your photograph) again marks that the converb clause subject is third person singular or second person singular.

Sometimes the matrix clause subject does not give any clue about the referent of the converb clause subject, and thus, the subject of the converb clause is determined from the context.

(20) a. [Washington'da çalışırken] de böyleydi durum.

'The situation was the same while working in Washington.'

The agent, i.e. *ben* (I), *sen* (you) or *o* (s/he), of the act of *working* is not clear in example (20 a). In this case, the referent of the converb clause subject can be found in the context.

(20) b. Bir olaydan haberdar olmadığım zaman bana o olaydan en son haberi olan kişinin ben olmamın ne kadar ayıp bir şeymiş gibi davranılmasına son derece gıcık oluyorum. [Washington'da çalışırken] de böyleydi durum. Örneğin sabaha karşı dörtte telefon çalar açarsınız ve karşıdaki ses size 'Ooohh sende uyuyorsun haberin yokmu olanlardan. Beyaz Saray'ın bahçesine uçak düştü' der.

'I am irritated by the attitude that what a shameful thing it is that I am the last person informed about an event when I do not know anything about the event. The situation was the same while I was working in Washington. For instance, the phone rings at four a.m., you answer it, and the voice on the line says, 'Ooohh, you are unaware of what is going on. Do not you have any information about the events? An airplane fell down to the garden of the White Palace.'

As example (20 b) demonstrates, the subject of the converb clause is the narrator himself, i.e., the first person singular. The converb clause subject (in this case, PRO) is co-indexed with 'I'.

Essentially, Turkish temporal converbs can be divided into two in terms of subject reference as the ones which do not have subject agreement markers and the ones which have subject agreement markers. Consider the examples below.

(21) Beni [PRO_i uzanıp] kendime çekiyorum onu.

'I reach to him/her and pull him/her near me.'

(22) Beyrek kalktı, [PRO_i ağlaya ağlaya] kırk yiğidin yanına geldi.

'Beyrek stood up, and came next to the forty heroes, crying.'

(23) Daha [pro_i şuraya geleli] (benim); bir günüm bile olmadı.

'It has not been a day since I came here.'

- (24) (O)_i [pro_i Daireye gelir gelmez] bin beygirli bir dinamo gibi faaliyete geçti.
‘S/he began working like a one thousand horse-powered dynamo as soon as s/he came to the office.’
- (25) (O)_i [pro_i Senin ayak seslerini işitince] pencereden çıktı gitti.
‘When s/he heard your footsteps, s/he escaped from the window.’
- (26) Beni [PRO_i elimi sallayarak] sessizce yürüdüm.
‘I walked silently, waving my hand.’
- (27) Adamı [pro_i zenginleştikçe] Batı’nın çuval dokumalarını seçer.
‘The man chooses the sacking weavings of the West as he gets richer.’
- (28) Seni [PRO_i garson olmadan önce] ne yapıyordun Halis?
‘What were you doing before you became a waiter, Halis?’
- (29) Ebru_i [pro_i evi temizledikten sonra] pasta yapacak.
‘Ebru is going to make a cake after cleaning the house.’

The temporal converbs, *-(I)p*, *-A...-A*, *-All*, *-r...-mAz*, *-Inca*, *-ArAk*, *-DikÇA*, *-mAdAn önce* and *-DiktAn sonra* in examples (21)-(29) above do not have explicit subject agreement marking inherently. When there is no overt lexical subject in the temporal converb clause, the converb clause subject is regarded as being co-indexed with the subject of the matrix clause. On the other hand, the temporal converb *-ken* may have subject agreement marking before itself, but it can have only the third person plural.

- (30) [pro_i Ayrırlırlarken] (dede çocuğa)_i gökleri gösterdi.
‘The old man showed the sky to the child while they were seperating.’
- (31) * [(Ben) Arayacağımken] sen geldin.
‘While I was attempting to call you, you came.’
- (32) * [(Sen) Gelirsinken] ben aradım.
‘While you were coming, I called you.’

The other group of Turkish temporal converbs which have subject agreement markers on themselves is constituted the converbs which are formed by nominalized structures. This group includes the converbs *-DIđIndA*, *-DIđIndAn beri* and *-DIđI zaman*.

(33) [Elimdeki işleri bitirdiđimde] dinlenebilirdim.

'I could rest for a while when I finish my duties.'

(34) [Geldiđinde] vakit çok geç olmuştu.

'It was too late when you came here.'

(35) [Evi sattıđımdan beri] o semte gitmiyorum.

'I have not gone to that neighborhood since I sold the house.'

(36) [Bize geldiklerinden beri] her gün kavga ediyoruz.

'We quarrel every day since they came to our house.'

(37) [Uslu çocuk olduđun zaman] seni çok seviyorum.

'I love you very much when you are a good child.'

(38) [Savaş çıktıđıØ zaman] yiyecek sıkıntısı çekilmişti.

'There had been a shortage of food supplies when the war began.'

The converbs in examples (33)-(38) carry various different subject agreement markers. *-DIđIndA*, *-DIđIndAn beri* and *-DIđI zaman* bear the first person singular (*-m*), the second person singular (*-n*), the third person singular (*Ø*) and the third person plural (*-lar*) markers. This enables the speakers of Turkish language determine the subject of a converb clause formed with *-DIđIndA*, *-DIđIndAn beri* and *-DIđI zaman*.

In this section of the study, the subject reference of temporal converb clauses and the control structure are described. According to the observations made on the sample sentences so far, temporal converbs can be classified into two groups as the ones which do not have subject agreement markers and the the ones which have subject agreement markers.

All the Turkish temporal converbs are varying-subject converbs. That is to say, the converb and the matrix clause subjects may be either coreferential or noncoreferential. However, it is observed that when the subjects are noncoreferential, an overt lexical subject should appear in the converb clause. Otherwise, the empty category PRO is co-indexed with the matrix clause subject and the subjects become coreferential.

III.8. Summary

In section III and in its subsections, Turkish temporal converbs and converb clauses were examined in terms of their syntactic properties. Turkish temporal converbs can be divided into two groups as *simple bound converbs* and *converbs constructed with nominalizers*. The first group includes the converbs such as *-InçA*, *-ArAk*, *-ken*, *-A...-A*, *-(I)r...-mAz*, *-(I)p* and *-All*. The latter group includes other temporal converbs such as *-DIğIndA*, *-DIkçA*, *-mAdAn önce*, *-DIktAn sonra*, *-DIğIndAn beri* and *-DIğI zaman*. Some properties of these two structurally different groups of converbs have alterations. In order to display the syntactic differences among temporal converbs, Turkish sample sentences were analyzed. Co-occurrences of temporal converbs with bare roots of verbs, interaction of these converbs with voice, negation, modality and subject agreement markers were examined. The following results were drawn.

- Bare roots of verbs can be attached the converbs *-(I)p*, *-InçA*, *-ArAk*, *-All*, *-A...-A*, *-(I)r...-mAz*, *-DIğIndA*, *-DIkçA*, *-mAdAn önce*, *-DIktAn sonra*, *-DIğIndAn beri* and *-DIğI zaman*. Only *-ken* can be added on inflected verb stems and take various tense and aspect markers before itself.
- All of the converbs can be used with voice markers.

- With three exceptions all of the converbs can follow negation marker . These exceptions include *-DIđIndAn beri*, *-(I)r...-mAz* and *-mAdAn (önce)*. Since *-(I)r...-mAz* and *-mAdAn (önce)* have negation markers inherently, they can not be negated again.
- *-ArAk*, *-A...-A* and *-(I)r...-mAz* can not follow modality markers. Both *-ArAk* and *-A...-A* primarily express non-temporal meaning relationships. In this respect, these converbs can not co-occur with modality markers. It should also be noted that Turkish temporal converbs can only co-occur with *-(y)Abil*. Any other modality markers can not be used before temporal converbs.
- Among the simple bound converbs, only *-ken* carries subject agreement. In addition to *-ken*, the converbs constructed with the nominalizer *-DIK* have subject agreement marking. *-DIđInda*, *-DIđIndAn beri* and *-DIđI zaman* are instances of such converbs.

Converb clauses can appear in the beginning, in the middle or at the end of complex sentences. That is to say, they can be the topic, the focus or the backgrounding elements of a sentence. The arguments of the converb clause may also change their locations in the clause boundaries, and they can be the focus or the backgrounding elements. However, the arguments of the converb clause can not be extracted from the clause boundaries, and become the backgrounding element in the complex sentence when there is a one-way dependency between the converb and the matrix clauses.

It is stated in section III.7. that clauses have layered structures. When Turkish sample sentences are analyzed, it is observed that Turkish temporal clauses are joined to matrix clauses in the core-level layer in terms of juncture. On the other hand, in terms of nexus, temporal converb clauses are both cosubordinate and coordinate clauses.

Temporal converb clauses share matrix clause operators. However, nuclear operators like aspect and core-level operators like modality may not be shared by both of the clauses. Only the core-level and peripheral operators have scope over the sentence formed by the two cores which include the converb and the matrix clauses. Thus, temporal converb clauses are in the categories of *core cosubordination* and *core coordination* in the interclausal relations hierarchy.

Structurally, some converbs, as it was stated above, have subject agreement markers inherently, and some of them do not. It is observed that Turkish temporal converb clauses may have both coreferential and noncoreferential subjects with the matrix clause. If the subjects are noncoreferential, the absence of a lexical subject in the converb clause creates ungrammatical sentences. In this case, the presence of a lexical subject in the converb clause is obligatory. Additionally, the complex sentences constructed with *-(I)p*, *-ArAk* and *-A...-A* requires the obligatory control of the converb and matrix clause subjects. Only when the converb clause verb is an intransitive verb or when it is passivized, noncoreferential subjects can appear in the clauses.

A descriptive syntactic analysis of temporal converb clauses was presented in this section. In the following chapter, the semantic properties of the temporal converbs and the temporal converb clauses will be described by analysing the sample Turkish sentences.



IV. THE SEMANTIC REALIZATIONS OF TURKISH TEMPORAL CONVERBS

In this section, the semantic restrictions of temporal converbs on the matrix clause verb will be described by considering these converbs as conveying *temporal relations* and other meaning relations such as *manner, condition, cause, etc.*

Many researchers have analyzed the semantic properties of temporal converbs and described the meaning relationships conveyed by these converbs. Nedjalkov (1995:106-110) classifies converbs into three groups as *specialized converbs, contextual converbs* and *narrative converbs* considering the meaning relations conveyed by these converbs.

1. Specialized Converbs: These converbs are divided into two subcategories as,

a. Temporal Specialized Converbs: These converbs have mere temporal meanings such as simultaneity, anteriority and posteriority.

Udmurt: Simultaneity

- (1) "Uža-ku-m kuaž zoriz."
 work-CONV-1SG rain went
 'While I worked, it was raining.'

Evenki: Posteriority

- (2) "Nuŋan ukumni-va emev-re-n, teligne suru-mnen."
 he milk-ACC bring-NONFUT-3SG then go away CONV
 'He brought milk, then went away.'

b. Non-temporal Specialized Converbs: These converbs convey various different meaning relationships other than temporal ones such as manner, cause, purpose, condition, comparison and result.

Nivkh: Condition

- (3) “Čaŋ n'-erRon-Raj ni t'aqo-yir čaŋ čev-na-d'-ra.”
 you all me-touch-CONV.COND I knife-INSTR you all cut-FUT-FIN-EMPH
 'If you hurt me, I will cut you with a knife.'

2. Contextual Converbs: These converbs may convey both temporal and non-temporal meaning relations. Estonian and Russian converbs are given as instances of this kind of converbs.

Estonian: Simultaneity and manner

- (4) a. “Närveeri-des kõnnib (harilikult) ta mööda tuba.”
 worry-CONV walk3SG usually s/he along roomPARTSG
 'Worrying [when he is worried], he (usually) walks about the room.'
- b. “Ta kõnnib mööda tuba närveeri-des.”
 s/he walk3SG along roomPARTSG worry-CONV
 'He is walking about the room worrying.'

3. Narrative (Coordinative) Converbs: These converbs describe more than two events which occur in succession to advance the narration. The Turkish temporal converb *-(I)p* is given as an example.

In the literature, the converbs *-ken*, *-Inca*, *-(I)r...-mAz*, *-DIkça*, *-DIktAn sonra* and *-All* are defined as temporal converbs, and the converbs *-(I)p*, *-A...-A*, *-ArAk* and *-mAdAn (önce)* are identified as manner converbs (non-temporal converbs) by linguists and writers of descriptive grammar books (Gencan, 2001; Haspelmath, 1995; Johanson, 1995; Johanson and Csató, 1998; Kornfilt, 1997; Lewis, 1986; Slobin, 1995; Subaşı Uzun, 1990).

In order to demonstrate how these converbs are described and classified by other linguists, the Turkish temporal converbs will be displayed separately.

-ken:

Slobin (1995:349) states that *-ken* has an inherent temporal meaning. This converb introduces the converb clause proposition as a background for the matrix clause proposition. *-ken* may also conjoin two clauses by conveying a simultaneous meaning relationship. In this case, the subjects of the converb and the matrix clauses are non-coreferential. Johanson and Csató identify *-ken* as an intraterminal converb. That is to say, it presents the event of the converb clause as ongoing (1998:216). It conveys the meaning 'while' (Kornfilt, 1997:71-72; Lewis, 1986:190). According to Gencan, *-ken* gives a manner reading other than the temporal meaning relation, *simultaneity*, to the verb to which it is suffixed (2001:429).

-Inca:

-Inca is a terminal converb. It presents events with their relevant limits (i.e., this converb presents the converb clause event as it has come to its end). It conveys the meaning 'when, as soon as' (Johanson and Csató, 1998:216). *-Inca* also denotes the meaning 'until' when it is immediately followed by the postposition 'kadar' (until) (Kornfilt, 1997:71-72). The action indicated by the verb marked by *-Inca* precedes the action in the main verb (Lewis, 1986:179). It denotes that the action in the matrix clause will be realized after the converb clause event is realized. In its negative form, it denotes causality.

(5) "Sizi göremeyince pek üzüldü."

'S/he got very upset for not having been able to see you.'

As Slobin (1995:353) points out, *-Inca* does not form serial or compound verb constructions. The main function of this converb is to conjoin two unrelated clauses by providing an aspectual meaning relationship.

-(I)r...-mAz:

-(I)r...-mAz means ‘as soon as’ (Johanson and Csató, 1998:233; Kornfilt, 1997:71-72; Lewis, 1986:182). When this converb co-occurs with reduplicated verbs, it undergoes different functions. For instance, an expression like ‘ister istemez’ (either you want or not) is no longer an adverb clause which indicates temporal relations, but an adverbial phrase. An expression like ‘bilir bilmez’ (without knowing anything) functions as an adjectival phrase (Lewis, 1986:182). *-(I)r...-mAz* denotes that the event of the converb clause is realized before the event indicated by the matrix clause verb (Gencan, 2001:432).

-DIkça:

-DIkça means ‘so long as, the more’ (Lewis, 1986:183). It denotes ‘as/as long as’ with verbs conveying continuous action, whereas it denotes ‘whenever’ with verbs conveying repeated action (Kornfilt, 1997:71-72).

(6) “Bursun devam ettikçe yoksulluk çekmezsin.”

‘You will not suffer poverty as long as you are paid the bursary.’

(7) “Ankara’ya döndükçe her tarafını değişmiş bulurum.”

‘Whenever I return to Ankara, I find it completely changed.’

-DIkça also denotes the repetitive occurrence of the event indicated by the converb clause verb. As the converb and matrix clause events are coordinated, the action in the matrix clause is also repetitive (Gencan, 2001:434).

-DIktAn sonra:

-DIktAn sonra means ‘after’ (Lewis, 1986:183). Gencan (2001:436) states that the temporal converb *-mAdAn* is the negative form and the opposite form of *-DIktAn sonra*.

-All:

-All denotes the beginning of the events indicated by the matrix clause verbs. It conveys that the matrix clause event has begun in a particular point of time, and it is in progress at the moment of speaking (Gencan, 2001:432).

(8) Ankara’ya gittim gideli gripten kurtulamadım.

‘I have a terrible cold since I went to Ankara.’

-(I)p:

Haspelmath (1995:8) does not define *-(I)p* as a complete adverbial. He identifies this converb as a kind of clause-chaining device, and he states that there is not a clear-cut way to determine whether this converb belongs to the group of temporal converbs or to the group of clause-chaining structures. As Johanson (1995:329) points out, in the constructions in which there are more than two clauses which are conjoined by *-(I)p*, the clauses do not modify each other. Actually, all of the clauses in the sentence can be said to be the parts of the whole proposition indicated by the complex sentence. *-(I)p* conveys an ‘and’ relation, and it is “conceptually vague” (Johanson and Csató, 1998:231; Lewis, 1986:177). It denotes the sense of a choice between the positive and the negative forms of the event of the converb clause when it co-occurs with reduplicated verbs such as the ones in example (9).

(9) Aydan’ın Ankara’ya gidip gitmediğini bilmiyorum.

‘I do not know whether Aydan went to Ankara or not.’

As Johanson (Bisang, 1995: 155) mentions,

The unidirectionality is to be considered as a linguistic value of the 'and' relation expressed by *-ip*. By virtue of this value, the relation may be interpreted as a chronological one. As for the coordinative *...ve...*, its conjuncts are, however, subject to the natural rules of linear successivity.

The use of 'de' after *-(I)p* marks a break between the action of the two clauses. There is a "time-lag" between the realizations of two actions. (Lewis, 1986:177-179)

(10) "Ne yapacaksın eve gidip de?"

'What will you do by going home?' (What is the use of your going home?)

-(I)p forms complex sentences in which the event of the converb clause is succeeded by the event of the matrix clause, and the particle 'de' emphasizes the succession of the events (Gencan, 2001:424). The repetition of the converb clause formed with *-(I)p* denotes the frequent occurrence of the converb clause event (Gencan, 2001:425).

(11) "Gidip gidip pencereden bakıyor."

'S/he goes to the window and stares out repeatedly.'

The converb clauses formed with *-(I)p* have functions in the process of constructing the text such as enabling the coherence. The converb clause marked with this converb is coherent with the matrix clause. Yet, if there are more than two clauses in the sentence, the converb clause is coherent with the other embedded clause which immediately follows it. *-(I)p* contributes in establishing the coherence in the text by joining clauses with various meaning relations such as *cause-effect*, *condition*, *reason*, etc. Some converb clauses constructed with *-(I)p* convey 'cause-effect' relationship.

(12) "Papaza kızıp oruç bozmak."

'To break the fast for having been angry with the father.' (to stop doing something without a logical reason)

Some of them denote the meaning of 'condition'.

(13) "Yeni temizlik yaptım. Ayaklarınızı silip öyle içeri girin."

'I have just finished cleaning. Wipe your shoes before getting in.'

Some clauses indicate 'reason'. The converb clause is given as the reason of the matrix clause.

(14) "Benim kızım, bayram harçlıklarını biriktirip kendine barbie bebek alacak."

'By saving her allowance, my daughter will buy a barbie for herself.'

Some of the clauses constructed with *-(I)p* denote 'specialization' (özelleştirme). The converb clause includes a kind of special or related knowledge about the matrix clause or about the following embedded clause (Subaşı Uzun, 1990:71-77).

(15) "Orada burada sürtüp vaktini boşa geçireceğine otur da bir iki şey oku."

'Sit down and read something useful instead of strolling around and wasting your time.'

-A...-A:

-A...-A is an intraterminal converb. It presents events as ongoing (Johanson and Csató, 1998:216). *-A...-A* and *-ArAk* overlap in terms of indicating the manner of the converb clause verb (Lewis, 1986:177).

(16) Koşarak geldi = Koşa koşa geldi.

'S/he came very fast (running).'

Gencan (2001:429) mentions that *-A...-A* is a 'manner converb'.

-ArAk:

-ArAk is an intraterminal converb, i.e., it presents events as ongoing (Johanson and Csató, 1998:216). It is also a 'manner converb' which denotes the manner and the time of the matrix clause event (Johanson and Csató, 1998:232; Kornfilt, 1997:71-72; Gencan,

2001:426). Recently, in the daily usage, it is replaced by *-(I)p*, and undertakes some functions of it (Johanson and Csató, 1998:232).

-mAdAn:

-mAdAn means 'not doing', 'before doing' (Johanson and Csató, 1998:233; Lewis, 1986:181). Kornfilt (1997:71-72) states that it is a 'manner converb'. It is used for indicating the time of the matrix clause event, and the manner in which the matrix clause verb is realized (Gencan, 2001:436).

The descriptions made on the Turkish temporal converbs can be summarized as above. Yet, some of the temporal converbs are left unidentified. For instance, there is not any information about semantic properties of the converbs *-DIğIndA*, *-DIğIndAn beri* and *-DIğI zaman* in the books and articles of the above mentioned researchers.

In the following subsections of this study, all of the temporal converbs will be analyzed and their semantic properties will be described.

IV.1. Temporal Relations in Turkish Temporal Converb Clauses

Basically, the scope of this study includes the Turkish converbs which convey temporal relationships. In addition to the main temporal reference of the event in the matrix clause, these converbs relates the events in the embedded clauses to the events in the matrix clauses by ascribing temporal [or as it is claimed by other linguists, *aspectual* (Johanson, 1995)] meanings to the complex sentence. At this point, it is considered as useful to have a brief look at the notion of *linguistic time*. The notion of time acquires a shape according to the speaker's moment of speech, and can be illustrated as a timeline as the one below. The speaker's moment of speech is regarded as *now* (or the tense locus). If

the event occurs before the tense locus, it is considered to be in the past. On the other hand, if the event occurs after the tense locus, it is considered to be in the future.

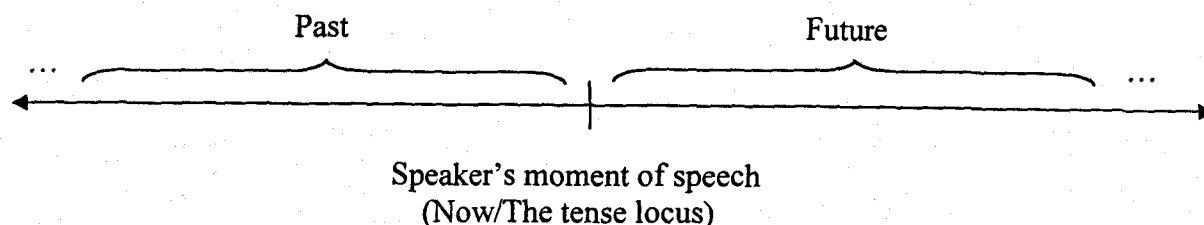


Figure 11: The timeline: The tense locus

Every sentence is located (or marked) in a specific point on the timeline.

(1) Ali çarşıdan geldi.

‘Ali came from the bazaar.’

A sentence like the one in (1) (which is marked with the Turkish past tense marker) contains an event which was realized in the past. The action of *coming from bazaar* took place before the speaker's moment of speech. The reference time of the event is located in the past. So, its representation on the timeline will be as below.

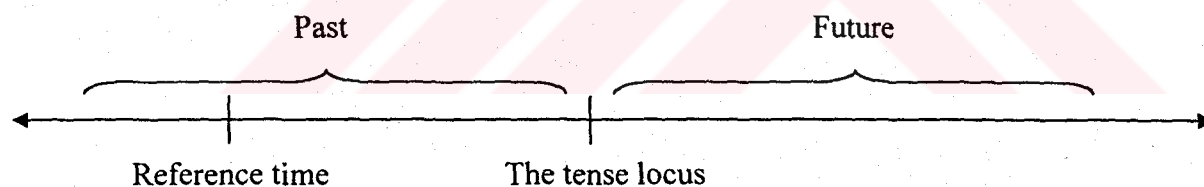


Figure 12: The timeline: The reference time

In a complex sentence there are two or more propositions. In this case, the time in which the matrix clause event occurs is taken as the basis of the timeline. The temporal meaning relationships which are denoted by converb clauses are identified in terms of the temporal and aspectual properties of the matrix clause verb. Three main temporal meaning relations are conveyed by the Turkish temporal converbs in the course of clause-linkage process: simultaneity, anteriority and posteriority.

IV.1.1. Simultaneity

One of the temporal meaning relations among clauses in a complex sentence is *simultaneity*. This meaning relationship requires that at least two events are attained at the same period of time on the timeline. So, when the converb and the matrix clause events are marked by a temporal converb which denotes simultaneity, it is indicated that the two events occur at the same time with respect to a particular time span on the timeline.

Simultaneity is denoted by different Turkish temporal converbs. *-ken*, *-(I)p*, *-ArAk*, *-DIđI zaman* and *-DIđIndA* are considered as explicit means which convey simultaneity. Simultaneous events are basically introduced in the form of ‘V+ing’ or of ‘while V+ing’ as it is observed in the examples below.

(1) Ayşe [ders çalışırken] televizyon izleyebiliyordu.

‘Ayşe could watch TV *while studying*.’

(2) Ahmet [elindeki belgeleri inceleye inceleye] müdürün odasına gitti.

‘Ahmet went to the manager’s office, *examining* the documents that he was holding.’

(3) Küçük bir çocuk [ıslık çalarak] pastaya doğru yaklaştı.

‘A small child approached the cake, *whistling*.’

(4) Babam [Almanya’ya gittiğinde/gittiği zaman] yirmi iki yaşındaymış.

‘My father was twenty-two when he went to Germany.’

Simultaneous actions conveyed by temporal converbs are divided into three groups with respect to the initial (beginning) points of the events in the converb and the matrix clauses.

1. The converb clause event begins before the matrix clause event, and the two events are realized simultaneously when the matrix clause event is initiated.

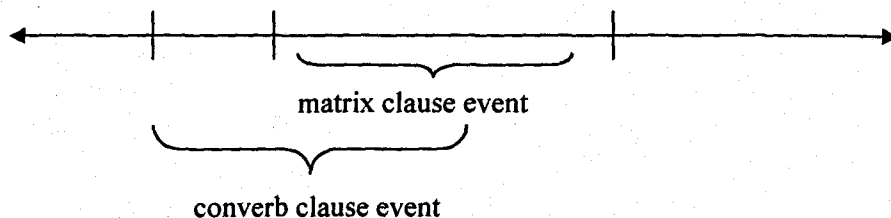


Figure 13: Type 1 Simultaneity of the converb and the matrix clause events

(5) Bağıır, [bağırdıkça] yüzü kızarır, gözleri büyür, boyun damarları atar.

'S/he shouts, as s/he shouts s/he blushes, his/her eyes widens, his/her veins in the neck beats.'

(6) [İstanbul'da gezerken] Ayşe'ye rastladım.

'I came across Ayşe while travelling in İstanbul.'

Examples (5)-(6) demonstrate the event sequence illustrated by figure (15).

The event of *shouting* is realized before the event in the matrix clause in (5). By the effect of shouting, the person in consideration blushes, his/her eyes widen, his/her veins in the neck beats. Again, in (6), the converb clause event precedes the matrix clause event. The event of *coming across* is realized while the event of *traveling in İstanbul* is still in progress. It is observed in the complex sentences that the two events are realized simultaneously.

2. The converb and the matrix clause events initiate at the same time. Thus, the two events are fulfilled simultaneously from the very beginning of the events in the clauses. Consider the figure below.

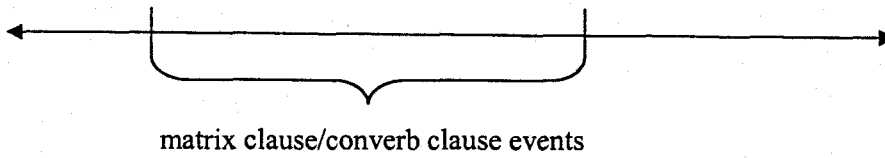


Figure 14: Type 2 Simultaneity of the converb and the matrix clause events

(7) Askerler [marş söyleye söyleye] yürüdüler.

‘The soldiers marched, singing a march.’

(8) [Elindeki trampeti çalarak] adamların yanına yaklaştı.

‘S/he approached the men, playing the snare drum that s/he is holding.’

In examples (7)-(8), the events in the converb and the matrix clauses begin, and they are realized at the same time on the timeline. The actions of *approaching the men and marching* are realized simultaneously with the actions of *singing a march* and *playing the snare drum*.

3. The converb clause event may begin after the matrix clause event. Thus the two events which begin in succession occur simultaneously.

(9)a. Arkadaşım [evlendiğinde] bir markette çalışıyordu.

‘My friend was working in a supermarket when s/he got married.’

(10)a. [Kalemim kırıldığı zaman] yazı yazıyordum.

‘I was writing when my pencil was broken.’

The following figure illustrates the occurrence of the converb and the matrix clause events on the timeline.

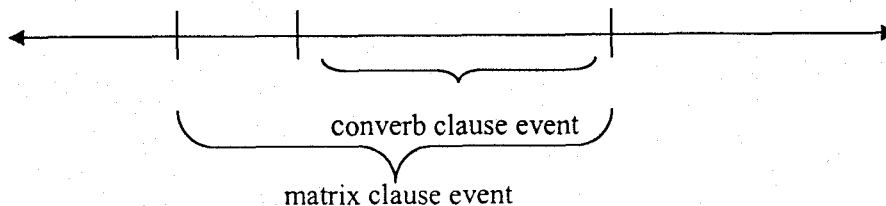


Figure 15: Type 3 Simultaneity of the converb and the matrix clause events

This kind of simultaneity is denoted by the converbs, *-DIđIndA* and *-DIđI zaman*. Yet, it should be noted that the aspectual properties of the matrix clause verb have an effect on the interpretation of the converb clause. In examples (9)-(10), the matrix clause verbs are marked by the progressive aspect, and the past tense marker (*-(I)yor + -IDI*). The progressive aspect presents the converb and the matrix clause events as simultaneous because the progressive marker indicates that the event which is denoted by the verb is ongoing (or is in progress). When this marker is deleted from the clause, the sentences become odd or ungrammatical.

(9)b.? Arkadađım [evlendiđinde] bir markette alıđtı.

'My friend worked in a supermarket when s/he got married.'

(10)b. * [Kalemim kırıldıđı zaman] yazı yazdım.

'I wrote when my pencil was broken.'

Additionally, when the matrix clause is a copular sentence, the complex sentence formed by the converbs *-DIđIndA* and *-DIđI zaman* gives the simultaneous reading again.

(11) Annem [Türkiye'ye geldiđinde/geldiđi zaman] dokuz yađındaymıđ.

'My mother was nine years old when she came to Turkey.'

(12) [Ahmet bizim okula geiđ yaptıđında/yaptıđı zaman] ok alıđkan bir ocuktu.

'Ahmet was a very hard-working pupil when he began studying in our school.'

So far, it is observed that simultaneity is denoted basically by *-ken*, *-A...-A*, *-ArAk*, *-DIđIndA*, *-DIđI zaman* and *-DIkA*. However, all of these converbs do not always indicate this sequence of events. The temporal converbs *-DIđIndA* and *-DIđI zaman* give simultaneous reading only when they are co-occurred with progressive marker *-(I)yor* on the matrix clause verb, and when the matrix clause is a copular sentence.

When the matrix clause verb is inflected by perfect aspect succeeded by the past tense marker (*-miş + -IDI*), the event sequences conveyed by the converb and the matrix clauses change.

(13) [Ahmet geldiğinde] Ayşe yola çıkmıştı.

‘Ayşe had left when Ahmet came.’

The converb and the matrix clause events are not attained simultaneously in example (3). On the contrary, the converb and the matrix clauses are conjoined with the meaning relationship of *posteriority*. The converb clause event succeeds the matrix clause event, and it reaches to its end. Therefore, the aspectual markers on the matrix clause have an effect on the interpretation of the temporal meaning relationship denoted by the converb.

IV.1.2. Anteriority

Anteriority indicates the temporal relationship in which the converb clause event precedes the matrix clause event. This sequential order of the converb and the matrix clause events is denoted mainly by the converbs, *-InCA*, *-(I)r...-mAz*, *-DIktAn sonra*, *-All*, *-(I)p*, *-DIğIndA*, *-DIğIndAn beri*, *-DIğl zaman* and *-ArAk*.

-InCA, *-DIğIndA* and *-DIğl zaman* conjoin the converb and the matrix clause events by denoting the meaning ‘when’.

(1)a. [Misafirler odalarına çıkınca/çıktığında/çıktığım zaman] Mehmet Bey içeri geldi.

‘Mehmet Bey came in when the guests went to their rooms.’

-InCA always denote anteriority of the converb clause event.

(1)b. [Misafirler odalarına çıkınca] Mehmet Bey içeri gelecek.

‘Mehmet Bey will come in when the guests went to their rooms.’

In examples (1)a-b, the matrix clause verb is marked with the past tense marker and the marker of futurity. The converb clause receives its temporal and aspectual interpretation from the TAM markers of the matrix clause verb. For example, if the matrix clause event occurs in the past, the event frame for the converb clause is also past. However, if the matrix clause event will be realized in the future, the converb clause event will also be realized in the future. What should be mentioned here is that when the event sequences of the clauses which are conjoined by *-Inca* are considered, the converb clause event precedes the matrix clause event. That is to say, *-Inca* denotes the anteriority of the converb clause event, no matter whatever the event frame of the matrix clause event is.

-DIktAn sonra and *-(I)r...-mAz* convey anteriority of the converb clause only, i.e., they do not denote any other kind of temporal meaning such as simultaneity and/or posteriority.

(2) [Tören bittikten sonra] konuklar yukarıya, açık havaya çıkarıldı.

'The guests were led outside to open air after the ceremony ended.'

(3) [Paris'te birkaç gün kaldıktan sonra] Lozan'a döneceğim.

'I will return to Lozan after staying in Paris for a few days.'

Unlike *-DIktAn sonra*, *-(I)r...-mAz* indicate the immediate succession of the matrix clause event. The converb clause event occurs, and then the matrix clause event occurs immediately.

(4) [Yerime döner dönmez] yorgunluktan gözlerim kapanıverdi.

'My eyes closed from weariness as soon as I returned my bed.'

(5) Paşa [namazını bitirir bitirmez] koltuğa uzandı.

'The general laid down on the couch as soon as he finished his namaz.'

Some temporal converbs like *-All* and *-DIđIndAn beri* present the converb clause event as the initiator of the matrix clause event.

(6) [Romatizması onu köşe minderine bağlayalı] işler deđiđmiđti.

'The situation had changed since the rheumatism has tied her to (she became dependent on) the pillow.'

(7) [Gittin gideli] yüzü gülmedi kadıncađızın.

'Poor woman, she did not feel good since you were gone.'

(8) [Hükümet deđiđtiđinden beri] ülke yeniden yapılıyor.

'The country is renewing since the government has changed.'

(9) [Ayşe'yle masalarımızı deđiđtiđimizden beri] her işim ters gitti.

'Everything goes wrong about me since I have changed my table with Ayşe's.'

As examples (6)-(9) demonstrate, the converb clause events act like the initiators of the matrix clause events. So, *-All* and *-DIđIndAn beri* denote the anteriority of the converb clause event. In example (7), *-All* co-occurs with the reduplicated form of the converb clause verb, which is also inflected by the past tense marker *-DI*. This reduplicated form emphasizes the anterior reading of *-All*. The past tense marker denotes that the subject of the converb clause has fulfilled an action in the past ['gittin' (you have gone) in example (7)], and *-All* denotes that another event has occurred after the converb clause event; and the beginning point of the matrix clause event is the realization of the converb clause event ['gideli' (since you have gone) in example (7)].

Although these two converbs can co-occur with the past tense, the progressive and perfect aspect, they can not co-occur with the prospective marker, *-AcAk*.

(10) * [Sen gideli] yüzü gülmeyecek kadıncađızın.

'Poor woman, she will not feel good since you were gone.'

(11) * [Hükümet değiştiğinden beri] ülke yeniden yapılacak.

‘The country will renew since the government has changed.’

The sentences in (10)-(11) are ungrammatical, because the converb clause event should precede the matrix clause event on the timeline. Yet, *-All* and *-DiğİndAn beri* view the converb clause event as a finished action, and when the matrix clause verb is marked with the prospective marker, *-AcAk*, it indicates that the matrix clause event has not been realized yet. It will be realized in a particular point of time in the future. Therefore, the complex sentences such as the ones in (10)-(11) are regarded as ungrammatical because of the inconsistency of the event frames (the time of the occurrences) of the two clauses.

When *-(I)p* and *-ArAk* are taken into consideration, it is observed that these two temporal converbs also denote anteriority.

(12) [Ceketini çıkarıp] koltuklardan birinin üstüne atar.

‘He takes off his jacket and then he throws it on one of the armchairs.’

(13) [Ali’nin çantasından bir avuç evrağı alıp] sobada yaktılar.

‘They took a handful of documents from Ali’s bag and burned them in the stove.’

(14) Yaşlı adam [gözlüklerini takarak] mektubu okumaya başladı.

‘The old man wore his eyeglasses and then he began reading the letter.’

(15) [Kitabımı alarak] seslice okudum.

‘I took my book and read it loudly.’

In examples (12)-(15), the converb clause events precede the matrix clause events on the timeline. That is to say, these examples display the anteriority of the converb clause event. *-(I)p* and *-ArAk* conjoin the two clauses by denoting an ‘and then’ relationship. The converb clause event occurs at a particular point of time on the timeline, and then the matrix clause event is realized and finished.

IV.1.3. Posteriority

In complex sentences, the third temporal meaning relationship among the converb and the matrix clauses is posteriority. The converb clause event succeeds the matrix clause event on the timeline. Posteriority is denoted by the converbs, *-mAdAn* (*önce*), *-DIğIndA* and *-DIğI zaman*.

(1) [Kapılar açılmadan önce] bir buçuk saat kuyrukta bekleyeceksiniz.

‘You will wait in the queue for one and half an hour before the doors are opened.’

(2) Poincaré ile [konferans başlamadan] tekrar görüşmek fırsatını buldum.

‘I had the opportunity of meeting with Poincaré once more before the conference started.’

(3) [Salona vardığımda/vardığım zaman] konferans başlamıştı.

‘The conference had started when I arrived at the conference room.’

(4) [Ahmet eve döndüğünde/döndüğü zaman] bütün işlerini bitirmişti.

‘Ahmet had finished all his duties when he returned home.’

It should be mentioned that the co-occurrence of the perfect aspect *-mIş* with the past tense marker *-IDI* [as *mIş+IDI* in examples (3) and (4)] presents the matrix clause event as having been occurred before the converb clause event. Therefore, *-DIğIndA* and *-DIğI zaman* acquire the posterior reading. However, it should be noted that *-DIğIndA* and *-DIğI zaman* do not have their meaning interpretations by their co-occurrence with different TAM markers. Consider example (5).

(5) Ayşe [annesiyile babası barıştığında/barıştığı zaman] çok sevinmişti.

‘Ayşe had been very happy when her mother and father had been reconciled.’

In this example, the converb clause event occurs before the matrix clause event. That is to say, *-DIđIndA* and *-DIđI zaman* denote the anteriority of the converb clause event although the matrix clause verb is inflected by *-mIđ+-IDI*. So, it can be said that *-DIđIndA* and *-DIđI zaman* acquire their temporal interpretation from the semantic content of the converb and the matrix clause verbs (in other words, from their interaction in the complex sentence).

-mAdAn (önce) denotes the posteriority of the converb clause event mainly by its co-occurrence of the postposition 'önce' (before). Yet, 'önce' can be deleted from the complex sentence as it is in the example (2). At this point, the negation marker which forms *-mAdAn* conveys the event sequence of the two clauses. The negation marker indicates that the converb clause event has not been realized yet at that particular point of time when the matrix clause event is realized. The negation marker, thus, indicates the posteriority of the converb clause event.

IV.2. Non-temporal Meaning Relations in Turkish Temporal Converb Clauses

As it is mentioned in the beginning of section IV, Nedjalkov (1995:106-110) proposes that converbs are divided into three as *specialized converbs*, *contextual converbs* and *narrative converbs*. When Turkish temporal converbs are taken into consideration, it is observed that the converbs like *-DIđIndAn beri* and *-All* convey only temporal meaning relations among the converb and the matrix clauses. So, these converbs are considered as temporally specialized converbs. On the other hand, *-ken*, *-InçA*, *-(I)r...-mAz*, *-DIktAn sonra*, *-(I)p*, *-A...-A*, *-mAdAn*, *-ArAk*, *-DIđI zaman*, *-DIđIndA* and *-DIkçA* do not only

convey temporal meaning relationships among the converb and the matrix clauses, but also denote other meaning relationships such as manner, condition, contradiction, interruption of the converb clause event and so on. Therefore, it can be mentioned that these Turkish temporal converbs are not temporally specialized converbs which conjoin the converb and the matrix clauses by denoting only temporal meaning relationships, but they are contextual converbs which convey both temporal and non-temporal meanings. The contextual properties of the above mentioned converbs will be dealt with separately in the following subsections.

IV.2.1. *-ken*

-ken is described by the linguists (Kornfilt, 1997:72; Lewis, 1986:190) as denoting the simultaneous occurrence of the converb clause event with the matrix clause event. It is mentioned that *-ken* means 'while'. On the other hand, Gencan (2001:429) states that this converb may convey the manner of the matrix clause event apart from temporal meaning relationships. Yet, he does not provide any information about under what conditions *-ken* acquires its manner interpretation. *-ken* is assigned different meaning relationships as *contradiction*, *interruption* and the like as the effect of its interaction with TAM markers. Consider examples (1)-(6) below.

(1)a. [Yanıtlayacakken] duraklar, ayağa kalkar.

'S/he hesitates at the time when s/he would respond, and s/he stands up.'

b. [Tam yanıtlayacakken] duraklar, ayağa kalkar.

'Just as s/he would respond, s/he hesitates and stands up.'

(2)a. [Ali sigarasını yakacakken] babası geldi.

‘Ali’s father came just when he intended to lit his cigarette.’

b. [Tam Ali sigarasını yakacakken] babası geldi.

‘Just as Ali intended to lit his cigarette, his father came.’

(3) Aziz ise [önce dinlemezken] sonra donup kalmıştır olduğu yerde

‘As for Aziz, at first he did not listen to what is said, then he is petrified.’

(4) [Ayşe yemeğine dokunmazken] kardeşi tabağını silip süpürmüştü.

‘While Ayşe did not eat anything, her brother had eaten up everything in his dish.’

(5)a. [Evlenmişken] ayrılmamalıydın hayatım.

‘You should not have divorced, once you had got married.’

b. [Hazır evlenmişken] ayrılmamalıydın hayatım.

‘Now that you had got married, you should not have divorced, my dear.’

(6)a. [Gelmişken] birer bardak çay içtik.

‘As we came here (by considering this as an opportunity), we drank a cup of tea.’

b. [Hazır gelmişken] birer bardak çay içtik.

‘Now that we had come here, we drank a cup of tea.’

The examples above display the co-occurrences of *-ken* with the negated form of the aorist (*-mAz*), the prospective marker (*-AcAk*) and the perfect aspect (*-mİş*). Each co-occurrence of *-ken* with these markers convey a different meaning. The future marker denotes that the converb clause event will be realized in a particular point of time in the future. Yet, the event is interrupted (consider examples 1a and b). Here, *-ken* denotes the interruption of the converb clause event which will happen in the near future. The particle ‘tam’ (just) can be added to the converb clause in order to emphasize the interruption of the converb clause

event. In (1)-(2)b, *tam* indicates that the converb clause event is interrupted by the event of the matrix clause.

As it is mentioned before, *-ken* mostly co-occurs with the aorist by denoting the simultaneous occurrence of the converb and the matrix clause events. However, when the aorist (*-Ir*) is negated, *-ken* loses its simultaneous reading, and it is assigned the meaning of *contradiction* [see examples (3)-(4)]. The converb clause event is negated by the negative form of the aorist and contrasted with the event of the matrix clause by the use of *-ken*. *-ken*, in this case, denotes the contradiction between the converb and the matrix clause events.

The co-occurrence of *-ken* with the perfect aspect, *-mİş*, indicates that the converb clause event is presented as the opportunity for the realization of the matrix clause event. The sentences in (5)-(6) are instances of this kind of co-occurrence. Considering *-mİş*, its functions should be stated here in order to have a clearer opinion about the meaning relationship conveyed by this marker in its co-occurrence with *-ken*. *-mİş* is basically a past tense marker since it views events as happening in the past according to the tense locus (the moment of speech). It also denotes perfect aspect because the event is given with its result(s). The event occurs in the past; it has its continuous results at the moment of speech, and the knowledge about the event has been reached indirectly (the indirect experience) by the speaker. So, *-mİş* conveys evidential modality. In its co-occurrence with *-ken*, *-mİş* reflects its past tense interpretation to the converb clause event. Therefore, it is understood that the converb clause event has taken place in a particular point of time in the past. *-ken*, in this case, conveys *opportunity* (i. e., there is a causal relation between the converb and the matrix clause events). The converb clause event has been realized already, and thus, this event has led the way to the realization of the matrix

clause event. This meaning interpretation of *-ken* in its co-occurrence with *-miş* can be emphasized by the adverbial 'hazır' (now that). Examples (5)-(6)b. display the emphasis provided by 'hazır' on the interpretation of the converb clause event as an opportunity for realizing the matrix clause event.

The discussion so far has demonstrated the different interpretations of *-ken* in its interaction with the perfect aspect, the prospective and the negation marker. The correlation of the simultaneous reading of *-ken* with the future reading of *-AcAk* creates the interpretation of the converb clause event's *interruption*; with the past perfect reading of *-miş*, this correlation denotes the reading of *opportunity*; with the negated aorist *-mAz*, it conveys the *contradiction* between the converb and the matrix clause events. *-ken* actually denotes simultaneous occurrence of the two events when it co-occurs with the aorist, but when one of these events are negated, the propositions in the clauses become contradictory. That is to say, when it co-occurs with the negative aorist, *-ken* express *contrast* among the converb and the matrix clause events.

IV.2.2. -InCA

In addition to the temporal meaning relationship of anteriority, *-InCA* denotes the reason of the event expressed in the matrix clause. It also maintains a conditional sense among the converb and the matrix clauses.

(1) A:İyi pekala!Burada ölmek istemiyorum.

'Well! I do not want to die here.'

N:[Başka yerde ölünce] daha mı anlamlı oluyor?

'Does it become more meaningful when you die at another place?'

(2) [Kızdığımı görünce] çevirdi sözünü.

‘S/he changed the subject when s/he noticed that I was getting angry.’

The sentences in (1)-(2) demonstrate that the converb clause event is given as the reason for the realization of the matrix clause event. In (1), the reason of the situation’s being more expressive is introduced as dying at another place. When example (2) is considered, it is observed that the reason of the matrix clause event is given by the converb clause which is marked by *-IncA*. The person in consideration changed the topic of the conversation because the speaker is getting angry. These two sentences can be paraphrased as,

- a. the situation will be more meaningful because the person will die at another place.
- b. the person changes the topic of the conversation because the speaker does not want to talk about it.

In addition to the discussion above, *-IncA* denotes condition when it co-occurs with the negation marker. What is indicated by *condition* here is that the converb clause, which includes the negation marker and *-IncA* is given as a condition for the realization of the matrix clause event. In order to realize the matrix clause event, the converb clause event should be realized.

(3) Her ne iş olsa [Korkut Ata’ya danışmayınca] yapmazlardı.

‘They did not do anything without asking Korkut Ata’s advice.’

(4) [Göz görmeyince] gönül katlanırmış.

‘When you are not aware of the fact, you can ignore it easily.’

In (3), the matrix clause event will not happen until the converb clause event is attained. The converb clause event sets the condition for the realization of the matrix clause event. Similarly, in (4), the condition for someone to ignore the fact is to be unaware about it.

-IncA forms lexically specified constructions when it is suffixed on the verb, *gel-* (come). *-IncA*, here, introduces the converb clause proposition as the topic of the complex sentence. In this case, the converb clause denotes ‘when it comes to’.

(5) [Hilmi Bey ve arkadaşlarına gelince] onlar birer züppe, derdi.

‘When it comes to Mr. Hilmi and his friends, s/he used to say that they are all fops.’

(6) [Ölmeye gelince], sıradan ölüyoruz.

‘When it comes to die, we are all dying one by one.’

IV.2.3. – (I)r...-mAz

-(I)r...-mAz denotes immediate anteriority of the converb clause event as it is discussed in section IV.1.2. Yet, this temporal converb constructs lexically specified adverbial phrases other than temporal adverbial phrases. The coordination of the reduplicated forms of verbs which is marked with *-(I)r...-mAz* modify the matrix clause verb, and it denotes the manner of the matrix clause event.

(1) [Olur olmaz] karışmasana söze.

‘Do not interrupt the conversation unnecessarily.’

(2) [İster istemez] ayrılmalıyız.

‘We should separate unwillingly (obligatorily).’

The converb clause in (1) indicates that the person interrupts the conversation inappropriately. Similarly, in (2), it is indicated that the speaker and his/her partner should separate unwillingly. Thus, the converb clause events denote the manner of the matrix clause events.

IV.2.4. -DIktAn sonra and -DIkça

-DIktAn sonra denotes the condition under which the matrix clause event is realized other than its temporal reading when it co-occurs with the negation marker.

(1)a. [Kitabımı yıpratmadıktan sonra] istediğin kadar kullanabilirsin.

‘You can use my book as long as you want, on the condition that you will not wear it out.’

-DIkça also denotes condition. When these two converbs convey conditional reading, they can be used interchangeably.

(1)b. [Kitabımı yıpratmadıkça] istediğin kadar kullanabilirsin.

‘You can use my book as long as you want, on the condition that you will not wear it out.’

The converb clauses in (1)a-b are given as the condition for the attainment of the matrix clause events. The conditional reading of *-DIktAn sonra* and *-DIkça* can be paraphrased with a marker which forms adverbial phrases by denoting condition.

(2) [Kitabımı yıpratmadığın sürece] istediğin kadar kullanabilirsin.

‘You can use my book as long as you want, on the condition that you will not wear it out.’

It is observed from (1) a. and b. that *-DIktAn sonra* and *-DIkça* convey the meaning of condition in their co-occurrences with the negation marker. Additionally, *-DIktAn sonra* forms “generic expressions” which have the meaning ‘as long as’. This reading can also be regarded as conditional.

(3) [İki insan birbirini sevdikten sonra] onları kimse ayıramaz.

‘Nobody can separate two persons as long as they love each other.’

IV.2.5. - (I)p

In section IV.2., the classification made by Subaşı Uzun (1990:71-77) about different meaning relationships provided by *-(I)p* was mentioned. According to this classification, *-(I)p* conveys cause-effect, condition, reason and specialization between the converb and the matrix clause events. Apart from these readings, *-(I)p* denotes the manner of the matrix clause event by negating the converb clause event and conveying the sense of 'without' in its co-occurrence with the negation marker.

(1) [Gece gündüz demeyip] yürüdüler.

'They walked without resting (without a break).'

(2) [Durup dinlenmeden] yürüdüler.

'They walked without having a rest (without a break).'

In (1), the negation marker appears on the converb clause verb. On the contrary, in (2), *-(I)p* is used in a complex adverbial phrase construction which includes the negation marker in the second converb clause (this clause is formed with the temporal converb *-mAdAn*). Both converb clauses denote the negation of the converb clause event, and modify the matrix clause event by stating the manner in which the matrix clause event is realized.

IV.2.6. -A...-A

The converb clauses which are formed with *-A...-A* convey the manner of the matrix clause event. Actually, this converb can be considered primarily as a manner converb other than being a temporal converb.

(1) Ahmet sokaklarda [yıkıla yıkıla] dolaşıyordu.

‘Ahmet was wandering in the streets, falling and rising.’

The converb clause in the complex sentence in (1) indicates the manner of the action of *walking* denoted by the matrix clause.

In addition to its manner reading, *-A... -A* also presents the converb clause as the process by which the matrix clause event is attained.

(2) [Düşüne düşün] olayın sebebini buldum sanırım.

‘I think that I found the reason of the event by thinking about it deeply.’

(3) [Dövüşe dövüş] bu noktaya gelindi.

‘This position was attained by fighting (by continuous struggles).’

The processes, by which the event of *finding the reason of the event*, and the event of *attaining that particular position* are introduced by the converb clauses which are formed with *-A...-A* in examples (2)-(3).

IV.2.7. -mAdAn

-mAdAn means ‘without’ on the condition that it does not co-occur with the adverbial ‘önce’ (before). The converb clauses which display the use of *-mAdAn* with the deletion of ‘önce’ from the clause may be regarded as conveying an ambiguous reading which includes both the temporal and the manner relationships denoted by the converb. Yet, when ‘önce’ is inserted into the clause, the complex sentence becomes odd.

(1)a. [Ciddi seçim yapmadan], her kolay başarıyı tarihe geçirdiniz.

‘You recorded all kinds of success which can be attained easily in the history, without making serious choices.’

(2)b. ? [Ciddi seçim yapmadan önce], her kolay başarıyı tarihe geçirdiniz.

‘You recorded all kinds of success which can be attained easily in the history, before making serious choices.’

IV.2.8. –ArAk

In addition to the temporal and manner readings, *-ArAk* denotes a *cause-effect* relationship among the converb and the matrix clause events.

(1) Eşek adamı [teperək] hastanelik etti.

‘The donkey injured the man seriously by kicking.’

In (1), the converb clause formed by *-ArAk* conveys that the donkey kicked the man, and the matrix clause conveys that the man has been seriously injured by the effect of kicking. These clauses are conjoined with the meaning relationship of *cause-effect*; the cause is to kick, and the effect is to be injured.

IV.2.9. –DiğI zaman, -DiğIndA and -Inca

The converb clauses formed by *-DiğI zaman*, *-DiğIndA* and *-Inca* convey an obvious meaning relationship of temporality. However, with intonation these clauses may display the reading of *condition* under which the matrix clause event is realized. There is not a clear-cut way to determine whether these clauses convey temporality or condition. Yet, when the postposition ‘ancak’ (only/only when), which denote condition, is inserted into the converb clause, the conditional reading is emphasized.

(1)a. [Gerekli harcı yatırdığın zaman/yatırdığında/yatırınca] paranı alacaksın.

‘You will get your money when you pay the necessary expenditure.’

b. [Ancak gerekli harcı yatırdığın zaman/yatırdığında/yatırınca] paranı alacaksın.

‘You will get your money only when you pay the necessary expenditure.’

The converb clause in (1)a. conveys anteriority of the converb clause event. The interpretation of this sentence will be conditional only when the necessary intonation is made, i.e., when the stress is placed on the converb clause verb. But as it is in (1)b, the conditional reading becomes obvious when the adverb/particle ‘ancak’ is included in the converb clause. The conditional reading may also be arisen from the modal reading of *obligation* which is denoted by the prospective marker, *-AcAk*. *-AcAk* denotes the intentional or obligatory realization of the event expressed by the verb of the sentence. Consider the example below.

(2) Yemeğini yiyeceksin!

‘You will/have to eat your meal!’

It is obvious in example (2) that the prospective marker provides the sense of obligatoriness of the proposition of the sentence. Therefore, it can be hypothesized that the prospective marker creates the conditional reading in the complex sentences which include converb clauses formed with *-DIğI zaman*, *-DIğIndA* and *-IncA*. When the converb clauses are used in complex sentences which occur in a different event frame other than future, the conditional reading disappears.

(1)c. [Gerekli harcı yatırdığım zaman/yatırdığımda/yatırınca] paramı aldım.

‘I got my money when I paid the necessary expenditure.’

IV.3. Temporally Overlapping Turkish Converbs

Sections IV.1. and IV.2. discuss the temporal and non-temporal meaning relationships conveyed by the Turkish temporal converbs. Some of the converbs which denote the temporal meaning of anteriority may overlap to some extent. In this section of the study, the converbs which convey similar temporal meaning relations among the converb and the matrix clauses will be analyzed.

The converbs which overlap in their temporal readings are *-All* and *-DIđIndAn beri*; *-Inca*, *-DIđIndA* and *-DIđI zaman* which denote anteriority. Although it is observed in the data that these temporal converbs denote very close meaning relationships, in some cases they can not be used interchangeably in the sample sentences. The following two subsections discuss the converbs which denote similar meaning relationships, i.e., the converbs which overlap in their temporal interpretations.

IV.3.1. *-All* and *-DIđIndAn beri*

The converb clauses which are formed with *-All* and *-DIđIndAn beri* mark the beginning (initial) point of the matrix clause event or proposition on the timeline. In the sentences in (1)a and b, the converb clause events are realized before the matrix clause events, and they point out the beginning of the matrix clause event.

(1)a. [Ankara'ya geleli] gelirimiz yükseldi.

b. [Ankara'ya geldiđimizden beri] gelirimiz yükseldi.

'Our income has increased since we came to Ankara.'

The attainment of the converb clause event leads the way for the matrix clause event to be fulfilled. In this case, our income has increased after we came to Ankara. As *-All* and *-DIđIndan beri* give matrix clause events the perfective reading, the use of the prospective marker, *-AcAk*, on the matrix clause verb becomes unacceptable.

(1)c. * [Ankara'ya geleli] gelirimiz ykselecek.

d. * [Ankara'ya geldiđimizden beri] gelirimiz ykselecek.

As it is seen in example (1) a and b, *-All* and *-DIđIndAn beri* link the converb and the matrix clause events by denoting anteriority. That is to say, these converbs overlap in their semantic interpretations. Yet, there are instances in which *-All* and *-DIđIndAn beri* can not be used interchangeably.

Although *-All* is a simple bound converb, it can co-occur with the adverbial 'beri' (since) without displaying any change in the meaning relation that it denotes. Example (1)e demonstrates this.

(1)e. [Ankara'ya geleli beri] gelirimiz ykseldi.

'Our income has increased since we came to Ankara.'

'Beri' marks the time span which takes place after the beginning or ending point of an event on the timeline. It mentions that the matrix clause event has its initial point after the realization of the converb clause, and that the matrix clause event is ongoing at the moment of speaking. So, the co-occurrence of *-All* with the adverbial 'beri' increases the emphasis made on the beginning point of the matrix clause event or the time span which the matrix clause denotes.

Morphologically, 'beri' can be used with different parts of speech such as the nominalized structures which are assigned ablative case, postpositions and nouns.

(2)a. [Babam bana olta takımı hediye ettiğinden beri] her hafta sonu balığa çıkarım.

'I am used to going fishing every weekend since my father gave me a fishing-rod as a present.'

(3)a. [Senin kadarkenden beri] her hafta sonu balığa çıkarım.

'I am used to going fishing every weekend since I was at your age.'

(4)a. [1999 yılının sonbaharından beri] her hafta sonu balığa çıkarım.

'I am used to going fishing every weekend since the autumn of 1999.'

In such cases, *-All* makes a lexical choice, and it is added only on verbs.

(2)b. [Babam bana olta takımı hediye edeli] her hafta sonu balığa çıkarım.

(3)b. * [Senin kadaralı] her hafta sonu balığa çıkarım.

(4)b. * [1999 yılının sonbaharınalı] her hafta sonu balığa çıkarım.

In addition, it is observed from the data that *-All* forms acceptable sentences when it co-occurs with the negation marker, whereas *-DiğIndAn beri* can not be used with the negation marker. The sentences in (5) and (6) exemplify this.

(5)a. [Seni görmeyeli] bayağı kilo almışsın.

b. ?? [Seni görmediğimden beri] bayağı kilo almışsın.

'You had gained a lot of weight since I did not see you.'

(6)a. [Bursa'ya gitmeyeli] yedi ay oldu.

b. ?? [Bursa'ya gitmediğimden beri] yedi ay oldu.

'It has been seven months since I did not go to Bursa.'

In addition to the morphological differences among *-All* and *-DiğIndAn beri*, these converbs display differences in their interactions with the matrix clause verbs. Consider examples (7), (8) and (9).

(7)a. [Bu kitaplar yasaklanalı] yarım yüzyıl oldu.

b. ?? [Bu kitaplar yasaklandığından beri] yarım yüzyıl oldu.

‘It has been half a century since these books were forbidden.’

(8)a. [Yemekten kalkalı] iki saat olmuş.

b. ?? [Yemekten kalktığımdan beri] iki saat olmuş.

‘It has been two hours since I finished eating my meal.’

(9)a. [Temizliğı yapalı] çok olmadı.

b. ?? [Temizliğı yaptığıımızdan beri] çok olmadı.

‘It has not been a long time since we finished cleaning.’

The matrix clauses in examples (7), (8) and (9) demonstrate different time spans, and the initial points of these time spans are marked by the converb clause event. Although the use of *-All* is acceptable in the sentences in which the matrix clause is consisted of a temporal expression like ‘yarım yüzyıl’ (half a century) and ‘iki saat’ (two hours), the use of *-DIğIndAn beri* is unacceptable in such sentences. There are not two succeeding events in the sentences in (7), (8) and (9). In these constructions, there is only one event which is ongoing, or whose effects are continuing for a specific time span. This event is denoted by the converb clause. The time span which takes place after the converb clause event is given in the matrix clause. It is seen in examples (7), (8) and (9)b that *-DIğIndAn beri* can not express this kind of a meaning relationship among the converb and the matrix clauses. In order to be linked by *-DIğIndAn beri*, both the converb and the matrix clauses have to include different events, and the converb clause have to mark the starting point of the matrix clause event.

-DIğIndAn beri expresses that the initial point of the matrix clause event is the beginning or the ending point of the converb clause event. Just as it is in *-DIğIndAn beri*,

the succession of two events can also be expressed by *-All*. Example (10) illustrates this fact.

(10)a. [Bati'nın çürük fikirlerini benimseyeli] kendi gücümüzü unuttuk.

b. [Bati'nın çürük fikirlerini benimsediğimizden beri] kendi gücümüzü unuttuk.

'We forgot about our own strength since we have adopted the corrupted ideas of the West.'

In example (10), the uses of both *-All* and *-DiğIndAn beri* are acceptable. At this point, the distinctive features of the semantic properties of *-All* and *-DiğIndAn beri* are going to be described by analyzing the data.

As the converb clauses which are formed with *-All* and *-DiğIndAn beri* denote the beginning points of the matrix clauses, these converbs interact with the matrix clause verb with which they co-occur. When the complex sentences which include these converbs are analyzed, it is observed that *-All* makes choices about the aspectual properties of verbs. *-All* forms acceptable complex sentences when it co-occurs with change of state verbs in the matrix clause or when the matrix clause is a copular sentence. On the other hand, the complex sentence becomes ungrammatical when *-All* co-occurs with motion verbs.

(11)a. [Adana'yı gezeli] Mersin'i beğenmiyorum.

b. [Adana'yı gezdiğimden beri] Mersin'i beğenmiyorum.

'I do not like Mersin since I have visited Adana.'

(12)a. [Bahar geledi] öğrencilerin derse olan ilgileri azaldı.

b. [Bahar geldiğinden beri] öğrencilerin derse olan ilgileri azaldı.

'The interest of students in lessons has decreased since the spring has come.'

In (11) and (12), the matrix clause verbs are change of state verbs, *beğen-* (to like) and *azal-* (to decrease). These verbs denote that the proposition of the matrix clause is a newly

acquired state or habit. In the complex sentences formed with *-All* and *-DIđIndAn beri*, the state or habit that is expressed by the matrix clause is acquired while the converb clause event is in progress or after the converb clause event is realized. Consider examples (13) and (14).

(13)a. Ali ile Ayşe [evleneli] çok mutlular.

b. Ali ile Ayşe [evlendiklerinden beri] çok mutlular.

‘Ali and Ayşe are very happy since they got married.’

(14)a. Ali [birinci dönem başlayalı] çok çalışkan.

b. Ali [birinci dönem başladığından beri] çok çalışkan.

‘Ali is very hardworking since the first term has begun.’

The matrix clauses in examples (13) and (14) are copular sentences. A newly acquired state is expressed by the matrix clause, and the initiation of acquiring this new state is marked by the converb clause event on the timeline. So far, it is seen that both *-All* and *-DIđIndAn beri* can co-occur with change of state verbs and copular sentences.

On the other hand, there are instances in which the use of *-All* is not acceptable. Consider the following examples.

(15)a. ? Handan [Ayşe uyuyalı] yemek yapıyor.

b. Handan [Ayşe uyuduğundan beri] yemek yapıyor.

‘Handan is cooking since Ayşe has fallen asleep.’

(16)a. ? [Sınavı kazanalı] çok çalışıyorum.

b. [Sınavı kazandığımdan beri] çok çalışıyorum.

‘I am working very hard since I have passed the exam.’

(17)a. ? [Sokağa çıkalı] yürüyorum.

b. [Sokağa çıktığımdan beri] yürüyorum.

‘I am walking since I have gone out.’

(18)a. ? Sergen [antrenman başlayalı] koşuyor.

b. Sergen [antrenman başladığından beri] koşuyor.

‘Sergen is running since the training has begun.’

In the above complex sentences, the matrix clause verbs are motion verbs. *-All* is sensitive to the matrix clauses which include motion verbs when the matrix clause propositions are eventive. In the above mentioned examples, the matrix clauses include events which are realized (and are ongoing) after the realization of the converb clause events. The converb clause verbs in these examples are inflected with the progressive marker *-(I)yor* which expresses that the matrix clause events are ongoing at the moment of speaking.

When *-All* co-occurs with the adverbial *beri*, or when it is added to one of the reduplicated verbs which are formed with the past tense marker *-DI*, it allows the use of motion verbs in the matrix clause. This is displayed by the following examples.

(15)c. Handan [Ayşe uyuyalı beri] yemek yapıyor.

d. Handan [Ayşe uyudu uyuyalı] yemek yapıyor.

(16)c. [Sınavı kazanalı beri] çok çalışıyorum.

d. [Sınavı kazandım kazanalı] çok çalışıyorum.

(17)c. [Sokağa çıkalı beri] yürüyorum.

d. [Sokağa çıktım çıkalı] yürüyorum.

(18)c. Sergen [antrenman başlayalı beri] koşuyor.

d. Sergen [antrenman başladı başlayalı] koşuyor.

The use of *-All* is acceptable in these examples because ‘beri’ and the past tense marker – *DI* emphasizes the points of time when the converb clause event reaches to its end, and when the matrix clause event begins. These structures also emphasize that the matrix clause event is ongoing at the moment of speaking.

IV.3.2. *-IncA*, *-DIđIndA* and *-DIđI zaman*

The converbs *-IncA*, *-DIđIndA* and *-DIđI zaman* link the converb and the matrix clauses by denoting anteriority of the converb clause event. Examples (1) and (2) display the meaning relationship conveyed by these converbs.

(1)a. [Sabah olunca] herkes dinç uyandı.

b. [Sabah olduğunda] herkes dinç uyandı.

c. [Sabah olduğu zaman] herkes dinç uyandı.

‘Everybody awoke energetic when the morning came.’

(2)a. [Trende seni görünce] şaşırıp kalmıştım.

b. [Trende seni gördüğümde] şaşırıp kalmıştım.

c. [Trende seni gördüğüm zaman] şaşırıp kalmıştım.

‘I became bewildered when I saw you in the train.’

The matrix clause event is realized after the converb clause event in these examples. So, it is observed that *-IncA*, *-DIđIndA* and *-DIđI zaman* overlap in their semantic interpretations. One of the distinguishing features among these converbs is that *-IncA* can only express the anteriority of the converb clause event, whereas *-DIđIndA* and *-DIđI zaman* can express the simultaneous occurrence of the converb and the matrix clause events, or they can express the posteriority of the converb clause event. In examples (3) and (4) the complex sentences which are formed with *-IncA* are unacceptable.

(3)a. [Sen kapıya dayandığında] Ahmet içerdeydi.

b. [Sen kapıya dayandığın zaman] Ahmet içerdeydi.

c. * [Sen kapıya dayanınca] Ahmet içerdeydi.

‘Ahmet was in when you were pounding at the door.’

(4)a. [Songül eve geldiğinde] Ali yemeği pişirmişti.

b. [Songül eve geldiği zaman] Ali yemeği pişirmişti.

c. * [Songül eve gelince] Ali yemeği pişirmişti.

‘Ali had cooked the meal when you arrived home.’

Another distinction among these converbs is that they make different choices on the matrix clause verb. In examples (5) and (6), the matrix clauses are copular sentences.

(5)a. * Handan [arabasına binince] çok üzgündü.

b. Handan [arabasına bindiğinde] çok üzgündü.

c. Handan [arabasına bindiği zaman] çok üzgündü.

‘Handan was very upset when she got on her car.’

(6)a. * Ahmet [eve dönünce] yorgundu.

b. Ahmet [eve döndüğünde] yorgundu.

c. Ahmet [eve döndüğü zaman] yorgundu.

‘Ahmet was weary when he returned home.’

In these sentences, *-DIğIndA* and *-DIğI zaman* are acceptable, but the use of *-InCA* becomes unacceptable. Copular sentences express states, but the temporal converb *-InCA* does not allow stative expressions in the matrix clause.

On the other hand, *-InCA* allows the use of change of state verbs in the matrix clause. Consider examples (7) and (8).

(7)a. Ayşe [raporları okuyunca] çok kızdı.

‘Ayşe became very angry when she read the reports.’

b. * Ayşe [raporları okuyunca] çok kızgındı.

‘Ayşe was very angry when she read the reports.’

(8)a. Ali [açık havada biraz yürüyünce] acıktı.

‘Ali got hungry when he walked in the open air for a while.’

b. * Ali [açık havada biraz yürünce] açtı.

‘Ali was hungry when he walked in the open air for a while.’

In examples (7) and (8), the sentences marked with ‘a’ are formed with change of state verbs, on the other hand, the sentences marked with ‘b’ are copular sentences which are constructed by the adjectival forms of change of state verbs. In this instance, *-IncA* can not be used in the complex sentence when the matrix clause is copular.

It was mentioned earlier that copular sentences express states. In considering a stative sentence, the speaker hypothesizes that the converb clause event is realized when the matrix clause event is in progress, because copular sentences express that the subject of the matrix clause is in the indicated state continuously. In example (7) Ayşe is angry. The subject’s state of being angry does not take place after the realization of the converb clause event. On the contrary, the subject of the matrix clause is already in this state when the converb clause event is realized. Therefore, the converb clause event is realized and finished in a particular point of time when the matrix clause proposition (or event) is valid. So, the two events occur simultaneously. *-IncA* can not convey this kind of a meaning relationship because it can link the converb and the matrix clause events by denoting the anteriority of the converb clause event.

In cases which *-Inca*, *-DIđIndA* and *-DIđI zaman* denote anteriority of the converb clause event, there is not a clear distinction in the use of these converbs. As examples (9) and (10) demonstrate, the meaning relationship is the same in all of the three sentences which are formed with *-Inca*, *-DIđIndA* and *-DIđI zaman*.

(9)a. [Konusmacı susunca] Ali alkışladı.

b. [Konusmacı sustuğunda] Ali alkışladı.

c. [Konusmacı sustuğu zaman] Ali alkışladı.

'Ali applauded when the lecturer finished his/her speech.'

(10)a. Ahmet [bahçedeki işi bitince] sokak sokak dolaşıyordu.

b. Ahmet [bahçedeki işi bittiğinde] sokak sokak dolaşıyordu.

c. Ahmet [bahçedeki işi bittiği zaman] sokak sokak dolaşıyordu.

'Ahmet was wandering in the streets when he finished up with his duties in the garden.'

When the syntactic properties of these temporal converbs are considered, it is observed that *-Inca* can not convey the subject reference of the converb clause unless the subject is expressed lexically in the converb clause, whereas *-DIđInda* and *-DIđI zaman* morphologically include subject agreement. So, in the complex sentences which are formed with a converb clause marked by *-Inca*, the subjects of the converb and the matrix clauses are regarded as co-indexed if there is not a lexical subject in the converb clause.

(11)a. Daha sonra, [evine çıktığında] seni görmeye geldim.

b. Daha sonra, [evine çıktığın zaman] seni görmeye geldim.

c. Daha sonra, [evine çıkınca] seni görmeye geldim.

'Then I came to see you when you moved to your house.'

(12)a. [Nöbeti bıraktığımda] gidebilirdik.

b. [Nöbeti bıraktığım zaman] gidebilirdik.

c. [Nöbeti bırakinca] gidebilirdik.

‘We could go when I finished my turn of duty.’

Although the subject referents of the converb clauses are evident in the ‘a’ and ‘b’ sentences in (11)-(12), the converb clauses in the sentences which are marked by ‘c’ do not have a specific agent. That is to say, it is not clear whether the converb clause agents of (11)-(12)c are the first or second or third person singular or plural. Mostly the converb clause subject is considered as co-referential with the matrix clause subject, yet the subject of the converb clause may be the first person singular, etc. The reason of this is that *-Inca* is a simple bound converb which constructs nonfinite clauses and which does not convey subject agreement. On the other hand, *-DiğIndA* and *-Diğl zaman* are temporal converbs which are formed by the nominalizer, *-DIK*. This nominalizer can display subject agreement on the converb construction.

IV.4. The Interaction of Turkish Temporal Converbs with Lexical Aspectual Properties of Converb Clause Verbs

When the correlation of Turkish temporal converbs with converb clause verb is considered, it is observed that these converbs are not sensitive to the lexical aspectual properties of converb clause verbs. Following examples illustrate this fact.

(1) Manav [domatesleri tartıp] poşete koydu.

‘The greengrocer weighed tomatoes and put them into the bag.’

(2) [Arıdan *korkup*] ortalığı ayağa kaldırmıştım.

‘I had stirred up by being afraid of the bee.’

(3) [Sen annene de bir tabak yemek *ayırınca*] kıyamet koptu.

‘They raised the devil when you reserved a dish of meal for your mother.’

(4) [Çocuklar birbirleriyle *kaynaşınca*] bizler de çok mutlu olduk.

‘We, too, became very happy when the children united with each other.’

(5) [Gelinliğini büyük bir kutudan *çıkarak*] askıya astı.

‘She took out her wedding-dress from a big box and hanged it.’

(6) İşimi [*severek*] yapıyorum.

‘I do my duty willingly (I am satisfied with my job).’

(7) [Bulaşık *yıkaya yıkaya*] canı çıkmıştı.

‘S/he became tired, washing the dishes.’

(8) Çocuk [*korka korka*] babasına yaklaştı.

‘The child approached his/her father, afraid.’

(9) [Sis *dağıldığında*] kasaba halkı dışarıya çıktı.

‘People living in the village came out when the fog lifted.’

(10) [Meyveler *lezzetlendiğinde*] hepsini toplayıp sattılar.

‘They picked the fruits and sold them all when the fruits became ripe.’

(11) [Ödevini *bitirdiği zaman*] annesi ona çikolata verdi.

‘His/her mother gave him/her chocolate when s/he finished doing his/her homework.’

(12) [Oturuktan *usandıkları zaman*] yürüyüşe çıkarlar.

‘They go out for a walk when they become fed up with sitting.’

(13) [ABD Irak'a *saldırıldığından beri*] dünya ülkelerinde genel bir huzursuzluk yaşıyor.

'There is a common uneasiness among the world countries since USA has attacked Iraq.'

(14) [Ayşe yeni evine *alıştığından beri*] çok neşeli.

'Ayşe is very happy since she has been accustomed to her new house.'

(15) [Mersin'e *geldikçe*] bize uğra.

'Visit us whenever you come to Mersin.'

(16) [Çiçekler *büyüdükçe*] daha fazla su isterler.

'Flowers need more water as they grow.'

(17) [Mektubu *göndermeden önce*] biraz tereddüt ettim.

'I hesitated for a moment before sending the letter.'

(18) İnsan [*yaşlanmadan önce*] dünya için güzel birşeyler yapmalı.

'One should do something useful for others before getting old.'

(19) [Kitabın üzerindeki tozları *üfledikten sonra*] okumaya başladı.

'S/he began reading after blowing the dust on the book.'

(20) [At arabası *uzaklaştıktan sonra*] hepsi evlerine döndüler.

'All of them returned their homes after the carriage went away.'

It is clear in examples (1)-(20) that the temporal converbs *-(I)p*, *-InCA*, *-ArAk*, *-A...-A*, *-DIğIndA*, *-DIğI zaman*, *-DIğIndAn beri*, *-DIkçA*, *-mAdAn (önce)* and *-DIktAn sonra* can co-occur with verbs expressing stative and eventive propositions. It should be noted here that *-ArAk* and *-A...-A*, as they primarily convey non-temporal meaning relationships among the converb and matrix clause events, lose their temporal reading, and they acquire

manner reading when they co-occur with verbs conveying psychological states such as *kork-* (to be afraid), *sev-* (to love), etc.

Other than the above mentioned converbs, the temporal converbs *-(I)r...-mAz*, *-All* and *-ken* make choices on the converb clause verbs. Consider the following examples.

(21) [Uçak *yükselir yükselmez*] midem bulanmaya başladı.

'I suffered nausea as soon as the plane went up.'

(22) [Uçak *yükseleli*] midem bulanıyor.

'I am suffering nausea since the plane has gone up.'

(23) ? [Ben *şaşırır şaşırmaz*] o gülmeye başladı.

'S/he began to laugh as soon as I bewildered.'

(24) ? [Ben *şaşıralı*] on dakika geçti.

'It has been ten minutes since I had bewildered.'

(25) ? [Ali orada *kalakalır kalakalmaz*] olanları anladı.

'Ali understood everything as soon as he stood still (with confusion).'

(26) ? [Ali orada *kalakalalı*] çok olmadı.

'It has not been a long time since Ali had stood still (with confusion).'

(27) ? [Sen *irkilir irkilmez*] ben geldim.

'I came as soon as you were startled.'

(28) ? [Sen *irkileli*] ben buradayım.

'I am here since you have been startled.'

Although *-(I)r...-mAz* and *-All* can be added to the verbs denoting change of state, motion and state, they can not be added on punctual psych verbs. It is observed in examples (23)-(28) that the co-occurrences of these converbs with punctual psych verbs are not

acceptable. In addition, there are other instances in which the use of *-(I)r...-mAz* is acceptable, but the use of *-All* is unacceptable. Consider examples (29) and (30).

(29) [Ayşe öksürür öksürmez] annesi ağzına bir kaşık bal tıktı.

‘As soon as Ayşe coughed, her mother jammed a spoonful of honey into her mouth.’

(30) ? [Ayşe öksürelî] bal yiyor.

‘Ayşe is eating honey since she has coughed.’

In these instances *-(I)r...-mAz* and *-All* are assigned to semelfactive verbs. *-(I)r...-mAz* can be added on semelfactive verbs, but *-All* does not prefer these verbs in the converb clause. The reason of this is that these verbs mostly can not constitute an orientation point for the matrix clause event. On the contrary, the events denoted by these verbs appear as instant outcomes of some other event [especially the events denoted by the converb clause verbs in (23), (25) and (27)].

Another temporal converb, *-ken* also makes choices about the aspectual properties of converb clause verbs. It is observed in sample sentences that this converb mostly loses its temporal reading and acquire different readings when it co-occurs with verbs which denote psych events such as *affet-* (to forgive), *gücen-* (to be offended), *bil-* (to know), *gururlan-* (to be proud of), *anla-* (to understand), *sev-* (to love), *iğren-* (to disgust), *incit-* (to hurt) and so on.

(31)a. ?? [Ben kavundan *iğrenirken*] sen meyve getirdin.

??‘You brought some fruit while I disgusted melon.’

b. [Ben kavundan *iğrenirken*] herkes kavuna bayılıyordu.

‘Everybody loved melon while (but) I disgusted it.’

manner reading when they co-occur with verbs conveying psychological states such as *kork-* (to be afraid), *sev-* (to love), etc.

Other than the above mentioned converbs, the temporal converbs *-(I)r...-mAz*, *-All* and *-ken* make choices on the converb clause verbs. Consider the following examples.

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'I am here since you have been startled.'

Although *-(I)r...-mAz* and *-All* can be added to the verbs denoting change of state, motion and state, they can not be added on punctual psych verbs. It is observed in examples (23)-(28) that the co-occurrences of these converbs with punctual psych verbs are not

acceptable. In addition, there are other instances in which the use of *-(I)r...-mAz* is acceptable, but the use of *-All* is unacceptable. Consider examples (29) and (30).

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‘Ayşe is eating honey since she has coughed.’

In these instances *-(I)r...-mAz* and *-All* are assigned to semelfactive verbs. *-(I)r...-mAz* can be added on semelfactive verbs, but *-All* does not prefer these verbs in the converb clause. The reason of this is that these verbs mostly can not constitute an orientation point for the matrix clause event. On the contrary, the events denoted by these verbs appear as instant outcomes of some other event [especially the events denoted by the converb clause verbs in (23), (25) and (27)].

Another temporal converb, *-ken* also makes choices about the aspectual properties of converb clause verbs. It is observed in sample sentences that this converb mostly loses its temporal reading and acquire different readings when it co-occurs with verbs which denote psych events such as *affet-* (to forgive), *gücen-* (to be offended), *bil-* (to know), *gururlan-* (to be proud of), *anla-* (to understand), *sev-* (to love), *iğren-* (to disgust), *incit-* (to hurt) and so on.

(31)a. ?? [Ben kavundan *iğrenirken*] sen meyve getirdin.

??‘You brought some fruit while I disgusted melon.’

b. [Ben kavundan *iğrenirken*] herkes kavuna bayılıyordu.

‘Everybody loved melon while (but) I disgusted it.’

Example (31)a and b display that *-ken* no longer denotes temporal relations among the converb and matrix clause events, but it denotes the a kind of *contradiction* among the converb and matrix clause events.

IV.5. Summary

Section IV. and its subsections introduce the semantic realizations of the Turkish temporal converbs. Considering linguistic time, three main temporal meaning relations conveyed by these converbs are distinguished. Temporal converbs convey the meaning relations of simultaneity of the converb and the matrix clause events, anteriority and/or posteriority of the converb clause event. It is observed in the data that the converb clause acquires temporal and aspectual interpretations by its interaction with the matrix clause verb and the TAM markers of the matrix clause. Converbs such as *-DIğIndA* and *-DIğI zaman* may denote more than one temporal meaning relation. These converbs have their temporal interpretation by their co-occurrences with different kinds of matrix clause verbs (i.e., by the aspectual properties of those verbs). The converbs which denote simultaneity are *-ken*, *-(Ip)*, *-ArAk*, *-A...-A*, *-DIğIndA* and *-DIğI zaman*. Anteriority is denoted by the converbs *-InCA*, *-(Ir...-mAz)*, *-DIktAn sonra*, *-All*, *-(Ip)*, *-DIğIndA*, *-DIğIndAn beri*, *-DIğI zaman* and *-ArAk*. Lastly, *-mAdAn (önce)*, *-DIğIndA* and *-DIğI zaman* denote posteriority.

The converbs which convey only temporal meaning relations are termed as temporally specialized converbs. *-All* and *-DIğIndAn beri* are the two converbs which are temporally specialized. On the other hand, *-ken*, *-InCA*, *-DIktAn sonra*, *-(Ip)*, *-A...-A*, *-mAdAn*, *-ArAk*, *-DIğI zaman*, *-DIğIndA* and *-DIkçA* are contextual converbs which denote

both temporal and non-temporal meaning relations such as *condition, manner, cause/effect*, etc. The temporal meanings of the above mentioned converbs get weaker, and these converbs acquire different readings by their interaction with the TAM markers of the matrix clause, and/or with the aspectual properties of matrix clause verbs. For instance, the converb of simultaneity, *-ken* denotes the interruption of the converb clause event when it co-occurs with the prospective marker, *-AcAk*. It also conveys that there is a propositional contradiction between the converb and the matrix clauses when the aorist on the converb clause is negated. When *-ken* co-occurs with the perfect aspect *-mİş* on the converb clause verb, it presents the converb clause event as an opportunity for the realization of the matrix clause event. *-Inca*, *-DIğIndA*, *-DIğI zaman*, *-DIkçA* and *-DIktAn sonra* denote the condition under which the matrix clause event is realized. *-Inca* and *-(I)r...-mAz* can form lexically specified expressions. At the same time, *-(I)p* and *-mAdAn* may denote the meaning *without* in addition to their temporal interpretations. *-A...-A* and *-ArAk* convey strong manner reading, but *-ArAk* also denotes a cause/effect relationship among the converb and the matrix clause events.

Converbs which overlap in their temporal meanings like *-All* and *-DIğIndAn beri*; *-Inca*, *-DIğIndA* and *-DIğI zaman* are analyzed in this section. The distinctive features of each of these converbs are described. It is observed in the data that although *-All* can be used in complex sentences in which the matrix clause is a temporal expression, *-DIğIndAn beri* can not be used in these complex sentences. *-All* is sensitive to the aspectual properties of matrix clause verbs. It forms acceptable complex sentences when it co-occurs with change of state verbs, or when the matrix clause is a copular sentence. When the matrix clause propositions are eventive, *-All* can not be used in the complex sentence. That is to say, *-All* requires stative reading in the matrix clause.

Another group of temporally overlapping converbs includes *-Inca*, *-DIğIndA* and *-DIğI zaman*. When these converbs are analyzed, it is observed that *-Inca* can only express the anteriority of the converb clause event, whereas *-DIğIndA* and *-DIğI zaman* can express simultaneity and posteriority. In addition, *-Inca* does not allow stative expressions in matrix clauses. So, when the matrix clause is a copular sentence, the complex sentence which is formed with *-Inca* becomes unacceptable.

-(I)r...-mAz, *-All* and *-ken* are sensitive to the aspectual properties of the converb clause verb, whereas the other converbs do not make choices about verbs. *-(I)r...-mAz* and *-All* do not prefer punctual psych verbs in the converb clause, and *-ken* loses its temporal reading and acquires modal readings such as *contradiction* of the converb and the matrix clause events when it co-occurs with verbs denoting psych actions in the converb clause.



CONCLUSION

In most of the European languages, complex sentences are formed by the use of adverbial subordinators and coordinators. Yet, Turkish language does not employ coordinators in its structure. Hence, sentences are conjoined by converbs which undergo the functions of these two categories. In this study, the adverbial clauses in Turkish which are formed with temporal converbs are analyzed.

Unlike adverbial subordinators, converbs in Turkish are nonfinite verb forms. The converb clauses acquire their temporal interpretation and subject reference from their interactions with the matrix clause operators. At the same time, converb clauses are adjuncts, and they are optional elements in the complex sentence structure.

The temporal converbs, which are in the concern of this study, establish temporal meaning relationships between the converb and the matrix clause events. In this study, the syntactic and semantic analyses of the Turkish temporal converbs *-(I)p*, *-ArAk*, *-InçA*, *-ken*, *-All*, *-DIğIndAn beri*, *-DIkçA*, *-DIğIndA*, *-DIğl zaman*, *-(I)r...-mAz*, *-A...-A*, *-DIktAn sonra* and *-mAdAn (önce)* are made. The co-occurrences of these converbs with TAM markers and with state, change of state and motion verbs are examined in order to find answers for the research questions.

The hypotheses of this study claim that the meaning relationships denoted by Turkish temporal converbs are affected by the operators of the converb clause verb. At the same time, the operators of the matrix clause verb also have effects on the meanings of these converbs. The time and the subject reference of the adverb clause is determined by the matrix clause verbs and/or operators. It is also claimed that temporal converb clauses have both coreferential and non-coreferential subjects with the matrix clauses. Only *-(I)p*, -

ArAk and *-A...A* constitute exceptions to this generalization. It is stated that when the converb clause subject is co-indexed with the matrix clause subject, the converb clause has the empty element PRO and undergo subject control. The temporal converbs basically express temporal relations among the conjoined clauses. Yet, these converbs may restrict the meaning of the converb clause verb by conveying modal relations between the clauses. In addition to this, the temporal converbs *-All*, *-DiğIndAn beri*; *-Inca*, *-DiğIndA* and *-DiğI zaman* overlap in the meaning relations that they denote. When the differences between these converbs are considered, it is hypothesized that *-All* prefers stative reading in the matrix clause.

The hypotheses stated above has proven to be true when the temporal converb clauses were analyzed syntactically and semantically. The summary of the results of the syntactic and semantic analyses is given below.

In section III, the syntactic analysis on Turkish temporal converbs has shown that the converb clause verb operators like negation and passive inflection, and the TAM markers that are added to the converb clause verb affect the meaning relationship conveyed by temporal converbs. *-ken*, for instance, acquire modal readings by its interaction with different TAM markers. Negation and passive inflection may absorb the temporal meaning relation of converbs such as *-A...-A* and assign them non-temporal meanings.

As converb clauses are nonfinite verbal constructions, they acquire their temporal interpretation and subject reference from the operators of the matrix clause verb and/or from the aspectual properties of the matrix clause verb. If the event frame of the matrix clause event is in the past, the converb clause event also takes place in the past.

Only the converbs *-(Ip)*, *-A...-A* and *-ArAk* undergo obligatory subject control. All the other temporal converbs may have both coreferential and non-coreferential

subjects. Therefore, the converb clause subject may be a lexical item which is not co-indexed with the matrix clause subject or it may be the empty category (PRO) which is co-indexed with the matrix clause subject. So, it is seen that Turkish temporal converbs are varying-subject converbs.

When the data is analyzed, it is observed that only *-All* and *-DIğIndAn beri* convey mere temporal meaning relationships among the converb and the matrix clauses. The other converbs denote both temporal and non-temporal meanings. The converbs which denote the anteriority of the converb clause event overlap in their temporal meaning relations. Yet, when they are analyzed in sample sentences, it is observed that the use of *-All* differs from the use of *-DIğIndAn beri* in some cases. Although *-DIğIndAn beri* is acceptable when the matrix clause is stative or eventive, *-All* can not be accepted in the complex sentence when the matrix clause is eventive. A similar case is observed when *-Inca*, *-DIğIndA* and *-DIğI zaman* are taken into consideration. *-Inca* can only denote anteriority, whereas *-DIğIndA* and *-DIğI zaman* denote simultaneity and posteriority. Meanwhile, *-Inca* can be used in the complex sentence only when the matrix clause is verbal. In cases when the matrix clause is a copular sentence, the use of *-Inca* in the complex sentence becomes unacceptable. This is not the case for *-DIğIndA* and *-DIğI zaman*. In addition to this, *-Inca* also prefers eventive reading in the complex sentence. Thus, the distinctions among temporally overlapping converbs were stated.

This study makes a descriptive analysis of the Turkish temporal converbs, and provides insights to basic syntactic and semantic properties of these converbs. It is considered that this study may be helpful in handling typological studies on adverbial clauses and converbs in Turkish.



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