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Abstract

This thesis focuses on scrambling in Turkish by discussing that word order deviations are driven by discourse-pragmatic factors. It gives a detailed description and analysis of Information Structure in the language through three main partitions: topic, focus and tail. It first presents potential morpho-semantic effects on the distribution of these partitions. Accordingly, specificity and definiteness categories may restrict topicalization possibilities, but it does not provide a conclusive account of all instances. Compared to topic, focus and tail are not constrained by any morphological and semantic regularities. However, tail must be referentially anchored in discourse. Then, the phonological features of the partitions are presented. It is argued that the primary prosodic prominence falls on focus; thus, it is indicated by a tonal accent. Topic is expressed by a rising boundary tone; it is associated with secondary prosodic prominence. Tail is prosodically non-prominent in Turkish. As such, it is always realized with de-accentuation.

In essence, the study analyzes the scrambling phenomenon from a syntactic standpoint. It shows that word order variation is motivated by discourse-configurational features. The topic feature on C is accompanied by an empty topic operator in Spec, CP which triggers a topicalized constituent to raise to the specifier of a Topic Phrase at the left periphery of a sentence. The occurrence of multiple topics, on the other hand, is resolved through an analysis of multiple specifiers of a single Topic head. In such constructions, the number of operators is equated with the number of topics so that each topic is attracted by its own operator. On the other hand, focus and tail are not derived by phrase-level projections. It is proposed that focus does not drive syntactic movement, rather it is licensed by the Agree operation between the goal (the C head) and a probe with matching features. Lastly, this study explains potential word order alternations in Turkish through the adjunction operation. It shows that focus

initiates the adjunction of tail elements to alternative positions in order to secure its syntactic and prosodic prominence in the sentence.

SCRAMBLING AND INFORMATION STRUCTURE IN TURKISH

by

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Dissertation

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Abbreviations

2sg.	second person singular
3sg.	third person singular
3pl.	third person plural
Abil.	abilitative
Acc.	accusative
Aor.	aorist
CP	complementizer phrase
Dat.	dative
DP	determiner phrase
Ep.Cop.	epistemic copula
Fut	future
Inf.	infinitive
IS	Information Structure
Loc.	locative
Neg.	negation
Nom.	nominative
NP	Noun Phrase
Past	past
Pl.	plural
Poss.	possessive
Pres.	present
Pr.Prog.	present progressive
PRO	anaphoric subject for infinitivals
Prog.	progressive
Rep.Past	reported past
S	sentence
SOV	subject-object-verb order
s-initial	sentence initial
V	verb
VP	verb phrase

f. Oku-du	kitab-1	Can.	VOS
read-Past.3sg	book-Acc	Can	
'Can read the book.'			

The unmarked order is SOV, which is exemplified in (1a). In this order, the subject precedes all the other constituents and the verb is placed at the end.² The grammatical relations of the nominal phrases are expressed through inflection, rather than by their positions. The subject of the finite sentence takes the nominative case in Turkish, though it is not overtly marked. This enables the subject and the case marked direct object (DO) to appear preverbally and postverbally in alternative positions.

However, direct objects are not marked with the otherwise obligatory accusative inflection when they are non-specific. Given that the nominative case is morphologically null, the order of the constituents with a non-specific object is more restrictive.

- (2) a. Kaos düzen getir-ir.
chaos order bring-Pres.3sg
'Chaos brings order.'
- b. Düzen kaos getirir.
order chaos bring-Pres.3sg
'Order brings chaos.'

Since the nominal arguments are not morphologically inflected in (2a, b), their functions are determined based on the positions in which they appear. Following the canonical order, *kaos* 'chaos' is the subject and *düzen* 'order' is the object of the first sentence while in the second sentence, the functions are reversed. Such constructions, however, are relatively rare. In most

² Native speakers confirm this characterization.

sentences, nominal phrases exhibit distinctive semantic features but, if not, at least one of the phrases is overtly case marked to indicate its grammatical and thematic relation to the verb (Erguvanlı, 1984). This necessarily highlights the importance of inflection for word order variations in Turkish.

1.2 Scrambling

The term ‘scrambling’ was introduced into the generative grammar by Ross (1967). It simply refers to the freedom to shift constituents around in sentences. In such constructions, constituents can appear in various orders while maintaining the core meaning. The scrambling phenomenon has been extensively studied to address several fundamental issues as follows:

- a. Scrambling as a uniform phenomenon or a general term to cover various processes
- b. Syntactic nature of scrambling
- c. Triggering factors behind scrambling
- d. Semantic effects
- e. The basic word order in scrambling languages
- f. Scrambling as an instance of movement or base-generation, and if movement:
 - i. A-movement or A’-movement
 - ii. Syntactic constraints on scrambling as movement

The following subsection briefly describes Turkish as a scrambling language by providing examples from declarative constructions.

1.2.1 Scrambling in Turkish

Besides the canonical order, options for realizing constituents in various orders show that Turkish is a scrambling language. It exhibits short- and long-distance scrambling both in

declarative and interrogative constructions. This thesis, however, focuses only on short distance scrambling in declarative structures. Consider the examples below:

- (3) a. Deniz araba-yı yıka-dı.
 Deniz-Nom car-Acc wash-Past
 ‘Deniz washed the car.’
- b. Araba-yı_i Deniz *t_i* yıka-dı.
- c. Deniz *t_i* yıka-dı araba-yı_i.
- d. *t_j* Araba-yı yıka-dı Deniz_j.
- e. *t_j* *t_i* Yıka-dı Deniz_j araba-yı_i.
- f. *t_j* *t_i* Yıka-dı araba-yı_i Deniz_j.

The first sentence is given in the canonical order. In the following sentences, the nominal arguments are scrambled to potential preverbal and postverbal positions. The base position of the moved element is marked with a trace in all the scrambled sentences. These sentences show the potential scrambling alternations through case-marked constituents.

However, this operation is more restrictive with non-case marked arguments and some adjuncts in Turkish. For example, a non-case marked object cannot appear in a s(entence)-initial position or postverbal position.³

- (4) a. Defne dün kitap al-mış.
 Defne yesterday book buy-Rep.Past
 ‘Defne bought a book yesterday.’
- b. *Kitap_i Defne dün *t_i* al-mış.
- c. *Defne kitap_i dün *t_i* al-mış.

³ The discussion is restricted to neutral contexts.

d. */? Defne dün t_i al-mış kitabı.

Similarly, an adjunct may not be moved away from its base position:

- (5) a. Defne ödev-in-i yavaş yap-ar.
 Defne homework-3sg-Acc slow do-Aor
 ‘Defne does her homework slowly.’
- b. *Yavaş_i Defne ödev-in-i t_i yap-ar.
- c. *Defne yavaş_i ödev-in-i t_i yap-ar.
- d. *Defne ödev-in-i t_i yap-ar yavaş_i.

The adjunct *yavaş* ‘slowly’ cannot appear in any alternative positions, other than the immediately preverbal position. However, this is not true of all adjuncts. While some adjuncts tend to occur in a particular position, such as *yavaş* ‘slowly’, some others can be realized both preverbally and postverbally:

- (6) a. Defne ödev-in-i her akşam yap-ar.
 Defne homework-3sg-Acc every evening do-Aor
 ‘Defne does her homework every evening.’
- b. Her akşam_i Defne ödev-in-i t_i yap-ar.
- c. Defne her akşam_i ödev-in-i t_i yap-ar.
- d. Defne ödev-in-i t_i yap-ar her akşam_i.

The sentences in (6) show that the adjunct *her akşam* ‘every evening’ can scramble to various positions⁴ without imposing any change in the interpretation of the sentence.

These examples indicate that scrambling in Turkish is in fact not an optional or arbitrary operation. Rather, there must be certain reasons to move some elements away from their base positions while forcing some others to stay where they belong. In this context, the current study attempts to establish a single source of motivation for all scrambling operations in the language. It shows that the motivation for moving constituents around mainly stems from formal discourse-pragmatic functions. These functions will be identified within the scope of Information Structure (IS) in the next chapter.

Chapter 2. Information Structure

Vallduví (1992) notes that sentences are packaged in various ways in accordance with the information that they carry.⁵ A sentence is informationally articulated into a trinomial hierarchical structure:

(7) S = {FOCUS, GROUND}

GROUND = {LINK, TAIL}

⁴ The issue of base positions for adjuncts is controversial. On the one hand, it is suggested that adjuncts are freely generated in positions adjoined to verbal and functional projections (Neeleman, 1994; Ernst, 2002). Restrictions on the surface are considered to be semantic in nature. Alternatively, it is argued that adjuncts are subject to a strict ordering constraint (Cinque, 1999). They are placed in the specifier of a designated functional projection. See Frey (2003) for a detailed discussion of these two approaches.

⁵ Vallduví (1992) defines Information Packaging as follows:

A small set of instructions with which the hearer is instructed by the speaker to retrieve the information carried by the sentence and enter it into her/his knowledge store.

The sentence reflects the focus-background division. The focus constitutes the informative segment. Therefore, it is the only non-elideable element of the sentence. This means that all sentences must have a focus. The ground serves as the complement of the focus and it corresponds to the presupposed part of the information. Within the ground, there is a specific element, the link⁶, which appears in the s-initial position. Its primary function is to link the sentence to the discourse context.⁷ Put differently, the link performs an information-retrieval task from the larger ground. It is essential to keep in mind that not all s-initial constituents may be links, since the ground exists only when a certain part of the information is retrieved from the discourse. If the information is already set, or if there is no need to address a particular point in the discourse, linkless sentences are employed. Lastly, the tail represents the already existing information, and it mostly indicates the right- or left-detached⁸ constituents. Importantly, the distribution of the tail depends on the structural properties of an individual language, so it may occupy alternative positions in the sentence. From a universal perspective, it is simply described as the non-focal and non-link part of the sentence.

Following the characteristics of the trinomial hierarchical articulation in (7), Vallduví illustrates four possible informational structures for a sentence: *link-focus*, *all-focus*, *link-focus-tail* and *focus-tail*.⁹

⁶ Vallduví (1992) defines the link as a special ‘topic-like’ element. As a matter of convenience, this term is simply addressed as ‘topic’ in the remainder of this research study.

⁷ A link serves an address pointer that directs the hearer to a given address in his/her knowledge store.

⁸ The detachment process refers to the syntactic operation in which adjoined elements are moved out of their bases and placed in non-argument positions.

⁹ All the examples have been taken from Vallduví (1992, pp. 61-65).

In a link-focus¹⁰ sentence, the only ground is the link:

(8) The boss [F CALLED].

Here, the link ‘the boss’ gives the presupposed information. The predicate ‘called’ expresses an assertion about the link.

In an all-focus sentence, the ground is null, which suggests that the hearer does not hold any pre-existing information. It provides a response to a question ‘what happened?’.

(9) [F The BOSS called].

In this type, the speaker assumes that the hearer is capable of retrieving the information conveyed by the sentence without any need for a link or tail.

A focus-tail sentence can be exemplified as in (10):

(10) I can’t believe this! This boss is going crazy! BROCCOLI, he wants now.

This sentence does not have an address point. The only shared information between the interlocutors is the tail.

In a link-focus-tail structure, the speaker provides the tail information, directs the hearer to a specific point and presents the informative segment. For example, in the sentence (11), *the boss* is the link, *hates* is the core part of the information and *broccoli* is the tail.

(11) The boss HATES broccoli.

¹⁰ Note that here and below, capitalization indicates the presence of a tonal accent. The brackets and F mark do not indicate the existence of a syntactic projection. They are only used to be fully consistent with the original data taken from Vallduví (1992).

These structures are further discussed in the following subsection.

2.1 Information Structure in Turkish

This study examines the trinomial information structure specifically with *topic*, *tail* and *focus* in Turkish. These categories are analyzed through question/answer congruence.

2.1.1 Focus

Focus sets a corresponding answer to the interrogated constituent(s) in a question. For example, the sentence below asks about the direction of the action that the agent performed. The answer *okula* ‘to the school’ is therefore focused.

(12) Q: *Deniz nereye gitti?*

‘Where did Deniz go?’

A: Deniz OKUL-A git-ti.

Deniz school-Dat go-Past

‘Deniz went to the school.’

In line with İşsever (2003)¹¹, this thesis examines focus in Turkish within ‘a domain’ which contains all preverbal positions, together with the verb. More precisely, the tonal accent may fall on any constituent on the left of the verb or the verb itself. There are two types of foci: *presentational-focus* (p-focus) and *contrastive-focus* (c-focus).¹² P-focus is associated with the immediately preverbal position whereas c-focus is not restricted to a particular position as long as the target constituent stays in the focus domain. In other words, if a constituent

¹¹ Göksel and Özsoy (2000) identifies the focal area by using the term ‘the focus field’ which is situated between the position that bears primary stress and the position that includes the verbal complex. However, this study follows İşsever’s (2003) analysis since the focus field is not applicable to the instances where focus projects from the verb phrase to the left.

¹² Kiss (1998) refers to c-focus as *identificational focus* and to p-focus as *information focus*.

receives the p-focus interpretation, it must appear left-adjacent to the verb. For c-focus, on the other hand, constituents stay in their base positions and receive the tonal accent in-situ. With respect to pragmatic functions, p-focus directly corresponds to the (explicitly or implicitly) interrogated element in the question (Gundel, 1988), while c-focus evokes the existence of alternative entities.

The contrast can be exemplified as follows:

(13) Q: *Selin Ömer'e ne vermiş?*

What did Selin give to Ömer?

A ₁ : Selin	Ömer-e	TELEFON-U	ver-miş.
Selin	Ömer-Dat	phone-Acc	give-Rep.Past

‘Selin gave the phone to Ömer.’

Here, the direct object *telefonu* ‘the phone’ is the informative part of the sentence, and it is p-focused. Since it has phonological prominence in the sentence, it receives a stronger accent.

In contrast, the sentence containing a c-focus constituent implies that there is at least one other option relevant to the question.

A ₂ . Selin	TELEFON-U	Ömer-e	ver-miş	(bilgisayar-ı	Can-a).
Selin	phone-Acc	Ömer-Dat	give-Rep.Past	computer-Acc	Can-Dat

‘Selin gave the phone to Ömer (and the computer to Can).’

In the sentence (13A₂), the direct object is chosen (out of a set of elements), and it is prioritized in the context through prosody.

2.1.2 Topic and Tail

Ground consists of the partitions that are somehow familiar to the interlocutors. These partitions may be already mentioned in the context, or they may be recognizable in the discourse. As opposed to focus, ground is not a compulsory segment of a sentence. This implies that both topic and tail are optional. Topic differs from tail in that it is not realized within the TP. Rather, it precedes the TP with which it is associated. It is, at this point, important to point out that a topic is not replaced with another constituent when it is fronted to the beginning of the sentence. This distinguishes topicalization from left-dislocation which requires the presence of a pronoun in the base position of a moved constituent. Further, topic bears a specific intonation pattern, while tail is not prosodically prominent. In this and following sections, the differences between topic and tail are discussed in detail.

Topic serves as a bridge for information structures, and it must occupy the s-initial position (Erguvanlı, 1984; Kılıçaslan, 1994¹³; Kornfilt, 1997; İşsever, 2003). Since Turkish does not have a topic particle (Kornfilt, 1997), topicalization¹⁴ is indicated by movement to this position.¹⁵

(14) Q: *Öğrenciler kitapları ne zaman aldı?*

‘When did the students buy the books?’

¹³ Kılıçaslan (1994) claims that topics may perform different functions: *textual*, *communicative* and *predicational*. The first two correspond to the sentence-external facet of the topic, while the third is associated with the sentence-internal facet of the topic.

¹⁴ Here, as in all the examples to follow, topic is italicized and followed by a comma in order to distinguish its syntactic position and prosodic prominence. It does not necessarily indicate an orthographic convention.

¹⁵ Kornfilt (1997) further argues that in topicalization constructions, no copy (and no particle) of the topicalized element is left behind.

A₁: *Kitap-lar-ı*, DÜN al-dı-lar.
 book-Pl-Acc yesterday buy-Past-3pl
 ‘They bought the books yesterday.’

In the answer (14A₁), the direct object is topicalized. However, not all s-initial¹⁶ constituents necessarily serve as a topic. The sentence below illustrates an alternative answer to the question in (14):

A₂: DÜN al-dı-lar.
 yesterday buy-Past-3pl
 ‘They bought yesterday.’

Here, the constituent that receives the focus interpretation starts the sentence on the surface structure. The distinction between these sentences is particularly important for prosodic features of the informative elements. Focus always receives the primary prosodic prominence, namely a tonal accent. Topic is associated with a rising boundary tone, which distinguishes a topic from tail elements in the ground (Vallduví & Engdahl, 1996).

Furthermore, a sentence can take multiple topics:

A₃: *Öğrenci-ler*, *kitap-lar-ı*, DÜN al-dı-lar.
 student-Pl book-Pl-Acc yesterday buy-Past-3pl
 ‘Students bought the books yesterday.’

If the context permits, there is no limit in the number of topics. However, the utterance usually requires a slight pause after each topic.

¹⁶ Erguvanlı (1984) states that subjects (canonically s-initial elements) are unmarked or natural topics.

Tails may occupy various positions in a sentence. To start with, all constituents appearing postverbally¹⁷ are construed as tails in Turkish, considering that topics cannot appear postverbally and that the focus domain is restricted to the preverbal (or verbal) domain. Second, it may potentially precede other constituents in a sentence. However, there is a tendency to place focus before tails in Turkish (İşsever, 2003). Given that focus constitutes the core part of the sentence information, if there is a tail element, it generally falls behind focus.

A₄: Kitap-lar-ı DÜN al-dı-lar.
 book-Pl-Acc yesterday buy-Past-3pl

‘They bought the books yesterday.’

A₅: DÜN al-dı-lar kitap-lar-ı.
 yesterday buy-Past-3pl book-Pl-Acc

‘They bought the books yesterday.’

In (A₄), the tail is given before the focus. When compared to the second sentence, it is pragmatically less favored. This is simply because tail elements do not denote essential information, thus mentioning them before the primary element makes the structure less effective.

Alternatively, tails can also occupy a preverbal position between the p-focus and topic positions.

(15) Q: *Gözetmen sınav kağıtlarını nereye yerleştirdi?*

‘Where did the proctor put the exam papers?’

¹⁷ Postverbal scrambling is not investigated within the scope of this thesis. For a detailed analysis, see Kılıçaslan (1994), Vallduvı & Engdahl (1996), İşsever (2003) and Kornfilt (2005).

A: *Gözetmen*, sınav kağıt-lar-ın-ı DOSYA-YA yerleştir-di.
 proctor exam paper-Pl-3sg-Acc folder-Dat put-Past

‘The proctor put the exam papers into the folder.’

The context plays an important role in determining the information structure of the sentence. For example, the sentence (15A) gives information about the direction of the action. Hence, the answer *dosyaya* ‘into the folder’ is focused in the immediately preverbal position. The constituent *gözetmen* ‘the proctor’ is the topic in the s-initial position. The phrase *sınav kağıtlarını* ‘the exam papers’ which precedes the p-focused element and follows the topic serves as the tail.

Furthermore, in the absence of a p-focus element, the tail may immediately precede the verb. The following sentence illustrates an answer corresponding to the object argument of the verb:

(16) Q: *Gözetmen neyi dosyaya yerleştirdi?*

‘What did the proctor put into the folder?’

A: *Gözetmen*, SINAV KAĞIT-LAR-IN-I dosya-ya yerleştir-di.
 proctor exam paper-Pl-3sg-Acc folder-Dat put-Past

‘The proctor put the exam papers into the folder.’

The phrase *sınav kağıtlarını* ‘the exam papers’ is c-focused and *gözetmen* ‘the proctor’ is the topic. The indirect object, *dosyaya* ‘into the folder’ follows the c-focus, and functions as the tail.

Lastly, a sentence may have several tails. Consider the following question and potential answers below:

(17) Q: *Öğrenci ödevini asistana ne zaman teslim etti?*

‘When did the student submit his homework to the assistant?’

A₁: *Öğrenci, ödev-in-i asistan-a DÜN AKŞAM teslim et-ti.*
 student homework-3sg-Acc assistant-Dat yesterday evening submit-Past

‘The student submitted his homework to the assistant yesterday evening.’

In the canonical order, the topic is the subject of the sentence. The informative part, given as an answer to the timing of the action, *dün akşam* ‘yesterday evening’ is the focused element. The tail elements are the direct and indirect objects that are placed after the topic and before the p-focused element. Note that these tail constituents do not have any prosodic or pragmatic prominence in the sentence. They are simply preferred to ease the understanding of the context.

Another important point is that there is no restriction in the order of tails. They can be scrambled on condition that topic is s-initial and p-focus immediately precedes the verb. The sentences below exemplify alternative word orders for the sentence in (17A₁):

A₂: *Öğrenci, asistana ödevini DÜN AKŞAM teslim etti.*

A₃: *Öğrenci, DÜN AKŞAM teslim etti asistana ödevini.*

A₄: *Öğrenci, DÜN AKŞAM teslim etti ödevini asistana.*

The tails appear in various positions. But importantly, these changes do not affect the information structure of the construction.

In addition to the analysis based on each partition, it is also crucial to discuss the interaction of these categories with respect to the context. Following Vallduví (1992), the next section

discusses the four major sentence types in Turkish: all-focus, topic-focus, focus-tail and topic-focus-tail.

2.1.3 Sentence Types

2.1.3.1 All-Focus

An all-focus sentence indicates a context in which all constituents are interpreted as part of new information. The typical question for such constructions is *Ne oldu?* ‘What happened?’. The answer, based on the event in the discourse, is mostly expected to follow the canonical order of the language.

(18) Q: *Ne oldu?*

‘What happened?’

A₁: KÖPEK KADIN-A SALDIR-DI.

dog woman-Dat attack-Past

‘The dog attacked the woman.’

The felicitous answer is illustrated in (18A₁) by using the unmarked SOV order. In all the other alternative orders, the answer becomes discursively odd due to the nature of the question:

A₂: #KADIN-A KÖPEK SALDIR-DI.

A₃: #KADIN-A SALDIR-DI KÖPEK.

A₄: #KÖPEK SALDIR-DI KADIN-A.

A₅: #SALDIR-DI KÖPEK KADIN-A.

A₆: #SALDIR-DI KADIN-A KÖPEK.

Knowing that the word order is marked solely due to discourse-pragmatic reasons, there does not seem any motivation to alternate the positions of the constituents in the answer. Even though these sentences are all grammatically well-formed, they do not provide relevant information to the discourse. As a result, they are contextually ill-formed.¹⁸

Another explanation for the infelicity of these constructions comes from the syntactic realization of IS categories. The p-focus interpretation can be assigned only to a single unit in a sentence. Having said that Turkish has a focus domain, rather than a unique position, the focus can extend its scope within the domain. However, scrambling of the elements within this unit is restricted. In the all-focus type, the whole sentence is focused, which necessarily indicates the lack of a formal requirement for them to move around.

2.1.3.2 Topic-Focus

A topic-focus sentence can be represented in different ways. In the simplest form, the sentence may have only two constituents:

(19) Q: *Adam parayı ne yapmış?*

‘What did the man do with the money?’

A: *Para-yı, KAYBET-MİŞ.*

money-Acc lose-Rep.Past

‘He lost the money.’

In this example, the verb is focalized, while the direct object acts as the topic. Alternatively, the number of the elements in the focus unit can be extended:

¹⁸ # symbol indicates that the sentence is contextually infelicitous.

(20) Q: *Adama ne olmuş?*

‘What happened to the man?’

A: *Adam,* *PARA-SIN-I* *KAYBET-MİŞ.*

man money-3sg-Acc lose-Rep.Past

‘The man lost his money.’

The answer in (20) contains three constituents, a topic element and two elements that receive the p-focus interpretation.

Another option is to increase the number of the elements in the topic unit, in addition to the use of multiple topics as discussed earlier:

(21) Q: *Adamın karısına ne olmuş?*

‘What happened to the man’s wife?’

A: *Adam-in* *kari-si,* *KAYBOL-MUŞ.*

man-Gen wife-3sg get lost-Rep.Past

‘The man’s wife got lost.’

In this context, the topic unit consists of two elements whereas the focalized element is the verb itself. In brief, the topic-focus type has only two IS units. The number of the constituents in these units may change depending on the context. While focus is limited to a single unit with one or multiple constituents inside, topic may iterate as distinct units, or it may take several elements within its unit.

2.1.3.3 Focus-Tail

In a focus-tail construction, all the constituents preceding the verb, or optionally only the verb itself, are focused, and the tail appears postverbally. Since topic, as a ground element, cannot

appear following the verb, all these constituents are interpreted as tail. Take an alternative answer to the question in (21), as repeated below:

(22) Q: *Adamın karısına ne olmuş?*

‘What happened to the man’s wife?’

A: KAYBOL-MUŞ *adam-ın* *kari-si.*

get lost-Rep.Past man-Gen wife-3sg

‘The man’s wife got lost.’

When this answer is compared with the one in (21), it seems that the same set of constituents can undertake different functions based on the context.

2.1.3.4 Topic-Focus-Tail

As the name suggests, all the three categories are used in this type of constructions. While topic is restricted to s-initial position, focus and tail may appear in alternative orders. A typical example can be given as follows:

(23) Q: *Defne babasına ne sürpriz yaptı?*

‘What surprise did Defne have for her father?’

A: *Defne,* *baba-sın-a* EV AL-DI.

Defne father-3sg-Dat house buy-Past

‘Defne bought a house for her father.’

The event of buying a house is focalized because it identifies the interrogated part of the discourse. The bridging element is the subject of the sentence and it occupies the topic position. The element that appears in between these two categories is the tail. As discussed in the previous types of sentences, the number of the elements within the categories can be increased, as well:

(24) Q: Defne babasına ilk maaşıyla ne sürpriz yaptı?

‘What surprise did Defne have for her father with her first salary?’

A: *Defne*, baba-sın-a ilk maaş-1-yla BİR EV AL-DI.

Defne father-3sg-Dat first salary-3sg-Com.Conj a house buy-Past

‘Defne bought a house for his father with her first salary.’

2.2 Summary

In this chapter, the major categories of information structure, namely topic, tail and focus, are described in Turkish. Each category is evaluated with respect to its syntactic and prosodic characteristics. Later, the four sentence types (all-focus, focus-tail, topic-focus and topic-tail-focus) are identified and illustrated through various examples. In the light of the discussion above, the present research study makes the following assumption: All scrambling in Turkish is driven by discourse-pragmatic considerations. Simply put, scrambling in the language is directly associated with particular discourse functions. That being the case, it is now time to consider the nature of movement. Since it is shown that there are some morphological, syntactic and phonological factors in the realization of the information structural categories, the next chapter presents further investigation on IS operations. While examining scrambling along with other interfaces, the chapter also addresses previous analyses in the literature.

Chapter 3. Realization of Information Structure

The purpose of this chapter is to introduce different perspectives into IS operations. Bringing together various analyses (Erguvanlı, 1984; Hoffman, 1995; Vallduví & Engdahl, 1996; Göksel & Özsoy, 2000; İşsever, 2003; Rizzi, 2006; Miyagawa, 2017), it investigates the relationship between IS and other interfaces. In particular, it deals with two major approaches, syntactic and phonological, in order to pave the way for the understanding of the discussion developed in the next chapter. In view of the fact that morphological and semantic factors also

affect word order variation in Turkish, Section 3.1 presents a detailed consideration of morpho-semantic distinctions. Then, the following sections explore prosodic and syntactic aspects, respectively. Lastly, all proposals are reviewed at the end of each section.

3.1 A Morpho-Semantic Account

The semantic categories ‘specificity’ and ‘definiteness’ play a critical role in deriving IS units in Turkish. Choi (1996) highlights the effect of specificity on scrambling, and states that a scrambled element should be definite or specific. She assumes that an indefinite or non-specific NP cannot be in a scrambled position.¹⁹ However, this prediction does not always hold true for Turkish. Since there is not a common agreed upon evaluation for these concepts, a thorough investigation is required before the discussion proceeds.²⁰ Therefore, the next subsection describes the language specific facts from Enç (1991) and von Heusinger and Kornfilt (2017).

3.1.1 Specificity and Definiteness

To begin with, Enç (1991) argues that accusative case-marked NPs are obligatorily interpreted as specific, while non-case marked NPs are non-specific. She provides the following examples to show the contrast:

- (25) a. Ali bir piyano-yu kirala-mak isti-yor.
 Ali one piano-Acc rent-Inf want-Pres.
 ‘Ali wants to rent a certain piano.’

¹⁹ A similar discussion is provided for Hindi by Mahajan (1990).

²⁰ Among many seminal studies (Erguvanlı, 1984; Kılıçaslan, 1994; Kornfilt, 1997; von Heusinger & Kornfilt 2005), only the most related ones are mentioned in this section.

- b. Ali bir piyano kirala-mak isti-yor.
 Ali one piano rent-Inf want-Pres.
 ‘Ali wants to rent a (non-specific) piano.’

Enç states that *piyanoyu* ‘a certain²¹ piano’ represents a particular object, while *piyano* ‘piano’ does not evoke a similar effect in the context. Following this, Enç introduces the notion of *partitivity*, which is closely associated with specificity.

- (26) Oda-m-a birkaç çocuk gir-di.
 room.1Poss-Dat several child enter-Past

‘Several children entered my room.’

- a. İki kız-1 tanı-yor-du-m.
 two girl-Acc know-Prog-Past-1sg

‘I knew two girls.’

- b. İki kız tanı-yor-du-m.
 two girl know-Prog-Past-1sg

‘I knew two girls.’

Based on the context provided in the first sentence, Enç states that the NP *iki kız* ‘two girls’ in (26a) is interpreted as part of *birkaç çocuk* ‘several children’, namely as an implicit partitive. However, *iki kız* ‘two girls’ in (26b) cannot receive a similar interpretation.

Then, she stresses the relation between specificity and definiteness. On her account, both specifics and definites require discourse referents to be linked to a previously established context. However, these notions differ in the nature of linking. While definite NPs are

²¹ Enç (1991) indicates that the scope possibilities of accusative NPs in Turkish are similar to the English NPs containing ‘certain’. Thus, she prefers to gloss such NPs by using ‘certain’.

attributed an *identity* relation, specific NPs are featured through an *inclusion* relation.²²

Assuming that identity entails inclusion, she proposes the idea that all definites are specific.

This prediction further implies that all definites in Turkish carry accusative case in the object position.²³ The alleged distinction is provided in (27a) and (27b), in which the non-case marked object leads to ungrammaticality when the object is specific:

- (27) a. Zeynep Ali-yi /o-nu /adam-ı /o masa-yı gör-dü.
 Zeynep Ali-Acc he-Acc man-Acc that table-Acc see-Past
 ‘Zeynep saw Ali /him /the man /that table.’
- b. *Zeynep Ali /o /adam /o masa gör-dü.
 Zeynep Ali he man that table see-Past
 ‘Zeynep saw Ali /him /the man /that table.’

Lastly, Enç claims that indefinites can be either specific or non-specific. This is illustrated with a numeral in the following sentences. Here, she shows that case marking is not required only for implicit partitives as in (26), but also for explicit partitives.

- (28) a. Ali kadın-lar-dan iki-sin-i tanı-yor-du.
 Ali woman-Pl-Abl two-3sg-Acc know-Prog-Past
 ‘Ali knew two of the women.’
- b. *Ali kadın-lar-dan iki-si tanı-yor-du.
 Ali woman-Pl-Abl two-3sg know-Prog-Past
 ‘Ali knew two of (the) women.’

²² In Enç (1991), the identity relation is introduced as the strongest possible linking relation, whereas the inclusion relation has a weak connotation.

²³ This assumption does not cover all cases in Turkish, thus a counterargument will be presented later in this section.

In the examples above, the numeral *iki* ‘two’ is expected to take agreement and accusative markers, given that it is the head of and the last element in the explicit partitive construction, and because, according to Enç, the partitive must be specific. Thus, the second sentence, in which the numeral appears without the accusative case is ungrammatical. She asserts that the case marking of the indefinite object indicates a partitive reading, which is essential for the specificity interpretation. Under this perspective, the specificity necessitates indefinite objects to be marked with the accusative case, as well.

In contrast to Enç, von Heusinger and Kornfilt (2017) contend that the notion of specificity cannot be reduced to partitivity. According to them, accusative morphology expresses specificity in general, unless that morphology is needed for some formal reasons, in which case it stops expressing specificity in a consistent way. They argue that specificity is not associated with the assumptions that ‘the speaker knows the referent’ or ‘the speaker has the referent in mind’. Instead, it indicates that ‘the referent is referentially anchored²⁴ to some salient discourse item’. This is shown in the sentences below:

- (29) a. Ali: “Kütüphane-de çok başarılı bir öğrenci-m-i gör-dü-m.”
 Ali library-Loc very successful a student-1sg-Acc see-Past-1sg
 ‘Ali: “I saw a very successful student of mine in the library.”’
- b. Osman: “Ali kütüphane-de çok başarılı bir öğrenci-sin-I gör-müş.”
 Osman Ali library-Loc very successful a student-3sg-Acc see Rep.Past
 ‘Osman: “Ali (reportedly) saw a very successful student of his in the library.”’

²⁴ The concept of referentially anchored indefinites refers to indefinites that introduce a particular referent that is linked to a salient referential anchor in the discourse (von Heusinger & Kornfilt, 2017).

second sentence shows that even when the direct object is case-marked, it may convey a non-specific interpretation. In this sentence, the agent (the speaker) may have eaten three specific kinds of fruit such as apple, banana and pear, or three of the same fruit such as three specific apples. However, these items can also be interpreted non-specifically, such as any kinds of fruit, like pears. Therefore, von Heusinger and Kornfilt argue that partitivity and specificity are related, but independent notions.

3.1.2 Morpho-Semantic Analysis

Following von Heusinger and Kornfilt (2017), (and partially Enç (1991)) this study argues that definiteness entails specificity, but not vice versa. Specificity requires overt structural Case marking (such as accusative and genitive cases), whereas morphological marking of structural case does not always signal specificity in Turkish. Further, the specificity of indefinites is conditioned by the context where the referent is referentially anchored. Given that specificity and definiteness of elements affect the word order, this section mainly focuses on the interaction between these concepts and the derivation of IS units in Turkish.

First off, topicalization is generally associated with definiteness. Vallduví (1992) asserts that the task of topics is to mark or signal the referents they encode as hearer-old. While the hearer-oldness may be a necessary condition to be a topic, it is clearly not a sufficient condition. Importantly, if topics are hearer-old, it is just because discourse-oldness is a precondition for topichood, not because topichood is a marker of discourse-oldness. Moreover, Erguvanlı (1984) notes that the feature [+/-animate] is the critical factor to determine the position of indefinite subjects, rather than the case it carries. According to her, [+animate] indefinite subjects can occur s-initially, but any other constituent that appears in the topic position has to be definite. However, this is difficult to differentiate, given that in root

sentences, the nominative case of the subject is morphologically null. Consider the following sentences:

- (31) a. *Bir çocuk ağaç-tan düş-tü.*
 a child tree-Abl fall-Past
 ‘A child fell out of the tree.’
- b. **Bir elma ağaç-tan düş-tü.*
 A apple tree-Abl fall-Past
 ‘An apple fell from the tree.’

Turkish limits the distribution of subjects due to their semantic functions in some cases.²⁷ One such limitation is observed in the sentence (31b) in which the non-specific subject must be immediately preverbal, even though it is case-marked. On the other hand, Erguvanlı outlines the distinction in positioning in terms of animacy by using *bir çocuk* ‘a child’ and *bir elma* ‘an apple’. She states that the first subject with [+animate] feature can be topicalized, but the second subject with [-animate] feature is restricted to the immediately preverbal position. As opposed to her claim, the topic position is in fact not restricted to definite or animate elements in Turkish. For example, when the sentence given in (31b) is presented within the relevant context, it becomes acceptable. Assume that each of these single apples is part of a set of two apples and the question is about the source of the falling action:

²⁷ Kornfilt (1997, p. 215) states that Turkish does not generally employ word order to express the semantic and syntactic functions of noun phrases; however, she shows that there are some instances where the semantic and syntactic factors affect the order of noun phrases. For example, when a direct object is non-specific and thus cannot be attached the accusative case, it must be immediately preverbal. Given that the nominative case is not overtly marked in Turkish, a similar constraint can also be observed when the subject of a matrix sentence is non-specific.

(32) Q: *Elmalar nereden düştü?*

‘Where did (the) apples fall from?.’

A. *Bir elma AĞAÇ-TAN, bir elma POŞET-TEN düş-tü.*

a apple tree-Abl a apple bag-Abl fall-Past

‘An apple fell from the tree and another apple fell from the bag.’

The use of the inanimate indefinite subject as the topic can be associated with partitivity, or preferably with contrastive topic. With respect to partitivity, *bir elma* ‘an apple’ does not bear specificity in the context, which shows that partitivity is not always dependent on specificity in Turkish. As a result, the subject can be categorized as a non-specific, inanimate, indefinite topic. This indicates that Erguvanlı’s assumption contradicts the particular example above. Alternatively, it is also possible to interpret the NPs as familiar entities, namely as specific set of apples. On either interpretation, nevertheless, the subject can hold the topic feature.

As further evidence for non-specific topics, another example can be presented from İşsever (2003, p. 1044):

(33) Q: *Ne olmuş orada? O kalabalık ne?*

‘What happened over there? What is this crowd?’

A₁: *Bir çocuk ağaç-tan düş-müş herhalde. Ona bak-ıyor-lar galiba.*

a child tree-Abl fell-Rep.Past probably him look at-Prog.3pl probably

‘I think a child fell down from the tree. They are probably looking at him.’

In the example, the question does not initiate any context for the topic of the answer, but the non-specific NP *bir çocuk* ‘a child’ can still be topicalized. İşsever argues that topicality is not restricted to specifics and provides the following facts for this sentence: *bir çocuk* ‘a child’ is structurally s-initial and the sentence is pragmatically construed ‘about’ it. He provides a good reason to show that specificity does not directly interact with topicality. Nevertheless, this

argument requires a more solid example given that subjects mostly occupy an s-initial position in an unmarked word order. Take an example with an oblique case-marked topic:

A₂: *Bir araba-ya* çocuk taş at-mış.
 a car-Dat child stone throw-Rep.Past

‘The child threw a stone to a car.’

In (*A₂*), the sentence is about a non-specific inanimate object *bir araba* ‘a car’. By preceding the other arguments, the indirect object is prioritized in the event. Therefore, the car becomes the center of the action, but it does not hold any specificity interpretation. This example again suggests that the topic position is not constrained by animacy or specificity in Turkish.

However, it is important to remind ourselves that topic is related to familiar concepts or entities, as mentioned in the previous chapter. Therefore, these instances of topic do not illustrate a good example for the discussion, although they are effective in indicating non-specific inanimate topic uses.

In sum, while specificity and definiteness block some elements from occurring in topic position as displayed in (31b.), these notions do not reflect all potential occurrences in the language. In other words, IS operations apparently interact with semantic and morphological properties of elements; however, they are not directly structured around these constraints.

In contrast to topic, there is no morphological or semantic restriction on focus assignment.

The sentences below indicate that constituents can appear in the p-focus position regardless of their specificity, definiteness or morphological cases:

(34) a. Çocuk ağaç-ta BİR KEDİ gör-müş.
 child tree-Loc a cat see-Rep.Past

‘The child saw a cat in the tree.’

- b. Çocuk ağaç-ta KEDİ-LER-DEN BİR-İN-İ gör-müş.
 child tree-Loc cat-Pl-Abl one-3sg-Acc see-Rep.Past

‘The child saw one of the cats in the tree.’

- c. Çocuk ağaç-ta KADIN-IN KEDİ-SİN-İ gör-müş.
 child tree-Loc woman-Gen cat-3sg-Acc see-Past

‘The child saw the woman’s cat in the tree.’

In the first sentence, *bir kedi* ‘a cat’ is a non-specific indefinite non-case marked direct object. The second direct object has a partitivity feature which may be understood either as specific or non-specific. If a particular context is provided prior to this statement, such as ‘The child was looking for the three cats.’, the object can be interpreted as specific. Otherwise, it may be non-specific, as well. In the last example, *kadının kedisini* ‘the woman’s cat’ is a definite specific case-marked direct object. All these instances of direct objects can get a tonal accent in the p-focus domain by immediately preceding the verb.

In addition, Turkish does not restrict the assignment of c-focus feature, either:

- (35) a. Çocuk BİR AĞAÇ-TA kedi gör-müş.
 child a tree-Loc cat see-Rep.Past

‘The child saw a cat in a tree.’

- b. Çocuk O BÜYÜK AĞAÇ-TA kedi gör-müş.
 child that big tree-Loc cat see-Rep.Past

‘The child saw a cat in that big tree.’

In (35a), the c-focused element is the locative object, which is classified as non-specific and indefinite. In the following sentence, the indirect object is specific and definite. As suggested, focus assignment is not subject to any semantic and morphological constraints in Turkish.

Lastly, tail generally refers to discourse-old material, but it does not need to be specific or definite. Hence, it does not always require morphological marking.

(36) Q: *Kim bana bir kahve ısmarlamak ister?*

‘Who would like to buy me coffee?’

A: Emin değil-im ama, MERVE bir kahve ısmarla-yabil-ir.

 sure not-1sg but Merve a coffee buy-Abil-Aor

‘I am not sure, but Merve can buy you coffee.’

In this example, the tail element *bir kahve* ‘coffee’ carries a connection to the discourse as the answer repeats this segment mentioned in the question. However, it does not denote any specific or particular type of coffee, and it is not case-marked.

3.2 Syntax of Information Structure

This section investigates the syntactic behavior of partitions by taking a closer look at their distributional and discourse-functional characteristics. It examines potential derivations for each partition and attempts to provide a unified syntactic account of IS in Turkish.

3.2.1 Focus

In some languages, focus is indicated by movement to a designated position. One such language is Hungarian in which a focus element moves to a left-peripheral position together with the verb (Bródy, 1990;1995):

(37) [_{TopP} Péter [_{FocP} MARIT mutatta [_{VP} be tv t_{DP} Zsófinak]]]

 Peter Mary-Acc introduced V_{particle} Sophie-Dat

‘Peter introduced MARY to Sophie.’

- c. KADIN_i araba-sın-ı_i herkes-e göster-di.
 d. Kadın_i herkes-e ARABA-SIN-I_i göster-di.
 e. Araba-sın-ı_i herkes-e KADIN_i göster-di.
 f. HERKES-E kadın_i araba-sın-ı_i göster-di.

Based on the context established in the first sentence²⁸, p- or c-focusing different arguments do not affect the target interpretation of the sentence. For example, if the direct object receives its interpretation from the subject suggesting that the car belongs to the woman, this meaning is also obtained in the marked orders. This suggests that the grammatical relations of the arguments do not change due to focus assignment in Turkish.

Second, Turkish does not have a single specific position for focus. Rather, it allows constituents to receive a tonal accent in the domain preceding the verb. Although the immediate preverbal position is defined as the default focus position, elements may receive the relevant accent in-situ. In this respect, forming maximal projections for each potential focus position is not a desirable option for treating focus in Turkish. More essentially, it is not easy to generate a uniform pattern for movement. There are several reasons for this. The first possible strategy is to generate a maximal focus projection that dominates the verb phrase.

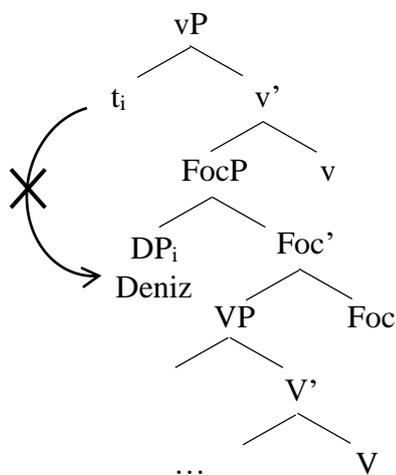
This can be illustrated as follows:

- (40) Problem-i DENİZ çöz-dü.
 problem-Acc Deniz solve-Past
 ‘Deniz solved the problem.’

²⁸ Note that the analysis here is particularly limited to the given context. However, it is possible to interpret the direct object as being a part of another context such that the car belongs or related to another person.

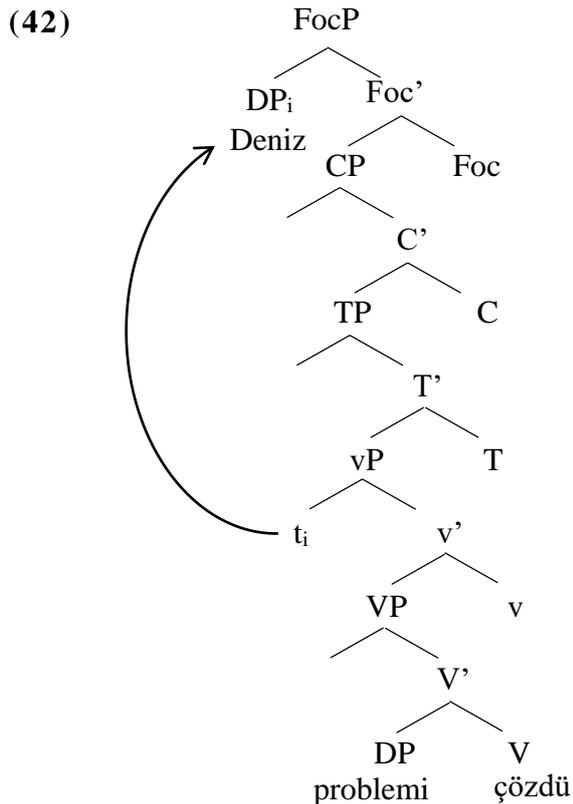
The focused element is the subject *Deniz* that precedes the direct object *problemi* ‘the problem’ in the canonical order. When it receives the p-focus interpretation, it appears left-adjacent to the verb. In contrast with the examples in Hungarian and Italian, the direction of the movement in Turkish appears to be reversed. In the surface representation, the subject seems to undergo a rightward movement to satisfy its focus requirement, which would imply an illegitimate operation in syntax:

(41)



In this derivation, the subject DP moves downwards to Spec, FocP. As a result, it cannot c-command its trace, violating a hierarchy constraint: elements may be raised in syntax, but never lowered (Kayne, 1994).²⁹ Alternatively, the focus projection may be taken to a higher position, such as above the finite sentence:

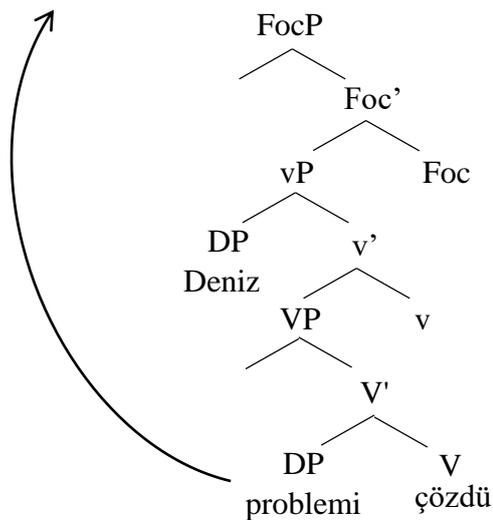
²⁹ Kayne (1994:47) notes that lowerings and movements to a position that neither c-commands nor is c-commanded by the original position are excluded, since every trace of movement must be asymmetrically c-commanded by its antecedent.



This derivation provides a better solution, at least in terms of syntax; however, it is still problematic. Even if it exemplifies a potential structure in a different order like *DENİZ problemi çözdü*. ‘DENİZ solved the problem’, it does not seem relevant for the given sentence (40). Hence, it does not represent the expected surface realization. Besides, the focused constituent cannot appear adjacent to the verb due to the intervening DP *problemi* ‘the problem’. Alternatively, it is possible to topicalize the direct object *problemi* ‘the problem’ and move it higher than the focused constituent. Even though the sentence gives the target order, the result is still not convincing to argue for the derivation in (42). This is simply because such a derivation does not account for the instances where topic, as an optional partition, is not employed.

Another solution is to move non-focal constituents out of the focus domain (Vallduví & Engdahl, 1996; İşsever, 2003). This approach can be shown as in (43):

(43)



This structure is promising in terms of the linearization of the sentence, particularly for the p-focus. However, it gives rise to further questions. First, the target position where the non-focal constituent raises is unclear, which implies superfluous rule application. Second, if this is a canonical movement, the mechanism needs some feature to attract the non-focal constituent from its base-generated position by letting the target constituent receive its interpretation in the immediately preverbal domain. Based on this feature-driven approach, the object *problemi* ‘the problem’ overtly moves in order to defocus itself so that the subject *Deniz* gets focused, but there is no such formal feature available to be matched and valued in the derivation.

There is also the view that an element moves for altruistic reasons in order to satisfy the need of a different element. For example, if the IS of a sentence requires that the subject must appear left-adjacent to the verb for the p-focus interpretation, the intervening phrase leaves its base position not to violate the interaction between the subject and the verb. Lasnik’s (1995c; 2003, p.23) formulation of the Enlightened Self Interest supports such an altruistic movement, in which the movement of α to β is to satisfy the formal need of either α or β . In accordance with this principle, the tail is an instance of α , and it moves to satisfy the need of the focus, which is β . This view captures the basic idea behind focus assignment in Turkish, but it requires a more detailed analysis both for focus and tail elements. Particularly, the process

must be specified in a way that addresses the type of tail movement while providing a convincing solution to focus assignment.

On the other hand, c-focus constituents pose a more serious problem to the idea of using a Focus Phrase for focus. Take a look at the following sentence:

- (44) Zeynep DERNEĞ-E para başısla-mış.
 Zeynep charity-Dat money donate-Rep.Past
 ‘Zeynep donated money to the charity.’

In the example above, the focus assignment does not lead to any change in the word order. The DP *derneğe* ‘the charity’ is focused in its base position. At first sight, it might seem tempting to argue for a Focus Phrase right above the focal DP, but this approach may posit several superfluous categories. Given that all the constituents preceding the verb (the subject, the direct object and the indirect object) or the verb itself can be focal, the phrase category would have to move around to satisfy the focus feature of individual phrases. Alternatively, the derivation would have to generate multiple focus phrases for each element. However, this is not a possible argument due to the economy condition, which requires syntactic representations to involve as few grammatical operations as possible. Lastly, it may be possible to argue for only one FocP, in a particular height, and then move constituents around; in some instances, as in (44). The result of these movements may look like the base sequence, but economy considerations would mark such a derivation as undesirable, as well.

In sum, the discussion presented in this section show that focus in Turkish cannot be reduced to phrase-structural configurations. Thus, there is no need to postulate a phrasal category for focus, since it either violates linearization or economy constraints. In this regard, the main purpose of this research is to combine the two types of foci in one derivation pattern, and to find a uniform solution for all problems. Thus, the next chapter is dedicated to a detailed

presentation and discussion of an alternative approach which proposes that foci in Turkish do not undergo movement, instead tails move when required. It suggests that such tail movement accounts for various word order patterns without imposing any feature checking restrictions.

3.2.2 Topic

Topic in Turkish is restricted to sentence-initial position.³⁰ Rizzi (1997) claims that topic elements occur in the left periphery of a functional projection that is activated only when it is required. As previously mentioned in Chapter 2, topic is not an obligatory unit, thus a similar observation applies to Turkish topics.

(45) Q: *Keki kim yedi?*

‘Who ate the cake?’

A₁: *Kek-i, CAN ye-miş-tir.*
 cake-Acc Can eat-P.Part-Ep.Cop

‘Can most probably ate the cake.’

A₂: *CAN ye-miş-tir.*
 Can eat-P.Part-Ep.Cop

‘Can most probably ate (the cake).’

As can be seen in the example (45A₂), the topic element can be left out. The optionality of topic provides an insight into its surface realization. There is no rule (as well as no need) to

³⁰ Contrastive topic is not discussed within the scope of this study.

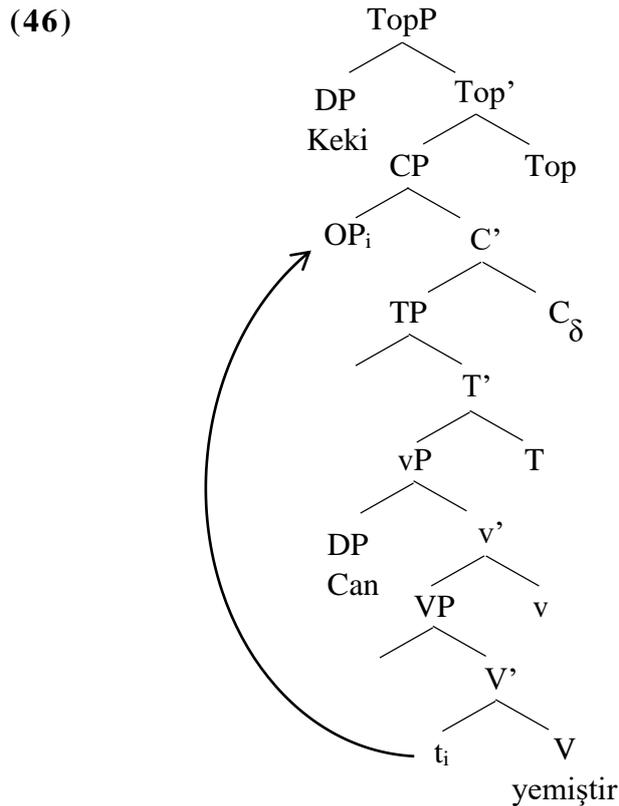
create a projection for topic within the core sentence (Chomsky, 1977, p. 91).³¹ Therefore, it must be outside of the CP domain. Further, Miyagawa (2017) states that a dedicated topic position above the CP is essential to account for embedded topics, as discussed by Sag (1976), and topic recursion. Miyagawa proposes that discourse-configurational features, such as topic and focus, appear on C in certain languages and on T in other languages.³² Given that the position of a topic feature indicates where the Topic Phrase appears, this study assumes that the relevant discourse feature is on C in Turkish. Thus, the special projection for topic in the language is at the beginning of the sentence:

³¹ Chomsky (1977, pp. 91-97) discusses topicalization through the processes of *wh*-movement and left-dislocation. By giving a left-dislocation example: *As for this book, I think you should read it.*, he states that “Plainly in this case, there can be no transformational analysis in our terms since no transformation can create the structure for ‘as for this book’ or even more complicated phrases that can appear in this position” (p. 91). He then argues that topicalization is just like left-dislocation, except that in the Top, \bar{S} structure, \bar{S} is a *wh*-sentence. On his account, topicalization is similar to *wh*-movement. However, there is the obligatory rule of *wh*-phrase deletion in topic constructions, and the deletion of the *wh*-phrase leaves an open sentence (indicated with the trace *t*). The process is exemplified as follows:

[\bar{S} [TOP this book] [\bar{S} [COMP what] [I asked Bill to get his students to read *t*]]]

Following Miyagawa (2017), this study identifies \bar{S} as CP and S' as Topic Phrase to be consistent with the modern representation of the syntactic labels. Also, topicalization is distinguished from *wh*-movement due to the nature of the triggering factor, as discussed in this section.

³² According to Miyagawa (2010), feature inheritance from C to T is crucial because it enables languages to have A-movement. He states that without inheritance by T, all movement would be A-bar movement.



The construction above exemplifies the topic movement, in which the direct object *keki* ‘the cake’ is moved away from its base position and raises to the specifier of the Topic Phrase (TopP). According to Chomsky (1977), topicalization is similar to *wh*-movement, and it shows A-bar characteristics, such as island sensitivity. However, the feature that triggers topicalization is associated with the discourse-configurational feature (indicated as δ) on C, whereas it is the feature Q for *wh*-movement (Cable, 2010). In line with Rizzi (1997), Miyagawa (2017, p. 4) argues that the topic feature attracts an empty topic operator to the specifier of CP, and the topicalized phrase lands in the specifier position of the topic projection. The function of the operator is to link the topic above it to a lower relevant position inside TP, which is indicated through coindexation. He illustrates the derivation for a simple sentence in English as follows:

(47) This book, I really like.

= [TopP this book [CP OP_i C_δ [TP I really like t_i]]]

↑—————┘

The head C hosts the discourse-configurational feature (δ), which triggers the movement of the empty operator to the Spec, CP while the target phrase *this book* raises to Spec, TopP. The construction in (46) presents a similar derivation for Turkish.

With respect to island effects, Miyagawa (2017, p. 4) shows that topicalization blocks *wh*-movement by creating an island itself:

- (48) a. *To whom did *this book* Mary give?
 b. *When did *this book* everyone read?
 c. *Where did *this book* Henry buy?

He explains the topic island phenomenon through Rizzi's (1990) Relativized Minimality.

Based on this condition, an A-bar movement cannot occur across another A-bar movement. In this instance, the topic movement restricts the *wh*-movement.

As a non-*wh*-movement language, Turkish differs in this respect from English. A *wh*-phrase does not move (in the narrow syntax) to check its *wh*-feature. In addition, it may scramble to a variety of positions:

- (49) a. Selin okul-a ne zaman gel-ecek?
 Selin school-Dat when come-Fut
 'When will Selin come to the school?'

The *wh*-phrase *ne zaman* 'when' immediately precedes the verb in the unmarked order.

Alternatively, it may occur in s-initial position or between the subject and object, respectively:

- b. Ne zaman Selin okul-a gel-ecek?
 c. Selin ne zaman okul-a gel-ecek?

Even if there is no overt movement for *wh*-phrases, an identical blocking effect is observed in Turkish, as well:

(50) *Selin bugün okula gelmeyecek.*

‘Selin will not come to school today.’

a. *Selin-i, sen ne zaman gör-dü-n?*
 Selin-Acc you when see-Past-2sg

‘When did you see Selin?’

The sentence in (50) contains both a topic and *wh*-phrase. The phrase *ne zaman* ‘when’ cannot scramble to an alternative position in this construction, contrary to its flexibility in (49).

b. **Selin-i, ne zaman sen gör-dü-n?*

Note that this constraint is observed in a neutral context. When the preverbal subject *sen* ‘you’ is stressed here, the result is acceptable, especially if an overt contrast follows: *Selini ne zaman SEN gördün, ne zaman DEFNE gördü?* ‘When did YOU see Selin, when did DEFNE see (her)?’ The focus on the second subject enforces the stress of the subject in the previous sentence, thereby diminishing the stress on the *wh*-phrase. As a result, the *wh*-phrase receives relatively less stress, and the island effect disappears. However, the *wh*-adverb is more flexible in (49), since such focusing of a different constituent is not necessary there.

While *wh*-phrases can occur in various positions, just like their non-*wh*-counterparts, some syntactic restrictions may be observed on the surface syntax of *wh*-constructions as shown in (50). It is beyond the scope of this study to discuss the properties of *wh*-elements. However, there are some seminal studies³³ that argue for (covert) *wh*-movement in Turkish. Having said

³³ For a more detailed discussion, see Akar (1990), Özsoy (1996) and İşsever (2009).

that it is the C head that carries both Q and δ features, it seems that a blocking effect is induced by the [+topic] feature on C when a *wh*-phrase scrambles to an alternative position. Therefore, a detailed analysis of the interaction between *wh*-interrogation and topicalization is required in order to better explain the constraints in interrogative topic constructions. But importantly, the blocking effect on the *wh*-scrambling provides an effective evidence for the existence of topic movement in Turkish.

In addition, Rizzi (1997) claims that topics must precede interrogative *wh*-words. He provides an example from Italian:

- (51) a. **A chi, il premio Nobel, lo daranno?*
 ‘To whom, the Nobel Prize, will they give it?’
 b. *Il premio Nobel, a chi lo daranno?*
 ‘*The Nobel Prize, to whom will they give it?*’

This argument provides a strong support to the phrase level of topics. Otherwise, it is not easy to account for the ungrammaticality in the reversed order. It also suggests that the Topic Phrase must be hierarchically higher in the structure, namely above Spec, CP where the *wh*-elements move. Turkish topics constitute further evidence to this effect:

- (52) *Çocuk evine dün gönderilmiş.*
 ‘The child was sent to his house yesterday.’
 a. *Çocuk, kim-e emanet ed-il-miş?*
 child who-Dat trust-Pass-Rep.Past
 ‘To whom was the child trusted?’
 b. #*Kim-e çocuk emanet ed-il-miş?*
 who-Dat child trust-Pass-Rep.Past
 ‘To whom was the child trusted?’

When the DP *çocuk* ‘the child’ is topicalized in the question, it moves to the left-periphery of the sentence. Therefore, the first sentence gives a well-formed structure for the context. The second sentence is not acceptable because the topic element cannot receive its intended interpretation when it follows the *wh*-phrase. Therefore, the subject must be in the topic position (i.e. in Spec, TopP) in this particular discourse.

In addition, Miyagawa (2017) argues that there is in principle no upper limit on the number of topics allowed, although in practice pragmatic and prosodic factors intervene to restrict the number. To put it simply, there is typically just one topic, but two are not impossible. This can be illustrated in a basic construction such as in (53):

(53) Q: *Öğretmen öğrencileri nereye çağırdı?*

‘Where did the teacher invite the students?’

A₁: *Öğretmen, PARTİ-YE çağır-dı.*

teacher party-Dat invite-Past

‘The teacher invited to the party.’

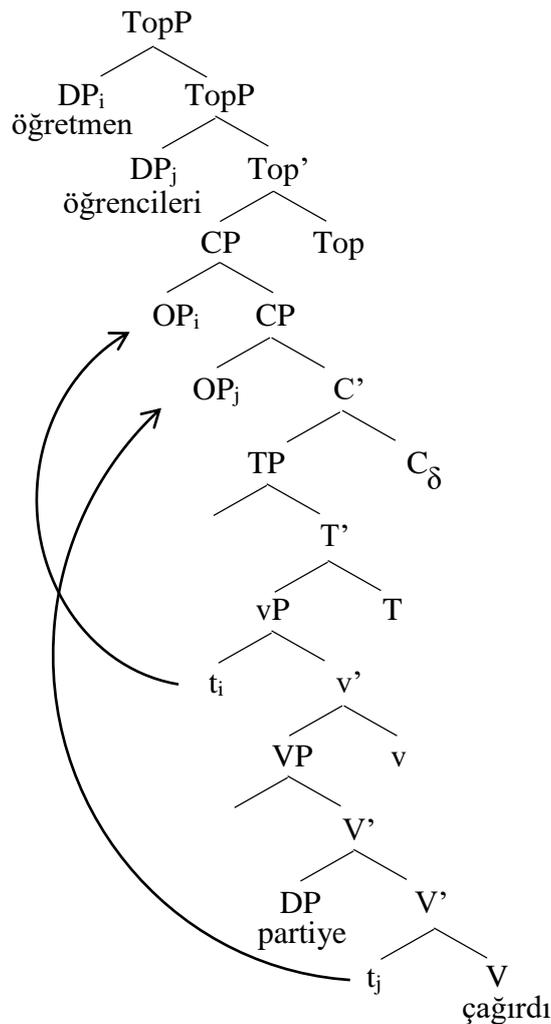
A₂: *Öğretmen, öğrenci-ler-i, PARTİ-YE çağır-dı.*

teacher student-Pl-Acc party-Dat invite-Past

‘The teacher invited students to the party.’

In the first answer, only the subject is topicalized, whereas the matrix sentence is preceded by the two topic phrases in (53A₂). Note that the second topic *öğrencileri* ‘the students’ may also be interpreted as the tail depending on the context. If it is the tail, however, it cannot receive a rising boundary tone, and thus prosodic prominence. The sentence with the two topics is analyzed in (54) below:

(54)



Richards (1999) suggests that scrambling with crossing paths is the result of movement to multiple specifiers of a single head, whereas scrambling with nesting paths involves movement to the specifier of multiple heads. In the first derivation, movement to a higher specifier occurs before movement to a lower specifier, thereby crossing paths appear. In the second one, movement to lower specifier takes places earlier in order that one path nests the other one. Following Richards' (1999) multiple specifier approach to multiple movement, Jiménez (2011) proposes that the free versus strict arrangement of topicalized constituents in the left periphery may be used as a parametric basis. According to him, if a language employs a single category with multiple specifiers to attract topics, the order of preposed constituents are flexible. However, if there exists a recursive projection of multiple heads in the language, topics are strictly ordered. In line with the analyses by Richards and Jiménez (albeit this study

defines topicalization as an instance of A-bar movement), the topic movement in Turkish is analyzed through the multiple specifiers as illustrated in (54). It is because Turkish does not restrict the order of the topics; thus, either topic may be realized first. Further, the multiple specifiers are accompanied by the same number of operators so that each topic is marked and hosted by its own operator and specifier. In accordance with the given structure, the movement of the first topic *öğretmen* ‘the teacher’ precedes the movement of the direct object *öğrencileri* ‘the students’. As a result, the crossing paths are observed in the derivation.

Lastly, Rizzi (1997) discusses the use of a resumptive clitic in Italian topics, which is a copy of the topic with the relevant phi-features that agree with those of the topic.

(55) a. *Il tuo libro*, lo ho comprato.

‘Your book, I bought it.’

He shows that the sentence becomes grammatically ill-formed when the clitic *lo* is omitted:

b. **Il tuo libro*, ho comprato.

‘Your book, I bought.’

However, as mentioned earlier, and referring to Kornfilt (1997), nothing is left behind in Turkish when an element is topicalized.

In brief, the discussion given in this section supports the idea of having a distinctive position for topic assignment in Turkish. It is therefore suggested that an element with the topic interpretation must undergo canonical movement to check its feature. The designated position is presented as the left-periphery of a sentence, where the topic category is syntactically projected as TopP.

3.2.3 Tail

Vallduví (1992) claims that ground does not make a contribution to the hearer's knowledge store. In other words, the ground conveys a piece of knowledge that the speaker assumes that the hearer already knows. The ground consists of topic and tail, in which topic is used as an address pointer of a given utterance, whereas tail indicates where to add informative segment, focus, under the given address. Vallduví points out that a sound account of information packaging provides a concise representation of the information split of a sentence.

Accordingly, tail is recognized as the non-focal non-topic segment of the sentence, and it is never marked by prosodic prominence. Through its s-initialness and intonational prominence, topic is therefore distinguished from tail in the ground. In addition, knowing that Turkish assigns focus to a constituent in the preverbal domain or the verb itself, tail may appear to the right or the left of the focused constituent in the core sentence. For example, if a sentence focuses a verb, tail elements may occur either preceding or following the verb. Based on this view, it is not plausible to designate any specific position to realize tail in surface syntax.

Vallduví and Engdahl (1996) assert that tails in Turkish can surface in a number of ways: leftward movement, rightward movement, and in-situ de-accenting. However, this supposition cannot be favored due to minimalist considerations. Especially when all the potential positions that a tail can occupy are taken into account, the derivation of such constructions poses problems for simplicity and economy conditions. In the answers in (56), for instance, the tail element may be placed in several positions in the sentence:

(56) Q: *Kadın resimleri nereye götürdü?*

‘Where did the woman take the pictures?’

A₁: Kadın resim-ler-i EV-E götür-dü.

woman picture-Pl-Acc house-Dat take-Past

‘The woman took the pictures to the house.’

A₂: Resim-ler-i kadın EV-E götür-dü.

picture-Pl-Acc woman house-Dat take-Past

‘The woman took the pictures to the house.’

A₃: Kadın EV-E götür-dü resim-ler-i.

woman house-Dat take-Past picture-Pl-Acc

‘The woman took the pictures to the house?’

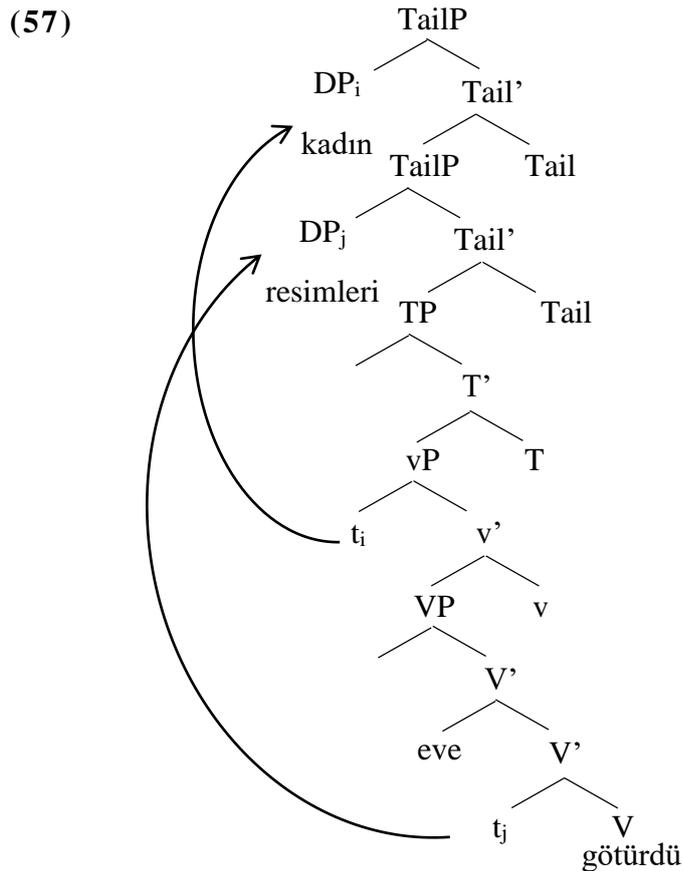
A₄: Resim-ler-i EV-E götür-dü kadın.

picture-Pl-Acc house-Dat take-Past woman

‘The woman took the pictures to the house.’

Besides being optional, the tail DPs *kadın* ‘the woman’ and *resimleri* ‘the pictures’ can take turns in their surface realizations. Note that syntactic operations in general are permissible only to form a legitimate result in the derivation. Considering that a potential tail movement does not give rise to any phonological or semantic effect that is detectable at the linguistic interfaces, it is not plausible to generate a particular projection with a particular category for the tails.

For example, one option may be to have multiple layers of phrases to attract tail elements:



The critical question concerning such a derivation for the tails is about the source of the motivation. Even if the structure in (57) illustrates the expected order of scrambling, it fails to address the most essential problem. There is no formal feature that can be associated with a Tail Phrase (TailP). Also, tail elements do not have any distinctive characteristics, like topic, to undergo an overt movement. Following the core assumption of the Minimalist program (Chomsky, 1995) in which all superfluous movement steps and symbols are banned based on an economy condition, this research study rejects the idea of defocus movement for tail elements (see the discussion in Section 3.2.1). In simple terms, there is no canonical movement that can account for the realization of tails in Turkish. The derivation of these elements is discussed in detail under adjunction operation in Chapter 4.

3.3 Phonology of Information Structure

As seen in the previous section, syntax does not suffice to explain scrambling. Even though IS operations in Turkish cannot be reduced to phonology, either, the individual prosodic features³⁴ of the units give important clues for the analysis. Focus is associated with the primary prosodic prominence. It is identified with a tonal accent. Topic is placed s-initially where it holds a rising boundary tone (Büring, 1997). As such, it receives the secondary prosodic prominence. In this way, topic is separated from the rest of the sentence through its position and prosody. If there are multiple topics in a sentence, a slight pause is inserted after each topic. De-accentuation, on the other hand, occurs on tail; thus, it is prosodically non-prominent in Turkish. This being the case, its flexibility in ordering cannot be solved through a basic phonological analysis. For example, Büring (2011) asserts that there is a one-to-one correspondence between being discourse-new and being accented. Leaving a constituent unaccented indicates that that constituent is given within the ground. He gives the following example from English:

(58) Q: Why do you study Italian?

A: I am MARRIED to an Italian.

Here, the DP *an Italian* is contextually clear, hence it is deaccented. Moreover, Büring (2011, p. 19) argues that givenness does not require direct reference. He characterizes givenness as follows:

(59) An expression E is given in a context C if there is a synonym or hyponym A to E such that the meaning of A is salient in C.

³⁴ The characterization of the prosodic features in this study reflects the common assumptions with respect to IS partitions.

Evidently, elements may be deaccented if they are familiar in the context, even if they are not overtly mentioned.

Furthermore, Bolinger (1958) presents a distinction between accent types, in which accent A is related to a falling accent while accent B is associated with fall-rise accent. Following Bolinger, Jackendoff (1972) introduces a rule that correlates focus with the accent. He states that if a phrase serves as the focus of a sentence, the highest accent in the sentence must be on that phrase. The same holds true for Turkish foci. A focus element always receives prosodic prominence in the sentence. Given the fact that there is no single designated position for focus, this special accent is critically important for the identification of focused constituents.

There is limited research investigating the relationship between prosody and IS in Turkish. In one such study, Göksel and Özsoy (2000) contend that the focus field potentially covers all preverbal positions including the verb. This prediction yields the right results in the analysis of foci in Turkish, for both p-focus and c-focus.

This is displayed in (60):

(60) { XP.....V }

They state that a focused constituent is obligatorily stressed due to the fact that stress is the sole indicator of focus. In view of this, stress can be assigned to any constituent in this area, which eliminates the need for a certain focus position. Other than being true to facts, this approach is not comprehensive enough to solve all the constraints on focus assignment in Turkish. There is no requirement for constituents to move around as they can receive their stress wherever they occur within the focus field. Nevertheless, the reason for the word order alternations is not addressed at all.

(61) Q: *Defneyi doktora kim götüreceek?*

‘Who will take Defne to the doctor?’

A₁: Defne-yi doktor-a BABA-SI götür-ecek.

Defne-Acc doctor-Dat father-3sg take-Fut

‘Defne’s father will take her to the doctor.’

A₂: Defne-yi BABA-SI doktor-a götür-ecek.

Defne-Acc father-3sg doctor-Dat take-Fut

‘Defne’s father will take her to the doctor.’

In both answers above, the focus constituent is the DP *babası* ‘her father’. There is no difference in terms of the propositional value of the sentences. Since constituents cannot target other positions without any formal requirement, the phonological perspective effectively explains these focus constructions in Turkish.³⁵ On the other hand, even if the role of prosody is absolute for focus realization, phonological means alone cannot express scrambling facts in Turkish.

All in all, focus is a phonologically distinguished unit, but its prominence in prosody cannot easily solve its syntactic realization. Hence, focus assignment requires a more detailed investigation in Turkish. Topic is relatively easier to define in a sense that it is syntactically projected on the surface. Together with its prosodic effect, it is articulated with a rising tone at an s-initial position. Lastly, tail cannot find an answer for its distribution in a sentence through prosody, it needs to be analyzed based on the derivation of the accented units. Put simply, first the realization of foci and topic must be examined before tail can be diagnosed in the surface

³⁵ Göksel and Özsoy (2000) discusses two distinct types of foci in Turkish: focal stress and sentential stress. In this, the immediately preverbal area can host both foci, but focal stress can be assigned to any element in the preverbal domain. Since the distinction is not clear, the assumption is not included in this section.

structure. Having stated that tail appears within the core sentence, its distribution should be compared and contrasted with focus. In accordance with the basic distinction coming from prosody, it may be argued that the position of a focus element affects the occurrence of tail elements. The next chapter investigates IS units following the assumptions of this chapter discussed under morpho-semantic and phono-syntactic properties of Turkish.

Chapter 4. Derivation of Information Structure

The previous chapter provides an account of topic, focus and tail units by investigating interactions with interfaces. The discussion developed so far can be summarized as follows. First, there are some semantic and morphological effects on the distribution of the units; however, these effects are not very substantial. For example, specificity and definiteness categories block some constituents from appearing s-initially, but they do not constitute a restriction which is valid in all instances. By contrast with topic, focus is not subject to any morphological and semantic constraints. Also, tail overrides all morphological and semantic effects on condition that it is referentially anchored in discourse. These units also differ from a syntactic perspective. Topic has a maximal projection, TopP, and it is associated with the s-initial position. An element holding topic interpretation undergoes an overt movement to check its relevant feature. As for focus and tail, there cannot be generated any dedicated projection in syntax. Despite this fact, they can be derived in such a way as to account for their occurrence in multiple positions. Thus, these two units require some more investigation in this chapter. Lastly, these three types of units are realized with different prosodic features. Among all, focus is the one that carries the primary prosodic prominence as the mandatory unit of a sentence. Topic is distinguished with a rising tone, but tail is deaccented in any position.

In light of these results, the derivation of IS in Turkish is still unresolved. Especially, there is not a well-supported analysis for focus and tail to account for their scrambling across the sentence. Thus, this chapter is intended to suggest an approach to clarify the syntactic construction of IS units. The first section reviews the aforementioned derivation for topic. Then, it argues for in-situ focus assignment. The last section describes an adjunction operation to integrate tail elements into syntactic structures.

4.1 Topicalization

The Minimalist Program assumes that syntactic computation is driven by feature checking under checking theory. This notion links LF-uninterpretable features and movement. The main idea is that a lexical item α with a feature F moves to a checking domain β with a matching feature F' so that it establishes a relation with β . In this way, it deletes F' as an uninterpretable feature; if F is uninterpretable, it is also deleted. Chomsky (1995) proposes that movement takes place in order to satisfy the interface requirement of Full Interpretation (FI), namely that it occurs to eliminate uninterpretable features. Further, economy considerations permit movement only when it is required, in accordance with the Last Resort condition.

Based on the Minimalist tenets, this study suggests that [topic] is a formal feature that is related to discourse and information structure. It is encoded in syntax, thereby projecting its own phrase structure as TopP (Rizzi, 1997). In Turkish, topic is realized at the left-periphery of a sentence with a special tone. It triggers a syntactic movement operation, thus exhibits word order alternations. This functional projection drives computation by attracting a constituent bearing the matching feature. In this way, both phonological and interpretive properties of the syntactic structure are read off at interface levels. Accordingly, the

constituent holding the topic feature is interpreted as the topic of the sentence at Logical Form, and is assigned a rising boundary tone at Phonetic Form.

The sentence below illustrates the topicalization of a direct object in Turkish:

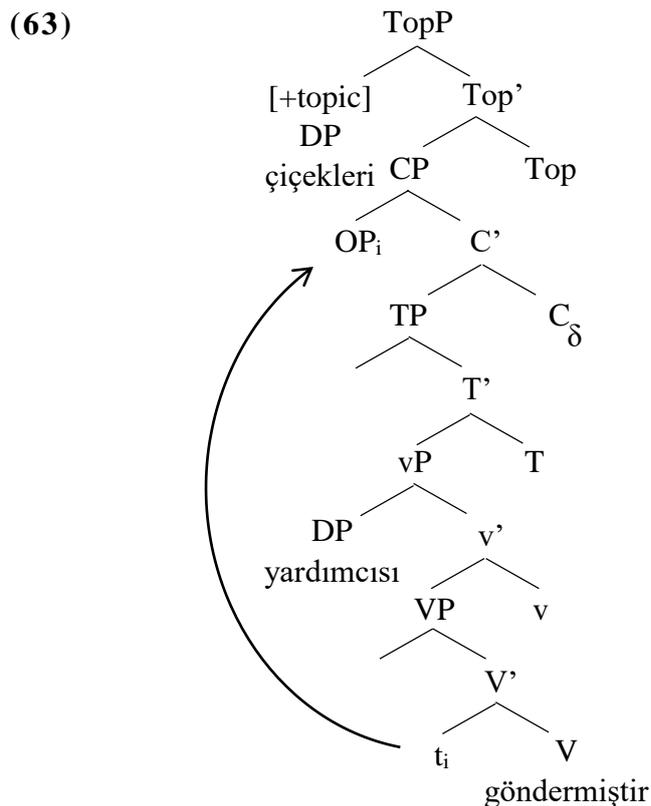
(62) Q: *Başkana bu çiçekleri kim göndermiş?*

‘Who sent these flowers to the president?’

A: *Çiçek-ler-i, YARDIMCI-SI gönder-miş-tir.*
 flower-Pl-Acc assistant-3sg send-P.Part-Ep.Cop

‘His assistant must have sent these flowers.’

The derivation takes place as follows:



The discourse-configurational feature (δ) on C attracts the topic operator to Spec, CP. The operator links the topic above it to the lower position inside TP (Miyagawa, 2017). This is indicated through coindexation of the base position and the operator. Accordingly, the direct

object *çiçekleri* ‘the flowers’ bears a [+topic] feature by introducing aboutness in the answer. It raises to Spec, TopP so that it can check its feature and receive the relevant tone. Since it is not possible for this constituent to satisfy its discourse-related feature in-situ, it undergoes an overt movement, thereby changing the linear order.

If the context allows, a sentence can have multiple topics. Let’s first review the sentence below:

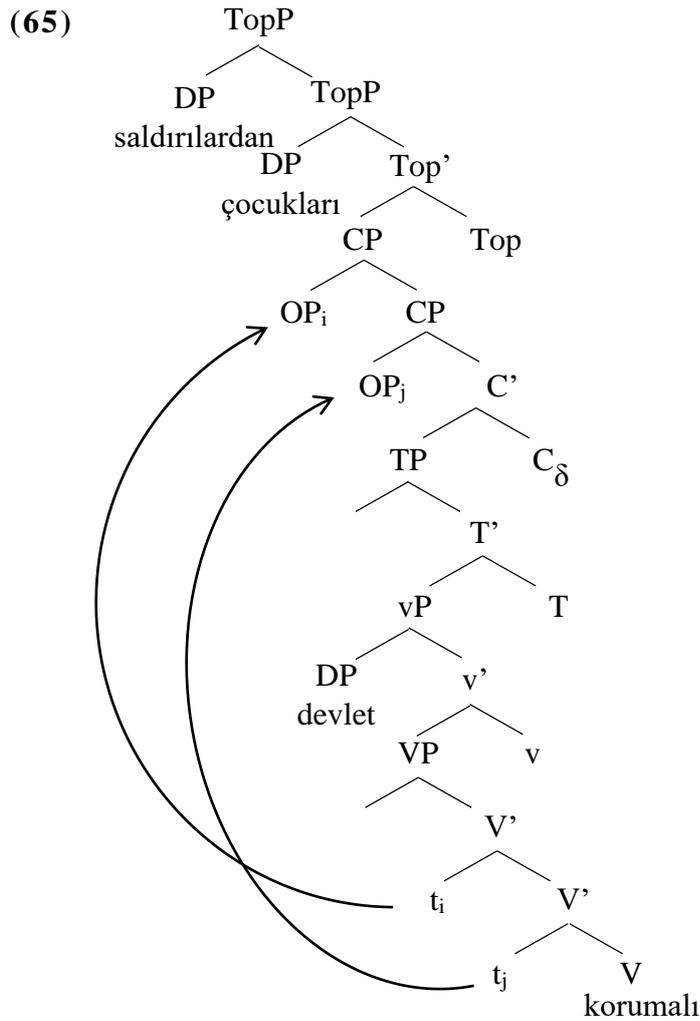
(64) Q: *Çocukları bu tür saldırılardan korumak kimin görevi?*

‘Whose responsibility is it to protect children from such assaults?’

A: *Saldırı-lar-dan, çocuk-lar-ı, DEVLET koru-malı.*
 assault-Pl-Abl child-Pl-Acc government protect-Nec

‘The government must protect children from the assaults.’

The syntactic structure is as follows:



Topic is an iterative category that can be multiplied based on the discourse requirements. For instance, if the speaker prefers to use two address pointers as in the utterance (64), the objects can be identified as the topic phrases together. Otherwise, it is possible to interpret one or both of the objects as the tail phrases, especially when they do not carry the special topic tone or topic interpretation. The topicalization operation above exemplifies the movement of the topics *saldırılarından* ‘the assaults’ and *çocukları* ‘children’ to the specifiers of the single Topic head. Accordingly, the structure undergoes multiple movements in a successive-cyclic fashion, in which the directional object precedes the movement of the direct object by forming crossing paths in the derivation. Therefore, the topic constituents are hierarchically ordered in accordance with the given context. Topicalization is also observed in non-finite constructions. Consider a follow-up question-answer set below:

(66) Q: Peki aileler evde neler yapabilir?

‘What about families, what can they do at home?’

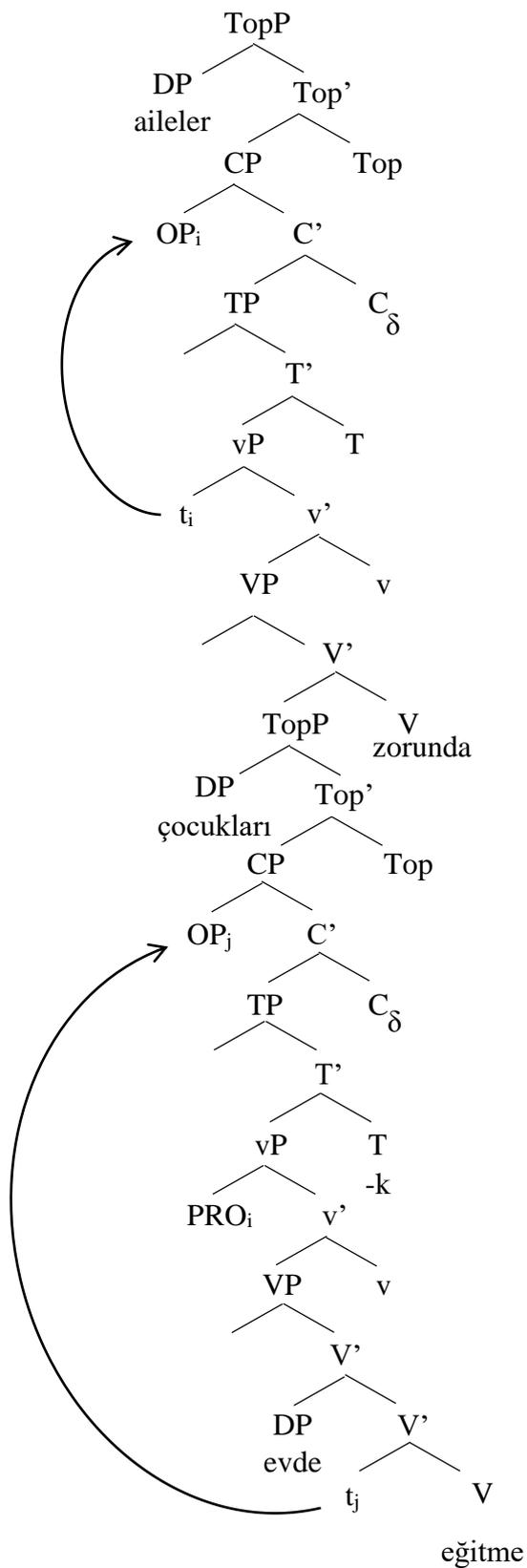
A: *Aile-ler_i*, [*çocuk-lar-ı*, PRO_i ev-de EĞİT-MEK] zorunda.
 family-Pl child-Pl-Acc home-Dat educate-Inf be obliged

‘The families are obliged to educate the children at home.’

The outer brackets mark the boundaries of the infinitival structure. The infinitive does not show any markings for tense or agreement. It lacks an overt subject, instead there is a PRO-DP that is controlled by the matrix subject (Kornfilt, 1996).³⁶ There are two topics in this construction; one appears as part of the infinitive, and the other as part of the matrix sentence. Thus, the topic projections must be given separately dominating the CPs. More specifically, each CP must be recognized with its own TopP to attract the relevant constituents. The structure can be shown as follows:

³⁶ Kornfilt (1996) states that clauses in Turkish are Agreement Phrases (with an Agree head). With respect to infinitivals, she assumes that the -k element of the infinitive marker -mA may be an Agreement head, or may block any Agree element or features from occurring there.

(67)



According to the derivation above, the topic constituents raise to the left-peripheries of the CPs in which they occur. The topic of the infinitive sentence does not move across the main

sentence for two main reasons. First, the derivation must be as economical as possible. Second, it does not need to raise to the higher sentence, since it can receive its topic interpretation within its CP. However, when the discourse-pragmatics of the utterance recognizes the direct object of the infinitive sentence as the topic of the entire utterance, the topic may raise across the boundary of the embedded sentence. As in the first one, this alternative derivation must also obey the economy condition by first moving the topic to the left-periphery of the infinitive, and then landing it in Spec, TopP of the matrix sentence. In such topic movement, the first landing site must be specified as [-topic]; otherwise, the constituent cannot be forced to move higher.

This can be supported with further evidence:

(68) *Aileler evde çocuklara ne yapmalı?*

‘What should family do for children at home?’

A: #*Aile-ler*, [*çocuk-lar-ı*, PRO_i *ev-de*, EĞİT-MEK] zorunda.
 family-Pl child-Pl-Acc home-Dat educate-Inf be obliged

‘The families are obliged to educate the children at home.’

Here, the topic *evde* ‘at home’ cannot receive its rising tone due to the ordering restrictions. The tail *çocukları* ‘the children’ intervenes between the topics *aileler* ‘the families’ and *evde* ‘at home’. While the first topic can satisfy its discourse-related feature, the second topic cannot. These results suggest that a topic element must either appear s-initially or be preceded by another topic element.

In short, topicalization is assigned via syntactic movement in Turkish. The derivation triggers a constituent(s) with the [+topic] feature to raise to Spec, TopP to satisfy the discourse functional needs. The moved constituent is recognized by a distinctive tone in its specifier

position. There can be more than one topic in a construction. However, each topic must be identified at the left-periphery of its own sentence.

4.2 Focalization

Focus in Turkish is represented by two distinct types: p-focus and c-focus. While p-focus restrictively occurs left-adjacent to the verb, there are no fixed landing positions for c-focus. Contrary to Rizzi's (1997) claim that there is a one-to-one correspondence between syntactic position and interpretation, Turkish does not designate a specific site for focus assignment. Even if p-focus differs in terms of its limited distribution, it does not in fact affect the linearization of constructions, it only receives a stronger accent at PF. This shows that focus in Turkish is primarily distinguished in prosodic and pragmatic terms, since syntax is not sufficient to account for its distribution. For the sake of simplicity and consistency, this study proposes that focus is assigned in-situ, meaning that it does not drive syntactic movement of the focused element in Turkish. Accordingly, there is no need to realize focus in a designated function projection. Instead, [focus] is treated as a privative feature that is derived by mapping rules operating between IS and syntax (Neeleman et al., 2009).

The two foci can be contrasted as in (69) and (70):

(69) Q: *Başkan toplantıda ne hakkında konuştu?*

‘What did the president talk about in the meeting?’

A: Başkan ÇOCUKLUK ANI-LAR-IN-I anlat-tı.
 president childhood memory-Pl-3sg-Acc talk about-Past

‘The president talked about his childhood memories.’

(70) Q: *Anlamadım. Kim çocukluk anılarını anlattı?*

‘I did not understand. Who talked about his childhood memories?’

A: BAŞKAN çocukluk anı-lar-ın-ı anlat-tı.
 president childhood memory-Pl-3sg-Acc talk about-Past
 ‘The president talked about his childhood memories.’

The question in (69) interrogates the content of the conversation, while the second question (70) assumes a misconception or misunderstanding in the context. In this regard, the questions provide different perspectives to the conversation. As might be expected, the answers differ in the information that they provide to the context. The first focused constituent *çocukluk anılarını* ‘the childhood memories’ mentions a new piece of information whereas the second constituent highlights a contextually available piece of information in the answer. However, there is no distinction in the canonical order. Let’s analyze a similar question in a different order:

(71) Q: *Toplantıda çocukluk anılarını kim anlatmış?*

‘Who talked about his childhood memories in the meeting?’
 A: Çocukluk anı-lar-ın-ı BAŞKAN anlat-tı.
 childhood memory-Pl-3sg-Acc president talk about-Past
 ‘The president talked about his childhood memories.’

In the surface representation, the focused constituent *başkan* ‘the president’ occurs in a marked position by following the direct object. There are two possibilities for deriving this word order alternation. First, it is the focused element that lowers to the immediately preverbal site to receive the p-focus feature. Second, it is the tail element *çocukluk anılarını* ‘the childhood memories’ that raises above the subject so that the subject can be interpreted adjacently to the verb. As discussed in the previous chapter, there is no way to maintain a downward movement operation for focus. Thus, the only option is to argue for a tail

movement. Such a derivation is presented in the next section. But before going into the discussion of the issue, focus assignment in-situ must be justified by some further evidence.

The initial evidence comes from binding relations:

(72) Q: Selin bu kadar uzun süredir ne anlatıyor?

‘What has Selin been talking about for so long?’

A₁: (Selin_i) KENDİN-İ_i anlat-ıyor.

self-Acc talk about-Pr.Prog

‘She has been talking about herself.’

The focused element is the anaphoric expression *kendini* ‘herself’. According to the given context, the anaphor receives its meaning from the agent, *Selin*. Even if the antecedent is not overtly realized in the answer, the context satisfies the binding relations. Now, check the following answer to the same question:

A₂: #KENDİN-İ_i Selin_i anlat-ıyor.

self-Acc Selin talk about-Pr.Prog

‘It is Selin who has been talking about herself.’

‘(Intended meaning) She has been talking about herself.’

When the order of the phrases is changed, the target interpretation cannot be attained.

Importantly, although the structure is well-formed, it does not obey the discourse requirements. Therefore, this answer is not acceptable in the context. This shows that the focused element must stay in-situ, otherwise the target interpretation cannot be achieved. Here is another example:

(73) Ahmet en çok kimi özlemiş?

‘Whom did Ahmet miss most?’

A₁: (Ahmet_i) ÇOCUK-LAR-IN-I_i çok özle-di.
 kid-P1-3sg-Acc a lot miss-Past

‘Ahmet missed his kids a lot.’

A₂: #/* ÇOCUK-LAR-IN-I_{i/j} Ahmet_i çok özle-di.
 kid-P1-3sg-Acc Ahmet a lot miss-Past

‘Ahmet missed his kids/someone else’s kids.’

In this example, the binding relation is set between the subject *Ahmet* and the direct object *çocuklarını* ‘his kids’. In order to get the coreferential reading between these two DPs, the antecedent subject must precede the object, namely, the antecedent must be hierarchically higher than the object in the structure. When the context is formed, the DP *çocuklarını* ‘his children’ can only refer to *Ahmet* within the limited context. In this respect, the first sentence provides a felicitous answer. On the other hand, the second sentence in the marked order is both syntactically and pragmatically ill-formed. When the focus element appears in an alternative position, the resulting interpretation is not relevant to the context. Also, the binding relation cannot be established when the object is raised above the antecedent. Therefore, focus movement cannot be supported due to binding relations.

Second, the focus domain covers all preverbal positions, as well as the verb. In all-focus constructions, the verb always serves as the focus, or takes a part in the focus domain.

(74) Adamın kedisine ne olmuş?

‘What happened to the man’s cat?’

A₁: ÖL-MÜŞ
 die-Rep.Past

‘(It) died.’

A₂: ARABA ÇARP-MIŞ.

car hit-Rep.Past

‘A car hit (the cat).

Focus can extend its scope; however, it is not iterative. This is because it is not possible to assign a tonal accent to multiple constituents in a single utterance. Further, if focus has a syntactic category, it must hold the whole focused unit as shown in (74A₂). It may be assumed that constituents build up in the same category, but it would violate one-to-one mapping with features and lexical items. In light of the fact that each category is associated with one phrase, this is not a legitimate option for the derivation.

Lastly, as observed in this and earlier chapters, elements can receive focus in their base positions on condition that they are in a position preceding the verb. Thus, they do not have to move across the sentence to match features. Additionally, it is not possible to attach a maximal projection dominating each phrase, basically in terms of constraints on Minimalist derivation. This being so, it is plausible (even self-evident) that Turkish syntax does not project focus as a distinct category.

Following these results, the aim is now to clarify how constituents receive their focus features in-situ. On the basis of Minimalist assumptions, the most highly evaluated account would deal with the two types of foci in the language through one interpretive mechanism in order to ensure a perfectly economical system. The operation Move is triggered by a feature-checking mechanism, by which the computation drives a constituent into a specifier-head relation within a functional projection. But this feature must be strong enough to initiate this operation, like in topicalization. Since focus in Turkish does not necessarily exhibit alternations in word order, it raises the issue of optionality. Also, Move is employed in the

derivation only when there is no other alternative which is more economical and that yields the same outcome. Therefore, it is more preferable to propose an in-situ approach for focus.

Chomsky (1995; 2001) points out that optional rule application might be assigned to some other component of the language system rather than as part of the core syntax, such as a ‘stylistic’ component of the mapping of S-structure to PF. He argues that displacement rules that are interspersed in the phonological component should have little semantic effect. This implies that discourse-related operations do not affect the core semantics of constructions. On the other hand, it has an impact on the discourse-pragmatic interpretation and the prosody of an utterance.

As discussed in the previous sections for topic (see 3.2.2; 4.1), discourse-configurational features appear on C in Turkish. Thus, it can be suggested that focus exhibits a similar trait; the [focus] feature occurs on the C head. Alternatively, it may be assumed that the focus feature is inherited by T. Unlike topic, however, it lacks an operator to trigger an overt movement. Therefore, there does not seem any need to discuss feature inheritance to the T head. Chomsky (1995, p. 183) points out that raising an operator to Spec, CP must be driven by necessity only to satisfy some condition. Also, he states that the movement is overt only when the feature on C is strong. This study therefore suggests that the focus feature on C is not strong in Turkish. As a result, it cannot create a focus operator to drive a focused constituent to move away from its base-generated position. As a result, focus stays in-situ.

Then, it can be argued that focus is introduced into the derivation as an uninterpretable feature that is checked and valued via Agree under Match. It does not trigger syntactic movement, instead it is derived by the Agree operation between the goal (the C head with the [+focus] feature) and a probe with matching features. Accordingly, focus is assigned relevant properties at the interfaces, namely a primary accent at PF and informational interpretation at

LF. In short, an uninterpretable focus feature is eliminated by Agree in the derivation, and it is spelled-out in-situ along with its prosodic reflex. As a result, focus does not have an effect on syntactic structure, which brings tail to the center of attention to explain word order alternations.

4.3 Tail

Tail does not have a distinctive function in discourse, in contrast to focus and topic. Thus, it does not bear a prominent prosodic pattern. The only ineludible part of a sentence is focus, whereby topic, as an optional unit, is distinguished from others both through its syntactic and phonological features. Following the discussion earlier, this section proposes that tail is a pragmatically null unit, since it does not provide an essential information to the discourse. It does not convey any new or update information, but it has a prominent effect on the surface representation of the sentence. Hence, it requires a more detailed analysis in various respects. Especially if focus does not undergo syntactic movement, tail needs to explain all variations, i.e. the variations not accounted for by topic movement. Let's start the discussion with an example:

(75) Q: *Bugün okula çocuğu kim götürdü?*

‘Who took the kid to the school today?’

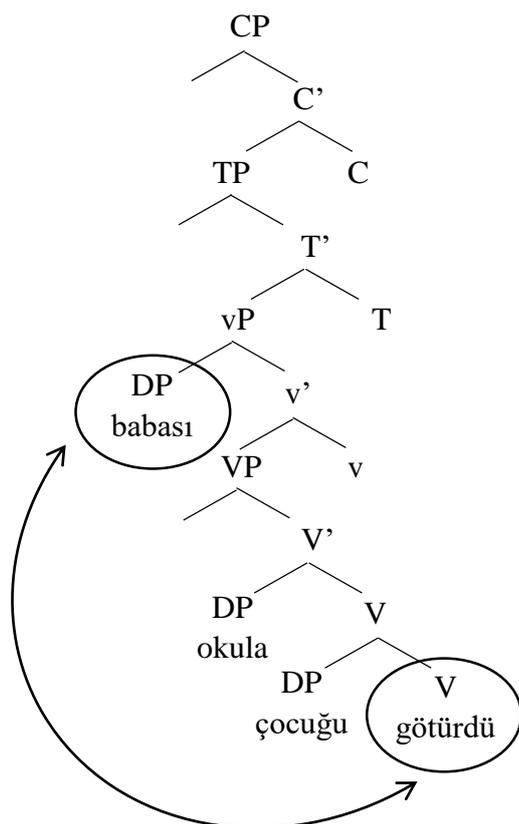
A: Okul-a çocuğ-u BABA-SI götür-dü.

school-Dat kid-Acc father-3sg take-Past

‘His father took the kid to the school.’

The interrogation is about the agent of the action, which corresponds to *babası* ‘his father’ in the answer. The other two phrases *çocuğu* ‘the kid’ and *okula* ‘to the school’ are the tail constituents. They do not have any distinct prosodic marking or pragmatic importance in the discourse. Now, check the derivation:

(76)

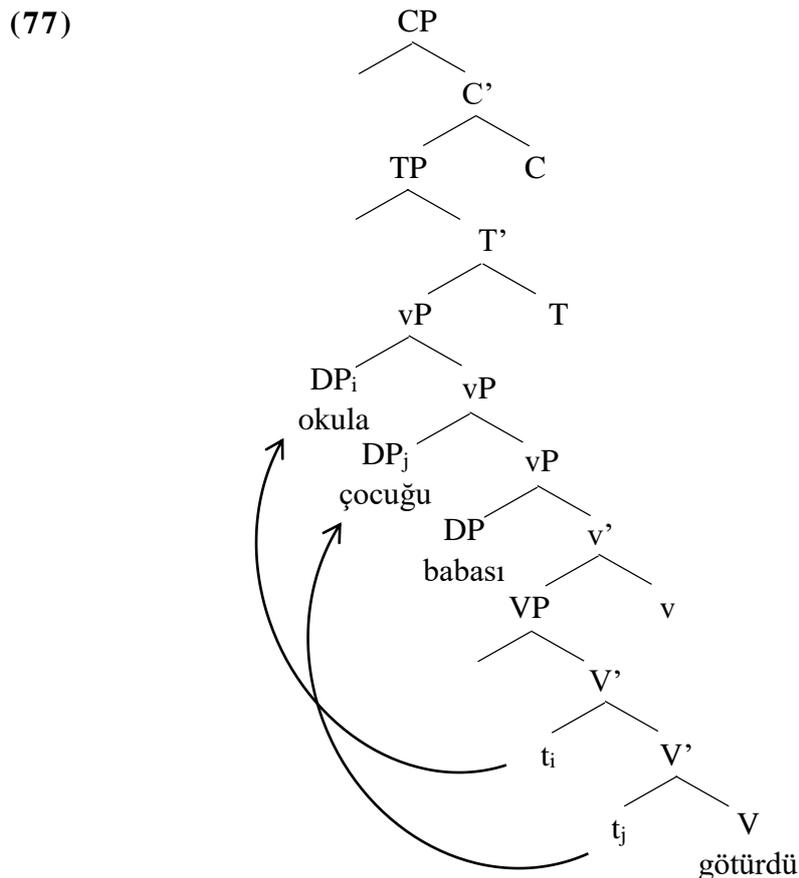


On the surface linear order, the focus element appears left-adjacent to the verb where it receives its p-focus. But it seems that the direct and indirect objects break this relationship in the underlying structure. If the focus stays in-situ, the other constituents must be pushed outside the focus domain. Given that the Last Resort condition requires that movement is permitted only to satisfy FI, these elements cannot be placed into a specific position due to lack of motivation. The solution comes from adjunction.

Chomsky (1995) proposes two ways of building new structures: substitution (canonical movement) and adjunction. Adjunction differs from substitution in that it forms a two-segment category rather than a new category. It has a crucial role in grammar because it accounts for displacement of constituents from the positions in which they are interpreted. For example, in the structure in (76), the objects are generated within the verb phrase, but on the surface they can appear in different positions. Further, the substitution option is realized by raising an element to Spec, Head by overt movement, whereas adjunction conditions a head-

head or phrase-phrase relation between the moved element and the host position. Simply put, if the moved constituent is a head, it must be sister to another head, or if it is a phrase, it must be adjoined next to a phrase.

In accordance with these facts, the derivation can be formulated as in (77):



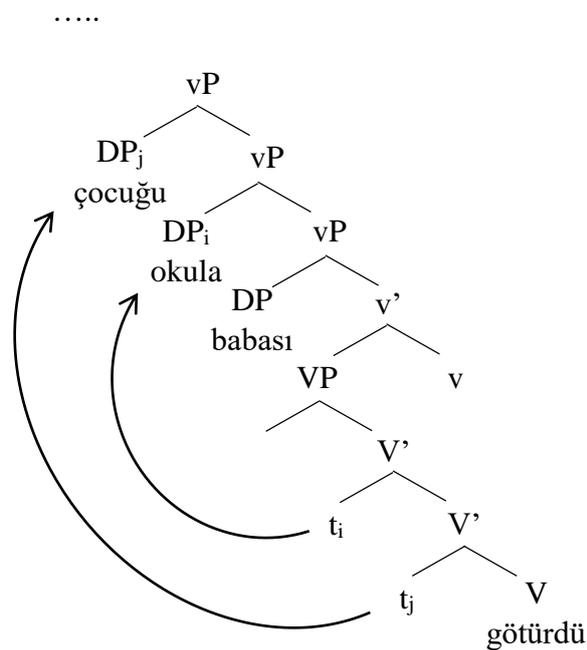
Assuming that the subject, as the external argument, is generated in the specifier of vP, the direct and indirect objects must adjoin to higher positions. The positions to which they adjoin should be the phrasal categories, matching their phrasal level, which reflects the ‘structure-preserving’ character³⁷ of adjunction. Also, the operation must conform to economy and locality restrictions. Hence, the DPs adjoin to the vP categories by leaving subject as the only

³⁷ Chomsky (1995) discusses the structure-preserving hypothesis of Emonds’ (1976), which suggests that the target of substitution has always the same categorial features as the moved category, and states that a similar property holds for adjunction, as well.

element immediately preceding the verb. This structure provides an efficient solution for a number of reasons. First of all, the operation does not require a feature checking relation at the target position, and therefore it does not violate FI. Second, adjunction does not change the grammatical properties of the constituents. In other words, the alternations in the tail order do not change the core structure. Third, it supports the focus-in-situ assignment phenomenon. Therefore, it can explain apparent different positions for focus. It can account for the focus assignment both in the immediately preverbal position and in any positions within the focus domain. More importantly, it presents the most economical derivation³⁸.

Like topic, tail can also be iterated. Similarly, there is no ordering restriction among tail constituents, either. For example, the order of the objects in the structure (77) can be changed as follows:

(78)



³⁸ I leave potentially problematic interactions with the Extension Condition with respect to the Focus feature in C to future research. I am grateful to Kenji Oda (p.c.) for pointing out such potential interactions.

However, adjunction does not have a pre-generated landing position as in topicalization.

Another important aspect is that adjunction is not limited to leftward scrambling. This offers a solid explanation for tail constituents following c-focus:

(79) Q: *Kim soruyu öğrencilere açıklayacak?*

‘Who will explain the question to the students?’

A₁: CAN öğrenci-ler-e soru-yu açıkla-yacak.

Can student-Pl-Dat question-Acc explain-Fut

‘Can will explain the question to the students.’

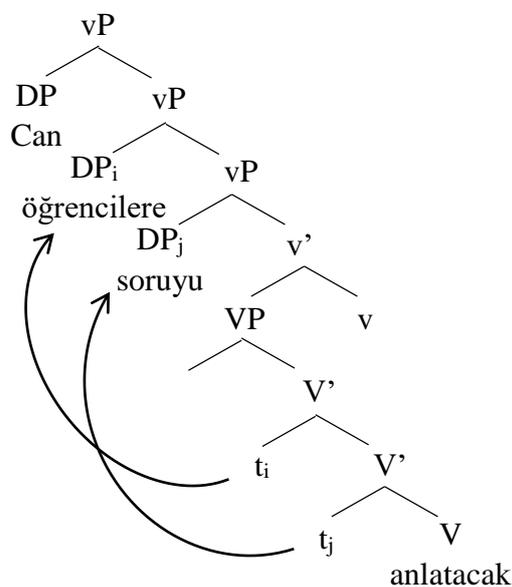
A₂: CAN soru-yu öğrenci-ler-e açıkla-yacak.

Can question-Acc student-Pl-Dat explain-Fut

‘Can will explain the question to the students.’

The question in (79) can be answered in two different ways, as in (A₁) and (A₂). The focused element is given at the beginning of the sentence. Following the focus, the tails can be ordered in either way, namely in the direct object-the indirect object or the indirect object-the direct object order.

(80)



This time, the adjunction operates preceding the verb, by inserting additional vP categories into the derivation. As a result, the objects can be ordered as expected in the context.

All of this is optional. The mechanism derives adjunction only when it is required in discourse. If tail elements are not pulled from an earlier context, there is no need to realize them in the structure. Thus, the ordering is realized only with topic (if available) and focus.

Chapter 5. Further Evidence

There are two main strategies for IS scrambling in Turkish. The first one is feature checking movement used in topic. The second is adjunction that addresses deviations from the canonical order. Focus triggers the scrambling (via adjunction) of tail elements. However, a focused constituent itself does not undergo movement. Based on these assumptions, this chapter attempts to investigate further support for these formalizations in Turkish. Initially, the discussion is extended to postverbal scrambling. Then, scrambling is examined through simple *wh*-constructions.

5.1 Postverbal Scrambling

Topic is associated with the *s*-initial site, whereas focus is assigned in the domain preceding the verb. Simply put, neither topic nor focus can occupy a position following the verb:

(81) Q: *Doğum günü partisine kimler katıldı?*

‘Who attended the birthday party?’

A₁: #Katıl-dı BÜTÜN AKADEMİSYEN-LER.

attend-Past all academician-Pl

‘All academicians attended.’

A₂: #BÜTÜN AKADEMİSYEN-LER katıl-dı, parti-ye.
 all academician-Pl attend-Past party-Dat

‘All academicians attended the party.’

In (81A₁), the verb begins the sentence while the focus is postverbal. The tonal accent can only be assigned within the focus domain in Turkish (See 2.1.1). This order leads to ill-formedness for the discourse, since the focus, as the informative segment, cannot receive its prosodic prominence in the utterance. In the second sentence, the topic cannot get its rising tone following the verb, thus it violates the prosodic and informational flow of the utterance.

As a result, in addition to its preverbal occurrences, whatever comes after the verb must be defined as tail:

(82) *Melek kızına ne hediye almış?*

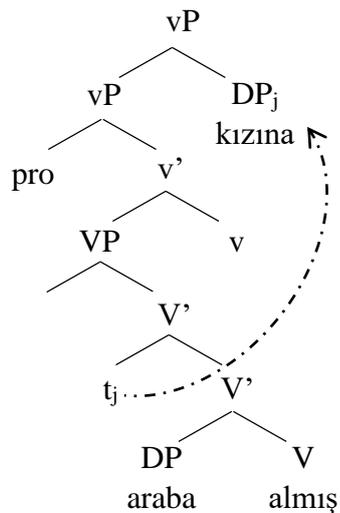
‘What gift did Melek buy for her daughter?’

A: ARABA al-mış kız-ın-a.
 car buy-Rep.Past daughter-3sg-Dat

‘(Melek) bought a car for her daughter.’

There is one constituent that follows the verb, the indirect object. Assuming that adjunction is the only operation that can generate the unmarked order, this phrase must be adjoined into the structure accordingly. The derivation is illustrated below:

(83)



The pro gets its interpretation from the context, thus from the subject *Melek*. The focused element is the direct object that occupies its base position next to the verb. The indirect object constitutes the tail of the sentence, and it is right-adjoined to vP. The adjunction may alternatively target TP or CP. However, such long-distance adjunction is problematic because it violates locality conditions.

The argumentation on adjunction of tails can be further evidenced by the analysis of gaps adapted from Kornfilt (1998). In all the examples below, the right-adjoined constituents correspond to the gaps in the preverbal field. She first states that gaps cannot provide an answer to an information question:

(84) Q: *Hasan ne zaman doğ-du?*

Hasan when born-Past

‘When was Hasan born?’

A₁: 1980’de.

1980-Dat

‘in 1980.’

A₂: *Doğ-du.

born-Past

‘(Hasan) was born.’

A₃: *Doğ-du 1980’de.

born-Past 1980-Dat

‘(Hasan) was born in 1980.’

As stated in the earlier chapters, the information is conveyed through focus in Turkish, which is presented only in the preverbal field. Therefore, *1980’de* ‘in 1980’, the answer to the question, must appear before the verb. This is supported in Kornfilt (1998) with another example:

(85) Q: *Öğrenci-ler-den kim iyileş-ti?*

‘Who recovered among the students?’

A: *___ iyileş-ti Hasan, fakat ___ hala hasta Ayşe.

recover-Past Hasan but still sick Ayşe

‘(Intended reading:) Hasan recovered, but Ayşe is still sick.’

The example above shows that the elements appearing postverbally must be contextually familiar to in the discourse. In other words, they cannot introduce a new concept or idea. It is then plausible to argue that tail cannot be base-generated in their postverbal positions. Instead, they belong to the preverbal site and they are inserted into the structure through right-adjunction.

5.2 *Wh*-Scrambling

The basic function of *wh*-phrases in question constructions is to introduce new entities into the discourse. Knowing that the postverbal site can only be occupied by a tail element, hence

by contextually familiar constituents, *wh*-phrases must always occur preceding the verb. Let's analyze a simple question below:

- (86) Q: a. Soru-yu öğretmen-e kim sor-du?
 question-Acc teacher-Dat who ask-Past
 'Who asked the question to the teacher?'
 b. Kim soruyu öğretmene sordu?
 c. Soruyu kim öğretmene sordu?

The *wh*-phrase *kim* 'who' can scramble within the preverbal area. However, it cannot be placed after the verb:

- d. *Soruyu öğretmene sordu kim?
 e. *Soruyu sordu kim öğretmene?
 f. *Öğretmen sordu soruyu kim?

The restriction on the occurrence of *wh*-elements postverbally can be associated with their inherent focus feature (Kiss, 1998; Karimi & Taleghani, 2007). Given that focus is related with informative part of the context, and *wh*-element serves as information bearers, it is reasonable to observe these ungrammatical results. Further, topic is a part of grounded information, namely it is somehow known in the context. Therefore, a *wh*-element cannot be topicalized:³⁹

- (87) Q: Müdür kimi evine davet etmiş?

'Whom did the manager invite to her house?'

³⁹ We should remember that in Turkish, the comma following each topic in these examples does not necessarily indicate a distinctive orthographic convention. They are used in order to better illustrate the discourse categories.

discursively focused items. One such analysis has been carried out by Göksel and Özsoy (2000). They show that focus- and *wh*-phrases may co-occur within a sentence, but there are ordering restrictions between them. Consider the following examples from their analysis:

(89) a. *Ne zaman OKUL-A gid-ecek-sin?

when school-Dat go-Fut-2sg

‘When will you go to the school?’

b. OKUL-A ne zaman gid-ecek-sin?

school when go-Fut-2sg

‘When will you go to the school?’

The sentence is acceptable when the discursively focused element precedes the *wh*-element, but not vice versa. They do not explain the reason behind this contrast; however, the ungrammaticality may be related to intonation pattern of the sentence. As mentioned earlier, an utterance can take only one focus unit. If the sentence starts with an inherently focused item, the focus assignment is blocked for the second element. On the other hand, the inherently focused constituent does not affect the flow of the utterance since it is not as strong as the overtly tonal accented element. Hence, the distinction arises simply due to prosodic effects. Given that it is inherently focused, the *wh*-phrase *ne zaman* ‘when’ prevents the tonal accent from falling on the indirect object *okula* ‘to the school’ in the first sentence. In other words, the word order gives rise to prosodic breaks in the utterance, thereby diminishing the prosodic prominence of the informative segment. Thus, the result becomes ill-formed. The second sentence has a falling prosodic pattern from the tonal accent to de-accentuation, and it sounds relatively more acceptable. This prediction is valid for the other data set that they discuss, as well:

- (90) a. *Kim KÌM-İ sev-iyor-muş?
 who who-Acc love-Prog-Rep.Past
 ‘Who loves whom?’
- b. KÌM kim-i sev-iyor-muş?
 who who-Acc love-Prog-Rep.Past
 ‘Who loves whom?’

Here, one of the two inherent focused elements is assigned additional tonal accent from the discourse. As expected, the discourse-related focal element must appear first. In sum, deviations from the canonical word order, even in inherently focused lexical items, stem from discourse-pragmatic means that is realized via syntactic structure.

Chapter 6: Conclusion

This thesis explores the nature of scrambling in Turkish by arguing that word order variation is dependent on discourse-pragmatic factors. It provides an account of the three major categories of information structure, namely topic, focus and tail units, particularly focusing on interactions with interfaces. It first demonstrates some semantic and morphological effects on the distribution the categories. Accordingly, specificity and definiteness categories may block some elements from appearing sentence initially, but they do not constitute a restriction that is valid in all cases. By contrast with topic, focus is not subject to any morphological and semantic constraints. Also, tail overrides all morphological and semantic effects when it is referentially anchored in discourse. Then, the different prosodic features of the categories are addressed. Among all, focus is associated with the primary prosodic prominence of an utterance; it is indicated by a tonal accent. Topic is expressed by a rising boundary tone. As such, it is associated with secondary prosodic prominence. De-accentuation occurs on tail; thus, it is prosodically non-prominent in Turkish.

Furthermore, the study analyzes the categories from a syntactic perspective. It discusses that discourse-configurational features appear on C in Turkish. The topic feature attracts an empty topic operator to the specifier of CP, and the topicalized phrase lands in the specifier position of the topic projection. The Topic Phrase is realized at the left-periphery of a sentence. Therefore, an element holding topic interpretation undergoes an overt movement to check its relevant feature. Then, the constructions with multiple topics are presented via an analysis of multiple specifiers of a single Topic head in a Topic Phrase, in which each topic is accompanied by its own operator. However, focus and tail are not generated within any dedicated projection in syntax. It is suggested that focus is introduced into the derivation as an uninterpretable feature that is checked and valued via Agree under Match. Since the [focus] feature on C is not strong, it does not trigger syntactic movement. Instead, it is derived by the Agree operation between the goal (the C head) and a probe with matching features. As a result, focus is assigned relevant properties at the interfaces, namely as a primary accent at PF and informational interpretation at LF. Lastly, in order to explain the word order alternations, the study offers that tail undergoes adjunction operation. Put differently, focus triggers the scrambling (via adjunction) of tail elements. In this way, the focused element itself does not undergo movement.

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Education

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 Languages, Literatures, and Linguistics
 Syracuse University, USA
- *Scrambling and Information Structure in Turkish* (M.A. Thesis)
- 2015 -** **M.A., English Linguistics**
 Institute of Social Sciences
 Hacettepe University, Turkey
- 2010 - 2014** **B.A., English Language Teaching**
 Foreign Language Education
 Middle East Technical University, Turkey
- *The Attitudes towards Individual and Group Work in the Schools of Natural Sciences and Social Sciences at Middle East Technical University* (Unpublished Undergraduate Thesis).
- 2013 - 2014** **Erasmus Exchange Program, Linguistics**
 Pedagogy and English Philology
 Pedagogical University of Cracow, Poland
- 2013** **Erasmus Intensive Language Courses, Polish**
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Employment & Teaching Experience

- 2017 - 2019** **Teaching Assistant to 201: The Nature and Study of Language**
 Linguistic Studies, Syracuse University, USA
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- 2014 - 2017** **English Instructor**
 Department of Foreign Languages
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- 2013** **Administrative / Teaching Assistant**
 English 4 Skills Language Courses, Turkey
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 School of Foreign Languages
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- 2012** **English Instructor**
 American Cultural Association Language Schools, Turkey

Academic Training

- 2018 -** Future Professoriate Program
 Graduate School, Syracuse University
- 2014** Arı Private Schools
 Teaching Practice
 Middle East Technical University, Turkey
- 2013** Gymnasium (Secondary School)
 Teaching Practice, Institute of Modern Languages
 Pedagogical University of Cracow, Poland

Unpublished Work

- 2017** A Syntactic Analysis of Turkish Discourse Particle: Şey
- 2017** A Diachronic Study on the Turkish Coordinate Structures
- 2017** Critical Analysis of Government Speeches: A Corpus-based Study on
 Turkish Politics
- 2016** Online Newspapers' Coverage of Femicide in Turkey: The Analysis of
 the News Concerning the Murder of Özgecan Aslan

Posters

- 2016** Can We Really Motivate the Unmotivated?
Foreign Language Education Joint Festival: Unity in Diversity
TOBB University of Economics and Technology, Turkey

Seminars & Workshops

Organization Committee Member

- 2016** Trainers' Professional Learning and Unlimited Sharing Conference
Department of Foreign Languages
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- 2016** Organization of Workshop Festival
Department of Foreign Languages
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- 2013** 3rd International Symposium of Policies and Issues on Teacher
Education
Hacettepe University, Ankara, Turkey
- 2012** The 16th International Conference on Turkish Linguistics
Middle East Technical University, Ankara, Turkey
- 2007** Global Warming, Comenius Program
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Conferences Attended

- 2018** North East Linguistics Society 49th annual meeting
Cornell University, Ithaca, New York, USA
- 2014** 28th National Linguistics Conference, Sakarya, Turkey
- 2014** Reading Processes for Deaf, Dyslexic and Typically Developing
Children
Ankara University, Ankara, Turkey
- 2013** Atayurt English Language Teaching Conference, Eskisehir, Turkey

Awards

- 2019** Outstanding Languages, Literatures and Linguistics Teaching Assistant
Gerlinde Ulm Sanford Ceremony - Syracuse University
- 2010-2014** Turkish Government Undergraduate Scholarship
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