#### (Non-)Peripheral Matters in Turkish Syntax

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The goal of this dissertation is to investigate the nature of word order variation in declarative and interrogative clauses in Turkish within the framework of the generative syntax. The specific issue that will be examined in this dissertation concerns the role of discourse-pragmatics in word order variation. I will argue that all movement operations in Turkish are driven by discourse-based features; and there is no room for any operation that changes the linear order of constituents randomly and/or without the involvement of a discourse-feature. This eliminates the option of allowing any operation that fits the profile of 'scrambling' as understood in the tradition of Saito (1989 et seq.). Evidence that supports this conclusion will be presented through a detailed examination of variable binding data from Turkish, which also shows that subjects in Turkish do not undergo movement to Spec, IP either. It is also argued that Foci (and wh-phrases with a focal character) must stay in situ in Turkish, while all non-Foci must move. This provides an explanation for the obligatory adjacency of Focus/wh-phrases to the verb in Turkish. The assumption regarding the strict in-situness of Focus in Turkish receives support from Rooth's (1985) non-movement analysis of Focus, under which the semantics of Focus is handled without the establishment of an operator-variable relation. With the elimination of 'scrambling' and subject movement to Spec, IP as non-discourse driven movement operations, a detailed characterization of different kinds of discourse related functional projections carried out in this dissertation for Turkish allows for a non-ambiguous mapping to the interfaces regarding the interpretation of the elements that are associated with them. Turkish thus presents itself as an 'optimal language' in terms of the transparency of the mapping of syntax to discourse-pragmatics/semantics.

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## **Chapter I**

## Introduction

'Scrambling' is a term that is often used to refer to instances of word order variation in a single language particularly when the formal/functional triggers of such variation remain unknown (cf. Bošković 2004). Because of that 'scrambling' is considered to be a type of operation that is typically at odds with the Last Resort principle of Chomsky (1986) in that it is not feature driven and applies freely violating the Last Resort (cf. Saito 1989, 1992). In other words, 'scrambling' does not obey the restrictions that 'other' movement operations obey. A number of proposals have been made in the literature to deal with the Last Resort issue that 'scrambling' raises. The most prominent reaction has been to argue that there is no issue here; i.e., 'scrambling' does obey Last Resort contrary to appearances. There are two specific proposals under this general approach. One of them takes it for granted that 'scrambling' is driven by a (strong) feature  $[\Sigma]$ , which a number of authors assume is only used for scrambling, and which is optionally added to the numeration (see Sabel 2005; also Grewendorf & Sternefeld 1999, Sabel 2001). The other type of solution as illustrated in a paper by Bošković and Takahashi (1998), which suggests that long distance scrambling in Japanese, in particular, involves

base generation, which is followed by the lowering to the base positions. The lowering operation is driven by the theta-features of the 'scrambled' element, particularly when theta-features are relevant (i.e., arguments but not adjuncts). Scrambling abides by the Last Resort principle under Bošković and Takahashi's (1998) proposal, just as in Sabel (2005). Despite such alternatives the true nature of the *triggers* of scrambling have still remained elusive.

Turkish is a language that is well known for extensive flexibility in its word order, which is what has allowed its classification as a 'scrambling' language on a par with Japanese and Korean, among others, since Kural (1992). Interestingly, word order variations in Turkish have also been noted to have discoursepragmatics effects since Erguvanli (1985), but the following questions have not been addressed previously: Do 'scrambling' and movement operations with discourse-pragmatic effects co-exist in Turkish? Or, should one of them be eliminated in favor of the other?

It should be noted at this point that 'scrambling' and topicalization/focalization have been argued not to be mutually exclusive; that is, they may in principle co-exist in a single language as discussed in Bošković (2004). There are also languages, such as Jingulu, for example, a language spoken in Australia, which uses overt morphological markers to indicate discourse-pragmatic functions (see Panselfani 2004). Importantly, the appearance of morphological markers on an element in Jingulu is insensitive to that element's linear position. This suggests that whatever is responsible for word order variation in this language

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may not be mapping to discourse-pragmatic functions. To the extent that the underlying motivation for word order variations is unclear in a language like Jingulu, the term 'scrambling' continues to survive in the sense described in Bošković (2004), as noted in the beginning of this chapter.

In this dissertation, I examine Turkish and show that all movement in Turkish is driven by the formal counterparts of discourse-pragmatic functions; there is no movement operation that has no discourse-pragmatic trigger. This provides the major motivation for the elimination of 'scrambling' from the inventory of syntactic operations, at least in Turkish, where all movement can then be taken to respect the Last Resort principle. A detailed characterization of different kinds of discourse related functional projections which provide nonambiguous instructions to the interfaces regarding the interpretation of the elements that are associated with them makes it possible to dispense with scrambling as a distinct type of movement. In this system, scrambling, with all its puzzles, is fully integrated into a discourse-driven movement system. The conclusion reached in this work is even stronger given that Turkish does not even have English-style movement of subjects to Spec, IP; all movement in Turkish is in fact discourse-driven. From the point of view of discourse-pragmatics, Turkish can actually be considered a 'perfect language' since it provides a rather straightforward mapping between syntax and the discourse-pragmatics component.

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The model adopted in this dissertation is the one proposed in Bošković (2007a), who argues, contra Chomsky (2000, 2001), that the locality of Move and Agree is radically different. Agree, in particular, is free from *Phases/Phase* Impenetrability Condition and the Activation Condition (AC), which constrain Move. The difference in the locality of Move and Agree is not stipulated since, in Bošković's (2007a) analysis, the AC, which requires that an element undergoing Move/Agree have an uninterpretable feature, is used only to implement successive-cyclic movement, unlike Chomsky's (2000) proposal, where AC is used to implement movement in general. This enables Bošković (2007) to dispense with the AC as an independent condition of the grammar. The work also eliminates the generalized EPP mechanism of Chomsky (2000, 2001), which encodes a formal requirement of the target to have a specifier. Bošković (2007) develops a system in which all movement, including successive-cyclic movement and final steps of movement, is driven by an uninterpretable feature of the moving element. Adopting such a system, I argue in this dissertation for a system where movement of constituents that bear certain discourse functions is driven by an uninterpretable OP(erator) feature they have. Specifically, constituents that bear a [topic] feature or a [discourse anaphoric] feature also bear a [uOP] feature, which triggers their movement. In other words, discourse-driven movement operations in Turkish are limited to constituents that either encode topicality or discourse anaphoricity. Crucially, Focus in Turkish is strictly in-situ, which implies that Focus constituents in Turkish do not bear [*u*OP]. The question is, of course, why?

A promising answer, as I argue in the dissertation, comes from a proposal made in Rooth (1985), who suggests that Focus constituents need not move as they can be interpreted in-situ without creating a movement-based operator-variable relation. Taking Rooth's (1985) proposal for granted means that movement of Focus, if possible at all, cannot be driven by the [uOP] feature, which would result in formation of an operator-variable relation. Incidentally, Park (2005) shows that while movement of Focus is possible in Serbo-Croatian, Focus-moved constituents must undergo reconstruction. Park (2005) also claims that obligatory reconstruction of Foci in SC follows from Rooth's (1985) proposal that Focus does not create an operator-variable relation. The in-situ character of Focus (contrastive/non-contrastive) in Turkish clearly presents an optimal solution given Rooth's (1985) claim and Park's (2005) observation from SC: While in SC elements undergoing Focus movement must reconstruct, Turkish does not move Focus in the first place, hence choosing the more optimal solution.

Evidence that shows that Focus in Turkish is strictly in-situ is provided in Chapter 2 through an examination of different sub-types of Focus, such as Presentational Focus, Contrastive Focus, and Corrective Focus in declarative clauses in both root and subordinate contexts. Evidence that shows that Topics, particularly Contrastive and Aboutness Topics, and discourse anaphoric elements are strictly ex-situ, is presented in Chapter 2. In the beginning of this chapter, I provide a review of the major concepts of discourse-pragmatics employed in this dissertation. The remainder of Chapter 2 contains (i) an overview of the general framework and the specific proposal adopted in this dissertation, (ii) the application of the framework to the data sets introduced earlier in this chapter, (iii) presentation and analysis of further data from Turkish involving variable binding, which also reveal a restriction on the reconstruction of Topics and provides evidence that English-style movement of subjects to Spec,IP is missing in Turkish, and finally (iv) a comparison of Turkish and Basque in terms of Focus-Verb adjacency. In this chapter, I also very briefly outline a linearization algorithm that applies specifically to Turkish, which is built on the discourse-pragmatic mapping of Turkish clauses.

Chapter III aims to expand the coverage of the proposal to wh-questions in Turkish, as is. A better part of this chapter is devoted to showing that non-Discourse-linked wh-phrases behave distributionally just like non-wh Foci, whereas Discourse-linked wh-phrases are like discourse anaphoric elements in distributional terms. The observation that non-Discourse-linked wh-phrases must be adjacent to V just like Foci while the same adjacency effect is not enforced for Discourse-linked wh-phrases is argued to follow from a commonly held assumption that non-Discourse-linked wh-phrases have [focus]. This amounts to claiming that non-Discourse-linked wh-phrases cannot bear [OP] just like Foci, and thus are strictly in-situ. The V-adjacency of non-Discourse-linked wh-phrases and Focus more generally then follows once its is acknowledged that non-Foci and Discourse-linked wh-phrases must move since they bear [OP], which triggers movement. The remainder of Chapter III is devoted to providing an account for

two unrelated issues. One issue concerns mutual exclusivity of a wh-phrase and a (non-wh) Focus in Turkish. I provide an account of this under a specific version of Relativized Minimality within the Agree approach adopted in the dissertation. The second issue that I address in this chapter concerns sentences in Turkish that are on the surface rather similar to instances of wh-sluicing in English. I propose a non-movement analysis of wh-phrases in sluicing contexts in Turkish showing that Turkish has elliptical sentences that are almost identical to those 'sluicing-like constructions,' which are not possible in English. The source of 'sluicing-like constructions' in Turkish, then, is not the same as English. Despite the nonmovement analysis of 'sluicing-like constructions' in Turkish that I argue for, I note that a movement analysis of 'sluicing-like constructions' would not be at odds with the present system in which wh-phrases/Foci are strictly in-situ, since it is well established that sluicing contexts allow certain 'anomalies' that are not otherwise observed in non-sluicing contexts even in English.

## **Chapter II**

The Correspondence Between Syntactic Structure and Information Structure in Turkish Clauses

## 1. Introduction

The primary goal of this chapter is to investigate in detail the syntactic distribution of constituents in root clauses in Turkish, an SOV language, and propose an analysis of it. In this particular context, a major question that I will seek to find an answer to is given in (1):

 To what extent is word order variation in Turkish determined by discoursepragmatics considerations?

This question of what role discourse-pragmatics plays in determining distinct word order patterns in Turkish has already been addressed in the previous literature, although the majority of the previous research was not couched within the generative framework (see Erguvanlı 1984, Erkü 1983, Göksel 1998, Göksel and Özsoy 2000, İşsever 2003, Enç 1986). The contribution of the present study thus lies in the perspective it subscribes to. It also presents novel data in a number of domains that will be the key to the discussion and the analysis to be developed.

The answer that I give in this chapter to the above question is that word order variation in Turkish is determined *fully* by discourse-pragmatics considerations. The results of the investigation reveal that, despite considerable flexibility in word order, word order flexibility in Turkish is not random, and each and every piece of word order variation has discourse-pragmatics effects.

I begin my investigation in this chapter by a brief summary of the basic concepts of discourse-pragmatics that I will adopt in this dissertation.

## 2. Basic concepts of information structure

A major diagnostic test that I will appeal to throughout this dissertation is the *question-answer congruence*. Büring (2005:4) defines it as follows: "The material in the answer that corresponds to the *wh*-constituent in the (constituent) question is focused."

A question like 'what happened?' typically invokes a context in which all elements of a sentence constitute new information (i.e., *all-focus* sentences), hence are equal in terms of their discourse-pragmatic properties, which allows for identification of the canonical word order in a language. As illustrated in (2), only (A1) provides a felicitous answer to the question in (2), which corresponds to the canonical order of constituents in Turkish, namely Subject-Object-Verb (see Erguvanli 1984, Erkü 1983, Kural 1992, Kornfilt 1997a, among others):

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(2)

Q:	Ne	oldu?
----	----	-------

'What happened?'

A1: Cadı	hırsız-ı	lanetle-di.	SOV
witch-nom thief-acc curse-past			
'The witch cur	sed the th	nief.'	
A2: #Hirsiz-1	cadı	lanetledi.	OSV
thief-acc v	witch-nor	n curse-past	
A3: <sup>#</sup> Cadı	lanetled	li hırsız-ı.	SVO
witch-nom curse-past thief-acc			
A4: <sup>#</sup> Hirsiz-i	lanetledi	cadı.	OVS
thief-acc curse-past witch-nom			
A5: <sup>#</sup> Lanetledi	hırsız-ı	cadı.	VOS
curse-past thief-acc witch-nom			
A6: <sup>#</sup> Lanetledi	cadı	hırsız-ı.	VSO
curse-past witch-nom thief-acc			

All the sentences in (2) but (2A1) are contextually infelicitious despite the fact that they are also grammatically well formed.

Different types of questions invoke different types of answers as implied by the definition of the *question-answer congruence* given above. We can thus identify constituents that bear new information focus/presentational focus (I will use the term P(resentational)-Focus following Rochemont and Culicover 1990). Gundel (1998) states that P-Focus 'is the part of the sentence that answers the relevant *wh*question (implicit or explicit) in the particular context in which the sentence is used.' P-Focus is not contrastive; it simply asserts the membership of an individual in a set (cf. É.Kiss 1998). Consider the Q/A pair in (3) (P-Focus is marked via caps):

(3)

Q: What did she give to John?

A1: She gave the BOOK to John.

A2: <sup>#</sup>She GAVE the book to John.

The *wh*-phrase in (3) matches the direct object in the answer, which entails that the element that is interpreted as P-Focus is the direct object. Accordingly, only (3)A1 forms a felicitious answer to the question in (3), and under normal circumstances, it is the direct object *the book* in (3) that receives phonological prominence. The Q/A pair in (4) illustrates the distribution of P-Focus in Turkish sentences:

(4)

Q: Cadı kim-i lanetle-di? witch-nom who-acc curse-past 'Who did the witch curse?'

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A1: Cad1 HIRSIZ-I lanetledi	. SOV		
witch-nom thief-acc curse-pas	it		
A2: HIRSIZ-I lanetledi cadı.	OVS		
thief-acc curse-past witch-no	m		
A3: <sup>#</sup> Cadı lanetledi HIRSIZ	Z-I. SVO		
witch-nom curse-past thief-a	2C		
A4: <sup>#</sup> HIRSIZ-I cadı lanetle	edi. OSV		
thief-acc witch-nom curse-	past		
A5: <sup>#</sup> Lanetledi HIRSIZ-I cadı.	VOS		
curse-past thief-acc witch-n	om		
A6: <sup>#</sup> Lanetledi cadı HIRSIZ	-I. VSO		
curse-past witch-nom thief-acc			

The only responses that are felicitious in (4) are those given in (A1) and (A2), where the constituent with P-Focus is placed immediately pre-verbally, as also noted in Demircan (1996), Erguvanlı (1984), Erkü (1983), Göksel (1998), Göksel and Özsoy (2000), Göksel and Kerslake (2005), İşsever (2003), Kennelly (1997), Kornfilt (1997a), Kural (1992), Öztürk (2005), Şener (2007), among others. In all the other responses in (4), the constituent with P-Focus is placed either pre- or post-verbally. Significantly, a non-P-Focus constituent breaks the adjacency between the constituent with P-Focus and the verb in the former case.

P-Focus is generally used in opposition to C(ontrastive)-Focus (Gundel 1998), though, as in the case of P-Focus, a host of different terms are used in the relevant literature (see É.Kiss 1998 for *identificational focus*, Drubig 1994 for *focus operator*). In contrast to P-Focus, which simply asserts the membership of an individual in a set, C-Focus involves selection of a *subset* out of a set of alternatives (see Molnar 2006 for a discussion of the concept of *contrastiveness*). As dicussed in É.Kiss (1998), *wh*-questions can, in principle, be used to identify not only P-Focus but also C-Focus depending on whether the answer is intended to be exhaustive or not. Consider the two sentences in (5), which illustrate the different behavior of C-Focus and P-Focus in Hungarian:

(5)

Q: Hol	jártál	a nyáron? (É.Kis	ss 1998,249-50:11)		
wher	where went.you the summer.in				
'Where	did you go	in the summer?'			
A	1: Jártam	DLASZORSZÁGBAN.			
	went.I I	ıly.to			
Ί	went to I	ALY [among other places].'			
A	2: OLASZ	ORSZÁGBAN jártam .			
Ί	t was ITA	Y where I went.'			

The answer given to the *wh*-phrase in (5)A1 is non-exhaustive, hence P-Focus, and it is placed in the post-verbal field. The answer in (5)A2 is exhaustive (=C-Focus), and placed in the immediately pre-verbal position (notice that the English translation of (A2) is a *cleft* construction, which É.Kiss (1998) claims is the way identificational focus is realized in English particularly when it is not associated with the focus particle *only*.) The Hungarian pattern from (5), however, should not be taken as the illustration of a general pattern for Foci across languages. As discussed later in this Chapter, Turkish Foci behave rather differently from Hungarian.

There are other tests for identifying C-Focus. Lee (2003), for example, uses alternative disjunctive questions as a diagnostic. In particular, if the speaker responds to a single disjunct, as illustrated in the Korean example in (6), the answer is characterized by C-Focus (CT stands for *contrastive topic*. See below for *contrastive topic*):

(6)

Q: aki-ka ton-ul mence cip-ess-ni (ttonun/animyen) phen-u baby-nom money-acc first pick-past-Q (or/if.not) pen-acc mence cip-ess-ni?

first pick-past-Q

'Did the baby pick the money first, or did she pick the pen first?'

A: (aki-ka) ton-ul<sub>Cf</sub> / <sup>?\*</sup>ton-un mence cip-ess-e.

baby-nom money-acc / money-CT first pick-past-dec

'The baby picked the money first/<sup>?\*</sup>money-*CT* first.' (Lee 2003, p.5: 20)

Lee (2003) notes that the responding speaker in (6) keeps the previous speaker's presupposition regarding the alternative question constant, satisfying the expectation that the question will be answered with one disjunct. In utterances with C-Focus, alternative(s) are excluded, and the choice can be understood as exhaustive at the moment of speech. As seen in (6), the object NP can be Casemarked, which is what happens with C-Focus in Korean; it cannot be marked by the (contrastive) topic marker –*un*.

Another discourse-pragmatics notion that will be pertinent to our investigation is C(ontrastive)-Topic. I will use the definition of C-Topic offered in Büring (2003, 2005), though it should be noted that there are different diagnostics that are used to identify C-Topic due to different definitions given in the relevant literature (see the papers in Féry et al. 2007, but also Williams 1997, Molnar 2006, Sauerland 2005, Wagner to appear, for a view that takes C-Topic as 'Topic inside Focus').

According to the definition of C-Topic subscribed to here, a context that favors an interpretation of a constituent as C-Topic is the one in which the hearer

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answers a question that differs from the one being asked.<sup>1</sup> (7) is an example from Büring (2005):

(7)

(What did the pop stars wear?)

The <u>female</u> pop stars wore CAFTANS.

In (7), *female pop stars* are contrasted with male pop stars, and the implicature is that the latter wore something else (see also Krifka 1991 for earlier examples of this sort and the claim that topics of the above sort do not necessarily encode old information).

In an attempt to distinguish C-Topic from C-Focus, Lee (2003) puts forth a test similar to that of Büring (2005) where C-Topic is identified by a preceding *conjunctive question* (recall that C-Focus is preceded by a *disjunctive question*). Lee (2003) suggests that in the case of a C-Topic the speaker deviates from the previous speaker's presupposition regarding the potential topic. (8) illustrates a situation in which the speaker asks about the entire topic referent set 'Bill's sisters,' yet the respondent presupposes a conjunctive question such as 'What did Bill's youngest sister and the rest do?':

<sup>&</sup>lt;sup>1</sup> I assume that constituents that narrow down the current discourse topic and those that change it can be classified as C-Topics. Non-Contrastive Topics, such as Reinhart's (1981) *Aboutness Topics*, will be briefly examined in Section 3.3, but since they appear to display rather similar properties to C-Topics I do not discuss them here separately.

Q: What did Bill's sisters do?

(8)

A: [Bill's youngest sister]<sub>CT</sub> kissed John<sub>F</sub>.

[L+H\*LH%]

The respondent here answers the first conjunct question only, contrary to the questioner's expectation. Importantly, the contrastive contour on *youngest sister* has the implicature 'but Bill's other sisters didn't kiss John' or 'but I don't know what Bill's other sisters did'.

Another discourse-pragmatic notion which is relevant to the present investigation is *discourse-anaphoricity*. Discourse anaphoric elements (henceforth, DAs), which roughly correspond to Vallduvi's (1993) notion of *tail*, mark given/topical/backgrounded information or the *familiarity topics* of Frascarelli & Hinterhölzl (2007), and de Cat (2007), among others. Neeleman and van de Koot (2008) note that such constituents often refer to the current discourse topic, yet they cannot introduce a new discourse topic. Neeleman et al. (2008) offer to relate DAs to expressions that merely index the current topic of discourse as illustrated in (9) (see also Ariel 1990, 1991, Choi 1999) (indices in (9) are mine):

(9)

Maxine<sup>(i)</sup> was introduced to the queen at her<sup>(i)</sup> birthday party.

(Neeleman et al. 2008:2)

While *Maxine* in (9) introduces a new Topic of discourse, the pronominal *her* in the comment indexes the Topic, and therefore it is a DA.<sup>2</sup> The distributional properties of DAs and their interaction with other categories will be investigated in the context of Turkish in the following sections.

## 3. Syntactic structure of information in Turkish

## 3.1 The distribution of C-Topics and C-Foci

Having briefly outlined the basic concepts and terminology to be employed in this thesis, I begin my investigation of Turkish by focusing on the syntactic distribution of C-Topics and C-Foci. In this sub-section, in particular, I apply to Turkish the specific tests offered in Neeleman and van de Koot (2008) (henceforth, NK08) in their investigation of Dutch. I will not present a comparion of NK08's Dutch data to the Turkish data to be introduced in this Chapter, but it is worth noting that the two languages differ in certain respects.<sup>3</sup> Consider now the Turkish example in

<sup>&</sup>lt;sup>2</sup> New Topic, as Neeleman et al. (2008) use it, corresponds to *Shifted Topics* as sometimes noted in the literature. They are different from *Contrastive Topics* I will investigate in this thesis. *Shifted Topics* also differ from *Continuing Topics* as they are typically encoded via full NPs whereas the latter may be encoded through pronouns besides full NPs (see de Swart & de Hoop 2000).

<sup>&</sup>lt;sup>3</sup> It is useful to reiterate that the constituents that correspond to the *wh*-phrases in NKo8's Dutch data and my Turkish data in the main text are construed as C-Focus assuming that a set of alternatives that are known to the speaker and the hearer is questioned (by the use of a *wh*-phrase), and the hearer's answer/choice is understood as exhaustive.

(10):4

(10)

Can'dan n'aber? O ne yedi partide?

What about John? What did he eat at the party?

Valla Can'ı bilmiyorum ama...

Frankly, I don't know about John, but...

<u>Aylin</u> **DOLMA-LAR-DAN** ye-di.

A-nom dolma-pl-abl eat-past

'Aylin ate from the dolmas.'

<sup>&</sup>lt;sup>4</sup> C-Topics like those in (10), which surface when a speaker decides to switch topic to another member of the set presupposed, appear typically with a H+L\* H- tone contour, as in the PRAAT extraction given in (11). Note that this contour is associated with a boundary tone, which presumably indicates the right edge of the relevant phonological phrase ( $\phi$ P). A word of caution is in order here: Phonological prominence/stress is an important diagnostic in identifying Focus, yet not every constituent that bears phonological prominence/stress is Focus. In Turkish, any pre-verbal XP may in principle receive phonological prominence/stress. Readers with native speaker intuitions should thus pay extra attention to how the contexts are designed, and what kind of phonological/prosodic properties a certain discourse function may be associated with.

Same context as (10)...

(n)

## <sup>#</sup>DOLMA-LAR-DAN <u>Aylin</u> t<sub>dolmalardan</sub> ye-di.

dolma-pl-abl A-nom eat-past

The contrast of felicity in the responses in (10) and (12) demonstrates that an insitu C-Focus may follow a C-Topic whereas C-Focus cannot move across C-Topic.

NKo8 provide a test that corroborates the classification of C-Topics versus C-Foci in that only the latter can be replaced by a negative quantifier.<sup>5</sup> As the felicity

<sup>&</sup>lt;sup>5</sup> It has been commonly noted in the literature that non-referring expressions are not 'good' topics (cf. Reinhart 1981, Lambrecht 1994 among many others). A practical consequence of this restriction is that while definite descriptions can be topics, universally quantified noun phrases and anaphors are unlikely Topics (see Pesetsky 1987; Lambrecht

contrast between (13)a and (13)b shows, a C-Topic cannot be replaced in Turkish by a negative quantifier whereas a C-Focus can be:

(13)

Can'dan n'aber? O ne yedi partide? What about John? What did he eat at the party? Can'ı bilmiyorum ama... Well, I don't know about John, but... a. <sup>#</sup>Kimse DOLMA-LAR-DAN ye-me-di. noone-nom dolma-pl-abl eat-neg-past 'Nobody ate from the dolmas.' b. <u>Aylin</u> HİÇBİRŞEY-DEN ye-me-di. A-nom anything-abl eat-neg-past

'Aylin did not eat from anything.'

Importantly, a C-Topic can be (in fact, *must be*) moved across a C-Focus; a C-Topic cannot follow an in-situ C-Focus in Turkish, as illustrated below:

<sup>1994,</sup> p. 156; Erteschik-Shir 2007). Erkü (1983:130) notes in her discussion of Turkish that "...for an expression to assume the topic function [in Turkish], it must be the case that either the referent of this expression be uniquely identifiable by the speaker and the hearer (i.e., the referent is definite) or this referent belong to a uniquely identifiable set (i.e., a definite set)." The latter condition makes it possible for indefinite NPs in Turkish to be topics to the extent that they belong to a definite set.

(14)

Çorbadan n'aber? Ondan içen oldu mu peki?

What about the soup? Has anyone eaten that?

Valla çorbadan haberim yok ama...

Frankly, I don't know about the soup, but...

a. **<sup>#</sup>AYLİN** <u>dolma-lar-dan</u> ye-di.

A-nom dolma-pl-abl eat-past

'Aylin ate from the dolmas.'

b. <u>Dolma-lar-dan</u> **AYLİN** t<sub>dolmalardan</sub> ye-di.

dolma-pl-abl A-nom eat-past

Replacing the moved C-Topic in (14) with a negative quantifier is impossible, which provides support for its C-Topic status:

(15)

Çorbadan n'aber? Ondan içen oldu mu peki?What about the soup? Has anyone eaten that?Valla çorbadan haberim yok ama...Frankly, I don't know about the soup, but...#<u>Hiçbirşey-den</u> AYLİN t<sub>hiçbirşeyden</sub> ye-me-di.nothing-ablA-noméAylin ate from nothing.'

The infelicity of the response in (15) further supports the generalization that a C-Topic cannot follow a C-Focus in Turkish. The only licit order is then C-Topic»C-Focus.

Finally, I would like to introduce some observations on the interaction of VPinternal objects with Topic and Focus. Note first that the unmarked order of objects in Turkish depends on whether or not a DO bears Case. If a DO is bare (i.e., Caseless), the order is IO»DO (Erguvanlı 1984, Kural 1992, Kornfilt 1997a, Göksel and Kerslake 2005, among many others). If a DO bears accusative Case, it is not immediately clear what the unmarked word order is since in ditransitive sentences in which both the DO and IO are overt, the linear order is dependent on the discourse function of the objects as I show below (see Section 5.2 for more discussion).

In the investigation to follow, I only consider accusative marked DOs. The sentences in (16) below have a ditransitive verb, where the context is set up so as to favor an interpretation of the IO as C-Focus and the DO as C-Topic:

(16)

Antika masaya ne oldu peki? Deden onu kime bırakmış?

What about the antique table? Who has your granddad bequeathed that to?

Valla antika masadan haberim yok ama...

Frankly, I do not know about the antique table but...

- a. ... <u>cep saat-i-ni</u> BABA-M-A bırak-mış.
  pocket-watch-3s.poss-acc dad-1s.poss-dat bequeathed-e.past
  'My granddad bequeathed his pocket-watch to my dad.'
- b. \*... BABA-M-A <u>cep saat-i-ni</u> t<sub>babama</sub> bırak-mış.
  dad-ıs.poss-dat pocket-watch-3s.poss-acc bequeath-e.past
  'My granddad bequeathed his pocket-watch to my dad.'

The contrast in the felicity in (16) shows that C-Focus must follow C-Topic, and it does not matter whether they are associated with subj-obj/obj-subj pairs or DO-IO/IO-DO pairs.

For the sake of completeness, I consider below another possible situation where the context is set up to get the IO interpreted as a C-Topic and the DO as C-Focus:

(17)

Babandan n'aber? Deden ona ne bırakmış?

What about your father? What has granddad bequeathed to him?

Valla babamdan haberim yok ama...

Frankly, I do not know about my dad but ...

a. ... <u>anne-m-e</u> **CEP SAAT-İ-Nİ** bırak-mış.

mom-1sg.poss-dat pocket-watch-3sg.poss-acc bequeath-e.past 'My granddad bequeathed his pocket-watch to my mom.'

# b. \*... CEP SAATİ-Nİ <u>anne-m-e</u> bırak-mış. pocket-watch-3sg.poss-acc mom-1sg.poss-dat bequeathed-e.past 'My granddad bequeathed his pocket-watch to my mom.'

The result of the discussion so far is all the same: C-Topics must precede C-Foci in Turkish no matter what grammatical function they bear.<sup>6</sup>

I turn now to an investigation of discourse anaphoric elements in Turkish.

## 3.2 The distribution of discourse anaphoric elements in Turkish

As noted above, discourse anaphoric elements/DAs typically mark given information in discourse, and pronominals are prototypical examples of DAs. However, one has to be extra careful regarding such elements in Turkish as Turkish is a language that allows multiple strategies to accommodate DAs.

Above all, Turkish avails itself of extensive use of *pro*-drop and argument ellipsis. In the unmarked case, then, a DA may be elided unless other

- (i) #... CEP SAATİ-Nİ <u>kimse-ye</u> bırak-ma-mış.
   pocket-watch-3sg.poss-acc anybody-dat bequeathed-neg-e.past
   'He did not bequeath his pocket watch to anybody.'
- (ii) ... <u>anne-m-e</u> HİÇBİRŞEY(-İ-Nİ) bırak-ma-mış.
   mom-dat nothing(-3s.poss-acc) bequeath-neg-e.past
   'He did not bequeath anything (of his) to my mom.'

<sup>&</sup>lt;sup>6</sup> Negative quantifier replacement test confirms that (17)a is the felicitous response in the relevant context while (17)b is not. The Dative NP *my mom* in (17) cannot be replaced by a negative quantifier (i), whereas the direct object NP in (17) can be replaced by it (see (ii)):

considerations prevent its elision. (18) illustrates a sentence from Turkish which involves ellipsis of multiple constituents that function as DAs:

(18)

A: I heard that Mete gave John's book back to him.

B: Doğru, [Mete/pro] [John-un kitab-1-n1] [John/on-a] VER-Dİ.
right M-nom J-gen book-2s.poss-acc J-/he-dat give-past
'You're right, Mete *did* give John's book back to him.'

Another strategy concerning DAs in Turkish is to place them in the post-verbal field (cf. Erguvanlı 1984; Erkü 1983; Göksel 1997; Kornfilt 1997b, 2005; Kural 1992, 1997; Şener 2005, 2006). DAs placed in the post-verbal field do not have the exact same status as elided DAs (one being overt and the other covert), but importantly for our purposes they both show a clear contrast with pre-verbally positioned DAs I introduce right now.

DAs placed in the pre-verbal domain are subject to certain distributional restrictions that are not relevant to post-verbal DAs (elided DAs are exempt from such restrictions being phonologically null). Consider the data in (19), where the pronominal is in an anaphoric relation with *Paul Auster's book* signaling that the pronominal is a DA, having already been mentioned in the context:

Yeni aldığın Paul Auster kitabını ne yaptın? What did you do with the new Paul Auster book you bought?

- a. <sup>#</sup>YARIN <u>o-nu</u> oku-ma-ya başla-yacağ-ım.
  tomorrow it-acc read-inf-dat begin-fut-ısg
  'I will begin to read it tomorrow.'
- b. <u>o-nu</u> YARIN oku-ma-ya başla-yacağ-ım.

it-acc tomorrow read-inf-dat begin-fut-1sg

'I will begin to read it tomorrow.'

As indicated by the felicity contrast in (19), placing the DA in a position preceding and contiguous to the V is not possible when there is another constituent that encodes new information (=P-Focus), like the temporal adverb *yarın* 'tomorrow' in (19). The contrast between (19)b and (19)a indicates that a DA cannot be Vadjacent in the presence of a Focus element.

The DA from (19)b may actually be placed in the post-verbal field or elided, as illustrated in (20):

(20)

Same context as (19)...

- a. YARIN oku-ma-ya başla-yacağ-ım <u>o-nu</u>.
  tomorrow read-inf-dat begin-fut-ısg it-acc
  'I will begin to read it tomorrow.'
- b. YARIN oku-ma-ya <u>o-nu</u> başla-yacağ-ım . tomorrow read-inf-dat it-acc begin-fut-ısg
- 'I will begin to read (it) tomorrow.'

It should be noted that nothing that bears P-/C-Focus in Turkish can be positioned in the post-verbal field (cf. Erguvanlı 1984; Göksel and Kerslake 2005; Kural 1997; Kornfilt 1997b; Şener 2005, 2006, among others).<sup>7</sup>

Taking the impossibility of *C*-Topics and *C*-Focus in the post-verbal field seriously, I propose that the property that distinguishes pre-verbal and post-verbal

(i) <u>C-Topic</u>

Can'dan n'aber? O ne yedi partide? What about John? What did he eat at the party? Can'ı bilmiyorum ama... Well, I don't know about John, but...

\*DOLMA-LAR-DANye-diAylin.dolma-pl-ableat-past A-nom'Aylin ate from the dolmas.'

<sup>&</sup>lt;sup>7</sup> As a matter of fact it is not only Foci; C-Topics (see below), A-Topics and Shifted Topics are also excluded from the post-verbal field in Turkish. An example that is illicit with a C-Topic in the post-verbal field is given below:

DAs is [contrast]. We have already seen that contrastive elements are possible in the pre-verbal field. As for DAs, pre-verbal DAs are *contrastive* while their post-verbal and (of course) elided counterparts are not.

The distribution of DAs in Turkish clauses is then as follows (the dots indicate potentially intervening other discourse functions):<sup>8</sup>

(21)

... [Pre-verbal DAs<sub>[+contrast]</sub>] » ... V » [Post-verbal DAs<sub>[-contrast]</sub>]

(21) receives support from the prosodic properties of pre-verbal DAs as opposed to post-verbal ones. Only pre-verbal DAs receive phonological prominence of some sort, which is why they are placed in the pre-verbal field.<sup>9,10</sup> Below I introduce

<sup>&</sup>lt;sup>8</sup> It has been argued that right-dislocated elements that are identified as *familiarity topics* in Frascarelli & Hinterhölzl (2007), which correspond to DAs in the present study, can be right dislocated, contrary to C-/A-/Shifted-Topics.

<sup>&</sup>lt;sup>9</sup> Recall that *phonological prominence* is not an exclusive property of Focus. I have shown so far and will continue to do so in the remainder of this chapter that Focus canNOT expand into the entire pre-verbal field in Turkish.

<sup>&</sup>lt;sup>10</sup> Note that post-verbal constituents in Turkish are (relatively) high in the structure, see Kornfilt (1997b, 2005), Kural (1997), Şener (2005, 2006), see also Section 5.1-5.3 of this chapter. There are also a number of arguments that show that post-verbal constituents in Turkish are derived via movement. The strongest argument for this claim comes from the island sensitivity of post-verbally placed elements. Below is an example that shows that a DO, which comes to hold a post-verbal position, cannot be legitimately extracted from a PP adjunct (see Kornfilt 1997b, Kural 1997, Sener 2005):

other distributional properties of pre-verbal DAs in Turkish.

Just like they cannot follow P-Focus, DAs cannot follow C-Focus. The data in (22) show that a string *C-Focus»DA* is not possible:

(22)

Can'dan n'aber? O ne yedi partide? What about John? What did he eat at the party? Onu bilmiyorum ama... I don't know about that, but... <sup>#</sup>Aylin DOLMA-LAR-DAN parti-de ye-di. A-nom dolma-pl-abl party-loc eat-past 'Aylin ate from the dolmas at the party.'

The infelicity of the response in (22) with the order *C-Focus»DA»V* can be interpreted as parallel to the impossibility of the order *P-Focus»DA»V* in Turkish.

The Q/A pair in (23) further shows that a DA cannot precede a (moved) C-

 (i) \*Pelin [[öğretmen t<sub>i</sub> on-a hediye et-me-diğ-i] için]
 P-nom teacher-nom she-dat gift give-neg-noml-acc for üzül-dü kitab-ı<sub>i</sub>.
 get.upset-past book-acc

'Pelin was upset because the teacher did not give her the book as a gift.' The island sensitivity of post-verbally placed XPs extends to other strong islands, such as adjunct clauses (see the references given above). I contend that this evidence is sufficient to assume that post-verbal constituents are derived as a result of movement derivations. Topic either, and once again postposing and ellipsis of the DA produces a felicitous output:

(23)

Corbadan n'aber? Ondan içen oldu mu partide? What about the soup? Has anyone eaten that at the party? Valla çorbadan haberim yok ama... Honestly, I don't know about the soup, but... a. <sup>#</sup>Parti-de dolma-lar-dan AYLİN t<sub>partide</sub> t<sub>dolma-lar-dan</sub> ye-di. party-loc dolma-pl-abl A-nom eat-past 'Aylin ate from the dolmas at the party.' b. <u>Dolma-lar-dan</u> AYLİN  $t_{partide} t_{dolma-lar-dan}$  ye-di parti-de. dolma-pl-abl A-nom eat-past party-loc c. <u>Dolma-lar-dan</u> <del>parti-de</del> **AYLİN** *t*<sub>partide</sub> *t*<sub>dolma-lar-dan</sub> ye-di. dolma-pl-abl party-loc A-nom eat-past

Though DAs cannot precede C-Topics and cannot follow P-/C-Focus, they may be sandwiched between C-Topics and P-/C-Focus:

(24)

Çorbadan n'aber? Ondan içen oldu mu partide? What about the soup? Has anyone eaten that at the party? Valla çorbadan haberim yok ama...

Honestly, I don't know about the soup, but... <u>Dolma-lar-dan parti-de</u> **AYLİN**  $t_{partide} t_{dolma-lar-dan}$  ye-di. dolma-pl-abl party-loc A-nom eat-past 'Aylin ate from the dolmas at the party.'

Finally, multiple DAs may linearly precede a C-Focus in the absence of a C-Topic:

(25)

Dün akşam partine kim geldi? Duydum ki Filiz'le Aylin gelmemiş.

Who did come to your party last? I've heard that Phylis and Eileen didn't.

Inanmayacaksın ama...

You wouldn't believe it but...

dün akşam parti-m-eYALNIZCA PELİN  $t_{dun aksam} t_{parti-m-e}$  gel-di.last night party-1s.poss-dat only P-nomcome-past'Only Pelin showed up at my party last night.'

I demonstrate very briefly in the next sub-section that the left peripheral character of Topics is not limited to C-Topics in Turkish.

## 3.3 Aboutness Topics

Neeleman et al. (2008) note that the *tell me about X* test (*a la* Reinhart 1981) forces an X(P) to be construed as an *A*(*boutness*) *Topic* in the reply. As illustrated in (26) by the double underlined constituent, an A-Topic in Turkish must be placed in the left periphery of its clause (see also Erkü 1983, Erguvanlı 1984, İssever 2003):

(26)

Yeni arabandan bahsetsene biraz.

Tell me a bit about your new car.

- a. <u>Araba<sub>i</sub>-yı</u> geçen hafta bir arkadaş-ım-dan t<sub>i</sub> al-dı-m...
  car-acc last week a friend-ıs.poss-abl buy-past-ısg
  b. <sup>#</sup>Geçen hafta <u>araba<sub>i</sub>-yı</u> bir arkadaş-ım-dan t<sub>i</sub> al-dı-m...
- last week car-acc a friend-1sg.poss-abl buy-past-1sg c. <sup>#</sup>Geçen hafta bir arkadaş-1m-dan <u>araba<sub>i</sub>-y1</u> al-d1-m...

last week a friend-1sg.poss-abl dog-acc take-past-1sg 'I bought the car from a friend of mine last week.' The observation that both A-Topics and C-Topics hold a position at the left edge of their clause in Turkish extends to Topics that are morphologically marked by the topic marker -sA, as shown in (27):<sup>10</sup>

(27)

Pelin yarın bir konuşma verecek bölümde, haberin var mı?

Pelin will give a talk in the department tomorrow, did you know about that?

Valla yarından haberim yok ama...

Frankly, I do not know about tomorrow

<u>haftaya</u> <u>Pelin</u> BİR KONFERANS-TA konuş-acak, o-nu bil-iyor-um next week P-nom a conference-loc speak-fut that-acc know-pre-1s 'Next week, Pelin will (give a) talk at a conference, I know that for sure.'

## 3.4 More on Focus in Turkish and its sub-types

We have already seen in Sections 3.1 and 3.2 that C-Focus must follow C-Topics and DAs in Turkish (at least pre-verbal DAs). It was also noted, in passing, in Section 2 that P-Focus must be left adjacent to the V. The prediction is then that P-Focus should not be different from C-Focus in terms of its distribution, hence

<sup>&</sup>quot; Erguvanlı (1984) states that -sA marked (and also -dA marked) categories are strong topics (in her terminology), which invoke contrastive readings. Erguvanlı's (1984) strong topics appear to be a superset of C-Topics I have been examining.

follows C-Topics. As the dialogue in (28) shows, this is indeed the case:<sup>12</sup>

(28)

Filiz-in kardeşleri ne iç-ti parti-de? What did Filiz's sisters get to drink at the party?

Valla tüm kardeşlerden haberim yok ama...

Frankly, I do not know about all the sisters but...

a. <u>Filiz-in en küçük kardeş-i</u> **RAKI-DAN** iç-ti.

F-gen most young sister-3s.poss rakı-abl drink-past

b. **\*RAKI-DAN** <u>Filiz-in en küçük kardeş-i</u> iç-ti.

rakı-abl F-gen most young sister-3s.poss drink-past 'Filiz's youngest sister drank (from the) rakı.'

The general conclusion that can be drawn is that Focus in Turkish must be left adjacent to the verb regardless of the sub-type of Focus.<sup>13</sup>

<sup>&</sup>lt;sup>12</sup> Suppose the following context for (28): The speaker does not know what drinks were served at the party, and only makes the inference that alcohol was served after having seen that Filiz' sisters all looked tipsy. Given this, the speaker does not necessarily have a specific set of alcoholic beverages in mind when s/he utters (28), which forces a P-Focus interpretation of the non-*wh* in (28) corresponding to the *wh*-phrase in the question.

<sup>&</sup>lt;sup>13</sup> Göksel and Özsoy (2000) make a different claim regarding Focus-V adjacency, which may be due to a variation among speakers. One observation that suggests that there may actually be a speaker variation regarding the positioning of C-Focus in Turkish concerns a dissimilarity among speakers in terms of the prosodic structure of sentences with C-Focus

I would like to introduce now two sub-types of C-Focus, namely *Corrective Focus*, and C-Focus that is associated with focus particles such as *yalnızca* 'only' (*exhaustively identified* in the sense of É.Kiss 1998). The main purpose of the examination of *Corrective* C-Focus and *exhaustively identified* C-Focus is that they both require V-adjacency. Notice, however, that I will not discuss these sub-types presented here in the actual analysis to be developed in Section 4 essentially because they display an identical behavior to 'regular' C-Focus (I call it *bare* C-Focus) studied in the previous sections in terms of V-adjacency.

Nevertheless, *Corrective* C-Focus deserves consideration here as a sub-type of C-Focus because it differs from *bare* C-Focus in one respect, in particular *Corrective Focus* does not allow *multiplicity*, unlike *bare* C-Focus. *Exhaustively identified* C-Focus (which is different from regular C-Focus being associated with the *yalnızca* 'only') shows an identical behavior to *bare* C-Focus in all respects, but there is one interesting observation presented in the end of Section 3.4.2 that makes it worth examining.

<sup>(</sup>thanks to Asli Göksel for the discussion of this issue). In a nutshell, speakers who do not require C-Focus to be left-adjacent to the verb allow a sharp fall of intonation after the constituent bearing C-Focus, and any XP that comes in between C-Focus and the V is substantially *distressed*. Speakers whose judgments are reported here do not allow such a sharp fall in intonation following a Focus constituent. A sharp fall is only possible *after* the verb for these speakers, if there is lexical material in the post-verbal field, not otherwise. I will limit my attention to the dialect/variant of Turkish that requires adjacency of Focus to V.

## 3.4.1 Corrective Focus

An XP that is focused for the purposes of 'correcting' or 'forcing the hearer to shift her background assumptions' receives a more prominent stress than those that are focused presentationally/informationally. Below, I give two examples of this type of focus:

(29)

A: (Duyduğum kadarıyla) Pelin'i çağırmışsın partiye.

(I have heard that) you invited Pelin to the party.

B: Pelin-i çağır-ma-dı-m, **AYLİN-İ** çağır-dı-m.

P-acc invite-neg-past-1sg A-acc invite-past-1sg

'I did not invite Pelin. I invited AYLIN.'

(30)

A: En çok ne yediniz Italya'da? Risotto mu?

What did you mostly eat in Italy? Risotto?

B: Hayir, **PİZZA** ye-di-k.

No pizza eat-past-1pl.

'No, we ate **PIZZA**.'

I identify those NPs that are in capital letters in (29) and (30) as *Corrective Focus*. It is quite obvious that the NPs that are classified as *Corrective Focus* in the answers in (29) and (30) do not force an exhaustive identification interpretation, though such interpretation is not completely missing with *Corrective Focus*.<sup>14</sup>

As it turns out, an NP that is associated with *Corrective Focus* must also be placed in the immediately pre-verbal position, as illustrated in (31):

(31)

A: Dün Pelin-i gör-müş-şün galiba sinema-da.
yesterday P-acc see-e.past-2sg allegedly movies-loc
'Reportedly, you saw Pelin at the movies yesterday.'

B: Hayır, **AYLİN-İ** gör-dü-m, **PELİN-İ** değil.

no, A-acc see-past-1sg P-acc not

'No, I saw Aylin, not Pelin.'

B': <sup>#</sup>Hayır, AYLİN-İ sinema-da gör-dü-m, PELİN-İ değil.

no, A-acc movies-loc see-past-1sg P-acc not 'No, I saw Aylin at the movies, not Pelin.'

<sup>14</sup> This is illustrated in (i):

(i) A: Pelin uyu-ma-dan önce bir elma ve bir armut ye-r.
 P-nom sleep-neg-abl before one apple and one pear eat-aor
 'Pelin eats an apple and a pear before she goes to sleep.'

B: Hayır, Pelin asla armut ye-me-z, YALNIZCA ELMA ye-r.
No, P-nom never pear eat-neg-aor only apple eat-aor
'No, Pelin never eats pears, she only eats apples.'

38

(31)a,b show a contrast in terms of contextual felicitousness, which is expected given what we know about the position of Focus in Turkish. The locative NP *sinema-da* 'at the movies' denotes pragmatically given information (as explicated by its placement in the post-verbal field in *A*'s utterance). Its *foregrounding* (via its placement in the pre-verbal field) in B's utterance is thus unexpected, especially under the present circumstances where there is actually another constituent that receives (*Corrective*) Focus.

Importantly, however, I am not suggesting that the 'promotion' of given /backgrounded information in the discourse to foreground is impossible. As a matter of fact, it is possible as can be seen in (32) below. In (32), speaker *A* places a locative NP in the post-verbal field as it corresponds to backgrounded/given information in A's experience/knowledge state. *B*'s response implies that this is not factually true in *B*'s experience, which is indicated by the *foregrounding* of the relevant NP as *Corrective Focus*:

(32)

- A: Dün Pelin-i gör-müş-şün galiba sinema-da.
  yesterday P-acc see-e.past-2sg allegedly movies-loc
  'Reportedly, you saw Pelin at the movies yesterday.'
- B: ŞARKÜTERİ-DE gör-dü-m Pelin-i, sinema-da değil.
  delicatessen-loc see-past-1sg P-acc movies-loc not
  'No, I saw Pelin in the delicatessen, not in the movies.'

Returning to the dialog in (31) with the above observation in mind, the problem with (31)b is that B/B' already defies A's statement about the person allegedly seen by B/B'. It turns out that the issue is not the foregrounding of backgrounded information, but the focusing (to correct) of backgrounded information in the presence of another *Corrective Focus* in a single statement. As shown by (33), stacking two NPs with *Corrective Focus* in the immediately pre-verbal position yields a rather degraded output in Turkish:

(33)

A: Dün Pelin-i gör-müş-şün galiba sinema-da.
yesterday P-acc see-e.past-2sg allegedly movies-loc
'Reportedly, you saw Pelin at the movies yesterday.'

B: <sup>?\*</sup>Hayır, AYLİN-İ, ŞARKÜTERİ-DE gör-dü-m Pelin-i, sinema-da değil.

no A-acc delicatessen-loc see-past-1sg P-acc movies-loc not 'No, I saw Aylin in the delicatessen; not Pelin, and not in the movies.'

A more natural dialog would be as in (34), where each NP with a *Corrective Focus* reading appears in a distinct utterance:

A: Dün Pelin-i gör-müş-şün galiba sinema-da.
yesterday P-acc see-e.past-2sg allegedly movies-loc
'Reportedly, you saw Pelin at the movies yesterday.'

B: Hayır, AYLİN-İ gör-dü-m, PELİN-İ değil,

no A-acc see-past-1s P-acc not,

ve dahası **ŞARKÜTERİ-DE** gör-dü-m on-u **SINEMA-DA** değil. and moreover delicatessen-loc see-past-1sg she-acc movies-loc not 'No, I saw Aylin, not Pelin. Besides, I saw her in the delicatessen, not in the movies.'

Having briefly discussed the basics of Corrective Focus, I now turn my attention to C-Focus associated with the focus particle *yalnızca* '*only*' in Turkish.

## 3.4.2 C-Focus associated with yalnızca 'only'

I set out by showing that an object NP with the discourse status C-Focus can be associated with *yalnızca* as indicated by the felicity of the response in (35):

(35)

Can'dan n'aber? O ne yedi partide?

What about John? What did he eat at the party?

Can'dan haberim yok ama...

I don't know about John, but...

AylinYALNIZCA DOLMA-LAR-DANye-di.A-nomonlydolma-pl-ableat-past'Aylin only ate from the DOLMAS.'

(35) shows that C-Focus associated with *yalnızca* linearly follows C-Topic.

The infelicity of the response in (36) demonstrates the parallel between bare C-Focus and C-Focus associated with *yalnızca*; the latter must also follow C-Topic:

(36)

Çorbadan n'aber? Ondan içen oldu mu peki?
What about the soup? Has anyone eaten that?
Valla çorbadan haberim yok ama...
Honestly I don't know about the soup, but... **\*YALNIZCA AYLİN** <u>dolma-lar-dan</u> ye-di.
only A-nom dolma-pl-abl eat-past
'Only Aylin ate from the dolmas.'

Recall from Section 3.1 that a C-Focus cannot move across a C-Topic. The same also holds for C-Foci associated with *yalnızca*:

(37)

Can'dan n'aber? O ne yedi partide? What about John? What did he eat at the party? Onu bilmiyorum ama... I don't know about that, but... **\* YALNIZCA DOLMA-LAR-DAN** <u>Aylin</u> t<sub>yalnızca dolmalardan</sub> ye-di. only dolma-pl-abl A-nom eat-past 'Aylin only ate from the dolmas.'

The infelicity of the response in (38) shows that *yalnızca* associated C-Focus shows a clear parallelism to *bare* C-Foci as it does not permit DAs to disturb its adjacency to V:

(38)

Can'dan n'aber? O ne yedi partide?

What about John? What did he eat at the party?

Onu bilmiyorum ama...

I don't know about that, but...

\*<u>Aylin</u> YALNIZCA DOLMA-LAR-DAN *parti-de* ye-di.
 Aylin only dolma-pl-abl party-loc eat-past
 'Aylin ate the dolmas at the party.'

The findings so far in this section provides support for the general empirical claim that Focus in Turkish, no matter what sub-type it is, must be left adjacent to the V.

One last observation that I would like introduce in this section concerns sentences that have multiple C-Foci with an exhaustive identification construal. The major finding we attain is this: Despite the fact that association of each C-Focus with a focus particle is possible in contexts in which the use of multiple C-Foci with exhaustive identification is forced, one focus particle that is right adjacent to the leftmost (or highest) XP is sufficient to derive an exhaustive identification interpretation for all C-Foci in it scope. This is illustrated in (39), where the context is designed to force all XPs to be interpreted as exhaustively identified:

#### (39)

I know that, in her literature class last week, my wife asked her three students, Pelin, Pinar, and Can each to read either a book by Orhan Pamuk or an essay by Paul Auster. Wondering about the outcome, I ask my wife today:

A: What happened with that reading assignment of yours from last week?

#### B: YALNIZCA PELİN, (YALNIZCA) KITAB-I oku-muş.

only P-nom book-acc read-e.past 'Apparently, only Pelin read the book.' Lit: 'It was only Pelin who read only the book.' B': <u>Kitab-1</u>, YALNIZCA PELİN oku-muş.
book-acc only P-nom read-e.past
'As for the book, apparently, only Pelin read it.'

B": **\*YALNIZCA PELİN** oku-muş <u>kitab-1</u>. only P-nom read-e.past book-acc 'Apparently, only Pelin read the book.'

The perfect felicity of (39)B shows that an XP may intervene between a C-Focus NP and the V if the intervening XP has a C-Focus interpretation as well. This is indeed what the context demands in (39), where the intervening object NP is made contrastive by placing *the book by Orhan Pamuk* against *the essay by Paul Auster*. The infelicity of (39)B" is also expected given that the post-verbal field cannot host contrastive XPs (see Section 3.2). The felicity of (39)B' is also not surprising given that Topics can be contrastive as well, and the speaker in (39)B' chooses to present one of the alternatives (i.e., *the book [by Orhan Pamuk*]) by contrastively topicalizing it, which, as is typical with C-Topics, implies the presence of alternatives (as is made explicit by its English translation).

To control the validity of the above claim regarding (39), I introduce another example in (40) where the context is designed to coerce a non-C-Focus interpretation of lower XPs (=discourse anaphoric) with the leftmost XP, which is right adjacent to the focus particle *yalnızca*, having a C-Focus interpretation. As

45

shown by (40)B, such a sentence cannot be felicitously uttered in this particular context:

(40)

I know that my wife asked Pelin, Pinar, and Can each to read a famous book by Orhan Pamuk titled 'White Castle' in her literature class last week. Wondering about the outcome, I ask my wife today:

- A: What happened with that reading assignment of yours from last week?
- B: \*YALNIZCA PELİN <u>kitab-1</u> oku-muş.
   only P-nom book-acc read-e.past
   'Apparently, only Pelin read the book.'
- B': <u>Kitab-i</u> **YALNIZCA PELİN** oku-muş. book-acc only P-nom read-e.past 'Apparently, only Pelin read the book.'
- B": YALNIZCA PELIN oku-muş <u>kitab-ı</u>.
  only P-nom read-e.past book-acc
  'Apparently, only Pelin read the book.'

The infelicity of (40)B actually confirms an observation that we have made before, which is that no XP with discourse anaphoric/given information can intervene between an NP that bears C-Focus and the V. The only difference in the above example is that C-Focus is obligatorily exhaustively identified due to its association with *yalnızca*. Any string in which the discourse anaphoric NP is not an intervener is good, as (40)B' and (40)B" show.

The felicity of (40)B" is also worthy of noting especially in the face of the infelicity of (39)B". Recall that the context in (39) was designed to make the object NP contrastive, and accordingly its impossibility in the post-verbal field follows given that [contrast] is not possible in the post-verbal field in Turkish. The felicity of (40)B" provides further support for this claim, as the object NP is not [contrastive] and is perfectly felicitous in the post-verbal field.

### 3.5 Interim summary and outlook

The investigation in this section has revealed the following facts about Turkish:

(41)

- C-Topics must precede (C-/P-)Focus regardless of the grammatical function of the constituents. This holds for both movement and nonmovement contexts. That is to say, (C-/P-)Focus cannot move across C-Topic.
- Morphologically marked C-Topics and A-Topics must be placed at the left edge of their clauses just like morphologically unmarked C-Topics.
- DAs linearly follow (C-)Topics (in the presence of a C-Topic) and precede C-/P-Focus in the pre-verbal field, and follow any other XP with any other function when they are in the post-verbal field. Pre-verbal

DAs are contrastive while post-verbal ones are not.

- Focus is V-adjacent no matter what sub-type Focus belongs to.
- Multiple C-Foci (adjacent to V and one-another) can be interpreted exhaustively to the extent that they are all within the scope of a single focus particle.

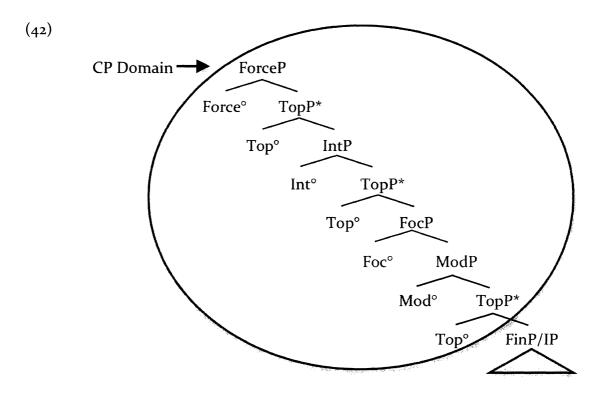
I now turn to developing an analysis of the these findings focusing on the question of how syntactic structures are mapped to discourse-pragmatic functions.

# 4. Mapping of syntax to discourse

## 4.1 Peripheries, cartographies, and non-peripheries in Turkish

The proposal I develop in this dissertation takes as its starting point the idea of *clausal cartography* popularized in Rizzi (1997) (and refined in a number of papers by Rizzi 2001, 2004, 2006, Belletti 2004, Beninca' and Polletto 2004, Frascarelli and Hinterhölzl 2007, among others), although it departs from Rizzi's (1997) original proposal and others mentioned above in certain respects in the implementation.

An essential property of the *cartography* approaches to clausal structure is that they assume a transparent one-one mapping of syntax to discourse. It is transparent because mapping is from specifically identified syntactic positions to specific discourse functions. In the articulated CP structure suggested in Rizzi (2004) given in (42), for example, the specifier position of Top(ic)P is mapped exclusively onto a Topic function, and the specifier position of Foc(us)P is mapped exclusively onto a Focus function, and so on:



There is a unique Focus projection sandwiched between multiple Topic projections, which are recursive (indicated by the Kleene star in (42)).

The existence of languages such as Gungbe, Japanese, Tzotzil where focus and topic related morphemes exist has also been taken as supportive evidence for the postulation of functional projections such as TopP and FocP (see Aboh 1998, 2004 for Gungbe, Aissen 1992 for Tzotzil, and Miyagawa 2007 for Japanese): ... do Kofi ya gankpa me we kponin le si I do. (Gungbe) ... that Kofi Top prison in Foc policemen PL shut him there '... that policemen shut Kofi in prison.' [Rizzi 2004: 238]

Rizzi (1997) adopts a *Criterion Approach* to Last Resort, where Last Resort is satisfied through an (A'-) moving category that lands in the specifier position of a specific head; This analysis does not resort to feature checking. However, Rizzi makes it clear in later work (Rizzi 2004, 2006; Rizzi and Shlonsky 2007) that his general approach is not incompatible with a feature-driven system.

In this dissertation, I assume that a cartographic approach to the mapping of syntactic structures to discourse functions is on the right track in its essentials (for alternative approaches to discourse mapping that do not appeal to clausal cartographies see e.g. Bobaljik and Wurmbrand 2008, Neeleman and van de Koot 2008, Wagner to appear, Wurmbrand 2010, among others). The articulated structure of CP that I will propose for Turkish will be slightly different from that of Rizzi's (2004) given in (42), however, I do adopt the general idea that the CP domain encompasses an articulated functional structure (see Section 4.2.2).

In what follows, I address two issues that will be relevant to the proposal I develop. The first one concerns the role of features in syntactic computation and how they are exploited, while the second one focuses on the locality restrictions on syntactic computation.

(43)

## 4.1.1 Features of Agree and Move

Feature checking (or licensing) drives much of the syntatic computation in the minimalist framework that has been developed in early work by Noam Chomsky and others in the 90's. The main idea is that all lexical items enter syntactic derivations as loaded with a set of features, and some of these features are required to establish a relation with other features during the syntactic computation, an operation called *feature checking*.

Chomsky (1995) introduces a distinction in features where some features are *interpretable* (henceforth, *i*F), while others are *uninterpretable* (henceforth, *u*F), the relevant notion being (un)interpretability. Some features are classified uniquely as [*u*F], while others vary as to what syntactic category they appear on; whether on a noun or a verb or a functional head. Thus, [phi] features (i.e., person/number) are *interpretable* on nouns but *uninterpretable* on verbs. Given the *Principle of Full Interpretation* (see Chomsky 1986, 1995), which requires that everything that is present at the interfaces be interpretable by the interfaces, [*u*F]'s must be eliminated prior to transfer the LF interface as, by assumption, LF is unable to deal with such features. This is accomplished by the operation of feature checking.<sup>15</sup>

<sup>&</sup>lt;sup>15</sup> In more recent work, Chomsky (2000, 2001) introduced another distinction in addition to (un)interpretability, namely *valued* vs *unvalued features*, where unvalued features receive their value during syntactic computation through feature checking while valued features enter syntax fully valued. The distinction could be easily incorporated into the analysis to be proposed below. This would, however, complicate the overall picture since

Chomsky (2000, 2001) proposes that feature checking, the mechanism of syntactic licensing and movement, takes place by way of the operation Agree. In this system, syntactic elements may enter the derivation with features that are [uF], which then get checked and deleted during the derivation. An Agree relation holds between two syntactic objects, the *Probe* and the *Goal*. For Chomsky (2001), Agree applies when the conditions in (44) are met:

(44)

- a. D(P) (i.e., domain of *P*(*robe*)) is the sister of *P*.
- b. Locality reduces to 'closest c-command'
- c. *P* and *G*(*oal*) must be active (=*Activity Condition*, see below).

An important issue that I will discuss in more detail in Section 4.1.3 concerns movement of XPs, which I assume bear certain discourse related formal features such as [topic], [da], to the Spec positions of the functional projections in the split CP domain. The specific question is what drives the movement of XPs to the CP domain in Turkish. I have already noted one possible answer to this question above, namely the Criterion Approach of Rizzi (1997). In what follows, I will both interpretable/uninterpretable and valued/unvalued features would need to be discussed. Therefore, for ease of exposition (i.e. to simplify feature matrices) I will not adopt the valued/unvalued distinction; see, however, Section 4.1.2 regarding how the distinction could be incorporated into the analysis adopted in the main text. The main consequence is that movement in general would be driven by an unvalued instead of an uninterpretable [OP] feature. Nothing substantial would otherwise change. provide the outline of an alternative approach that I will adopt in my analysis of Turkish. I begin with a brief review of the analysis of *wh*-questions offered in Chomsky (2000, 2001) under the assumption that formal discourse features that are relevant to syntactic computation have an affinity with the [wh/Q] feature (see Bošković 2008 for discussion).

Chomsky's (2000, 2001) analysis of *wh*-questions draws heavily on the *Activity Condition* (AC) given in (44)c, which states that an element *X* can only undergo Agree and/or Move if it has a [*u*F]. In Chomsky's (2000, 2001) system, the Probe and the Goal share a feature, and this feature must be uninterpretable on the Probe. Consider now the feature-checking scenario given in (45): Suppose that a wh-NP has the feature [*u*Wh] in addition to the feature [*i*Q], and this way it is visible to the *C* for Agree. In Chomsky (2000,2001), the movement of X is driven by the EPP feature/property of C<sup>o</sup>:

(45)

C	<b>NP</b> <sub>wh</sub>
[uQ]	[iQ]
EPP	[ <i>u</i> Wh]

The [uWh] feature on the *wh*-element is what makes it visible for Agree and movement to Spec-CP, thereby allowing it to check the EPP feature of the interrogative *C*: The [uQ] feature of *C* undergoes checking with the [iQ] feature of

NP<sub>wh</sub>, and the [uWh] of NP<sub>wh</sub> is checked as a reflex of the checking relation between [uQ] and [iQ] feature of *C* and NP<sub>wh</sub>.

Bošković (2007a) argues for a model that is minimally different from that of Chomsky's (2000, 2001) system outlined above. One place where the system developed in Bošković (2007a) differs from that of Chomsky's concerns the implementation of the AC, which Chomsky uses to implement movement. Bošković (2007a) points out that the following scenario can in principle do the job, which initially raises questions concerning the conceptual necessity of the AC:

(46)

Y Probe	X Goal	
[ <i>u</i> F]	[ <i>i</i> F]	
EPP		

Simply put, (46) has all that is needed for the Probe to establish an Agree relation with the Goal it c-commands, and for the EPP to trigger the movement of X under the Attract approach to movement (Chomsky 1995 et seq.).

Despite the vacuity of the AC under the derivational scenario in (46), Bošković (2007a) suggests that the AC may nevertheless be taken advantage of by assigning another function to it, which is to implement successive-cyclic movement operations across phasal domains. I will turn to this aspect of this proposal shortly. This relocation of the function of the AC, according to Bošković, makes it possible to dispense with the AC as an independent condition of the grammar (turning it into a theorem, where it holds), and more importantly, it makes it possible to eliminate the generalized EPP mechanism of Chomsky (1995 et seq). Consider now what Bošković's suggestion regarding the AC amounts to in the context of the schematic derivation in (45). For Bošković (2007a), the *extra* uninterpretable feature on the Goal, indicated by the [*u*K], forces the movement of the Goal, rendering the EPP on the Probe unnecessary, hence eliminable:

(47)

Y Probe	X Goal
[ <i>u</i> F]	[ <i>i</i> F]
[ <i>i</i> K]	[ <i>u</i> K]

The [uK] feature of the Goal is what triggers its movement to the Spec of the projection that has the [uF]. Bošković (2007a) proposes that the movement operation driven by the [uK] feature of the Goal in (47) is related to the way Agree applies. According to a proposal by Epstein and Seely (2002, 2006), Probes are determined dynamically to the extent that they bear features that render them *active*. Under this proposal, not only a Probe must have a [uF], but also an element with [uF] must act as a Probe. The (initial) Goal X in (47) must undergo movement for it has [uK], hence must function as a Probe, which is only possible after movement. I refer to such probing as Probe-by-movement. The operation of Agree

is thus decomposed into the two steps shown in (48), where the roles of Probe and Goal are reversed after the movement operation:



a.		Y Probe	X Goal	
		[ <i>u</i> F]	[ <i>i</i> F]	1 <sup>st</sup> step of Agree
		[ <i>i</i> K]	[ <i>u</i> K]	
b.	X Probe	Y Goal	t <sub>X Goal</sub>	
	[ <i>i</i> F]	<del>[uF]</del>		
	<del>[<i>u</i>K]</del>	- [ <i>i</i> K]	Mov	re + 2 <sup>nd</sup> step of Agree

Returning to wh-movement with this interpretation of the AC in mind, Bošković (2008) suggests that the major feature that is checked between C° and a *wh*-phrase in a situation like in (45) must be the more specific [Wh] feature, and not the [Q] feature as Chomsky (2001) suggested. The claim is then that [Q] is a more general, operator-type feature (which Bošković 2008 refers to as [OP]), shared by all elements undergoing operator-style movements. Thus [*u*OP] is what makes a *wh*-phrase visible for movement (under the AC), and it gets checked off as a reflex of

the primary checking relation between the target and the lower element as illustrated below:<sup>16</sup>

(49)

	MOVE	
↓ XP <sub>wh</sub>	[ <b>C</b> °	$\mathbf{XP_{wh}}$
[ <i>i</i> Wh]	<del>[uWh]</del>	••••
<del>[uOP]</del>	EPP	••••

When the wh-phrase in (49) undergoes movement to Spec,CP, its [uOP] feature is checked off by the C°. Given the AC, the wh-phrase cannot undergo another wh-movement. Bošković (2008) proposes that the [uOP] feature is not involved only in wh-movement but in all operator movement. In other words, elements undergoing topicalization, focalization, QR etc., also have it, as illustrated in (50) for Topic and Focus. As is usual, once an XP undergoes operator movement it cannot undergo another operator movement.<sup>17</sup>

<sup>&</sup>lt;sup>16</sup> Bošković (2008), who assumed Chomsky's (2001) system, uses the EPP feature/property as the driving force of movement in his implementation given in (48). I will not resort to the EPP feature/property, however, in line with Bošković (2007), as will be made clear in the discussion in the main text. The driving force for movement in the system adopted here, as in Bošković (2007), will be [uOP]. I also will not be resorting to reflex checking in this case (which following Chomsky 2001, Bošković 2008 appeals to).

<sup>&</sup>lt;sup>17</sup> The goal here is to derive the generalization in (i), which Bošković argues for, from the more general principles of the grammar:

(50)

a.	Тор°	XP [=topical constituent]
	[uTop]	[ <i>i</i> Top]
	EPP	[uOP]
b.	Foc°	XP [= focal constituent]
b.	Foc° [uFoc]	<b>XP</b> [= focal constituent] [ <i>i</i> Foc]

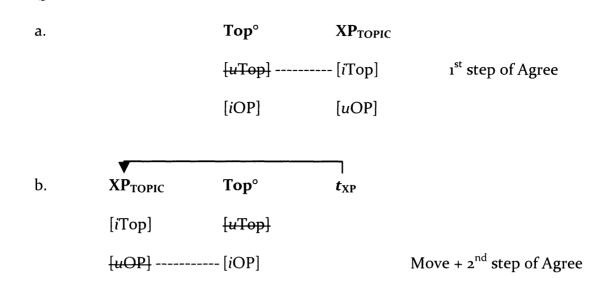
Adopting Bošković's (2008) suggestion that the Goal has an uninterpretable [OP], I suggest that not only the (initial) Goal but also the (initial) Probe has [OP] features, which appear as [*i*OP] on the (initial) Probe.<sup>18</sup> The relevant derivational scenario is illustrated in (51), where an interpretable and uninterpretable variety of the [OP] feature accompany the [topic] features of the Probe and the Goal; and the EPP is eliminated in line with Bošković (2007a):

(Bošković 2008, 250)

<sup>(</sup>i) Operators in operator-variable chains cannot undergo further operator movement.

Given that it is the [OP] feature that makes a phrase visible for any operator-style movement and that this feature is deleted once a phrase undergoes operator movement, the possibility of an operator-type movement feeding another operator-type movement is blocked.

<sup>&</sup>lt;sup>18</sup> This eliminates the need to appeal to reflex checking here.



(51)

Movement of XP is driven by [*u*OP], which needs to c-command the matching features of Top<sup>o</sup> to establish an Agree relation with it. This is the system that will be adopted in this dissertation, where, in line with Bošković (2007a), movement is driven by an uninterpretable feature of the moving element, in contrast to Chomsky's (2000, 2001) theory of movement, under which movement is driven by a formal inadequacy of the target of movement.

According to Chomsky (2000, 2001), the output of syntax is sent to the interfaces via an operation called Spell-Out/Transfer in an incremental fashion and not all at once as is the case in the *Extended Standard Theory* (see also Uriagereka 1999). Each such unit is called a *Phase*, and Chomsky contends that CP and vP (perhaps, also DP and PP, see Abels 2003, Chomsky 2008, Svenonius 2004, and possibly NP in article-less languages, see Bošković 2010a) are phases of the syntactic derivation whereas TP and VP are not. An important locality condition

concerning phases is the *Phase Impenetrability Condition* (PIC), given in (52), which forces successive cyclicity of movement operations through edges/Spec positions of phases:

(52) PIC [Chomsky 2001, p:14]

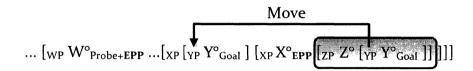
The domain of H is not accessible to operations at ZP; only H and its edge are accessible to such operations.

The practical consequence of the PIC in (52) is that an X that holds the edge/Spec of the lower phase H is accessible at the higher phase, while the complement of H is not accessible.

The PIC in (52) alone is actually not sufficient to derive successive cyclic movement. In Chomsky's system what triggers (successive-cyclic) movement of an XP that enables it to escape from the complement domain of a lower phase is a P(eripheral)-feature (i.e., the *generalized EPP feature* (*g*EPP) of Chomsky 2001). Postulation of such a feature/property is forced under the *Last Resort* principle, which requires that all syntactic operations are feature-driven.

The *g*EPP then implements intermediate movement steps that are enforced by the PIC.<sup>19</sup> Consider the derivational scenario given in (53) (the shaded box indicates the domain undergoes Spell Out by the introduction of W):

(53) W and X are phase heads, and YP is the complement of Z



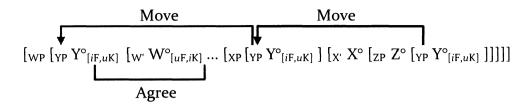
Chomsky's (2001) proposal of combining the PIC and the optional *g*EPP of phase heads ensures that YP moves to the edge of X° so long as X° has *g*EPP. If X° has no *g*EPP, YP will not move to Spec,XP, hence will not be accessible to W° by the PIC as ZP undergoes Spell Out when W° enters the derivation.<sup>20</sup>

Bošković (2007a), assigning a new computational role to the AC where AC implements (successive-cyclic) movement crossing phase boundaries, argues that the uninterpretable feature [uK] of a YP is what triggers the movement of the YP in (54):

<sup>&</sup>lt;sup>19</sup> Note that the assignment of the *g*EPP feature to phase heads raises questions as to how it comports with the *Inclusiveness Condition* particularly because for Chomsky (2000,2001) assignment of *g*EPP features to phase heads is done during the derivation.

<sup>&</sup>lt;sup>20</sup> In hierarchical terms, WP dominates XP, and XP dominates YP.

(54) W and X are phase heads, and YP is the complement of  $X^{\circ}$ 



YP with [*i*F,*u*K] moves until it reaches the Spec position of the highest phase head, W°, that has the matching features. Movement of YP proceeds through the edge of the *phase* X° in a fashion harmonious with the PIC. The analysis here is built on ideas entertained in previous work by Stjepanović and Takahashi (2001), Bošković (2007b), and Fox and Pesetsky (2005), who suggest that the PIC effect for successive-cyclic movement follows from phonological considerations. For Bošković (2007a), if something will ever move, it cannot be contained in a domain that will undergo Spell Out, for if it does, a problem arises in PF with respect to linearization. This is because linearizing Y in both the original spell-out unit and a latter spell-out unit leads to conflicting ordering requirements.

Once viewed in this fashion, the effects of the PIC are deduced: *Y* has to move to the edge of *X*, *X* a phase, in order not to get caught in a spell-out unit, which would lead to a PF violation. The freezing effect of phases, with the PIC as an escape hatch, follows. It is established via pronunciation (i.e., it holds for PF), but it has an effect on successive-cyclic movement. Taking this much for granted, Bošković (2007a) conjectures that duplicating the PIC effect in the *syntax proper* would be redundant, and thus the PIC should be eliminated as a syntactic locality

condition. This amounts to the claim that phases are accessible from the outside in the syntax, PIC being irrelevant to the syntax *per se*. A logical consequence of this is that Agree, which does not affect pronunciation, hence cannot cause the problem for PF that Move does when it does not conform to the PIC, should be free of PIC effects,<sup>21</sup> i.e., in the system where PIC effects for Move follow from PF considerations, Agree should not be constrained by the PIC.

Bošković (2007a) presents support for his claim that the PIC does not hold for Agree noting that there are instances of Agree at a distance (more precisely across multiple phases) that are found in a number of constructions/languages such as agreement in existential constructions (cf. discussion given in Legate 2003), LF anaphor movement (interpreted under Agree) in English, object agreement across CP in a number of languages, in-situ wh-questions in languages like Chinese and Japanese, among others. It is worth noting that while Bošković (2007a) exempts Agree from the effects of PIC, this does not mean that Agree is entirely free of locality considerations. In particular, Agree is subject to Relativized Minimality type constraints, such as the *Agree Closest* (see Chomsky 2000,2001). Bošković (2007b) shows that many illicit Agree relations that do not conform to the PIC are in fact ruled out independently of the PIC, by the Agree Closest. Chomsky (2008) himself notes that there is a great deal of overlap between the empirial coverage of the PIC and Agree Closest, which points to a redundancy in

<sup>&</sup>lt;sup>21</sup> This is in contrast to Chomsky (2000, 2001), who assumes that the PIC does hold for Agree.

the model. Bošković (2007a) eliminates the PIC (as a syntactic locality restriction affecting Agree) in the favor of Agree Closest.

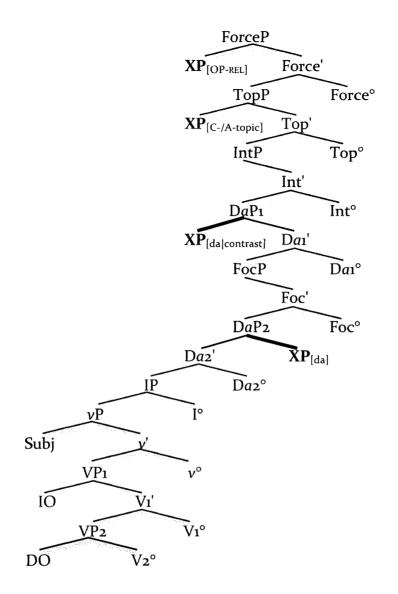
In what follows I turn to articulating the specific assumptions regarding the left/right peripheral organization of Turkish clauses along with the features involved in movement into those left/right peripheral positions, appealing to the theoretical tools we have in our disposal, which were summarized above.

## 4.1.2 Discourse-related features and the distribution of [OP] in

In addition to infectional features such as [phi] and [Case],<sup>22</sup> I assume that argumental and non-argumental XPs always bear a set of [discourse] features in Turkish, and [wh] features when relevant. Prior to a more involved discussion of discourse oriented features, consider first the functional structure of Turkish clauses that I adopt in this dissertation, which is based essentially on the proposal made in Rizzi (2004) (but see below):<sup>23</sup>

<sup>&</sup>lt;sup>22</sup> I will discuss these features below, where it will be shown that these features never induce movement in Turkish (Turkish in fact does not have the usual subject movement to Spec,IP, as discussed in Section 5.1).

<sup>&</sup>lt;sup>23</sup> It should be mentioned at the very outset that not all the CP-level projections posited by Luigi Rizzi in a series of works are used here, such as ModP or FinP, which are not relevant to the present dissertation (cf. Rizzi 1997, 2001, 2004, 2006).



(55)

One departure in (55) from the Rizzian articulated CP structure given in (42) concerns the label for the lower TopP, which I label here as  $DaP_1$  to properly distinguish it from TopP (which, as the discussion in Sections 1 and 2 has already shown, behave differently in a number of respects).<sup>24</sup> A major departure from Rizzi

<sup>&</sup>lt;sup>24</sup> Frascarelli & Hinterhölzl (2007) argue against free recursion of Rizzi's (1997) TopP, and identify three distinct types of topic associated with different tonal properties: (a) the Aboutness-Shift topic, corresponding to Reinhart's (1981) Sentence Topic, (b) Contrastive

(1997) and most of the work in the cartographic tradition is the postulation of a functional projection with a rightward specifier position, *Da*P<sub>2</sub>, which I assume hosts post-verbally moved (i.e., *postposed*) XPs in Turkish.<sup>25</sup> This functional projection has the same label as the functional projection above it, i.e., *Da*P<sub>1</sub>, but this is not without motivation: Recall that DAs in Turkish may be placed in either pre-verbal or post-verbal field, but the two differ from one another in terms of [contrast] (see below for more on this). The observation that multiple DAs may be placed in the left and right peripheries in Turkish can be captured by assuming multiple Specifiers (see Section 4.1.4 for mapping to word order). Finally, I contend that no other functional projection exists in Turkish beyond those given in (55).

Against this background, I turn to an explication of [discourse] features. I specifically assume that there are three types of [discourse] features: [topic], [da], and [focus] in addition to the feature [contrast], which does not act as a probe on its own but is always associated with [topic], [focus], or [da]; an XP with [topic|contrast] counts as C-Topic, and an XP with [focus|contrast] counts as C-Topic, and an XP with [focus|contrast] counts as C-Focus. An XP with just [topic] is an A-Topic, while an XP with just [focus] is P-Focus.<sup>26</sup>

Topic (c) Familiarity topics. Frascarelli & Hinterhölzl's (2007) Familiarity topics are virtually identical to DAs in the present work in that (i) Familiarity Topics are below Contrastive Focus, and they may be left-or right dislocated, just like constituents that are are identified as DAs in the present study based on data from Turkish.

<sup>&</sup>lt;sup>25</sup> The proposal that post-verbal constituents are high in the structure is not novel, as I noted earlier (see Kural 1997; Kornfilt 1997b, 2005; Sener 2005, 2006; Takano 2007).

<sup>&</sup>lt;sup>26</sup> See Neeleman et al. (2008) for a proposal that supports the type of four-way typology of

As discussed in the earlier sections, DAs in Turkish may be contrastive or non-contrastive, and they hold varying positions depending on this choice. An XP that bears [da|contrast] is moved to the Spec of DaP1, while an XP with [da] lacking [contrast] targets the rightward Spec of DaP2.

Following the system of *features* outlined in the preceeding sections, I assume that the functional heads Top°, Da1°, and Da2° in Turkish are each introduced with the feature matrix [uTop(|contrast)], [uda|contrast], and [uda], respectively, in addition to the feature [iOP]. XPs that move to the Spec of these projections bear the matching interpretable features and the uninterpretable variety of the [uOP] feature, which is what ensures the movement of XPs with [iF]. It is important to note here that the movement of a constituent with [uOP] begins before its target (i.e., initial Probe) is introduced into the derivation. If it were not for the [uOP] of XPs, movement would be totally unnecessary as an Agree relation could in principle be established between a functional head with [uF] and an XP with a matching feature to the extent that c-command holds (recall that Agree is not subject to the PIC unlike Move). These issues will be detailed in the next subsections.

The assumptions laid out thus far imply that all functional projections and LIs that bear [topic] and [da] features also always bear [OP] features.<sup>27</sup> This means

discourse features adopted here (with the absence of [da]).

<sup>&</sup>lt;sup>27</sup> I also contend that discourse functional heads that are not relevant to the computation are not projected adopting a principle that bans vacuous projections as a general

that only XPs that are introduced with [focus (|contrast)] features do not bear [OP]. This helps provide an account for the lack of Focus movement in Turkish; Focus undergoes Agree with XPs that are [focus (|contrast)], but no movement to Spec,FocP takes place due to the lack of [OP].<sup>28</sup> A question arises as to why Foci in Turkish cannot bear [OP]. A promising answer comes from a specific analysis of Focus proposed in Rooth (1985). Rooth (1985) suggests that focused elements need not move, and importantly, they can be interpreted in-situ without creating an operator-variable relation. Taking Rooth's approach to Focus for granted, the lack of [OP] on Foci in Turkish is what is expected; as a matter of fact, it is clearly the 'optimal' solution from the point of view of semantics. Interestingly, Park (2005) shows that in Serbo-Croatian, a language with 'Focus-movement,' constituents that undergo 'Focus-movement' must undergo reconstruction, the reason being, Park (2005) argues, that Focus does not create an operator-variable relation along the lines of Rooth (1985).<sup>29</sup>

consequence of the economy of representations (see Bošković 1997, Chomsky 1995, Grimshaw 1994, among others, for proposals along these lines).

<sup>&</sup>lt;sup>28</sup> [focus] features (with or without [contrast]) trigger Focus effects in discoursepragmatics as well as Focus related intonational properties in PF (for the latter, see Ladd 1996, Nespor and Vogel 1986, Selkirk 1986, 1995, Truckenbrodt 1999, among many others).

<sup>&</sup>lt;sup>29</sup> Park's (2005) claim about 'Focus-movement' in SC has consequences given the present claim that Foci do not bear [OP] to trigger their movement. If Foci do not bear [OP] in SC, what triggers their movement to yield the effect of 'Focus-movement'? One reasonable answer is that PF considerations are involved (see in this respect Stjepanović 1999, 2003 for the role of PF factors in focusing in SC, also see Reglero 2003 for Basque). At any rate, I leave the issue of what prompts the departure from optimal semantics (given Rooth's

Below, I provide a list of feature combinations relevant to Turkish:

(56)

PHRASES			TARGET		
° XP with just [ <i>i</i> topic] = A(boutness)-Topic + [ <i>u</i> OP]		$\rightarrow$	Spec,TopP		
° XP with [ <i>i</i> topic  <i>i</i> contrast] = C-Topic + [ <i>u</i> OP]		$\rightarrow$	Spec,TopP		
° XP with just [ <i>i</i> focus] = P-Focus			in-situ		
° XP with [ <i>i</i> focus  <i>i</i> contrast] = C-Focus		$\rightarrow$	in-situ		
° XP with just [ <i>i</i> da] = DA + [ <i>u</i> OP]		$\rightarrow$	Spec,DaP2		
° XP with [ida icontrast] = DA + [uOP]		$\rightarrow$	Spec,DaPı		
FUNCTIONAL HEADS					
° Top° →	[utop( ucontrast)] + [iOP]	<u></u>			
° Int° $\rightarrow$	[uwh( ucontrast)]				
° Daı° →	[uda ucontrast]+ [iOP]				
$^{\circ}$ Foc $^{\circ}$ $\rightarrow$	[ufoc (ucontrast)]		· · · · · · · · · · · · · · · · · · ·		
° Da2° →	[uda] + [iOP]		<u></u>		

Another question that needs to be addressed under the present [OP]-asmovement-trigger approach concerns XPs with specific discourse features and their targets. The question is explicitly the following: What guarantees that an XP with a [topic] feature does not land in the Spec position of DaP1, for example, given that it is the [uOP] of XP that triggers its movement?

There are three immediate solutions. One of them is to adopt a *filtering* approach that allows any XP with [OP] to land in any Spec position in the CP

account) in Focus-movement languages open here.

domain and filter out those that yield a clash in mapping to pragmatics. A head *H* that has, say, a [topic] feature, cannot host an XP with [da] in its Spec position since this produces a clash in pragmatics. A second alternative is based on the claim that the number of elements involved in Agree must be minimized, and heads are 'picky'; if X probes Y for feature F (i.e., X *picks* Y to Agree with it), Y should move to the Spec of X, and probe X for feature Z, even though there are other options available for checking the feature Z.

A third alternative is available, (noted by Susi Wurmbrand (p.c.)), which is based on a different set of assumptions regarding features/feature checking from those adopted earlier in this chapter. This alternative relies on a valuation driven system, which is in turn based on the valued/unvalued distinction noted in fn.15, where some features are lexically valued and some receive value during the syntactic derivation. As discussed in Bošković (to appear), Chomsky (2001), and Pesetsky & Torrego (2007), uninterpretable features, which are illegitimate at the LF interface (see Section 4.1.1), are eliminated through deletion, but the prerequisite for deletion is valuation. This means that unvalued/uninterpretable features must be valued to be able to delete. Also, unvalued/interpretable features must be valued since otherwise they cannot be interpreted.<sup>30</sup> The system is valuation driven; adapting it to Bošković (2007a) implies that Move/Agree is driven by unvalued features, not by uninterpretable features (see Bošković to

<sup>&</sup>lt;sup>30</sup> Note that Bošković (to appear) and Pesetsky & Torrego (2007) provide empirical evidence for the existence of valued uninterpretable feature and unvalued interpretable feature combinations, which are not allowed in Chomsky (2001).

appear for this adaptation). Under such an approach, the target (i.e., functional head) bears a *valued* variety of XP's *unvalued* feature, and the valuation via Agree is what determines the discourse-pragmatics value of the moved XP, as illustrated below for Topic movement (*Val* stands for valued, and *uVal* for unvalued feature):

(57)

Pre-Move: ... 
$$[_{TopP} [_{Top'} Top^{\circ} ... [_{IP} I^{\circ} ... [_{\nu P} XP_{Subj} ... [iF/uF|OP_{val[TOP]}]]$$
 [ $iF|OP_{uVal}$ ]  
Post-Move: ...  $[_{TopP} XP_{Subj} [_{Top'} Top^{\circ} ... [_{IP} I^{\circ} ... [_{\nu P} t_{XP-Subj} ... [iF|OP_{val[TOP]}]]$  —Agree—> [ $iF/uF|OP_{val[TOP]}$ ]

The suggestion here is that Topic, DA are different values of the [OP] feature, which is valued in the target heads and unvalued on the XP.<sup>31</sup> In (57), then the subject XP has to move having an unvalued (but interpretable) [OP] feature. This unvalued [OP] feature gets valued as [topic] if the XP moves to Spec,TopP.

This approach differs from the one adopted earlier, in that in the former, the feature that is relevant to movement (i.e., the one that triggers movement) is identical to the one that gets involved in the identification of discourse-pragmatic values. In the approach adopted earlier, however, the feature that drives

<sup>&</sup>lt;sup>31</sup> It is not clear whether the feature feature should be interpretable or uninterpretable on the target head.

movement is distinct from the one that gets involved in the identification of discourse-pragmatic values.

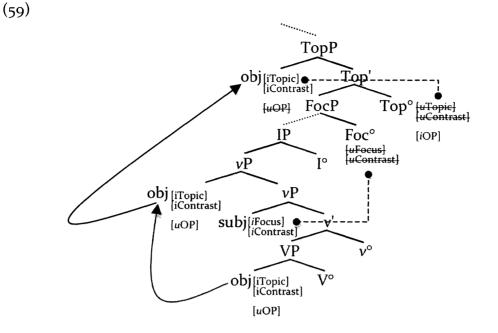
Any of the above alternatives should be sufficient to derive the desired result. In what follows, I present an implementation of the present proposal to some of the major Turkish facts introduced in the previous sections. (I will continue assuming that movement is driven by [OP], but the analysis can be restated in the system where movement is driven by unvalued [OP].

## 4.1.3 Implementation of the proposal and some predictions

I begin with the analysis of a Turkish sentence where the object NP undergoes Topic-movement and the subject NP is C-Focus:

(58)

Çorbadan n'aber? Ondan içen oldu mu peki?What about the soup? Has anyone eaten that?Valla çorbadan haberim yok ama...Frankly, I don't know about the soup, but...Dolma-lar-danAYLİN t<sub>dolmalardan</sub> ye-di.dolma-pl-ablA-nomeat-past'Aylin ate from the dolmas.'



The object NP with the feature set [*i*Topic|*i*Contrast] and [*u*OP] undergoes movement to the Spec of TopP through the edge of *v*P, as dictated under the PIC, given that *v*P is a phase. Recall that Move is subject to the PIC in the present system (unlike Agree). The presence of [*u*OP] on the object NP is what forces its movement and also its transformation into a Probe-by-movement; being a Probe in the Spec of TopP, the object NP c-commands and thus establishes an Agree relation with the relevant features of Top° completing feature checking. Since the subject NP has [*i*Focus|*i*Contrast], it lacks [*u*OP], hence it cannot undergo movement. An Agree relation is established between Foc° and the subject NP, however, as Agree is possible in the present system across phasal projections.

Simple though the sentence in (58) and its derivation in (59) are, they reveal a general pattern of analysis under the present system: Focus remains insitu whereas any constituent with non-Focus moves to left or right peripheral positions. Obviously, this is a rather tight-knit system in that all movement operations are driven by discourse-based features, and thus there is no room for any operation that changes the linear order of constituents randomly and without the involvement of a feature, that is any operation that fits the profile of 'scrambling' (as it is understood in the tradition of Saito 1985 et seq.) should be explicitly ruled out in Turkish in the light of the insights gained thus far. Evidence that supports this conclusion will be presented in Section 5 through a detailed examination of variable binding data from Turkish.

Consider now the examples in (60) repeated from Section 3.2, where a pronominal DA object is moved across a time adverbial that is newly introduced into the discourse, hence P-Focus:

(60)

Yeni aldiğin Paul Auster kitabını ne yaptın? What did you do with the new book you bought?

- a. <u>o-nu</u> YARIN oku-ma-ya başla-yacağ-ım.
  it-acc tomorrow read-inf-dat begin-fut-ısg
  'I will begin to read it tomorrow.'
- b. <sup>#</sup>YARIN <u>o-nu</u> oku-ma-ya başla-yacağ-ım.
  tomorrow it-acc read-inf-dat begin-fut-ısg
  'I will begin to read it tomorrow.'

As discussed in detail in Section 3.2, the pronominal DA must precede the adverb that is P-Focus and the reverse order is impossible.

I would like to briefly touch on the infelicity of (60)b for it is revealing in a number of respects, particularly regarding the position of the temporal adverb in Turkish. Notice first that in the absence of the temporal adverb (or any other constituent in the pre-verbal field that follows the pronominal DA) a sentence in which a DA is placed as left adjacent to the verb is perfectly fine, as shown in (61):

(61)

Yeni aldığın Paul Auster kitabını ne yaptın? What did you do with the new book you bought? <u>o-nu</u> oku-ma-ya başla-ma-m lazim bir an önce. it-acc read-inf-dat begin-inf-1sg necessary at once 'I need to start reading it right away.'

(61) unequivocally shows that DAs may actually appear linearly adjacent to the verb without being interpreted as Focus, but we already know that DAs hold a high position in the structure. It is worth noting that (61) raises a challenge for any approach that depends on the linear order of XPs to determine Focus (see, for example, Kural 1992 for such an approach to Focus in Turkish); if the semantic/discourse properties of XPs were left unspecified in the syntax, and concomitantly if one only relied on the linear position of an XP to determine its

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semantic/discourse function, an example like (61) would be problematic. The present approach faces no such problem, however, as the Focus character of an XP is determined in an unambiguous fashion by the [focus] features in the syntax.

Another important insight we gain by observing the felicity contrast between (60)b and (61) is that the presence of a temporal adverb makes a difference; informally put, it pushes the DA down in the tree to a position that it does not like to be in. To state it in more theoretical terms, it seems that temporal adverbs in Turkish also do not occupy a position higher than IP (unless they are interpreted as Topic or DA, hence moved), and placing a DA below a temporal adverb leads to deviance simply because DAs need to hold a left peripheral position.

My present claim that temporal adverbs are base generated in a position higher than the base positions of subjects and objects in Turkish receives support from examples that are answers to *all-focus* questions, as illustrated by the data in (62):

(62)

Pelin notices when she stops by at Aylin's place that Aylin and people in her family are very excited about something. So Pelin asks, wondering: What's going on?

Aylin says: We are all excited...

a. çünkü yarın ağabey-im gel-iyor.
'cause tomorrow brother-1s.poss-nom come-pres
'Because my brother will be arriving tomorrow.'
b. <sup>#</sup>çünkü ağabey-im yarın geliyor.
'cause brother-1s.poss-nom tomorrow come-pres
'Because my brother will be arriving tomorrow.'

The felicity contrast between (62)a and (62)b is significant as it shows that in *all-focus* sentences temporal adverbs hold a position higher than subjects, just as expected under the claim made above. Importantly, the sentence in (62)b would actually be felicitous in a different context in which Pelin knew about the possibility of Aylin's brother coming to visit, yet had no idea about when he would come to visit (or alternatively she knew that he would come to visit but at a later time than tomorrow). The implication is clear: (62)b would be possible if the temporal adverb were Focus and the subject were non-Focus.

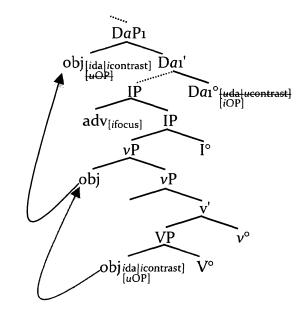
On the basis of the evidence introduced above and the conclusion that adverbs are like arguments as long as their discourse dependence is concerned, I propose that adverbs may be fronted when they are associated with [topic] or [da] and [uOP] features, and they must remain in the IP adjoined position when they are associated with [focus] features. This then suggests that temporal adverbs, in

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particular, can be identified as *edge*-markers for the inflectional domain (=IP) when they are Focus.<sup>32</sup>

This conjecture provides an immediate account for the observation that Focus subjects do not precede temporal adverbs in Turkish as illustrated in (62). A Topic/DA subject (or object) must then precede a temporal adverb when the adverb is Focus. Consider now a derivation of (60)a given in (63) below (projections and features that are not crucial for my present concerns are omitted in the derivation below):

(63)



<sup>&</sup>lt;sup>32</sup> As usual, it is difficult to determine here the precise adjunction site. It is also possible that the adjunct in question is adjoined to vP rather than IP. Nothing in the analyses below would change if this is the case. However, if this is the case (62) would provide evidence that subject NPs in Turkish do not need to vacate their base position to move to SpecIP. I will indeed argue below that the requirement that subjects move to SpecIP, which holds for English, does not hold for Turkish.

The pronominal DA object in (63) moves to Spec of  $DaP_1$  through the edge of the vP phase crossing the temporal adverb that is adjoined to IP. Since the adverb bears [focus] features, it cannot be displaced, and remains at its IP-edge position.

Consider below the sentence in (64) from Turkish where a temporal adverb is fronted having a C-Topic construal.

(64)

Pelin yarın bir konuşma verecek bölümde, haberin var mı? Pelin will give a talk tomorrow in the department, did you know about it?

Valla yarından haberim yok ama...

Frankly I do not know about tomorrow but ...

<u>haftaya</u> Pelin bir konferans-ta konuş-acak, o-nu bil-iyor-um next week P-nom a conference-loc speak-fut that-acc know-pres-1s 'Next week, Pelin will (give a) talk at a conference, I know that for sure.'

The temporal adverb undergoes movement in (64) to Spec,TopP to check the matching uniterpretable features of Top<sup>o</sup>, a movement driven by the [uOP] feature of the adverb as illustrated in the derivation in (65) below:<sup>33</sup>

<sup>&</sup>lt;sup>33</sup> I assume that *-sA* marked C-Topics in Turkish involve movement derivations like their non-*sA*-marked counterparts, and they are not base generated in the left periphery as argued for the *Hanging Topic Left Dislocation* (HTLD) constructions in English (see Ross 1967 for a first discussion of such constructions, and the papers in Anagnostopoulou, van Riemsdijk, and Zwarts 1997 for proposals that HTLD is different from topicalization in

English, CLD in Germanic, and CLLD in Romance). One piece of evidence supports the claim that -sA marked C-Topics involve movement derivations come from their island sensitivity. van Riemsdijk et al. (1997, 1-2: 2a, 2b) shows that HTLD in English displays no island sensitivity (i) while topicalization does (ii):

(i) *My father*, the man *he* works with in Boston is going to tell the police that that traffic expert has set that traffic light on the corner of Murk Street far too slow.

(ii) \**My father*, the man \_\_\_\_ works with in Boston is going to tell the police that that traffic expert has set that traffic light on the corner of Murk Street far too slow.

(-*sA* marked) C-Topics are island sensitive in Turkish as illustrated below (and also note that the overt use of a pronoun in the original position is impossible irrespective of whether the C-Topic is -*sA* marked or not):

(iii) Adjunct Island

\*kitab-ı(-ysa) Pelin [öğretmen \_\_\_/on-u ona hediye et-me-diğ-i için] book-acc-SA Pelin-nom teacher-nom it-acc she-dat gift give-neg-noml-acc for üz-ül-dü.

upset-pass-past-3s

'Pelin got upset for the teacher did not give her the gift.'

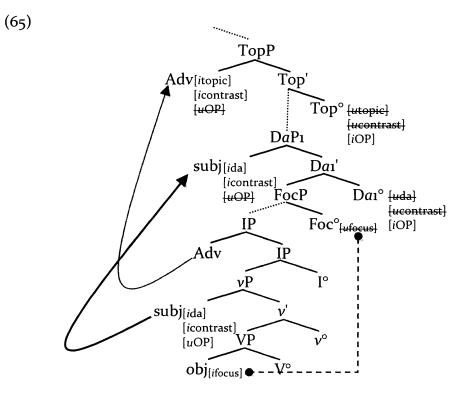
(iv) Complex NP

\*kitab-ı(-ysa) Pelin [[öğretmenin \_\_\_/on-u ona hediye et-me-diğ-i] book-acc-SA Pelin-nom teacher-nom it-acc she-dat gift give-neg-noml-3s.poss

iddia-sı-na] üz-ül-dü

claim-3s.poss-dat upset-pass-past-3s

'Pelin got upset by the claim that the teacher did not give her the gift.'



Notice in the derivation in (65) that the subject is not in-situ since it undergoes movement to Spec,  $DaP_1$ , being a DA. This is an important detail for the argument above because otherwise it would be impossible to show that the temporal adverb moves given that temporal adverbs are normally adjoined to a position higher than the base position of a (Focus) subject.

The V adjacency of Foci in Turkish receives a straightforward account under the present proposal that any constituent with [topic] and/or [da] feature moves and Foci are immobile since they lack [*u*OP]. It is thus fair to say that the Vadjacency of Foci in Turkish is *accidental* for it is an indirect consequence of the obligatory movement of non-Foci and the obligatory immobility of Foci. In the next section, I examine an interesting set of variable binding facts from Turkish and show that they can be provided an analysis under the present proposal without resort to additional assumptions.

## 5. Effects of discourse-pragmatics in variable binding

A major point made in this dissertation so far has been that word order flexibility in Turkish is too regular from the perspective of discourse-pragmatics to be dealt with under an approach that resorts to 'scrambling.' The feature-driven movement account argued for here has been shown to provide a succesful approach to word order variation in Turkish and its mapping to discourse/pragmatics. The emerging picture of Turkish is then that Turkish is a language where any variation in word order has a discourse-pragmatic correlate, and thus 'scrambling' has no place in this picture.

The data to be examined in the next three sub-sections involving variable binding provides support for this 'tight-knit' system where all movement has discourse-pragmatic effects. It also supports the claim that 'scrambling' should be strictly kept out of this system for allowing it would create insurmountable problems in a number of domains.

## 5.1 Variable binding in SOV and OSV sentences

So far I have argued that the key condition for the mobility of a constituent concerns whether it has [focus] features or not; [-focus] constituents must move, while [+focus] must stay in the base generated position. I have also assumed the presence of two types of [-focus] constituents; Topics and DAs. Setting postposed DAs aside temporarily, I will concentrate on Topics and those DAs that are placed in the pre-verbal field (namely, contrastive DAs).

The data to be introduced in this and the later sections point to an interesting observation, which is that XPs that undergo movement to Spec,D*a*P1 (i.e., those that involve [da|contrast] feature checking) may be reconstructed to the *base position* in Turkish for the purposes of variable binding whereas those that undergo movement to Spec,TopP (involving [top|contrast] checking) cannot.

Consider now the following two pairs of sentences, which involve transitive predicates:

(66)

a. <u>Herkes</u><sup>i</sup> [pro<sup>i</sup> **ANNE-Sİ]-Nİ** öp-müş. everyone-nom mother-3sg.poss-acc kiss-e.past 'Everyone kissed his/her mother.'

b. <u>Herkes<sup>i</sup> [pro<sup>i</sup> anne-si]-ni</u> ÖP-MÜŞ. everyone-nom mother-3sg.poss-acc kiss-e.past 'Everyone kissed his/her mother.'

83

- a. <u>Herkes-i</u><sup>i</sup> [pro<sup>i</sup> **ANNE-Sİ**] t<sub>herkes-i</sub> öp-müş. everyone-acc mother-3sg.poss-nom kiss-e.past 'Lit. Everyone, his/her mother kissed.'
- b. <u>Herkes-i<sup>i</sup> [pro<sup>i</sup> anne-si</u>] t<sub>herkes-i</sub> ÖP-MÜŞ. everyone-acc mother-3sg.poss-nom kiss-e.past 'Lit. Everyone, his/her mother kissed.'

Given the observation noted in Section 3 that quantifiers do not undergo Topic movement, I maintain that in (66) and (67) non-Focus QPs/NPs undergo DA movement, i.e., movement to the Spec of DaP1. Furthermore, they unambiguously show that a QP that c-commands an NP with a variable inside binds it, no matter what grammatical function a QP is and what discourse function it is mapped to.

The first set of key observations is presented below, which involve sentences that have a non-Focus object NP with a variable inside and a subject that is quantificational. Since the object is a non-quantificational NP and it is not identified as Focus, it must undergo either DA-movement or Topic-movement in the present system. We should thus consider the alternatives listed in (68) in order to have a better understanding of the relation between discourse driven movement operations and reconstruction:

(67)

(68)

- a. [  $[...vbl...]_{obj}$  ]<sub>CT</sub> » [QP<sub>subj</sub>]<sub>FOCUS</sub> » V
- b. [ [...*vbl*...]<sub>obj</sub> ]<sub>DA</sub> » [QP<sub>subj</sub>]<sub>FOCUS</sub> » V
- c. [ [...*vbl*...]<sub>obj</sub> ]<sub>CT</sub> » [QP<sub>subj</sub>]<sub>DA</sub> » [V ]<sub>FOCUS</sub>
- d. [ [...*vbl*...]<sub>obj</sub> ]<sub>DA</sub> » [QP<sub>subj</sub> ]<sub>DA</sub> » [V ]<sub>FOCUS</sub>

The actual facts corresponding to (68) from Turkish show that the type of movement matters as to whether variable binding is possible or not, especially when the subject QP is Focus. In order make the discussion more transparent I once again use minimal contexts that favor a C-Topic or a DA reading of the fronted object NPs:

(69) 
$$(=(68)a)$$
  $[[...vbl...]_{obj}]_{CT} \gg [QP_{subj}]_{FOCUS} \gg V$ 

A: Dünkü mezuniyet töreninden sonra bazı çocuklar once babalarını öptü. <sup>34</sup> After the graduation ceremony yesterday some kids kissed their fathers first.

B: <sup>?*</sup> [pro <sup>i</sup> anne-si]-ni-yse	HERKES <sup>i</sup>	t[pro anne-si]-ni	öp-tü.
mother-3sg.poss-acc-CT	everyone-nom		kiss-past

'Lit. His/her mother, everyone kissed.'

<sup>&</sup>lt;sup>34</sup> The larger context here is the following: Speaker B interprets speaker A's statement as compelling her to make a statement about the mothers in the same graduation ceremony. In that case, the identity of 'kissers' is what is questioned, and in a contrastive manner to 'some kids.' I refrain from using the actual question that corresponds to this story as it involves an NP with a variable preceding a wh-phrase, which is the kind of structure we are trying to judge in the answer/in B.

(70) (=(68)b)  $[[...vbl...]_{obj}]_{DA} \gg [QP_{subj}]_{FOCUS} \gg V$ 

A: Mezuniyet töreninden sonra kim annesini öptü, haberin var mı?

Do you know who kissed his mother after the graduation ceremony? Do you know anything about that?

B: Duyduğum kadarıyla...

As far as I have heard...

[proi anne-si]-niHERKESi $t_{[pro anne-si]-ni}$ öp-müş.mother-3sg.poss-acc everyone-nomkiss-e.past'Lit. His/her mother, everyone kissed.'

(71) (=(68)c)  $[[...vbl...]_{obj}]_{CT} \gg [QP_{subj}]_{DA} \gg [V]_{FOCUS}$ 

A: Dünkü törende her öğretmen bir öğrencisini tebrik etmiş. Doğru mu?

I hear that at the ceremony yesterday every teacher congratulated a student of her. Is that right?

B: Valla, öğrencilerden haberim yok ama...

Frankly, I do not know about the students but...

<u>[pro' bir arkadas-1]-n1</u>	<u>her</u>	ögretmen <sup>1</sup>	t[pro anne-si]-ni	AZARLA-DI
a friend-3sg.poss-acc	every	teacher-nom		scold-past
			sert bir şekilde.	
			in-a-	harsh-manner

'Every teacher SCOLDED a friend of her in a harsh manner.'

(72) (=(68)d)  $[[...vbl...]_{obj}]_{DA} \gg [QP_{subj}]_{DA} \gg [V]_{FOCUS}$ 

A: Dünkü törende her öğretmen bir öğrencisini tebrik etmiş. Doğru mu? I hear that at the ceremony yesterday every teacher congratulated a student of her. Is that right?

B: Valla, tebrikten haberim yok ama...

Frankly, I do not know about the congratulations but...

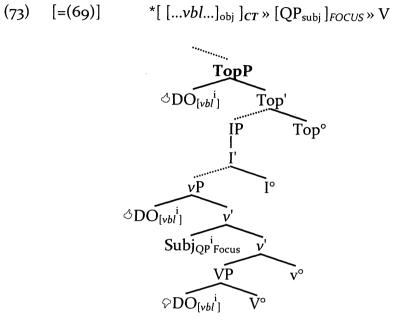
[pro<sup>i</sup> bir öğrenci-si]-niher öğretmen<sup>i</sup> $t_{[pro anne-si]-ni}$ AZARLA-DIa student-3sg.poss-acc every teacher-nomscold-past

sert bir şekilde.

in-a-harsh-manner

'Every teacher SCOLDED a friend of her in a harsh manner.'

The only example above in which variable binding is not available is the one in (69), where the object NP that has a pronominal variable undergoes Topicmovement. This is remarkable as it provides an important insight into how reconstruction is regulated in Turkish. Consider the derivation of (69) given below, which shows that the base/original copy of the Topic-moved object NP cannot be active in LF since otherwise the lack of variable binding cannot be accounted for (whether or not a copy can be in principle active in LF for variable binding purposes is indicated by [ $\circ$ ] vs. [ $\circ$ ]. Also, I indicate copies that are actually involved in variable binding when such binding is possible by shading):<sup>35</sup>



As indicated by the marking [ $\circ$ ] in (73), the highest copy of the DO (in Spec-TopP) and the intermediate copy of it (in Spec- $\nu$ P) can be in principle active for interpretation (i.e., for the purposes of variable binding). However, since they are not c-commanded by the quantificational subject, variable binding in (69) is not possible. If the lowest copy of the DO below the quantificational Focus subject were interpretable (i.e., if the reconstruction to this position were available),

<sup>&</sup>lt;sup>35</sup> Interestingly, Lechner (1998) argues that reconstruction to the base position is not possible in German with scrambling/topicalization, whereas reconstruction to intermediate positions is an option with scrambling/topicalization.

variable binding would be possible in (69), contrary to fact. The marking of  $[\heartsuit]$  on that copy of the DO indicates this.

It is worth noting at this point that that the sentence in (69) (among others examined below, see fn.32) provides evidence that subjects in Turkish do not undergo movement to Spec,IP (i.e., no EPP-driven movement of subjects is forced). To be exact, if movement of subjects to Spec,IP were possible/forced, then the lack of the bound variable reading in (69) would remain unaccounted for since the raised subject QP could bind the intermediate copy of the object NP in Spec,vP (this copy is available for the purposes of variable binding, see the discussion below). A question now arises what is responsible for the variation between Turkish and English with respect to subject movement to Spec,IP.

I suggest that an answer may be provided by adopting a proposal made in George and Kornfilt (1981) based on Turkish, where structural case marking goes hand-in-hand with agreement.<sup>36</sup> I assume that this unity of case and agreement does not hold in all languages, but it arises as a parametric option in some

<sup>&</sup>lt;sup>36</sup> The connection between agreement and structural Case is not at the center of George and Kornfilt's (1981) discussion. George and Kornfilt (1981) mainly argue for the claim that Chomsky's (1973) *Tensed-S Condition* refers to the notion of *Finiteness*, rather than to *Tensedness*. On the basis of evidence from Turkish, George and Kornfilt (1981) demonstrate that the presence of subject agreement is responsible for the opacity/transparency of domains, and not the presence of Tense. The observation that *Agreement* is about subjects (at least in Turkish), and that a subject is understood as the Nominative of a finite clause in Turkish, paved the way for the now widespread claim that structural Case goes hand-in-hand with agreement, not with Tense.

languages and not in others. I implement this by assuming that the parametrization is manifested in such a way that a language like Turkish allows *reflex checking* of Nominative Case features as a consequence of [phi] checking (see Chomsky 2000), while English does not allow it. An immediate consequence of this in Turkish is that no movement of a subject NP is forced<sup>37</sup> given that [uCase] of the subject is checked as a result of [phi] feature checking, as illustrated below:<sup>38</sup>

(74) <u>TURKISH</u>

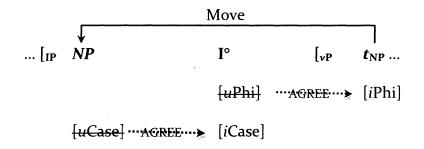
 $\dots [IP I^{\circ} [vP NP \dots \\ [uPhi] \cdots AGREE \cdots > [iPhi]$ 

<sup>&</sup>lt;sup>37</sup> This is tantamount to saying that Turkish does not have the EPP requirement in more traditional terms.

<sup>&</sup>lt;sup>38</sup> Alternatively, we can assume that subject NPs in Turkish bear default Nominative Case (Nominative is indeed the default Case in Turkish, see Kornfilt 2001); in this respect, see Bošković 2010c regarding how default Case can be implemented in the current framework. What is important for our purposes is that in Bošković's implementation default Case licensing does not involve Agree/Move (for Bošković 2010c, default Case is uninterpretable and unvalued, and valued uninterpretable features are quite generally deleted without undergoing checking). In fact, given that there is actually no morphological realization of Nominative in Turkish (i.e., traditional Nominative NPs are bare), it is also not out of question that such NPs even lack [uCase].

Unlike Turkish, English then does not allow reflex checking of Nominative Case as a result of [phi] feature checking. A subject NP with a [uCase] must move to act as a Probe and undergo feature checking in English, as illustrated in (75):<sup>39</sup>

(75) <u>ENGLISH</u>

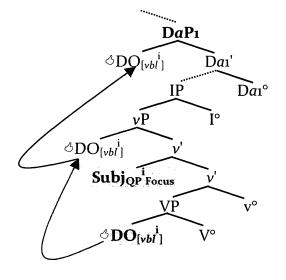


The implication of the above suggestion is that [uCase] may trigger the movement of subject NPs as a parametric option, but otherwise movement is driven by [uOP]of XPs.

Returning to the main thread of my discussion in this section, the grammaticality of (70) with the variable binding suggests that the restriction on the reconstruction of Topic-moved NPs to the base position does not hold for NPs that are DAs. As a matter of fact, the availability of variable binding reading in (70) is only possible if the DA-moved NP is reconstructed to the base position since the subject NP is Focus, hence does not vacate its original position, as illustrated below:

<sup>&</sup>lt;sup>39</sup> This is in fact how Bošković (2007) implements the traditional EPP requirement in his system.

(76) [= (70)] OK $[[...vbl...]_{obj}]_{DA} \gg [QP_{subj}]_{FOCUS} \gg V$ 



The data in (69) and (70) are compatible with an analysis that bans reconstruction of Topics to their original/first-merged positions, which takes it for granted that Topics cannot be interpreted in the theta domain. As suggested to me by Željko Bošković (p.c.), this may be made to follow from the assumption that Topicmovement forms an operator-variable chain, and the foot of such a chain must be turned into a variable in LF by the operation of trace conversion. Converting a copy of an NP into a variable is exactly what causes a problem for variable binding as it wipes out the pronominal variable, which was part of original copy, from the representation at the relevant level.

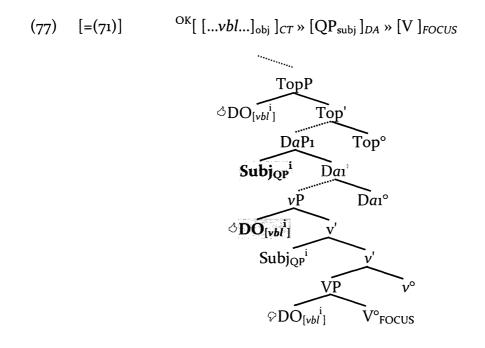
Željko Bošković (p.c.) also points out another alternative that provides an account for the contrast between Topic-moved and DA-moved XPs in terms of their reconstruction below Focus. The idea is simply that Topic cannot be interpreted in the scope of Focus, which is reflected in numerous works that put TopP on top of FocP (see Beninca & Poletto 2004, Frascarelli and Hinterholzl 2007, Kiss 1994, Puskás 2000, Rizzi 1997, 2001, 2004, 2006, Rudin 1988, among many others). The implication is that DAs, which may be bound, can be within the scope of Focus, unlike Topics. This is plausible in light of Rizzi's (1997 et seq.) claim that D*a*Ps (his lower TopPs) may be below FocP.

Although the data in (69) and (70) do not present decisive evidence in favor of one of the alternative analyses noted above, it will become clear during the discussion below when additional data are presented that the *no-reconstructionto-the-base* approach is more viable.<sup>40</sup>

Consider now the derivation of the sentence in (71). The availability of variable binding in (71) is a direct consequence of two factors: (i) The subject QP has a *non*-Focus character; it is in fact a DA, and (ii) intermediate copies of Topic-moved NPs may be active/interpreted, as we have seen in the derivation of (69) given in (73) (indicated by the [d] marking on the Spec-vP copy of the object NP). The verb being the Focus of the sentence, the subject QP and the object NP both undergo left peripheral movement. In light of the observation that object NPs undergoing movement to peripheral positions stop at the edge of vP creating an intermediate position for reconstruction, the derivation of (71) below demonstrates that the DA-moved subject QP in Spec, DaP1 c-commands and hence binds the

<sup>&</sup>lt;sup>4°</sup> It should be noted that under the *no-reconstruction-below-focus* analysis, the argument against subject movement to Spec,IP based on (73) does not go through. Even if the subject were to move to Spec,IP, the Topic could not reconstruct to Spec,*v*P since it would then be in the scope of Focus. However, we will see below evidence against the *no-reconstruction-below-focus* analysis.

intermediate copy of the Topic-moved DO in Spec-vP, which is active (indicated by [소]):



Importantly, the lack of reconstruction to the base position does not prevent variable binding in (71) as the subject QP vacates its base position not being Focus, hence can bind into a copy of the Topic in Spec,vP.

Finally, the derivation of (72) follows pretty much the same pattern as (71) except for one thing, which is that both the object NP and the subject QP undergo DA-movement in (72). We have already seen that base copies of DA-moved XPs can be active, unlike Topic-moved XPs. This provides a straightforward account for the availability of variable binding in (72).

I will now present an argument that can help us tease apart two explanations for the restriction on Topic reconstruction presented above. Recall that one explanation relied on the impossibility of Topic reconstruction in the scope of Focus, and in the other explanation relied on the impossibility of Topic reconstruction to the base position, due to the operation of trace conversion. Consider the example in (78), where both the DO and the subject QP undergoes left peripheral movement (Topic and DA-movement, respectively) across a temporal adverb:

(78)

A: Herkes babasını MEZUNİYET TÖRENİNDEN SONRA öptü. Everyone kissed their father AFTER THE GRADUATION CEREMONY.

B: [<u>pro<sup>i</sup> anne-si]-ni-yse</u> <u>herkes<sup>i</sup></u> **TÖREN-DEN ÖNCE** mother-3sg.poss-acc-CT everyone-nom ceremony-abl before

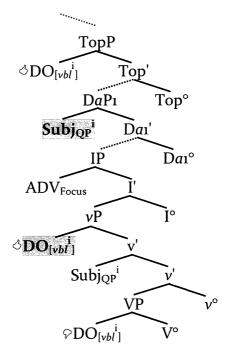
 $t_{[\text{pro anne-si}]-\text{ni}}$  öp-müş.

kiss-e.past

'Lit. As for his/her mother, reportedly, everyone kissed her **BEFORE THE CEREMONY**.'

(78) shows that the *no-reconstruction-below-focus* analysis cannot be maintained as this analysis predicts (78) to be ungrammatical: The DO in (78) undergoes Topic-movement while the subject QP undergoes movement to Spec,D*a*P1. If the restriction on Topic reconstruction were to be implemented as the ban on reconstruction under Focus, the Topic-moved NP would be unable to reconstruct quite generally in this example; i.e., to either Spec,vP or the base position because they are both below the base position of the focused temporal adverb. This is explicated in the derivation in (79) (note that it does not matter whether the temporal adverb is vP- or IP-adjoined; (78) is predicted to be unacceptable under the *no-reconstruction-below-focus* analysis either way):

(79) 
$$[=(78)]$$
  $OK[[...vbl...]_{obj}]_{CT} \gg [QP_{subj}]_{DA} \gg [ADV]_{FOCUS} \gg V$ 



On the other hand, the grammaticality of (78) is straightforwardly accounted for under the *no-reconstruction-to-the-base* analysis since the analysis allows activation of the object copy in Spec,vP, and the variable inside this copy can be bound by the subject in Spec, $DaP1.^{41}$ 

Consider now the sentences in (80), where the NPs with a variable are subjects and the subject NPs are sentence-initial. These sentences provide further support for the claims that (i) Focus remains in-situ, (ii) base copies of Topicmoved XPs are inactive for the purposes of variable binding, which is not the case with DA-moved XPs, (iii) subjects do not move to Spec, IP in Turkish.

(80)  $[ [...vbl...]_{subj} ]_{DA} \gg [QP_{obj}]_{FOCUS} \gg V$ 

A: Dünkü partide yalnızca Pelin'in annesi öp-müş Pelin'i. Doğru mu?

I hear that at the party yesterday only Pelin's mother kissed Pelin. Is that right?

B: Valla bildiğim kadarıyla...

Frankly, as far as I know...

\*[pro<sup>i</sup> anne-si] HERKES-İ<sup>i</sup> öp-tü.

mother-3sg.poss-nom everyone-acc kiss-past

'Lit. Everyone, his/her mother kissed.'

<sup>&</sup>lt;sup>41</sup> Note that following standard assumptions I assume that the object shift position (i.e., Spec,*v*P through which the object passes) is higher than the subject theta-position.

(81)  $[ [...vbl...]_{subj} ]_{CT} \gg [QP_{obj}]_{DA} \gg [V]_{FOCUS}$ 

A: Dünkü törende öğretmenler her öğrenciyi azarlamış. Doğru mu?

I hear that at the ceremony yesterday the teachers scolded every student. Is that right?

B: Valla öğretmenlerden haberim yok ama...

Frankly, I do not know about the teachers but...

\*[pro<sup>i</sup> danışman-1] herkes-i<sup>i</sup> TEBRİK ET-Tİ

mentor-3sg.poss-nom everyone-acc congratulate do-past

tören-de.

ceremony-loc

'Lit. Everyone<sup>i</sup> was CONGRATULATED by his/her mentor<sup>i</sup> at the ceremony.'

(82)  $[ [...vbl...]_{subj} ]_{DA} \gg [QP_{obj}]_{DA} \gg [V]_{FOCUS}$ 

A: Dünkü törende öğretmenler her öğrenciyi azarlamış. Doğru mu?

I hear that at the ceremony yesterday the teachers scolded every student. Is that right?

B: Hayir azarlamadi. Tam tersine...

No they did not. On the contrary,...

[pro<sup>i</sup> öğretmen-i] her öğrenci-yi **TEBRİK ET-Tİ** teacher-3sg.poss-nom ever student-acc congratulate do-past

tören-de.

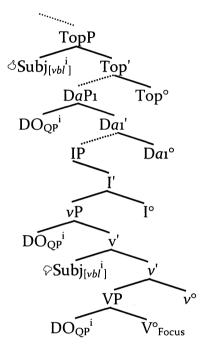
ceremony-loc

'Lit. Every student<sup>i</sup> was CONGRATULATED by his/her teacher<sup>i</sup> at the ceremony.'

The ungrammaticality of (80) with a variable binding reading is expected under the present system: Being Focus, the quantificational object must remain in-situ, which in principle eliminates the possibility of the quantificational object binding the variable inside the subject NP.

The sentences in (81) and (82) differ from one another only with respect to the discourse function of the subject NPs that host a pronominal variable; otherwise they are identical. Let me begin with (81), where variable binding is not available despite the fact that the object QP is not Focus. The object QP in (81) is a DA, which undergoes movement to Spec,  $DaP_1$  via Spec, vP, leaving an intermediate copy as indicated in (83):

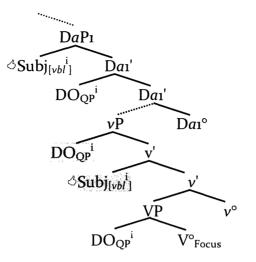
(83) 
$$[=(81)]$$
 \* $[[...vbl...]_{subj}]_{CT} \gg [QP_{obj}]_{DA} \gg [V]_{FOCUS}$ 



The only copy of the subject NP that is c-commanded by one of the copies of the moved object QP, hence the only copy that can be relevant for variable binding is the base copy in Spec,*v*P. However, we have already established that this copy of the Topic-moved subject NP cannot be active/interpretable for the purposes of variable binding. The lack of bound variable reading in (81) thus receives a natural account. It should be noted that the lack of an intermediate position between the base and the final position of the subject NP (unlike object movement) is a direct consequence of the phase system adopted here along with the PIC; since subjects

are at the edge of the *v*P-phase, they move to their landing site in one fell swoop (at least in root contexts), while objects cannot do so being embedded in the *v*Pphase. Note also that (81) provides very strong evidence that there is no subject movement to Spec,IP in Turkish. If there were, there would be a copy of the subject in Spec,IP, which would be available for binding by the DO in Spec,D*a*P1. (81) would then be incorrectly ruled in if the subject were to move to Spec,IP on its way to a higher position.

Variable binding is possible in (82), which is expected. Once again, the type of movement an NP undergoes plays a significant role in this outcome in light of the observation that reconstruction to the original position has a bearing on the computation of variable binding. Unlike (81), reconstruction of the subject NP to its base position is possible in (82), since the subject NP undergoes DA-movement. The availability of the bound variable reading in (82) is accounted for even in the absence of an intermediate copy of the subject simply because reconstruction to the base is an option with DAs (note that there are multiple copies/configurations in (84) that allow variable binding. I indicate only one of them via shading): (84)



To summarize, the data examined in this sub-section have provided support for the claim that Focus in Turkish remains in-situ while also demonstrating that the availability of reconstruction to the base position for the purposes of variable binding is dependent on the type of movement non-Foci undergo. Specifically, base copies of DA-moved XPs can be active for variable binding but base copies of Topic-moved XPs cannot be active for reasons outlined earlier. I have also provided evidence that subjects in Turkish do not move to Spec, IP.

In the next section, I turn to an examination of clauses with distransitive verbs in the context of variable binding and show that the conclusions reached in this section are supported by them.

## 5.2 Variable Binding and reconstruction in ditransitives

Turkish in principle allows both the IO»DO and the DO»IO order. However, when applied to Turkish ditransitive sentences, the tests used so far suggest that IOs are structurally higher than DOs (see also Öztürk 2004 for this claim on ditransitives),. Witness the contrast between (85) and (86) with respect to the availability of a bound variable reading:

(85) \*[Subj ]<sub>CT</sub>» [IO<sub>[...vbl...]</sub>]<sub>DA</sub>»  $t_{Subj}$ »  $t_{IO}$ » [DO<sub>QP</sub>]<sub>FOCUS</sub>» V

Pelin bazi kedileri sahiplerine vermiş.

Pelin apparently gave some cats to their owners.

\*<u>Ben-se [pro<sup>i</sup> sahib-i-ne</u>] **HER KEDİ-Yİ**<sup>i</sup> ver-di-m. I-nom-CT owner-3s.poss-dat every cat-acc give-past-1sg 'And I gave every cat to its owner.'

(86) [Subj ]<sub>CT</sub> » [IO<sub>QP</sub> ]<sub>DA</sub> »  $t_{Subj}$  »  $t_{IO}$  » [DO<sub>[...vbl...]</sub>]<sub>FOCUS</sub> » V

Pelin öğrencilere okulun kardan dolayı kapandığını haber verdi.

Pelin informed the students of the school's closing due to snow.

<u>Ben-se</u> <u>her</u> <u>öğrenci-ye</u><sup>i</sup> [*pro*<sup>i</sup> SINAV SONUC-U-NU] bildir-di-m. I-nom-CT every student-dat exam result-3s.poss-acc inform-past-1s 'And I informed every student of his/her exam result.' The IO in (85) is an NP with a pronominal variable and the DO is a QP, and variable binding is not an option there. In (86), however, the IO is a QP and the DO is an NP that hosts a pronominal variable, and variable binding is possible this time. Note two things about the data in (85) and (86), which are crucial for my present purposes. First, in both sentences the DOs are Foci, hence they remain insitu. Secondly, the IOs in both sentences undergo DA-movement, which we have seen can reconstruct to the base position. In light of these observations, it may be concluded that the ungrammaticality of (85) is not due to the lack of reconstruction, but it is a natural consequence of the base order/hierarchy of IO and DO in Turkish, which is that IO c-commands DO. This also provides a straightforward account for the grammaticality of (86) with the bound variable reading, where the IO-QP c-commands the DO that contains the pronominal variable.

Note now that the strings in (87) below are both unacceptable with a variable binding reading in *all-focus* contexts (as an answer to the 'what happened?' question):

- (87) <u>All-Focus Context</u>
  - a. \*IO<sub>[...vbl</sub><sup>i</sup>...] » DO<sub>QP</sub><sup>i</sup> » V b. \*DO<sub>[...vbl</sub><sup>i</sup>...] » IO<sub>QP</sub><sup>i</sup> » V

(87)a and (87)b are unacceptable in *all-focus* contexts for different reasons. (87)a is out because 'IO»DO' being the canonical order, binding of the variable within the IO is not possible, as discussed above. (87)b is out simply because 'DO»IO' cannot be used in *all-focus* sentences given that 'IO»DO' is the canonical order in Turkish, and 'DO»IO' is a derived order. In fact, sentences in which a DO precedes an IO quite generally cannot be used in *genuine all-focus* sentences, as in (88):

(88)

Q: Ne oluyor? Niye ağlıyor Pelin? What is going on? Why is Pelin crying? A: <sup>#</sup> Çünkü Mete kitab-ı Aylin-e ver-di. because M-nom book-acc A-dat give-past 'Because Mete gave the book to Aylin.'

Further support for the above analysis comes from the observation that variable binding becomes possible when the quantificational DO in (85) undergoes DA-movement as shown in (89) below, where the IO is Focus:

(89)  $[Subj]_{CT} \gg [DO_{QP}]_{DA} \gg t_{Subj} \gg [IO_{[...vbl...]}]_{FOCUS} \gg t_{DO} \gg V$ 

Pelin mahallede bulduğu her kediyi eve getirmiş.

*Reportedly, Pelin brought home every cat she found in the neighborhood.* 

<u>Ben-se</u> her kedi-yi<sup>i</sup> [pro<sup>i</sup> SAHİB-İ-NE] ver-di-m. I-nom-CT every cat-acc owner-3s.poss-dat give-past-1sg 'And I gave every cat to its owner.'

Given that 'IO»DO' reflects the base order in Turkish, the sentence in (89) should be analyzed as involving movement of the quantificational DO across the IO. Notice that the movement of the QP-DO in (89) is an instance of DA-movement while the subject of the same sentence is a C-Topic. Variable binding is thus possible once the QP-DO takes the IO in its scope.

Consider now the example below:

(90)  $[Subj]_{CT} \gg [DO_{[...vbl...]}]_{DA} \gg t_{Subj} \gg [IO_{QP}]_{FOCUS} \gg t_{DO} \gg V$ 

Pelin'in sınav sonuçlarını bazı öğretmenlere bildirdiğini duydum.

*I heard that Pelin informed some the teachers of her exam results.* 

Ben-se[proi sinav-1-ninsonuc-u-nu]HERÖGRENCİ-YEiI-nom-CTexam-3s.poss-gen result-3s.poss-accevery student-dat

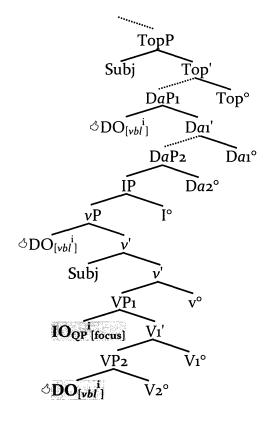
bildir-di-m.

announce-past-1sg

'And *I* let every student know of his/her exam result.'

The availability of variable binding in (90) shows once again that a DO that undergoes DA-movement in the pre-verbal field can be reconstructed to its base position below the quantificational IO, which is Focus, hence unmoved. The derivation of this sentence is given in (91) below adopting a version of the Split VP hypothesis proposed in Yatsushiro (1999), where the subject, indirect object and direct object are base generated as specifiers of distinct VP projections (see also Bobaljik 1995, Koizumi 1995, Larson 1988, Lasnik 1995, Marantz 1993, for different versions of this general proposal):

(91) [=(90)]  $[Subj]_{CT} \gg [DO_{[\dots vbl...]}]_{DA} \gg t_{Subj} \gg [IO_{QP}]_{FOCUS} \gg t_{DO} \gg V$ 



We then make an obvious prediction given the discussion thus far: If a DO that contains a pronominal variable undergoes Topic-movement, while a quantificational IO is Focus, variable binding should be impossible since Topicmovement does not allow reconstruction to the base. This prediction is borne out, as indicated by the ungrammaticality of (92) with the bound variable reading:

(92)  $[DO_{[...vbl...]}]_{CT} \gg [IO_{QP}]_{FOCUS} \gg t_{DO} \gg V$ 

Pelin yeni sınav tarihlerini bazı öğretmenlere bildirdi.

Pelin informed some the teachers of the new exam dates.

\*[<u>pro<sup>i</sup> sınav-1-nın sonuc-u-nu]-ysa</u> HER ÖĞRENCİ-YE<sup>i</sup>

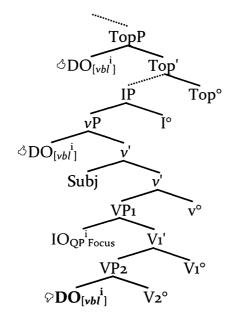
exam-3s.poss-gen result-3s.poss-acc-CT every student-dat

bildir-ecek.

announce-fut

'And she will let every student know of his/her exam result.'

The problem in (92) is clearly depicted by its derivation given in (93): Since the only copy of DO that is c-commanded by the quantificational IO is the base copy of the DO, and since that copy cannot be active in Topic-movement, a bound reading of the variable inside the DO-NP is not possible. Notice that there is an intermediate copy of the DO at the edge of vP, which may be active as reconstruction to this position is in principle possible with Topic-movement. However, this intermediate copy of the DO-NP is not c-commanded by the quantificational IO.



Assuming that the analysis of (92) in (93) is on the right track, we can make another prediction: If a quantificational IO is free to move (not being Focus), then the binding of a pronominal variable inside a DO should be possible even when the DO undergoes Topic-movement. The grammaticality of the sentence in (94) with the bound variable reading shows that this prediction holds as well:

(94)  $[DO_{[...vbl...]}]_{CT} \gg [IO_{QP}]_{DA} \gg [Subj]_{FOCUS} \gg t_{IO} \gg t_{DO} \gg V$ 

Pelin yeni sınav tarihlerini her öğrenciye bildirdi.

Pelin informed every student of the new exam dates.

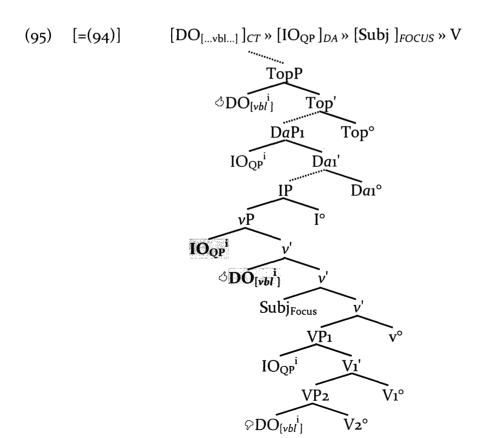
[pro<sup>i</sup> sınav-1-nın sonuc-u-nu]-ysa her öğrenci-ye<sup>i</sup> SUZAN exam-3s.poss-gen result-3s.poss-acc-CT every student-dat S-nom

bildir-ecek.

anounce-fut

'And Suzan will let every student know of his/her exam result.'

The derivation of (94) is depicted in (95) below, where both the quantificational IO and the host of the pronominal variable, namely DO, undergo movement to their final positions through the edge of the vP phase. This is what makes variable binding possible although the Topic-moved DO cannot be reconstructed to its original position below the subject NP that is Focus; intermediate reconstruction is sufficient as the IO also moves:



In the next section, I turn to an examination of clauses with constituents in the post-verbal field in the context of variable binding.

### 5.3 Variable Binding in SVO/OVS and VOS/VSO sentences

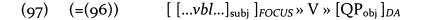
I now turn to examples involving post-verbal NPs. The insights gained by the examination of (di-)transitive sentences in the last two sub-sections allow us to make clear predictions regarding variable binding in sentences in which one or all of the arguments are placed in the post-verbal field.

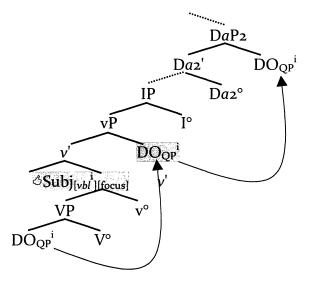
Under the structure adopted in this dissertation, a postposed (i.e., postverbally placed) XP targets the right-specifier position of the projection  $DaP_2$ , which is, by assumption, the lowest projection in the split CP. We have seen that DA-moved XPs in the pre-verbal domain (i.e., those that target Spec, $DaP_1$ ) can be reconstructed to their original position. Given this, the expectation is that the same option should be available for postposed XPs, which also undergo DAmovement, but of a less restricted type.

Structurally, an XP that moves to Spec, D*a*P<sub>2</sub> unambiguously c-commands a pre-verbal XP that is Focus, but such an XP does not c-command Topic-moved or DA<sub>1</sub>-moved XPs in their final landing sites since pre-verbal Topics and DAs are structurally higher than a DA<sub>2</sub>-moved XP.

I will begin the investigation with the sentence in (96), where the subject in the pre-verbal field that contains a pronominal variable is C-Focus, while the object QP is placed in the post-verbal field, being a non-contrastive DA: (96) [[...vbl...]<sub>subj</sub>]<sub>FOCUS</sub> » V » [QP<sub>obj</sub>]<sub>DA</sub>
[pro<sup>i</sup> ANNE-Sİ] öp-müş <u>herkes-i</u><sup>i</sup>.
mother-3s.poss-nom kiss-e.past everyone-acc
'Everyone, his/her mother kissed.'

Variable binding is possible in (96) as predicted under the present system. The postposed quantificational DO c-commands, hence can bind into the subject NP that is Focus. Being Focus, the subject NP in (96) remains in-situ, whereas the postposed object QP ends up in the Spec of  $DaP_2$  (passing through the phasal edge of vP):





The sentence in (96) not only argues for the in-situness of Foci in Turkish but it also supports the claim that post-verbal constituents are higher than pre-verbal constituents that are not moved to left peripheral positions. If a pre-verbal subject NP is not Focus, it may have one of the following discourse functions: Topic or DA. Consider first the sentence with a Topic subject:

(98)  $[ [...vbl...]_{subj} ]_{CT} \gg [V]_{FOCUS} \gg [QP_{obj}]_{DA}$ 

A: Dünkü törende öğretmenler her öğrenciyi azarlamış. Doğru mu?

I hear that at the ceremony yesterday the teachers scolded every student. Is that right?

B: Valla öğretmenlerden haberim yok ama...

Frankly, I do not know about the teachers but...

\*[<u>pro<sup>i</sup> danışman-1]</u> **TEBRİK ET-Tİ** <u>herkes-i</u><sup>i</sup>

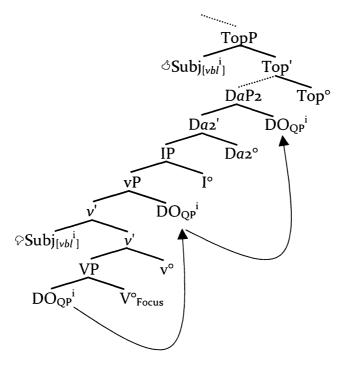
mentor-3sg.poss-nom congratulate do-past everyone-acc

tören-de.

ceremony-loc

'Lit. Everyone<sup>i</sup> was CONGRATULATED by his/her mentor<sup>i</sup> at the ceremony.'

The ungrammaticality of (98) with the variable binding reading supports the conclusion of the previous sections that a Topic-moved XP does not reconstruct to its base position, which means in the context of (98) the post-verbally placed quantificational DO does not c-command the subject NP, hence cannot bind the variable inside it, as illustrated in (99):



As is clear from the derivation of (98) in (99), for this analysis of the lack of variable binding to hold, no movement of the subject NP to Spec,IP should be possible, nor should (string vacuous) 'scrambling' of the subject be allowed (these operations would create copies of the subject that are c-commanded by the post-verbal QP). This is in line with the overall claims in this dissertation.

Turning to the other alternative, where the pre-verbal subject is a DA, we observe that it exhibits different behavior with respect to the availability of variable binding, as shown in (100): (100)  $[ [...vbl...]_{subj} ]_{DA} \gg [V]_{FOCUS} \gg [QP_{obj}]_{DA}$ 

A: Dünkü törende öğretmenler her öğrenciyi azarlamış. Doğru mu?

I hear that the teachers scolded every student at the ceremony yesterday. Is that right?

B: Hayır azarlamadılar. Tam tersine...

No they did not. On the contrary...

[pro<sup>i</sup> öğretmen-i] TEBRİK ET-Tİ her öğrenci-yi

teacher-3sg.poss-nom congratulate do-past every student-acc

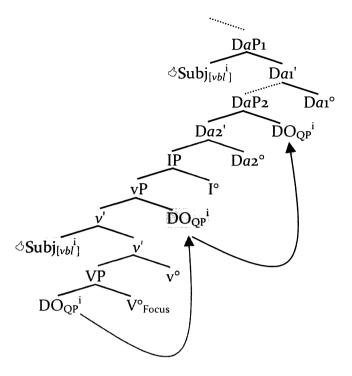
tören-de.

ceremony-loc

'Lit. Every student<sup>i</sup> was CONGRATULATED by his/her teacher<sup>i</sup> at the ceremony.'

The availability of the bound variable reading in (100) is once again predicted given that DAs can be reconstructed to their base position, unlike Topics. As a result, the subject NP in (100) which undergoes movement to Spec,DA1 can be reconstructed to its base position. The postposed quantificational object DA c-commands the base copy of the subject NP, hence can bind the pronominal variable inside the pre-verbal subject, as illustrated in (101):

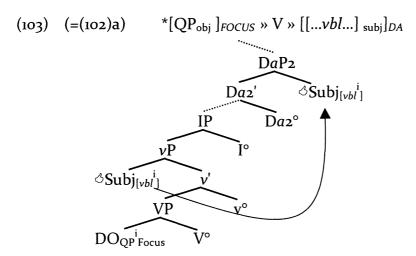




Consider now the sentences in (102) below, where the post-verbal constituent is the subject NP with a pronominal variable. A contrast in terms of the availability of variable binding emerges depending on the discourse function of the pre-verbal DO. Specifically, the sentence in (102)a reveals that variable binding is not an option when a quantificational DO in the pre-verbal field is Focus. The sentence in (102)b shows that the bound variable reading becomes possible when the quantificational DO in the pre-verbal field is no longer Focus. Since Topic movement of universal quantifiers is disallowed (as noted in Section 3), a non-Focus pre-verbal QP must be a DA, hence it moves to Spec-D*a*P1: (102)

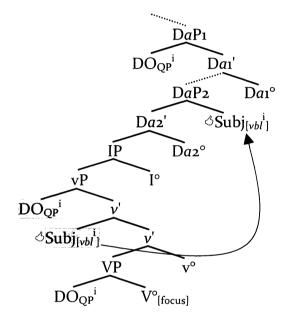
a. [QP<sub>obj</sub>]<sub>FOCUS</sub> » V » [[...vbl...]<sub>subj</sub>]<sub>DA</sub>
\*HERKES-İ<sup>i</sup> öp-müş [pro<sup>i</sup> anne-si].
everyone-acc kiss-e.past mother-3s.poss-nom
'EVERYONE, his/her mother kissed.'
b. [QP<sub>obj</sub>]<sub>DA</sub> » [V]<sub>FOCUS</sub> » [[...vbl...]<sub>subj</sub>]<sub>DA</sub>
Herkes-i<sup>i</sup> ÖP-MÜŞ [pro<sup>i</sup> anne-si].
everyone-acc kiss-e.past mother-3s.poss-nom
'\*His/her mother KISSED everyone.'

As the derivation of (102)a below illustrates, there is no configuration in which the pre-verbal object QP c-commands the subject NP since the object QP remains insitu being Focus. Put differently, even the base copy of the post-verbally placed subject NP is not sufficient for the purposes of variable binding:



The availability of the bound variable reading is expected for (102)b, since the object QP undergoes movement, hence c-commands and binds into the subject NP even in the post-verbal field, as illustrated in (104):

(104) 
$$(=(102)b)$$
  $[QP_{obj}]_{DA} \gg [V]_{FOCUS} \gg [[...vbl...]_{subj}]_{DA}$ 



In what follows, I will examine two more sets of data. The first pair of sentences given in (105) and (106) illustrate that a post-verbally placed quantificational subject binds into a pre-verbal object NP regradless of whether the latter is in-situ (being Focus) or moved (being Topic or DA):

#### (105) $[ [...vbl...]_{obj} ]_{FOCUS} \gg V \gg [QP_{subj}]_{DA}$

A: Mezuniyet töreninden sonra herkes önce babasını öpmüş. Doğru mu? I heard, after the graduation ceremony, everyone kissed his father first. Is that right? B: Hayır...

No...

[pro<sup>i</sup> **ANNE-Sİ**]-**Nİ** öp-tü herkes<sup>i</sup>. mother-3s.poss-acc kiss-past everyone-nom 'Everyone kissed HIS/HER MOTHER.'

(106)  $[[...vbl...]_{obj}]_{DA} \gg [V]_{FOCUS} \gg [QP_{subj}]_{DA}$ 

A: Mezuniyet töreninden sonra herkes annesini azarlamış. Doğru mu?

I heard, after the graduation ceremony, everyone scolded his mother. Is that right?

B: Hayır, tam tersine...

No, just the contrary...

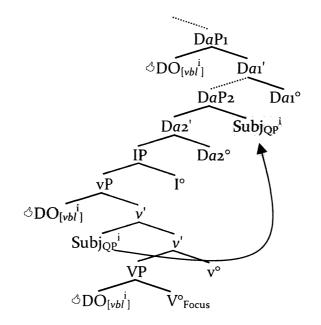
[pro<sup>i</sup> anne-si]-ni ÖP-TÜ herkes<sup>i</sup>.

mother-3s.poss-acc kiss-e.past everyone-nom

'Everyone KISSED his/her mother.'

I will only illustrate the derivation of (106) since the derivation of (105) is rather trivial in light of the discussion thus far: The postposed QP subject c-commands the Focus object NP both from the base and from the final landing site, hence variable binding is allowed. As for the derivation of (106), the DO undergoing movement to Spec,  $DaP_1$  can be reconstructed either to the intermediate position at the edge of vP or to its base position, which we have already established is possible. Either copy of the DO is c-commanded by the subject QP in its base position or in its final landing site in the Spec of  $DaP_2$  (I indicate only one of the configurations relevant to variable binding):<sup>42</sup>

(107) (=(106)) [ [...vbl...]<sub>obj</sub>]<sub>DA</sub> » [V]<sub>FOCUS</sub> » [QP<sub>subj</sub>]<sub>DA</sub>



To complete the paradigm, I present the examples in (108) and (109), where the postposed elements are DOs that contain a pronominal variable, while the preverbal subjects QPs are Focus and DA, respectively:

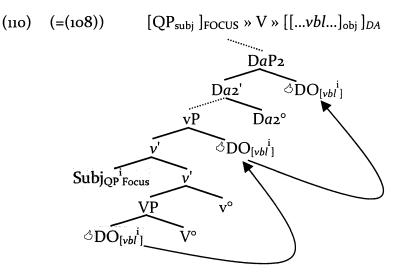
<sup>&</sup>lt;sup>42</sup> Note that the situation would not be different under the present system if the pre-verbal DO underwent Topic movement. Given that Topic-moved XPs can be reconstructed to intermediate positions though not to the base, the post-verbal subject QP would c-command, hence bind the intermediate copy of the Topic moved DO, just as in (106/107).

(108)  $[QP_{subj}]_{FOCUS} \gg V \gg [[...vbl...]_{obj}]_{DA}$ 

HERKES<sup>i</sup> öp-müş [<u>pro<sup>i</sup> anne-si]-ni</u>. everyone-nom kiss-e.past mother-3s.poss-acc 'EVERYONE kissed his/her mother.'

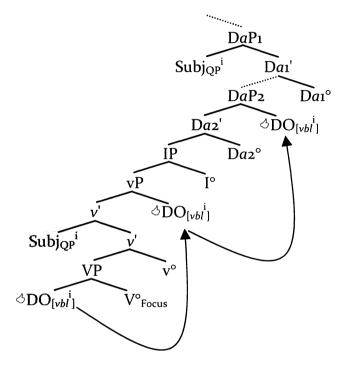
(109) [QP<sub>subj</sub>]<sub>DA</sub> » [V]<sub>FOCUS</sub> » [[...vbl...]<sub>obj</sub>]<sub>DA</sub>
<u>Herkes<sup>i</sup></u> ÖP-TÜ [pro<sup>i</sup> anne-si]-ni.
everyone-nom kiss- past mother-3s.poss-acc
'Everyone KISSED his/her mother.'

Consider the derivation of (108), where the pre-verbal subject QP is Focus, hence in-situ. Importantly, the postposed DO can be reconstructed all the way down to its base position, being a DA. The pronominal variable inside the base copy of the DO is c-commanded, hence bound by the subject QP in its base position:



The availability of the bound variable reading in (109) also follows trivially in the present system. The moved subject QP lands in the Spec of  $DaP_1$ , which is higher than the position that the postposed DO holds, as illustrated in (111):

(111) 
$$(=(109))$$
  $[QP_{subj}]_{DA} \gg [V]_{FOCUS} \gg [[...vbl...]_{obj}]_{DA}$ 



So far, we have examined sentences where one argument is in the pre-verbal field and the other in the post-verbal field. I would like to present now two more sets of sentences where both arguments are placed in the post-verbal field. These data presented below show that variable binding is possible in the post-verbal field no matter what the linear order of the postposed XPs is and also irrespective of the grammatical functions of the QPs and NPs with variables: (112)

A: Herkes annesini azarlayacakti mezuniyet töreninde (şaka olsun diye). Ne oldu biliyor musun?

I heard that everyone scolded his mother at the graduation ceremony (as a joke). Do you know what happened?

B: Tam tersine...

On the contrary...

a. [V]<sub>FOCUS</sub> » [QP<sub>subj</sub>]<sub>DA</sub> » [[...vbl...]<sub>obj</sub>]<sub>DA</sub>
ÖP-TÜ herkes<sup>i</sup> [pro<sup>i</sup> anne-si]-ni.
kiss-past everyone-nom mother-3s.poss-acc
'Everyone KISSED his/her mother.'
b. [V]<sub>FOCUS</sub> » [[...vbl...]<sub>obi</sub>]<sub>DA</sub> » [OP<sub>subi</sub>]<sub>DA</sub>

[V] FOCUS » [[...vbl...]obj]DA » [QPsubj]DA
ÖP-TÜ [pro<sup>i</sup> anne-si]-ni herkes<sup>i</sup>.
kiss-past mother-3s.poss-acc everyone-nom
'Everyone KISSED his/her mother.'

(113)

A: Herkesi annesi azarlayacaktı mezuniyet töreninde (şaka olsun diye). Ne oldu biliyor musun?

Everyone was going to kiss his mother after the graduation ceremony (as a joke). Do you know what happened?

B: Beklediğimizin aksine,

Contrary to what we all expected,

a. [V]<sub>FOCUS</sub> » [QP<sub>obj</sub>]<sub>DA</sub> » [[...vbl...]<sub>subj</sub>]<sub>DA</sub>
ÖP-TÜ herkes-i<sup>i</sup> [pro<sup>i</sup> anne-si].
kiss-past everyone-acc mother-3s.poss-nom
'\*His/her mother KISSED everyone.'
b. [V]<sub>FOCUS</sub> » [[...vbl...]<sub>subj</sub>]<sub>DA</sub> » [QP<sub>obj</sub>]<sub>DA</sub>
ÖP-TÜ [pro<sup>i</sup> anne-si] herkes-i<sup>i</sup>.

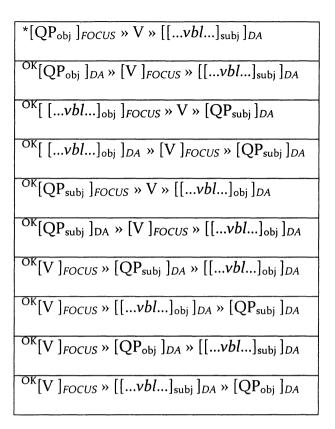
kiss-past mother-3s.poss-nom everyone-acc '\*His/her mother KISSED everyone.'

The felicity of all the sentences in both (112) and (113) with the variable binding reading is not surprising given that constituents that undergo postposing are DAs, which can be reconstructed to their base positions. This, in principle, makes variable binding always possible when the QP and the NP that contains the pronominal variable are both placed in the postverbal field as in (112) and (113).

Below I give a list of the sentences examined in this sub-section:

(114)

${}^{OK}[[vbl]_{subj}]_{FOCUS} \gg V \gg [QP_{obj}]_{DA}$
*[ [ <i>vbl</i> ] <sub>subj</sub> ] <sub>CT</sub> » [V ] <sub>FOCUS</sub> » [QP <sub>obj</sub> ] <sub>DA</sub>
<sup>OK</sup> [ [ <i>vbl</i> ] <sub>subj</sub> ] <sub>DA</sub> » [V ] <sub>FOCUS</sub> » [QP <sub>obj</sub> ] <sub>DA</sub>



# 5.4 Summary of the findings

The data examined in Sections 5.1-5.3 support the conclusions drawn in the previous sections regarding the behavior of Foci and non-Foci in Turkish. The data have specifically shown that two factors are relevant to the computation of variable binding in Turkish: (i) The place of a constituent with Focus (i.e., what constituent bears [focus]), and (ii) the type of movement that a constituent with no [focus] undergoes. We have seen that the type of movement that non-Focus undergoes is the key to the availability of reconstruction in that DAs may undergo reconstruction to the base while reconstruction to the base is not possible with Topics. I have also provided an explanation for the restriction on Topic reconstruction. The analysis of variable binding presented in Sections 5.1-5.3 has

been shown to accommodate both constructions involving QPs and NPs in the pre-verbal and the post-verbal field. It also captures variable binding data involving objects in ditranstive constructions.

A significant conclusion that may be drawn from the investigation in the last three sub-sections is that 'scrambling' is not part of Turkish syntax. All the data discussed above was captured without positing 'scrambling'. Furthermore, if 'scrambling' were allowed everything would collapse. In a nutshell, if 'scrambling' were allowed, there would be additional movement possibilities that would provide additional binding options that are not attested. Even putting this problem aside, if 'scrambling' were allowed, we would expect it to also be able to affect elements with [focus],<sup>43</sup> as a result of which the V-adjacency of Focus and 'low' behavior of Focus elements would remain unaccounted for. It is thus crucial that 'scrambling' is not at all an option that Turkish can resort to.

Similarly, the data discussed in Sections 5.1-5.3 provide strong evidence that Turkish subjects do not move to Spec, IP either as the final landing site of movement, or on their way to a higher position.

Before I conclude this section, I would like to briefly touch on the issue of linearization in the present system.

In the Minimalist Program, linear order is not established in narrow syntax but at the interface component dealing with sound, namely PF (cf. Chomsky

<sup>&</sup>lt;sup>43</sup> Since there is no Focus-movement in Turkish, we would not be dealing here with a case where an element has undergone Focus movement before 'scrambling'.

1995:334-5). Narrow syntax only operates on hierarchical structures being oblivious to the processees that transform structures into linear entities. PF is commonly assumed to contain language-variable operations of morphology-phonology (Chomsky 1965 et seq.), which implies that the mechanisms establishing linear order (i.e., linearization) might fall within the domain of language variable operations of morphology-phonology, and thus may be subject to cross-linguistic variation. This is a move that is in line with the main principles of the Minimalist Program, where syntax is minimized so as to include main generative procedures that combine elements to create larger units, such as Merge, and many traditional aspects of the theory of syntax are moved to the interfaces.

Such an approach is clearly at odds with the theories of linearization such as that of Kayne's (1994), where the linearization procedure features operations that apply to all languages in a uniform fashion (see Kayne's 1994 Linear Correspondence Axiom, and Uriagereka's 1999 deduction of the LCA. See also the criticism by Koster 2008, Richards 2004, among others).

Once a non-uniform approach to linearization is taken seriously, it is possible to assume that languages resort to different mechanisms to turn into linear units hierarchical structures generated by the narrow syntax. It is in fact rather trivial to come up with a linearization procedure that applies specifically to Turkish, though I will not take up this task in this dissertation. I merely note here in passing that the linearization of all syntactic units can be handled by

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asymmetric c-command except for the non-contrastive DAs in the post-verbal field, which can be assigned a special status in terms of linearization.<sup>44</sup>

In the next section, I discuss Focus-V adjacency in Turkish through a comparison with Basque, another language that exhibits Focus-V adjacency, and argue that Focus-V adjacency in Turkish should be analyzed differently from Focus-V adjacency in Basque.

# 6. Long distance (non-)movement of Focus and Focus-V adjacency in Turkish and Basque

I have argued in the preceding sections that the linear adjacency of Focus to V in Turkish is a consequence of the obligatory movement of non-Foci and obligatory non-movement of Foci. Under this approach, adjacency of V to Focus is *accidental* since there is no specific movement operation that puts together Focus and V in a local syntactic configuration as suggested, for instance, in Brody (1990) for Hungarian, in Ortiz de Urbina (1999a,b) for Basque, among others.

In this section, first I present a brief discussion of Focus in Basque, another SOV language that shares with Turkish the property of Focus-V adjacency, and review two competing analyses of Focus-V adjacency in this language. Then, I turn to Turkish and show that Turkish lacks long distance Focus movement, and instances of long distance movement attested in this language all involve

<sup>&</sup>lt;sup>44</sup> The post-verbal field may anyway have to be assigned special status even in some SVO languages to account, for example, for the role of heaviness.

movement of Topics, which is in line with the observations made earlier in this chapter based on data from root clauses. That Turkish is lacking Focus movement altogether suggests that the Focus-V adjacency in Turkish and Basque cannot be treated under a uniform analysis.

Let me begin with a sketch of Focus in Basque. Consider the sentences in (115), where the Foci are the object and the subject arguments, respectively:

(115)

a. Jonek MIREN ikusi rau

J-erg M-abs seen has

(i) Jon saw MIREN.

(ii) \***JON** saw Miren.

(iii) JON SAW MIREN.

b. Miren **JONEK** ikusi rau

M-abs J-erg seen has

(i) **JON** saw Miren.

(ii) \*Jon saw MIREN.

(iii) \*JON SAW MIREN.

[OK with an *all-focus* interpretation]

(Arregi 2001,4:2b)

(Arregi 2001,4:2a)

The data in (115) illustrate Focus-V adjacency in Basque, a characteristic that Basque shares with Turkish.

Different analyses of this phenomenon have been proposed in the literature

on Basque. Arregi (2001), for example, proposes an analysis of Focus in Basque adopting a 'N(uclear) S(tress) R(ule)-based' approach as originally proposed in Cinque (1993), who in turn builds on Chomsky and Halle (1968). Cinque's (1993) basic claim is that sentence/nuclear stress is assigned to the structurally most *embedded* constituent, which predicts that an object XP in a transitive sentence is always the Focus of the sentence. This is indeed the case in (115), as Arregi (2001) reports, where the object NP Miren is the most embedded constituent in the structure, the bearer of nuclear stress, and thus the Focus of the sentence. Taking an approach of this sort as a point of departure, Arregi (2001) argues that leftward and rightward movement operations in Basque create configurations in which unmoved (or probably only locally moved) constituents remain the most embedded. By the NSR rule, then, they come to bear sentential stress, and get interpreted as Focus. The example in (115)b illustrates this kind of scenario, where the object NP is fronted and the subject NP Jon remains as the most embedded constituent to receive stress and Focus.

The present analysis of Turkish Focus shares with Arregi's (2001) proposal the idea that it is non-Focus that moves, and the V adjacency of Focus in both languages is a result of the vP escaping movements of non-Focus. In other words, the adjacency of Focus to V in Basque is also *accidental* under Arregi's (2001) proposal, as in the present analysis of Turkish. The two approaches differ, however, as to how Focus is identified. For Arregi (2001), Focus is identified via nuclear stress placement which determines the F-Structure of a sentence in PF, whereas I adopt a position assuming that Focus is unequivocally determined in syntax by the presence of relevant features/properties (a proposal which dates back as early as Jackendoff 1972. See also Chomsky 1976, Horvath 1986, Brody 1990, Bošković 1999, Puskás 2000, Ortiz de Urbina 1999, Reglero 2003, among many others).<sup>45</sup>

Despite its initial appeal, Arregi's (2001) analysis has been shown to be unable to withstand futher data from Basque. Irurtzun (2007), in particular, makes a strong case against NSR-based approaches of the kind defended in Arregi (2001), where movement operations are driven by the need for non-focused elements to *avoid* stress. Irurtzun (2007) argues that Focus-V adjacency is accidental in such theories for no reference to the *verb* or such an adjacency is made. I refer the reader to Irurtzun (2007) for a detailed assessment of NSR-based approaches in general, and Arregi's (2001) proposal in particular. Nevertheless, I briefly discuss below one issue that is at the center of Irurtzun's (2007) critique of NSR based approaches, and their treatment of Focus-V adjacency in Basque. The issue in question concerns obligatory Focus movement in Basque out of embedded clauses. Irurtzun (2007) reports that a focal phrase originating in an embedded clause

<sup>&</sup>lt;sup>45</sup> It is worth noting here that the approach defended in Arregi (2001) for Basque makes certain predictions that are not made by the present approach to Turkish. To give an example, under Arregi's (2001) approach string vacuous movement/scrambling of a Focus constituent is possible to the extent that it remains as the lowest/most embedded in the structure for the purposes of the NSR. We have seen however in the preceding sections that (string vacuous) scrambling of Foci in Turkish is not an option.

typically appears at the left edge of the matrix clause in Basque, as illustrated in (116) (data due to Irurtzun 2007,p.150:12a, and p.68:8b, respectively):

(116)

a. JON pentsatzen dut [CP ikusi zuela Mirenek]

Jon think aux seen aux-that Miren

'(I) think Miren saw JON.'

b. MIRENEK esan du Jonek [CP uste duela Peruk [CP edan duela ardoa]]
Miren say aux Jon think aux-that Peru drink aux-that wine
'Jon said that Peru thinks that MIREN drank the wine.'

Irurtzun (2007) adopts a long distance Focus movement analysis of such examples, where the Focus constituent reaches a left peripheral Focus projection, as does the matrix V (Ortiz de Urbina 1989, 1993, 1995, 1999, Reglero 2003, 2004, Uriagereka 1999). The linear adjacency of the embedded Focus and the matrix V is thus derived through *structural adjacency*.<sup>46</sup> This analysis of Focus is identical to the analysis of long distance *wh*-questions in Basque, which also involve overt movement of embedded *wh*-phrases to the matrix clause and requires V-adjacency, as illustrated in (117) (example due to Reglero 2003,197:38).

<sup>&</sup>lt;sup>46</sup> By structural adjacency, I mean *contiguity/locality* in the structure, which is commonly derived via Spec-Head relations.

(117)

Nork<sub>1</sub> uste duzu [<sub>CP</sub> t<sub>1</sub> esan du-ela Mikelek who think aux say aux-comp M-erg

 $[_{CP} t_1 \text{ idatzi du-ela} eskutitza]]?$ 

write aux-comp letter

'Who do you think Mikel has said has written the letter?'

Irurtzun (2007) argues that the analysis that moves Focus (to the left periphery) has a great advantage in accounting for examples such as (116) and (117) over any analysis that moves non-Focus and derives Focus-V adjacency as an *accident* (as in Arregi 2001). One reason for this is that the movement analysis of Focus provides a 'simpler' account compared to the non-movement analysis of Focus (see below for this). Irurtzun (2007) also notes that it is a major virtue of the Focus movement analysis that it provides a straightforward account for the availability of subject-verb inversion in the embedded clause(s), under which the successive cyclic movement of the focal (*wh*-) XP is accompanied by the movement of the verb in both root and non-root contexts. Consider in this context the sentence in (118) from Arregi (2001), and his analysis in (119), where non-Focus moves:<sup>47</sup>

<sup>&</sup>lt;sup>47</sup> Notice that the example in (118) from Arregi (2001) differs from those examples cited from Irurtzun (2007) and Reglero (2003) in (116) and (1117) in that (118) does not involve subject-verb inversion in the embedded clause, though it does in the matrix clause. Irurtzun (2007) judges Arregi's (2001) (118) deviant, where there is no subject-verb inversion. Notably, judgments reported in Ortiz de Urbina (1989, 1999) and Laka &

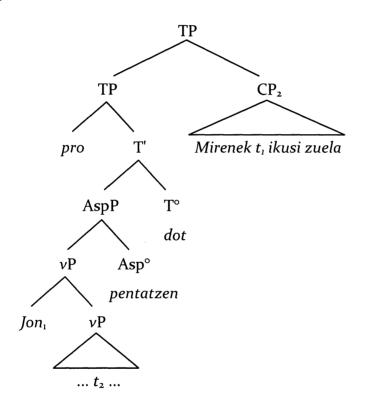
(118)

JON pentsatzen dot [Mirenek ikusi zuela]

J-abs I-think aux M-erg seen has-comp

'I think Miren saw JON.'

(119)



In the analysis given in (119) by Arregi (2001), the embedded subject *Jon*, which ends up being the Focus of the sentence, undergoes *fronting* to the matrix clause, which is in turn followed by the right dislocation of the remnant embedded CP

Uriagereka (1987) show the same pattern with that of Irurtzun's (2007), and contra Arregi's (2001) (see below for more on this). Torrego (1984) notes that Spanish also allows non-inversion in some cases.

(whose V also undergoes head movement to Asp<sup>o</sup> prior to the right dislocation of CP). Although the precise function of *fronting* was left unclear in Arregi (2001), it is clear that the *fronted* subject NP cannot be Focus movement in Arregi's (2001) system since Focus property is granted to this element only when/after NSR applies. Significantly, however, the instance of subject fronting in (118)/(119) looks exactly like an instance of Focus movement under the Focus movement analyses noted above. To note, no need would arise under the Focus movement analyses for the rightward dislocation of remnant CPs unlike Arregi's (2001) analysis.

Let us assume, as Irurtzun (2007) does, that there is a dialectal variation in Basque regarding the availability of subject-verb inversion in the contexts of long distance Focus/wh movement (see fn.47). The question is then how Arregi's (2001) analysis accounts for subject-verb inversion in the other dialect under his non-Focus movement analysis. It is obvious that the syntactic analysis of the sentences in (116)b and (117), which involve multiple embeddings and subject-verb inversion, gets extremely complex under the remnant movement analysis illustrated in (119). Being forced to an analysis of Focus-V adjacency that resorts to remnant movement operations (at least in non-root sentences), Arregi's (2001) analysis is subject to the general criticism directed to a family of approaches that adopt Kayne's (1994) antisymmetry theory, which heavily rely on remnant movement operations; namely that, they are difficult to *falsify* (see M.Richards 2004, Ernst 2002, 2007, Koster 2008, among others, for criticism). Irurtzun (2007) provides more evidence against a non-Focus movement analysis of Focus-V adjacency in Basque from other domains, such as the island sensitivity of Focus movement, and the *tense* adjacency of Focus in Eastern dialects of Basque (unlike Western and Central dialects illustrated by the examples above) and the absence of tense adjacency of Focus in the Eastern dialects in infinitival contexts and so on. These data raise non-trivial challenges for the approach taken in Arregi (2001) (though perhaps not insurmountable) and favor a movement analysis of Focus in Basque as well as the Focus-V adjacency in this language.

In order to determine whether long distance Focus movement is available in Turkish, I appeal to once again the kind of Q/A tests that I utilized in the preceding sections, which help to tease apart Topics and DAs from Foci. Consider now the contrast in (120), which provides the first piece of evidence that the observations regarding root clauses noted earlier are attested in embedded clauses as well:

#### (120)

Can'dan n'aber? Mert onun partide ne yediğini söyledi mi? What about John? Did Mert tell you what he ate at the party?

Valla Can'ı bilmiyormuş ama...

To be frank, he didn't seem to know about John, but...

- a. <u>Mert</u> [<u>Aylin-in</u> DOLMA-LAR-DAN ye-diğ-i-ni] söyle-di.
  M-nom A-gen dolma-pl-abl eat-noml-3s.poss-acc say-past
  'Mert said that Aylin ate from the dolmas at the party.'
- b. \*<u>Mert</u> [DOLMA-LAR-DAN<sub>1</sub> <u>Aylin-in</u> t<sub>1</sub> ye-diğ-i-ni] söyle-di.
  M-nom dolma-pl-abl A-gen eat-noml-3s.poss-acc say-past
  'Mert said that Aylin ate from the dolmas.'

The infelicity of (120)b suggests that movement of C-Focus across C-Topic is not an option inside a nominalized complement clause, just as it is not in matrix clauses. Witness now what happens when the C-Focus ablative phrase inside the complement clause undergoes long distance fronting in the same context as (120):

(121)

context same as (120)...

\*DOLMA-LAR-DAN, Mert [<u>Aylin-in</u> t, ye-diğ-i-ni] söyle-di.
 dolma-pl-abl M-nom A-gen eat-noml-3s.poss-acc say-past
 'Mert said that Aylin ate from the dolmas.'

The infelicity of (121) shows that long distance fronting of Foci is not possible in Turkish.

This conclusion about Foci can be strengthened by drawing attention to other contexts in which an embedded C-Focus is associated with a structurally higher argument than the C-Topic of the sentence. Consider for example the minimal context in (122), which shows that (i) a C-Focus that is structurally higher than a C-Topic in the embedded clause yields infelicity as also observed in root contexts earlier in this chapter, and (ii) a C-Focus that is structurally higher than a C-Topic in an embedded clause cannot be long distance moved:

(122)

Çorbadan n'aber? Mert çorbadan kimin içtiğini söyledi mi?

What about the soup? Did Mert tell you who drank from the soup?

Valla çorbadan haberi yokmuş ama...

To be frank, he did not seem to know about the soup, but...

a. <sup>#</sup><u>Mert/pro</u> [AYLİN-İN <u>dolma-lar-dan</u> ye-diğ-i-ni] söyle-di.

M-nom A-gen dolma-pl-abl eat-noml-3s.poss-acc say-past 'Mert said that Aylin ate the dolmas.'

b. \*AYLİN-İN<sub>1</sub> Mert/pro [t<sub>1</sub> dolma-lar-dan ye-diğ-i-ni] söyle-di.
A-gen M-nom dolma-pl-abl eat-noml-3s.poss-acc say-past
'Mert said that Aylin ate the dolmas.'

The infelicity of (122)b is important since long distance fronted embedded C-Focus does not cross a C-Topic in the embedded clause; still, movement to the sentence initial position produces an unacceptable outcome. Note also that the long distance fronted C-Focus in (122)b does not cross a C-Topic in the matrix clause either, as the matrix subject *Mert* corresponds to a DA.

The evidence presented in this sub-section leads to the conclusion that instances of long distance fronting in Turkish cannot involve C-Foci, which is indeed what we expected in light of the findings attained in this dissertation, which C-Foci simply do not move. Another conclusion that Foci cannot undergo long distance 'scrambling', which follows immediately if there is no independent operation of 'scrambling' as argued for in this dissertation, but raises a question for any account that would assume 'scrambling' for Turkish. I will now show that, unlike C-Foci, C-Topics may undergo long distance fronting.

(123) gives an example where an embedded constituent associated with C-Topic is moved to the left periphery of the matrix clause and the result is felicitous:<sup>48</sup>

(123)

Can'dan n'aber? Mert onun partide ne yediğini söyledi mi? What about John? Did Mert tell you what he ate at the party?

Valla Can'ı bilmiyormuş ama...

Well, he didn't know about John, but...

<sup>&</sup>lt;sup>48</sup> A heavy pause is needed right after the fronted embedded subject as indicated by the comma in the answer to (107). This is quite typical with topicalization as also observed in other languages (see Bošković 2004, Culicover 1996, Lasnik and Saito 1992 among others.)

#### <u>Aylin-in, Mert</u> [ $t_1$ parti-de **DOLMA-LAR-DAN**

A-gen M-nom party-loc dolma-pl-abl

ye-diğ-i-ni] söyle-di.

eat-noml-3s.poss-acc say-past

'Mert said that Aylin ate the dolmas at the party.'

Another example that involves a Q/A pair presented below shows that the fronting of a lower embedded constituent associated with C-Topic across a constituent with C-Focus is also possible:

(124)

Çorbadan n'aber? Mert çorbadan kimin içtiğini söyledi mi? What about the soup? Did Mert tell you who ate from the soup?

Valla çorbadan haberi yokmuş ama...

Well, he doesn't know about the soup, but...

<u>dolma-lar-dan</u>, <u>Mert</u> [**AYLÍN-ÍN** *t*<sub>1</sub> ye-diğ-i-ni] söyle-di. dolma-pl-abl M-nom A-gen eat-noml-3s.poss-acc say-past 'Mert said that Aylin ate from the dolmas.'

The data reviewed in this section allows an extension to embedded clauses of the claim made on the basis of root clauses that Focus does not undergo movement in Turkish, which means that Turkish has neither local Focus movement nor long distance Focus movement. Unlike Foci, however, Topics in Turkish can be moved both locally and non-locally.

The lack of long distance Focus movement in Turkish eliminates *indisputably* a movement analysis of Focus-V adjacency in Turkish. This further suggests that Focus-V adjacency in Turkish and Basque should be analyzed differently despite the similarities these two languages exhibit in root contexts. More evidence supporting this conclusion will be introduced in Chapter 3 from *wh*-questions in Turkish.

# 7. Summary and conclusions

In this chapter, I have argued for the following claims:

- All movement in Turkish is driven by the operator feature [OP] on the moving element, hence the analysis presented here can be taken as an argument in favor of the *moving-element-driven* system. [OP] is a feature that is assigned to constituents that have certain discourse features.
- Focal constituents do not undergo movement in Turkish; they remain in situ no matter what sub-type of Focus they belong to. This means that Foci lack the feature [OP], which entails that the semantics of Focus should be dealt with without the establishment of an operator-variable relation, as in Rooth (1985), where Focus does not establish an operator-variable relation.
- Topics and DAs undergo feature driven movement to the peripheries at all times. They are both introduced into derivation with the feature [OP].

- Topical constituents always target a *left* peripheral position designated for them, regardless of what sub-type of Topics they are.
- DAs may also undergo movement to the left periphery, but not uniformly so, because they may be placed in the right periphery as well. The factor that decides what periphery is targeted is the feature [contrast]; contrastive DAs move to a designated position in the left periphery, and non-contrastive DAs move to a designated position in the right periphery.
- V adjacency of Focus is accidental in Turkish as it arises as a consequence of two unrelated facts about Turkish, namely that Focus does not move and non-Focus (i.e., Topics/DAs) moves.

An important implication of these findings is that there is no room for an operation like 'scrambling' in Turkish, where all movement is driven by the formal counterparts of discourse-pragmatic functions in accordance with the Last Resort principle. We have seen that allowing 'scrambling' would not only not make any kind of useful contribution but would in fact harm the system developed in this dissertation. Bošković (2004,617-8) notes that in addition to, for example, Saito's sense of the term 'scrambling', where 'scrambling' is a well-defined independent movement operation, the term 'scrambling' is often used for

"...expository convenience when authors are not sure what kind of movement they are dealing with, or when they want to avoid

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committing themselves to the issue, or merely to indicate that the movement in question is different from other, better-known instances of movement regarding languages/ phenomena considered."

The results of the investigation conducted in this dissertation indicate that we no longer need to, in fact should not, employ the term 'scrambling' in any sense of this term, at least for Turkish. Turkish is a language that moves constituents only if they are to be mapped to certain discourse-pragmatic functions; it simply has no movement operations that lack a discourse-pragmatic function. Significantly, we have seen that even the traditional EPP-driven movement of subjects to Spec-IP as attested in English is also missing in Turkish, which makes another case for the lack of non-discourse-driven movement.

From this point of view, the fact that Focus remains in-situ in Turkish is well-gounded under a Roothian approach to Focus (Rooth 1985), where Focus is claimed to establish no operator-variable relation. In a system where movement is driven by the [OP] feature of the moving element, the absence of Focus movement, which entails the lack of [OP] feature with Focus, is not surprising under the assumption that Focus does not involve an operator-variable relation. Topics, on the other hand, do form an operator-variable relation as evidenced by the variable binding data from Section 5, which correlates nicely with the fact that they must move in Turkish. Turkish then has a rather transparent mapping of syntax to discourse-pragmatics/semantics. It may in fact be regarded as an 'optimal language' in this respect.

# **Chapter III**

### Questions and Ellipsis in Turkish

# 1. Introduction

One of the major goals of this chapter is to demonstrate that the principles that govern the mapping of syntactic structures to information structures apply regularly to interrogatives in the same fashion they do to the declaratives studied in Chapter 2. Arguing that the information structure categories identified in Chapter 2 are relevant to interrogatives just as they are to declaratives, I show that wh-phrases exhibit a variable syntactic behavior in Turkish depending on what discourse function they are mapped to; wh-phrases may be characterized as either Foci or (contrastive) DAs, and their syntactic distribution is determined accordingly.

An important issue tackled in this chapter concerns the V-adjacency of *wh*-phrases in Turkish *wh*-questions, which has been suggested by many researchers to be a strong tendency but not obligatory (cf. Akar 1990, Arslan 1999, Bechhofer 1975, Erguvanli 1984, Kural 1992, Kornfilt 1997a, Uzun 2000, among others). The main observation in the previous literature that underlies the claim about the non-obligatory nature of the V-adjacency of wh-phrases in Turkish is due to the

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availability of grammatical examples in which wh-phrases are not left adjacent to the verb. Assuming the validity of this empirical claim, a question arises why whphrases are adjacent to the verb in Turkish much more often than not. The present chapter provides an answer to this question by arguing that V-adjacency of whphrases should not be trivialized as a tendency since the presence/absence of Vadjacency correlates with the presence/absence of certain discourse-functional properties that are associated with *wh*-phrases. I demonstrate in this chapter that wh-phrases that do not have to be V adjacent have properties that wh-phrases that must be V adjacent do not. More specifically, only those wh-phrases that have a special *link* to the discourse are free from the V-adjacency requirement while those that have no such link must be adjacent to the V. A number of important properties of wh-questions in Turkish can be accounted for under the proposals developed in Chapter 2 given that such a correlation exists between the (non-)Vadjacency of wh-phrases and their discourse-functional properties. Specifically, I show that *wh*-phrases that are not linked to discourse parallel non-wh Foci as they also remain in-situ in overt syntax. Under the assumption that all constituents that are non-wh, non-Focus vacate IP, the V-adjacency of wh-phrases that are not linked to discourse follows. Wh-phrases that are linked to discourse differ in their syntactic behavior from those wh-phrases that are not, and they parallel those constituents that are non-wh, non-Foci. Like non-wh, non-Foci, discourse-linked wh-phrases can be characterized as targeting a unique functional projection in the left periphery. Obligatory movement of wh-phrases that are discourse-linked

provides a natural account for the lack of V-adjacency of discourse-linked whphrases in Turkish.

Once the analysis is laid out, the remainder of this chapter will be devoted to providing further support for the proposed analysis from other domains. In particular, I will discuss a Turkish construction which is at least superficially similar to wh-sluicing in English. The standard analysis of *sluicing*-constructions in English depends on movement of wh-phrases to CP (see, e.g., Merchant 1999), which is followed by ellipsis of the IP from which the wh-phrase moves before the ellipsis. Extending the movement analysis to the Turkish construction that will considered in this chapter would amount to assuming that wh/Focus may undergo movement in Turkish as well, but only in sluicing constructions and not otherwise. Though this would not be incompatible with the current system given that English sluicing constructions also display certain characteristics that are not found in their non-sluicing counterparts, I will argue that the so-called sluicing construction in Turkish should not be treated the same way as English sluicing. Specifically, the kind of ellipsis phenomena attested in sluicing constructions in Turkish is attested in other constructions that involve no wh elements (or an indefinite in the antecedent), which suggests that there is nothing special about 'sluicing' constructions in Turkish, and that they should not be tied to wh/Focus movement. In light of the fact that Turkish is a language that has extensive use of pro-drop, argument ellipsis, gapping etc., I argue for an analysis that allows ellipsis of non-Focus material without resort to movement of the remnant.

This Chapter is organized as follows: In Section 2, I introduce some important concepts concerning questions that will be important in my investigation. In Section 3, I present a detailed examination of wh-questions in Turkish. Section 4 presents an implementation of the analysis proposed in Chapter 2 to wh-questions. Section 5 is an investigation of 'sluicing' constructions and other ellipsis constructions in Turkish in matrix and embedded contexts. Section 6 finalizes the chapter.

# 2. Important concepts of questions: Discourse linking and echoes

In this section I provide a general introduction to two important issues that I appeal to in my investigation of wh-questions presented in this chapter: (i) The distinction between Discourse-linked/presuppositional wh-phrases and non-Discourse-linked/non-presuppositional wh-phrases, and (ii) Echo whquestions/wh-phrases. The former plays a central role in diagnosing the (il)legitimacy of certain linear orders in wh-questions in Turkish and the presence/absence of V-adjacency of *wh*-phrases. Although echo-questions are not directly relevant to the investigation carried out in this chapter, they have an indirect relevance to what is said. Echo questions often make even most degraded questions look well-formed, as a result of which they may constitute a serious confounding factor. A brief section on echo questions below aims to note the conditions in which they occur.

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#### 2.1 Discourse linking, presuppositionality, and referentiality

It is well-known that wh-phrases do not form a uniform class, as shown by their varied behavior in certain domains. Argument wh-phrases, for instance, display different behavior from adjunct wh-phrases regarding Weak Island sensitivity or V-adjacency in many languages (see Bošković 2002, Cinque 1990, Comorovski 1996, Lasnik and Saito 1992, Manzini 1994, Rizzi 1990, 2001, Starke 2001, among others). It has also been observed since Pesetsky (1987) that wh-phrases cannot be treated as uniform on discourse-functional or semantic grounds. The property in question is called *D*(*iscourse*)-*linking* in Pesetsky (1987). Consider a generic definition of Dlinking cited from Comorovski (1996:2): "...those wh-phrases whose range of felicitious answers is limited by a set of objects already referred to in the discourse or salient in the context of utterance." Comorovski's (1996) definition of D-linking highlights the presuppositional character of a *wh*-phrase with a *range-based* antecedent, which contrasts with specificity-based antecedents as detailed in Starke (2001). Starke (2001) observes in his investigation of extraction from weak and strong islands (WIs and SIs, respectively) that existential presupposition makes a difference in the availability of extraction from WIs and SIs. WIs, for example, can be voided in extraction contexts only if there is reason to believe that there exists some entity which the interlocutor has in mind as a referent for the wh-phrase. Starke contends that a wh-phrase extracting out of a WI drags along an existential presupposition, while no such presupposition is present on a wh-phrase that is extracted out of a domain that is not identified as a WI. For Cinque (1990),

the relevant concept is *referentiality*, which he defines as "...the ability to refer to specific members of a set in the mind of the speaker or preestablished in discourse." Cinque's (1990) *referentiality* subsumes Pesetsky's notion of D-linking (see also Rizzi's 1990 notion of *referential index*). In what follows, I will refer to any *wh*-phrase with an antecedent that has either a *range-based* or *specificity-based* presupposition as *D-linked* (DL). I also refer to wh-phrases with no *range-based* or *specificity-based* presupposition as *Non-D-Linked* (NDL).

It is well-known that DL *wh*-phrases exhibit rather different behavior from NDL *wh*-phrases in a number of respects (cf. Bošković 2002, Comorovski 1996, Grohmann 2000, Hornstein 1995, Pesetsky 1987, 2000, among many others). For one thing, DL *wh*-phrases are not sensitive to the superiority condition, unlike NDL *wh*-phrases. Questions with DL *wh*-phrases must involve overt movement in English just like questions with NDL wh-phrases (cf. Pesetsky 1987, 2000, Hornstein 1995, a.o.).<sup>1</sup>

<sup>&#</sup>x27;Wh-phrases that have the 'which x' form are generally classified as inherently DL, which implies that bare wh-phrases with the form 'who', 'what' are non-inherently DL. This does not mean that non-inherently DL wh-phrases are always non-DL. Thus, Bolinger (1978) and Pesetsky (1987) note that when contextually supported, DL interpretation of non-inherently DL *wh*-phrases is possible. As illustrated by the examples in (i), the existence of DL interpretation is supported by the lack of superiority effects:

a. I know that among all the disasters in that kitchen, Jane scorched the beans and Lydia put salt in the ice tea; but <u>what</u> did <u>who</u> break? I know that somebody broke something, so stop evading my question.

(1)

a. Which man reviewed which book?

(Hornstein 1995, 130-132)

b. *Which book* did which man review \_\_\_\_?

Another distinctive property of DL *wh*-phrases is attested in multiple *wh*-fronting languages, where they do not need to move in the syntax in contrast to NDL wh-phrases, which have to move, as illustrated below by the examples from Serbo-Croatian:

(2)

Ko je kupio koju knjigu? (SC) (Bošković 2002, 360:26a) who is bought which book 'Who bought which book?'

(3)

<sup>?\*</sup>Ko kupuje šta?

(SC)

(Bošković 2002, 356:13b)

who buys what

b. I know we need to install transistor A, transistor B and transistor C, and I know that these three holes are for transistors, but I'll be damned if I can figure out from the instructions where what goes!

Adopting a focus movement analysis of multiple wh-fronting, Bošković (2002) suggests that the variation between DL and NDL *wh*-phrases is due to the non-Focus character of DL *wh*-phrases in the spirit of Reinhart (1997), who states that "D-linked constituents are not particularly good foci." I will return to this issue in more detail in Section 4.

#### 2.2 Echo Questions

Echo questions display a set of distinctive properties compared to standard information asking questions. They have been noted to have two sub-types, which I call Type1 and Type2 echo questions. Type1 echo questions are formed as a repetition of the original statement or a yes-no/wh-question by the replacement of a non-*wh* phrase with a *wh*-phrase in situations where, for example, the hearer does not hear/understand what the speaker says. Examples of Type1 echo questions is given in (4)B and (5)B:

(4)

A: Nilufer ate okonomi yaki.

B: Nilufer ate what?

(5)

A: Did Bill apply for the job in *Palo Alto*?

B: Did Bill apply for the job <u>where</u>?

Type2 echo questions also involve replacement of a non-*wh* phrase with a *wh*-phrase, but unlike Type1, they are built upon statements that are found *surprising* from the point of view of the hearer. (6) is an illustration of Type2 echo questions:

(6)

A: I saw Bill yesterday, and I could not believe my eyes: He looks like he's put on 30 pounds in two months.

B: He put on <u>how much</u>?!

It has been noted in the literature that *wh*-phrases in echo questions display properties that are not often observed in *genuine* information asking questions. For instance, *wh*-phrases do not undergo fronting in echo questions in otherwise *wh*-fronting languages, like English. They also cannot satisfy selectional properties of verbs taking question complements. Bošković (2002) notes that *wh*-phrases must undergo Focus movement in SC and Bulgarian in Type 1 echo questions, but not in Type 2 echo questions, as shown in (8). On the other hand, in Basque even *wh*-phrases with a *surprise*-type echo question interpretation undergo fronting, as shown in (9):

(7) \*I wonder john kissed WHO?

[ <sup>?*</sup> ] Ivan kupuje ŠTA?	(SC)	(Bošković 2002, 356:16a)
Ivan buys what		
'Ivan buys WHAT?'	[OK with <i>surprise</i> -reading in SC]	

(9) A: Zugandik atera dira kontu zikin guzti horiek (Basque)
you-from come aux stories dirty all those
'All those dirty stories have come from you.'
B: Nigandik ZER atera dela?
me-from what-abs come aux-come
'(That) what has come from me?'
B': \*Nigandik atera dela ZER? (Reglero 2003, 199:50)

The above data show that *wh*-phrases do not move in echo questions in some languages that normally require movement of *wh*-phrases, whereas they move in others with one type of echo reading but not with the other type. Sentences that are ungrammatical as information asking questions can thus be judged grammatical as echo questions. A key diagnostic for echo-questions is that they exhibit a strong upward intonational contour not observed with information asking questions. I will exclude echo questions from my investigation altogether and restrict my attention to information asking questions. The reader should keep in mind this fact in their evaluation of the judgments given in this chapter.

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# 3. Wh-questions in Turkish

#### 3.1 Questions with object *wh*-phrases

I begin my investigation in this section by looking at the behavior of wh-phrases in (10). In ((10)a), an accusative marked object wh-NP holds the immediately preverbal position, whereas in ((10)b) the object wh-NP is fronted, as a result of which the non-wh subject NP intervenes between the wh-phrase and the V:

(10)

a. Pelin kim-i öp-tü? P-nom who-acc kiss-past 'Who did Pelin kiss?' b. [\*] Kim-i Pelin öp-tü? who-acc P-nom kiss-past 'Who did Pelin kiss?'

((10)b) is a *marked* sentence whose grammaticality status depends on the context in which it is produced. It is not well formed under certain circumstances as indicated by [\*]. It goes without saying that ((10)a) is also context dependent, but it represents a type of wh-question that may be used in multiple situations. As a matter of fact, as discussed below, the situations in which (10)b can be felicitously used is a subset of situations in which (10)a can be felicitously used. This might be considered a consequence of the fact that the (a) example in (10) is a representative of the canonical word order in Turkish (SOV), which is not the case in (b). However, it will become clear in the discussion below that this is not the order of constituents (from the point of view of declaratives) may also be an unmarked wh-question to the extent that wh-V adjacency is observed. In what follows, I elaborate on what I mean by 'context dependence' of *wh*-questions and *wh*-phrases.

Consider the context given in (11), where the antecedent of the wh-phrase is existentially presupposed:

(11)

Pelin's teacher and Mete, another teacher, see from the window of the teacher's lounge that Pelin is kissing another student in the schoolyard. Mete asks Pelin's teacher to elicit some information about it:

a. Pelin kim-i öp-üyor?

P-nom who-acc kiss-pres

'Who is Pelin kissing?'

b. <sup>#</sup>Kim-i Pelin öp-üyor?

who-acc P-nom kiss-pres

'Who is Pelin kissing?'

The antecedent of the wh-phrase has neither a specificity-based nor a range-based presupposition. True, there is a student kissing *Pelin*, but the identity of the student is what is questioned. The infelicity of ((11)b) in this context suggests that existential presupposition is not sufficient for allowing non-V-adjacency of a wh-

phrase in Turkish. In other words, a wh-phrase that is only existentially presupposed must be adjacent to V, as in ((11)a).

To the extent that V-adjacency of *wh*-phrases is concerned, contexts that enforce a non-existential presupposition of a *wh*-phrase produce a similar result to what we have seen in (11). In other words, a *wh*-phrase for which there exists no entity that the interlocutor has in mind as a referent for must be adjacent to V. Consider (12):

(12)

Pelin and Mete are invited to have a dinner at Suna's place tonight and they are really wondering about what Suna will cook for them. Since they have made friends with Suna very recently, they have no idea about what she is actually capable of cooking. Mete asks Pelin:

a. Sence biz-e ne pişir-ecek?<sup>2</sup>
in-your-opinion we-dat what cook-fut
'What will she cook for us, in your opinion?

<sup>2</sup> Note that bare non-human *wh*-phrases must be V-adjacent irrespective of discourse functions:

(i) \*Sence ne biz-e pişir-ecek?
 in-your-opinion what we-dat cook-fut
 'What will she cook for us, in your opinion?

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b. \*Sence biz-e ne-yi pişir-ecek?
in-your-opinion we-dat what-acc cook-fut
'What will she cook for us, in-your-opinion?

c. \*Sence ne-yi biz-e pişir-ecek?
in-your-opinion what-acc we-dat cook-fut
'What will she cook for us, in-your-opinion?

d. \*Sence biz-e pişir-eceğ-i (şey) ne?
in-your-opinion we-dat cook-noml-3s.poss (thing) what
'what is it that she will cook for us, in-your-opinion?'
'What is the thing that she will cook for us, in-your-opinion?'

The only felicitous example in (12) is (12)a, which has no accusative marking, and thus lacks the standard (discourse) functions attributed to accusative case in Turkish (Enç 1991, among others; Accusative case indicates the specificity of the argument it attaches to).<sup>3</sup> This immediately provides an account for the *infelicity* of (12)b and (12)c irrespective of whether the object NP is V-adjacent or not as they simply are incompatible with the context. This alternation between Accusative and

<sup>&</sup>lt;sup>3</sup> For Enç (1991), both specificity-based and range-based antecedents qualify as specific, although they are distinguished as two different types of specificity in the present system. The *range-based* wh-phrases here correspond to Enç's *partitive specifics*, while *range-based* wh-phrases correspond to Enç's *familiar specifics*. I will continue to use the terminology borrowed from Starke (2001) extending it to non-*wh*-phrases when needed. It should also be noted that there are Accusative marked NPs that do not exhibit the specificity function noted in the text, but it seems that these are limited to generic sentences.

non-Accusative wh-phrases is mainly attested with non-human objects; it is not as readily available with human objects. The infelicity of (12)d is also not surprising given that clefts are always presuppositional.

The observation concerning the V-adjacency of NDL non-human *wh*-phrases holds for [+human] object *wh*-phrases as well, which, as noted above, are *typically* marked for accusative case regardless of whether they are existentially presupposed or not.<sup>4</sup> (13) is an example where an accusative marked [+human] *wh*-phrase must be V-adjacent in a context in which it is not existentially presupposed; i.e., where it is interpreted as NDL:

(13)

Pelin and Mete are invited to a party at Suna's place tonight, and they are really wondering about who else will be at the party. Since they have made friends with Suna very recently, they cannot anticipate who might have been invited to the party. Mete asks Pelin:

a. Sence parti-ye kim-i çağır-mış-tır?
in-your-opinion party-dat who-acc invite-e.past-epis.mod
'Who might she have invited to the party, in your opinion?

<sup>&</sup>lt;sup>4</sup> Although [+animate/human] non-*wh* objects may display an optionality with regard to accusative case marking (i.e., they may be accusative or *bare*), the same kind of optionality is not observed with [+animate/human] *wh*-objects, which always have to bear accusative case.

b. \*Sence kim-i parti-ye çağır-mış-tır?
you-think who-acc party-dat invite-e.past-epis.mod
'Who might she have invited to the party, in your opinion?

The wh-phrase is marked accusative in (13)a, yet it does not impose on the whphrase a presuppositionality restriction as indicated by its felicity. The infelicity of (13)b suggests that an NDL-wh must be adjacent to V.

Significantly, however, in contexts in which a wh-phrase has a range-based and/or specificity based presupposition, it is D-linked, and the wh-phrase does not have to be adjacent to V. Consider (14):

(14)

Mete and Pelin are invited to Suna's wedding, and they see that Suna has kissed at least 20 well-wishers so far. Suna has not been the only kisser; her husband, Selim, has kissed as many people as Suna has. Mete and Pelin have noticed that the people Suna kisses, Selim does not kiss, and vice versa, obviously to minimize the amount of kissing as there are still quite many guests in line.

Selim'in öptüklerini gördüm. Peki...

I saw those people Selim kissed, but...

a. kim(-ler)-i Suna öp-tü?
who(-pl)-acc S-nom kiss-past
'Who did Suna kiss?'
b. hangi konuk-lar-i Suna öp-tü?
which guest-pl-acc S-nom kiss-past
'Which guests did Suna kiss?'
c. Suna kim-(ler)-i öp-tü?
S-nom who-(pl)-acc kiss-past
'Who did Suna kiss?'

The felicity of (14)a shows that even a *bare* object *wh*-phrase does not have to be adjacent to the V when it is DL. It may however seem surprising why all three sentences in (14) are felicitous in a single context. The fact of the matter is that the context in (14) is broad (perhaps, more aptly, unrestricted) enough to accommodate potential (discourse-functional) variations in the sentences in (14)a-c. Here is what I mean by this: The subject NPs in both (14)a,b and (14)c are interpreted *contrastively*, although what other discourse-functional properties (Topic/Focus/DA) the feature [contrast] is parasitic on depends on the position of the subject NP. The prediction in light of our findings in Chapter 2 is that the constituent that precedes the *wh*-phrase in (14)c should be identified as C-Topic (or alternatively as a contrastive DA), while in (14)a,b, where the subject NPs follow DL-*whs*, it should be identified as C-Foci. That this is the right way of

describing the data is supported by the prosodic properties of the sentences: Subject NP in (14)c only receives an accent typical of C-Topics, while the subject NPs in (14)a,b receive an accent attested with C-Foci in Turkish.

I summarize below the major observations made so far:

#### (15)

- a. In *Subj*»*Obj*<sub>WH</sub>»*V* sentences, the object *wh*-phrase can be either DL or NDL.
  - (i) Accusative marked [-human] object *wh*-phrases must be interpreted as DL, while bare [-human] object *wh*-phrases must be interpreted as NDL.
  - (ii) [+human] object *wh*-phrases must be marked Accusative; they may be interpreted as DL or NDL.
  - (iii) Subject NPs are interpreted as C-Topics.
- b. In Obj<sub>WH</sub>»Subj»V sentences, the object wh-phrase must be interpreted as DL.
  - (i) Wh-phrases must be Accusative (which is in accordance with the observation that wh-phrases in such sentences must be interpreted as DL).
  - (ii) Subject NPs are interpreted as C-Focus.

The obvious implication of the above findings is that only NDL *wh*-phrases must be left adjacent to the V in Turkish. Putting aside all other details, I identify this as a correlation:

#### (16) NDL-wh – V-Adjacency Correlation [to be revised]

NDL object *wh*-phrases in Turkish are adjacent to the V.

DL object *wh*-phrases in Turkish do not have to be adjacent to the V.

I now turn to *wh*-questions that involve subject *wh*-phrases, considering whether (16) holds for such questions.

#### 3.2 Questions with subject *wh*-phrases

Consider first sentences in which a [+human] subject *wh*-phrase receives a NDL interpretation:

(17)

Two students, Onur and Ersin, carried Mete to the teachers' lounge, teachers were shocked by Mete's appearance as Mete looked in very bad shape. He had a black eye, he had bruises on his face. Thinking that the wounds Mete had cannot be from a fall or something like it, one of the teachers asked Onur: a. <u>kim</u> döv-dü Mete-yi? who-nom beat.up-past M-acc 'Who beat up Mete?'

b. <sup>#</sup><u>Kim</u> Mete-yi döv-dü?

who-nom M-acc beat.up-past

'Who beat up Mete?'

The felicity contrast between ((17)a) and ((17)b) shows once again that a NDL-*wh* should be in the immediately pre-verbal position; a discourse anaphoric element may not interrupt its adjacency to V. Note that (17) shows that the canonical word order of Turkish declaratives (SOV) is not observed in wh-questions in which the wh-phrase is the subject. In a sense, V-adjacency of wh-NDL phrases is a stronger requirement than the one that enforces the canonical ordering of constituents in the language.

Consider now another context where there is an NDL subject *wh*, but also the object NP receives a C-Topic interpretation:

(18)

Four or five students carried Mete and Ersin to the teachers' lounge, teachers were shocked by Mete and Ersin's appearance as they were both looking in very bad shape, both had a black eye, had bruises in their faces. The students said that Ersin was beaten by a senior student. Wondering about Mete, in particular, one of the teachers asked:

a. Peki ama Mete-yi kim döv-dü? alright but M-acc who-nom beat.up-past 'Alright, but who beat up Mete?'

b. <sup>#</sup>Peki ama kim Mete-yi döv-dü?

alright but who-nom M-acc beat.up-past 'Alright, but who beat up Mete?'

The felicity contrast between (18)a and (18)b is not surprising given what has been said so far in this section and in Chapter 2: Topics precede all other arguments, DA and/or Focus. This contrast provides support for the correlation in (16) that NDL *wh*-phrases must be V-adjacent.

DL subject *wh*-phrases show parallel behavior to DL object *wh*-phrases in that they do not have to be V-adjacent. This holds, however, for [+human] subject *wh*-phrases, but not for non-human/animate subject *wh*-phrases (particularly, for those that are *not* inherently DL-wh, see below for this).<sup>5</sup>

Consider first a context in which a [+human] subject *wh*-phrase is DL:

<sup>&</sup>lt;sup>5</sup> As noted in Chapter 2, the case asymmetry attested with object (wh-) phrases in Turkish (i.e., accusative vs absence-of-accusative) is not available with subject (wh-) phrases since the subject case, i.e., nominative, is not marked morphologically.

Pelin told the students in her literature class that she wanted to discuss in two weeks the literary connections between Jack Kerouac's book 'On the Road' and Dennis Hopper's film 'Easy Rider.' She asked her students to read the book and/or watch the movie, without assigning it to specific students in the class. Next week, in the class, seeing Kerouac's book on some desks, she asked:

a. Kim(-ler) kitab-1 oku-du?
who-pl-nom book-acc read-past
'Who/which of you read the book?'
b. Kitab-1 kim(-ler) oku-du?
book-acc who-pl-nom read-past
'How about the book; who read it?'

That both (19)a and (19)a are felicitous is not surprising given that the subject *wh*-phrase is DL (to be precise, the *wh*-phrase in (19) is DL because it has range-based presuppositionality).

Consider now the status of the non-*wh* object in the (a) and (b) examples. Although the (19)a and (19)b both request information about the same individuals, they do it quite differently. The difference between the two questions is about what the 'questioner' has in mind. The question in (a) reflects *Pelin's* (*the teacher's*) expectation/guess that some students must have seen the film (though this is no more than an expectation/guess). Accordingly, it contrasts *the book* with *the film*, as a result of which the object NP receives a C-Focus interpretation/intonation. The question in (b), however, reflects more than an expectation on the questioner's part. As a matter of fact, it is more likely to be used in a situation in which *Pelin* knows that some/all students saw the film, and now she is inquiring about the readers of the book. This intuition is expressed by the English translation of the (b) sentence, where the fronted object NP receives a C-Topic interpretation/intonation.

I turn now to non-human/animate subject *wh*-phrases. It is necessary to note at the outset that non-*wh* subjects in Turkish can be construed as presuppositional (specificity-based) or not, and importantly, this variation is reflected in the syntactic distribution of non-wh subjects. Witness the examples below that illustrate this variation:

(20)

man-dat car hit-e.past '(A/some) car hit the man.' b. Araba adam-a çarp-mış. car man-dat hit-e.past 'The car hit the man.'

a. Adam-a araba carp-mış.

[odd without contextual support]

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While a presuppositional reading of the non-human/animate subject NP in the (a) example is dispreferred, a presuppositional interpretation of the sentence in (b) is enforced, where *the car* must have been either explicitly or implicitly introduced into the discourse.

The situation is somewhat different in *wh*-questions, however. Non-human/animate subject *wh*-phrase has the form *ne* 'what', like its non-subject counterpart discussed in the preceding section. An examination of non-human/animate subject *wh*-phrases reveals that they must be V-adjacent and cannot receive a DL interpretation.

Consider first a NDL context below, where the doctors have no idea about what kind of vehicle (a car, a bus, a truck, bike etc.) might have hit the man under discussion:

(21)

A man has been rushed into the ER with serious wounds. Doctors ask the paramedics about the cause of his presence in the ER, and they say that he was the victim of a traffic accident. Not being satisfied with the answer, one of the doctors ask for more info:

a. Ne çarp-tı bu adam-a tanrı aşkına?
what hit-past this man-dat for god's sake
'For god's sake, what hit this man?'

b. \*Ne bu adam-a çarp-tı tanrı aşkına?
what this man-dat hit-past for god's sake
'For god's sake, what hit this man?'

Notice the felicity contrast between (21)b and (20)b, where the former is a subject *wh*-phrase and the latter is a subject non-*wh*-phrase. Since in the former the object that hit the man is not mentioned in the context either explicitly or implicitly, which would of course make the question pointless, the *wh*-phrase cannot be interpreted as presuppositional (of any sort). The felicity of the sentence in (21)a follows from the general pattern observed so far, as the NDL-wh *ne* is adjacent to the V, in compliance with the correlation stated in (16).

Consider next a context in which the non-human/animate subject-*wh* has a presuppositional antecedent, hence DL.

(22)

Two men and a woman rushed into the ER at about the same time, all victims of traffic accidents. As the paramedics explain, it was revealed that one of them was hit by a car, the other by a bus, and the last one by a motorbike. Confused, one of the doctors, who is appointed to take care of the woman patient, asks: a. <sup>#</sup>Ne kadın-a çarp-tı? what-nom woman-dat hit-past 'What hit the woman?'

b. Hangi-si kadın-a çarp-tı?
which-3sg.poss-nom woman-dat hit-past
'Which of them hit the woman?'

c. <sup>#</sup>Kadın-a ne çarp-tı?<sup>6</sup>

woman-dat what-nom hit-past

'What hit the woman?'

The key example here is the one in (22)a, whose infelicity suggests that nonhuman/animate subject wh-phrases in the form of *ne* cannot be interpreted as DL, in contrast to object wh-phrases that have the same form with no Accusative. In other words, non-human/animate subject wh-phrases cannot be DL. As the felicity of (b) shows, however, replacing *ne* 'what' with an inherently DL form of the whphrase makes the question possible with a non-human/animate subject-wh.

To summarize, in this section we have made the observations listed below:

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<sup>&</sup>lt;sup>6</sup> The infelicity of (22c) is not absolute in the sense that it may be felicitiously used in this particular context with the implication that the speaker puts the context aside ignoring the information provided there. In other words, the question in (c) may not be *odd* in the present context if it has the following flavor: You said a lot but you actually said nothing. *Tell me now something that is worth listening to*. Otherwise, its use is *odd*, as indicated by the hashmark, giving the impression that the questioner was simply not listening.

- a. In sentences in which a subject wh-phrase is [+human] and interpreted as DL, it does not have to be adjacent to the V. In sentences in which a [[+human]|DL] wh-phrase is not V-adjacent, intervening non-wh NPs may be interpreted as C-Focus. If a [+human] subject wh-phrase is interpreted as NDL, it must be V-adjacent. In wh-questions in which a [[+human]|NDL] wh-phrase is V-adjacent, fronted objects may in principle be interpreted as C-Topics or DAs.
- b. In sentences in which a subject wh-phrase is non-human/animate and interpreted as NDL, it must be V-adjacent. If a nonhuman/animate subject wh-phrase is interpreted as DL, it can only have the morphological form of *inherently* DL-wh; it cannot have the bare form *ne* (i.e., a wh that has the form *ne* cannot be DL). A nonhuman/animate subject wh-phrase that has the form of an inherently-DL wh-phrase does not have to be adjacent to V.

The investigation carried out in the last two sections provides us with a clear picture of the syntactic distribution of *wh*-phrases in Turkish interrogatives. It is now obvious that a NDL *wh*-phrase must be left adjacent to the V in Turkish regardless of the grammatical function it has. A DL *wh*-phrase does not have to be V-adjacent, though V-adjacency is of course possible in the absence of

phonological material intervening between a DL-wh and the V. Given that Vadjacency is a general condition that all NDL *wh*-phrases must observe, we can restate (16) in a stronger form, as in (24):

NDL-wh - V-Adjacency Correlation [non-final version]
 NDL wh-phrases in Turkish *are* adjacent to the V.
 DL wh-phrases in Turkish do not have to be adjacent to the V.

Let's back up for a moment, and reflect on the content of the generalization in (24) in light of the findings from Chapter 2. The investigation in Chapter 2 has shown that Focus in Turkish is in-situ, and the V-adjacency of Focus can be derived as an 'accident' from its obligatory in-situness plus the obligatory movement of non-Foci to the clausal peripheries. If we are to interpret (24) as a sub-case of the distributional behavior of Focus and non-Focus non-wh-phrases, where the former is identical to NDL-wh and the latter to DL-wh, then the analysis of *wh*-questions with single *wh*-phrases should be rather straightforward: NDL-*whs* staying in-situ (and their obligatory V-adjacency) can be blamed on the feature [focus], which cannot be associated with [OP] by assumption, hence the immobility of the element that carries it. DL-whs, however, do not come with the feature [focus], and as a result they undergo movement. Unlike their non-wh counterparts, both DL and NDL wh-phrases must check [wh] features. I will turn to this issue in the subsequent sections.

In the next two sections, I would like to introduce some data that appear to raise a challenge for the validity of (24). I will argue, however, that (24) is not challenged by those facts once we have a better understanding of the syntactic behavior of the alleged interveners.

# 3.3 Apparent counter-examples to the V-adjacency of NDL whphrases

## **3.3.1** Bare object NPs as (non-)interveners

The examples that are relevant to my present investigation are wh-questions that involve the co-occurrence of a wh-phrase and a non-*wh* bare object NP. As exemplified in (25), bare object (non-wh) NPs must be adjacent to the verb in Turkish:<sup>7</sup>

<sup>7</sup> It has been reported in Erdal (2007) that bare object NPs can be placed in the pre-subject position to have a topical interpretation, as illustrated in (i):

(i) Çiçek, Pelin sat-ıyor. (Erdal 2007)
 flower P-nom sell-pres/aor
 'Pelin sells flowers.'

(i) represents a rather marked sentence in Turkish. A sentence like (i) sounds best in a context in which a list of items sold by certain people is in the center of the discussion, and things come up one by one as in (ii):

 (ii) Teachers are organizing a party for the kids graduating this Spring, and they are discussing what to buy and where. Each makes suggestions:

> A: Konfetileri Can'dan alırız. Peki çiçekleri kimden alacağız? We will buy confettis from John (=John's shop). How about flowers? Who/whose place/where do we get them (from)?

(25)

a. Pelin *sigara* iç-ti.

b. \**Sigara* Pelin iç-ti.

P-nom cigarette smoke-past

'Pelin smoked.

cigarette P-nom smoke-past

'Pelin smoked.'

In a sentence in which both a bare object NP and a low manner adverb occur, the order is  $Adv_{manner} \gg NP_{BareObj}$ :<sup>8</sup>

B: Bildiğim kadarıyla...

As far as I know...

çiçek, Pelin sat-ıyor.

flower P-nom sell-pres/aor

'As for flowers, Pelin sells them.'

It seems fair to conclude that fronted bare object NPs may receive a C-Topic interpretation in Turkish, but the examples in (i)/(ii) are not as readily used as (C-/A-) Topic examples reported in Chapter 2, which involved Case marked NPs. A very strong pause must be placed after the fronted objects in examples like (i)/(ii), which are unacceptable without such a pause. This requirement does not hold for Case marked (C-/A-) Topics. Though I will not go into further details of this construction, it is worth noting here that fronting of a bare object wh is completely unacceptable, as shown in (iii):

(iii) \*Ne, Pelin oku-yor?
what P-nom read-pres
'What is Pelin reading?/What does Pelin read?'
(cf. Pelin ne okuyor?)

The ungrammaticality of (iii) is in line with the present conclusion that bare object *wh*-NPs cannot be D-linked, and suggests further that they cannot be Topics either.

<sup>8</sup> An accusative marked object NP precedes a low manner adverb in Turkish. If such an object follows a low manner adverb the output is only marginally acceptable if the accusative marked object NP is interpreted as C-Focus, and it is completely unacceptable

(26)

a. Pelin hızlı kitap oku-r.

P-nom fast book read-aor

'Pelin reads books fast.' [lit. Pelin does book-reading fast.]

b. \*Pelin kitap hızlı oku-r.

P-nom book fast read-aor

The V-adjacency requirement for the bare object in (26) can be accounted for by adopting the syntactic head incorporation analysis proposed in Kornfilt (2003), along the lines of Baker (1988), in which the N head of an NP undergoes head movement to V. Incorporation of an N to V is only possible if the NP is not embedded within a functional structure, in which case it is impossible as dictated by the *Head Movement Constraint*, which does not allow skipping an intervening head position (also Travis 1984, Rizzi 1990).

What is crucial for our purposes is that the complex that a bare object forms with the V exhibits identical properties as non-complex Vs with respect to

if C-Focus interpretation is not possible (see Aygen 2002, Çağrı 2005, Kelepir 2001, Öztürk 2004, a.o.):

(i) a. Pelin kitab-1 hızlı oku-du.P-nom book-acc fast read-past

'Pelin read the book fast.'

b. "Pelin hızlı KİTAB-I oku-du.

P-nom fast book-acc read-past 'Pelin read the book fast.' the discourse functions they bear. Consider for example the verbal complex in (25)a, where the V that corresponds to English *smoke* is the complex word *sigara iç*- lit. inhale cigarette.' The verb *iç*- alone means 'drink (stg. liquid).' Importantly, both the complex and the non-complex V form may appear in all-focus sentences, as shown in (27) and (28), respectively:

(27)

Pelin walks into her office. Seeing an open bottle of wine on her desk, she asks:

A: What is going on here?

B: Mete iç-iyor.<sup>9</sup>

M-nom drink-pres

'Mete is drinking.'

(28)

Pelin walks into her office. Smelling the smoke in there, she asks:

A: What is going on here?

B: Mete sigara iç-iyor.

M-nom cigarette inhale-pres

'Mete is smoking.'

<sup>&</sup>lt;sup>9</sup> The sentence is perfectly felicitous in a situation in which *Mete* habitually drinks at work, presumably alcoholic beverages.

The examples above show that complex and non-complex Vs may both have a (P-) Focus interpretation. Vs, complex or non-complex, may also receive a DA interpretation. As a matter of fact, any sentence in which an argument receives a C-Focus interpretation can be taken to provide an example of a sentence whose verb bears a DA function. Consider the examples below:

(29)

A: Pelin mi konuştu Mete mi? *Was it Pelin or Mete who spoke?* B: **PELİN** konuş-tu. P-nom speak-past 'PELIN spoke.'

(30)

A: Pelin mi sigara içti Mete mi? Was it Pelin or Mete who smoked?

B: **PELİN** sigara iç-ti.

P-nom cigarette inhale-past

'PELIN smoked.'

In both (29) and (30) the Vs constitute *given information* in the minimal discourse, whereas the subject *Pelin* in the (B) sentences can be identified as C-Focus. The

key observation is that the complexity of a V does not factor in as to whether a subject NP can be interpreted as C-Focus or not; the C-Focus subject in (30)B is apparently treated as left adjacent to the V although the subject is actually left adjacent to the bare N. Since Turkish is an OV language that imposes rather strict limitations on the displacement of its bare objects, which form a complex predicate with the verb via incorporation, it is not implausible to treat the C-Focus subject in (30)B as adjacent to the V, just as in (29)B, where the V is simplex. Consider below an important piece of support for this approach: Unlike *bare* objects with a DA function, non-bare objects with a DA function act like genuine interveners in that they cannot break the adjacency of C-Focus to the complex V, as illustrated by the infelicity of (B) below:

(31)

A: Pelin mi sigara içti burada Mete mi? Was it Pelin or Mete who smoked here?

B: **\*PELİN** bura-da sigara iç-ti.

P-nom here-loc cigarette inhale-past 'PELIN smoked here.'

C: (Yalnızca) **PELİN** sigara iç-ti bura-da. only P-nom cigarette inhale-past here-loc '(Only) PELIN smoked here.' I would like to discuss one more issue that was pointed out to me by Željko Bošković (p.c.). The observations I have reported thus far demonstrate that the [bareN+V]-complex may be treated as DA or (all-)Focus. A question arises as to whether one of the constituent parts of the complex V may have a distinct discourse function. In other words, do we observe in Turkish cases in which the bare N and the V have distinct discourse functions such as [bareN<sub>Focus</sub>+V<sub>DA</sub>] and [bareN<sub>DA</sub>+V<sub>Focus</sub>]? The former is easier to show. Consider (32), where the bare N is P-Focus while the V is a DA:

(32)

A: Ne oku-yor-sun? What are you reading?

B: **KİTAP** (oku-yor-um).

book read-prog-1s

'I am reading a book.' [lit. I am doing book-reading.]

The V in (32) may be elided as indicated by the parentheses if it is not contrastive, but not if it is contrastive (recall that DAs may be either contrastive or noncontrastive).

A corresponding example for the latter case, i.e.,  $[bareN_{DA}+V_{Focus}]$ , can also be constructed, as shown by the Q-A pair given below:

Are you reading a book? [lit. are you doing book-reading.]

B: Hayir, kitap yaz-ıyor-um.

no book write-pres-1s

'No, I am writing a book.' [lit. No, I am doing book-writing.]

Speaker B's utterance in (33) may be interpreted in two ways. On one reading, Speaker B's utterance cancels what is presupposed by the question of Speaker A, hence Speaker B's utterance should actually be classified as *all-focus* despite the fact that the bare object N was used in Speaker A's utterance. When so interpreted, the pitch accent falls on the object N, which is a pattern observed with *all-focus* sentences in Turkish. There is however another interpretation of Speaker B's utterance in (33), where the object can be classified as a DA, and the inflected V as C-Focus. With this interpretation, the sentence in (33)B displays a different pattern of prosody, where the pitch accent falls on the inflected V and not the bare object. I conclude on the basis of this discussion that [bareN<sub>DA</sub>+V<sub>Focus</sub>] is possible as well. This is not surprising as a string in which a DA precedes Focus is not ruled out in the present system.

What is striking is the availability of the order 'P-Focus»DA' in (32), which appears to be at odds with the generalizations stated in Chapter 2, at least initially. Recall that the linear order (P-)Focus»DA is actually not impossible in Turkish. I have shown in Chapter 2 that the string (P-)Focus»DA is not possible when both elements are in the pre-verbal field, yet the order (P-)Focus»DA is possible if DA holds a position in the post-verbal field. What we have observed above pulls the V itself into the picture as a unit of discourse, and thus forces a minimal qualification of the statements made in Chapter 2. To state it more appropriately, the division of Turkish clauses as pre- and post-verbal does not have theoretical significance though it provides a useful device for descriptive purposes. The linear order (P-) Focus»DA is possible not only when the DA is post-verbal but also when the V itself is DA. The generalizations given in Chapter 2 (see (41) in Section 3.5) still remain intact: While DAs may appear to the left or to the right of Focus in Turkish (DA<sub>[+contrast]</sub>)»Focus»DA<sub>[-contrast]</sub>), Focus cannot precede DA<sub>[+contrast]</sub> in Turkish. The ordering restrictions in Turkish may then be reduced to the following linear statement by eliminating lexical categories such as V from the statement:

(34)

### Topic<sub>C/A</sub> » DA<sub>[+contrast]</sub> » Focus<sub>P/C</sub> » DA<sub>[-contrast]</sub>

As I have noted above, the statement in (34) does not cause any major changes to the generalizations from Chapter 2; it only refines them.

I now return to the main thread of my discussion. In light of the observations that non-*wh* C-Focus arguments must be left adjacent to Vs that are complex, a question arises whether NDL *wh*-phrases show a parallel behavior. The

felicity contrast between the questions in  $(35)Q_1$  and  $(35)Q_2$  in a context that forces a NDL interpretation of the *wh*-phrases suggests that NDL *wh*-phrases need to be adjacent to the complex V:

(35)

Seeing someone smoking on the balcony of his parents' house, but being unable to identify the person, Mete asks his wife:

Q1: Kim sigara iç-iyor balkon-da? who-nom cigarette inhale-pres balcony-loc 'Who is smoking on the balcony?'

Q2: <sup>#</sup>Kim balkon-da sigara iç-iyor?

who-nom balcony-loc cigarette inhale-pres

'Who is smoking on the balcony?'

It is worth noting that the question in (35)Q2 is perfectly felicitous in a situation in which there are multiple smokers who are explicitly identified in the discourse (meeting the conditions for both *specificity-based* and *range-based presuppositions*). In other words, just as expected, when the context specifies the *wh*-phrase as DL, non-adjacency to the complex V becomes perfectly possible.

It should be acknowledged that Turkish allows direct objects to surface as unmarked for case (i.e., bare) even when they involve a complex structure (when certain conditions are met, see Şener 2010b for discussion).<sup>10</sup> I will refer to such *bare but complex* objects as *bare NPs* (as opposed to *bare Ns* discussed above). As shown in (36), a bare object NP may involve a modifier and the indefinite article *bir* in its structure:

(36)

Pelin dün [kalın bir kitap] oku-du. P-nom yesterday thick a book read-past 'Pelin read a long book yesterday.'

An obvious prediction that reveals itself as a result of the observation on (36) is this: Since a bare object NP must be a maximal projection, it cannot form a complex predicate with the V assuming that incorporation into V is only possible with bare Ns. In light of our discussion above, then, a bare object NP (contrary to a bare N) should not be able to intervene between a *wh* and the V unless the *wh* is DL.

<sup>&</sup>lt;sup>10</sup> It is important to note that only direct objects can be *bare* in Turkish. Inherently/lexically case marked NPs retain their case no matter what position they hold, hence they do not have the option of being bare. This has the important implication that no Turkish sentence can have multiple bare Ns, which makes it impossible to test whether it may ever have multiple bare N incorporation or whether there is recursive N incorporation (see Section 3.3.2 below for more on this issue in the context of low adverbs).

As a matter of fact it seems impossible to find a *wh*-question in Turkish that has an intervening bare object NP where the *wh*-phrase does not have a DL character. Even in the absence of a discourse context, the obvious impression that a *wh*-question like (37) gives is that the speaker has in mind a pre-existing set of people who read long and/or short books, and she is inquiring which one read a long one:

(37)

Kim [kalın bir kitap] oku-du? who-nom thick a book read-past 'Who read a long book?'

Evidence that supports the conjecture above can be provided by the following context where the wh-phrase is NDL, and in this context the question given above in (37) is <u>infelicitous</u>: *Pelin* walks into the office that she shares with three other people. She sees a long book on one of the tables there, and utters (37), without having a particular individual in mind. The prediction is thus borne out: Intervention of a bare object NP between a *wh* and the V is only possible if the *wh*-phrase is DL.

The findings of this subsection are summarized as follows:

- a. Bare Ns in Turkish form a complex with Vs when adjacent; they do not interfere with the adjacency of *wh*-phrases to the V. A NDL *wh*phrase must be adjacent to the [N+V]-complex just like it must be to a simplex V.
- b. A V-complex formed of a bare N and a V may be discourse given (=DA) just like a simplex V can be. Once understood this way, complex Vs do not form a counterexample to the observation from Chapter 2 that Focus constituents follow Topic/DA constituents in the pre-V field in Turkish."
- c. Bare NPs, however, cannot form a [N+V]-complex with the V, hence such NPs are 'genuine' interveners when present. As a result, when a bare NP intervenes between a *wh*-phrase and the V, the *wh*-phrase must be DL.

It is clear that the findings of the present section summed up above provide support for the generalization in (24), though a slight revision of it is in order:

<sup>&</sup>quot; It was noted in Chapter 2 that Focus constituents precede DAs placed in the post-V field.

### (39) V-Adjacency - *NDL*ness Correlation (to be revised)

NDL *wh*-phrases in Turkish are adjacent to V, where V is a simplex V or a complex one formed by a verb and a bare N.

DL wh-phrases in Turkish do not have to be adjacent to any type of V.

I would like to finally examine another case that apparently presents a challenge to the V-adjacency requirement of NDL *wh*-phrases.

## 3.3.2 Low manner adverbs as (non-)interveners

The case in point involves questions with a certain class of manner adverbs, which are very low in the structure. As shown in (40), low adverbs must be adjacent to the verb:

(40)

a. Pelin <i>hızlı</i> konuş-ur.	b. * <i>hızlı</i> Pelin konuş-ur.	
P-nom fast speak-aor	fast P-nom speak-aor	
'Pelin speaks fast.'	'Pelin speaks fast.'	

Though otherwise adjacent to the verb, low manner adverbs such as *hızlı* 'fast,' *güzel/iyi* 'good/well,' *çok* 'much, a lot' are nevertheless not closer to the verb than a bare object N. As illustrated below, a bare object N must be closer to the verb when it co-occurs with a low manner adverb:

a. Pelin hızlı kitap oku-r.

P-nom fast book read-aor

'Pelin reads books/a book fast.' [lit. Pelin does book-reading fast.]

b. \*Pelin kitap hızlı oku-r.

P-nom book fast read-aor

More importantly, low manner adverbs may not co-occur with bare objects NPs no matter what the linear order is:<sup>12</sup>

(42)

a. \*Pelin hızlı [kalın bir kitap] oku-du.

P-nom fast thick a book read-past

'Pelin read a long book fast.'

b. \*Pelin [kalın bir kitap] hızlı oku-du.

P-nom thick a book fast read-past

'Pelin read a long book fast.'

(i) Pelin *hızla/hızlıca* [kalın bir kitap] oku-du.
 P-nom in-a-rapid-manner thick a book read-past
 'Pelin read a long book fast.'

<sup>&</sup>lt;sup>12</sup> There are other forms of the same adverb in Turkish, namely *hızla* 'rapidly/swiftly' or *hızlıca* 'in a fast manner' which may precede bare object NPs unlike manner adverbs used in the main text, as illustrated by the example in (i):

The ungrammaticality of (42)a, and its contrast with (41)a suggests that, like NDL *wh*-phrases, low manner adverbs must be adjacent to the V. Furthermore, a bare object N does not act as an intervener while a bare NP does.<sup>13</sup> I take this to provide a supporting argument for the approach entertained in the preceding sub-section, namely that bare Ns are a constituent part of a complex V, unlike bare NPs.<sup>14</sup> Are low manner adverbs also part of the V-complex formed by a bare N and the V in a sentence like (41)a, or are they VP-level phrasal adjuncts?

If low manner adverbs form a complex with the V, just like bare object Ns (and (42)a indicates that they do), a *wh*-phrase that is adjacent to the [Adv+V]-complex should be able to have an NDL interpretation since low manner adverbs should not count as interveners for the V adjacency of NDL *wh*-phrases. The felicity of the *wh*-question in (43), which forces an NDL interpretation of the *wh*-

<sup>&</sup>lt;sup>13</sup> A question arises as to why (42b) is not acceptable. Details aside, I suggest that bare NPs in Turkish form a complex predicate with the V (along the lines of Öztürk's 2004 pseudoincorporation analysis), yet such complex predicate formation is blocked by the intervening incorporated adverb in (42b).

<sup>&</sup>lt;sup>14</sup> Travis (1988) claims that 'true' adverbs are not maximal projections, contrary to adverbial PPs. Along similar lines, Nakamura (2000) claims that pre-verbal 'true' adverbs (unlike adverbial PPs) in English are head adjoined to the V. Compare the pre-verbal and post-verbal *true* and PP adverbials in (i):

<sup>(</sup>i) a. Bill *quickly/\*with a crash* dropped the bananas.

b. Bill dropped the bananas *quickly/with a crash*.

As a matter of fact, Rivero (1994) also argues for a head adjunction analysis of low adverbs in Bulgarian.

phrase, suggests that low adverbs are indeed not interveners, but part of a complex V that may encode *given* information:

(43)

Mete is talking to a friend of his, Pelin, who owns an advertising agency just like him. Mete needs at least one fast-speaker to use in his recent radio ad campaigns. He knows that Pelin's agency had some radio ad campaigns in the past. So, Mete asks Pelin:

a. Kim *hızlı* konuş-ur sen-in ekip-te? who-nom fast speak-aor you-gen team-loc 'Who speaks fast in your team?'

b. <sup>#</sup>Kim sen-in ekip-te *hızlı* konuş-ur? <sup>15</sup> who-nom you-gen team-loc fast speak-aor

'Who speaks fast in your team?'

The felicity contrast in (43) is no longer surprising. The subject wh-phrase, being NDL, must be adjacent to the complex V, and its non-adjacency results in its infelicity in the particular context depicted in (43).<sup>16</sup>

<sup>&</sup>lt;sup>15</sup> As expected, (43b) is felicitous if Mete knows who is in Pelin's team, and if he is specifically asking about the identity of fast-speakers from a list of people he knows. This changes the context so that the wh-phrase is no longer a NDL-wh, but a DL-wh.

It is important that low manner adverbs that are examined above have a very limited syntactic distribution in Turkish, which follows from the syntactic incorporation analysis. The prediction is that if another type of adverb has the option of having multiple sites of adjunction, then its linear intervention between a wh and the V will be possible if the wh is DL, and not otherwise.

Consider the adverb *gizlice* 'secretly', which presents a case in point as it may (like all others adverbs of this class) occupy different positions in a clause, producing different interpretations (just like the adverbs *hızla* 'rapidly/swiftly' or *hızlıca* 'in a fast manner' given in fn.12). As shown in (44), the adverb *gizlice* 'secretly' may appear linearly in any position available:

(44)

(<sup>√</sup>gizlice) Pelin (<sup>√</sup>gizlice) kitab-1 (<sup>√</sup>gizlice) oku-du (<sup>√</sup>gizlice) secretly P-nom secretly book-acc secretly read-past secretly 'Pelin read the book secretly.'

(NB: English translation based on the boldfaced adverb.)

I take the positional flexibility of adverbs like *gizlice and hızla/hızlıca* to mean that they cannot undergo incorporation to the V, unlike *hızlı* in (41), which incorporates into the V. The implication of the lack of incorporation with *gizlice*-

<sup>&</sup>lt;sup>16</sup> Note that a complex formed by a low manner adverb and a V may have the same discourse-functional possibilities as [bareN+V] complexes discussed in the previous subsection.

type adverbs is this: In sentences in which a *gizlice*-type adverb intervenes between a wh-phrase and the V, the wh-phrase cannot be NDL. This prediction holds as shown by the examples below in a context in which the wh-phrase is NDL:

(45)

Pelin saw Mete, her son, from a distance in the schoolyard as Mete was kicking another kid at a spot where other kids or teachers could not see him do that. Pelin asks him the same night when he comes home:

a. *Gizlice* kim-i tekmeli-yor-du-n bugün okul-da?
secretly who-acc kick-prog-past-2sg today school-loc
'Who were you kicking secretly in school today?'

b. <sup>#</sup>Kim-i *gizlice* tekmeli-yor-du-n bugün okul-da?
who-acc secretly kick-prog-past-2sg today school-loc
'Who were you kicking secretly in school today?'

Assuming that *gizlice*-type adverbs may be adjoined to a projection higher than the object-wh, but not undergo adjunction to the V, the felicity contrast in (45) is accounted for. The NDL wh-phrase is adjacent to the V in (45)a since the adverb is adjoined to a higher projection than the object NP, whereas in (45)b the adverb is adjoined to a projection that will place it in between the NDL-wh and the V, interfering with the V-adjacency requirement of NDL wh-phrases. Not surprisingly, the intervention of the adverb *gizlice* does not result in infelicity if the wh-phrase has a DL interpretation, as illustrated by the context in (46):

(46)

Mete's teacher tells Pelin that Mete holds a grudge against some kids at school because they used to tease Mete in the past. Pelin personally knows all those kids that Mete dislikes. Curiously, Mete seems to try to beat up some of those kids whenever he can, and mostly in public, while others in places that are not so visible to other people. Wondering about this odd behavior about beating up some kids but not others publicly, Pelin asks him:

Soyle bakalım....

Tell me...

Kim(-ler)-i / hangi-ler-i-ni *gizlice* tekmeli-yor-sun? who-pl-acc/ which-pl-3s.poss-acc secretly kick-pres-2sg 'Who/which ones have you been kicking secretly?'

Notice that in the context given in (46) the fact that *Pelin* personally knows all the students who *Mete* beats up implies that the antecedent of the wh-phrase involves a range-based presupposition, and hence DL. Being DL, the wh-phrase does not have to be adjacent to the V as expected under the condition in (39). In light of the

findings in this chapter thus far, I then give the final version of the correlation stated earlier in (39):

### (47) V-Adjacency – *NDL*ness Correlation

NDL *wh*-phrases in Turkish are adjacent to V, where V is a simplex V or a complex one formed by a bare N/low manner adverb.

DL *wh*-phrases in Turkish do not have to be adjacent to any type of V.

## 3.4 Interim Summary

I summarize the major findings of this chapter below:

	Type of Wh	Wh-Interpretation	V-Adjacency [Vsimplex/complex]
Bare wh [-animate/-human]         Object WH       Acc wh [-animate/-human]         Acc wh [+animate/human]	Bare wh [-animate/-human]	NDL	Obligatory
	*DL	N/A	
	Acc wh [-animate/-human]	DL	No
		*NDL	N/A
	NDL	Obligatory	
	DL	No	
( <i>ne</i> 'what') Nom wh [-animate/-huma	Nom wh [-animate/-human]	NDL	Obligatory
	(ne 'what')		
	Nom wh [-animate/-human]	DL (hangi x 'which x')	No
	······	*DL (ne 'what')	N/A
		NDL	Obligatory
	Nom wh [+animate/human]		
		DL	No

## 4. Analysis

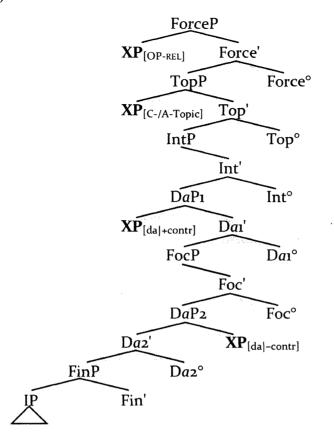
I concluded in Chapter 2 on the basis of data involving declarative clauses in Turkish that Focus, Presentational or Contrastive, does not undergo movement to a designated position in the left periphery of its clause, staying strictly in-situ. The necessity of constituents with [topic] and/or [da] to move to positions in the peripheries derives Focus-V adjacency in Turkish.<sup>17</sup>

There are two central issues that need to be addressed now. One concerns the obligatory V-adjacency of NDL wh-phrases and the absence of V-adjacency effect with DL wh-phrases. The other one concerns the licensing of wh-phrases in Turkish. As for the former, I will argue that the difference between NDL and DL wh-phrases in terms of V-adjacency stems from a difference in their feature composition, which requires NDL wh-phrases to stay in-situ throughout the derivation, while requiring DL wh-phrases to move (particularly when they do not happen to bear [focus] features, see below for more on this.) As for the licensing of [*iwh*] features on wh-phrases, I assume that Agree does the job, particularly for NDL wh-phrases, which do not undergo movement, while DL wh-phrases undergo movement to the Spec position of a functional head in the left periphery. In what follows I will elaborate on these ideas.

## 4.1 NDL in-situ, DL ex-situ

As has been discussed in detail in Chapter 2, I have been assuming the following articulated structure of the left periphery in Turkish, following Rizzi (2004):

<sup>&</sup>lt;sup>17</sup> It is immaterial whether V undergoes movement to I° or stays in-situ and merges with inflectional heads under a PF-merger analysis of verbal inflection (see Bobaljik 1995. Fukui and Sakai 2003 propose a specific implementation of such an analysis for verbal inflection in Japanese).



The investigation in the present chapter has concluded that DL wh-phrases behave differently from their NDL counterparts in that only the syntactic distribution of the latter is identical to non-wh Focus constituents. Taking this observation as a starting point, I suggest that NDL wh-phrases in Turkish are introduced with [*iwh*] and [*i*foc] features; each of these features gets checked through a distinct Agree relation established with Int° and Foc°, respectively. Extending to NDL *wh*-phrases the central assumption of Chapter 2 that a constituent with a [focus] feature cannot bear [OP], I assume that NDL *wh*-phrases cannot bear [OP]. This is plausible given that NDL *wh*-phrases also have a [focus] feature. Recall that an

(49)

uninterpretable [OP] feature is what drives movement to the specifier of a functional head that has the interpretable counterpart of the [OP] feature, while a constituent that lacks [*u*OP] stays in-situ.

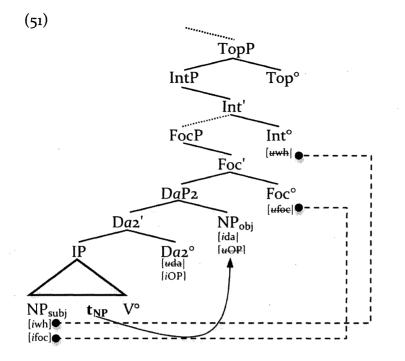
This feature composition of NDL *wh*-phrases ensures that they remain insitu throughout the derivation, ending up V-adjacent under the present system which requires movement of all constituents with [topic] and/or [da] features. It is also important to reiterate that I assume with Bošković (2007a) that Agree is not subject to phases/PIC, and thus the Agree relations established by the [*u*F] of Int° and Foc° are not blocked (unless, of course, a category with a like-feature intervenes to block Agree Closest, see Section 4.2 for more on this).

Consider below an illustration of the derivation of the sentence in (17), repeated below as (50), where irrelevant projections/steps in the derivation are omitted (dotted lines=Agree relations; straight lines=Movement relations):

(50)

<u>Kim</u> döv-dü Mete-yi? who-nom beat.up-past M-acc 'Who beat up Mete?'

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The object NP is postposed to the rightward Spec of  $DaP_2$  because it has [uOP], which requires it to move. The subject *wh*-phrase remains in-situ for it lacks [OP] and Agree is sufficient to check its [[*i*foc],[*i*wh]] features against the functional heads Foc<sup>o</sup> and Int<sup>o</sup>, respectively.

Turning to DL *wh*-phrases, we have seen that they exhibit certain properties that are unattested with NDL *wh*-phrases. The property that is most relevant to our present purposes is the one that concerns the exemption of DL *wh*-phrases from V-adjacency. I propose that this is a consequence of DL wh-phrases moving to a left peripheral position in Turkish. Complementing the proposal that DL-whs move in Turkish, I further suggest that DL-whs have no [focus] feature (see Bošković 2002, Reglero 2003, Stjepanović 2003, a.o.), but they bear [*i*da|*i*contrast] features in addition to their [*i*wh] features. Given the present system, DL *wh*- phrases are then associated with a [uOP] feature. This ensures that DL-whs obligatorily undergo movement in Turkish.

Next question to address is what position DL-whs target in the left periphery. There are a number of options here given the articulated CP structure adopted here. Either of the following positions may *in principle* be used as a landing-site for moving DL-whs in Turkish: Spec-TopP, Spec-IntP, or Spec-DaP1. I dismiss Spec-TopP in light of the assumption made in Chapter 2 that a clause may only have a single C- or A-Topic (see also Frascarelli and Hinterhölzl 2007), yet interrogative clauses may have multiple DL wh-phrases in Turkish and elsewhere. Spec,IntP may be a natural position for DL-wh since Int<sup>o</sup> is the head that the [*i*wh] feature of (N)DL-wh is checked against, but the facts indicate that Spec,DaP1 is the position that DL wh-phrases land in.

Given the hierarchical organization of the functional projections, the prediction is clear: If DL-whs in Turkish move to Spec,IntP, non-wh DAs will not be expected to precede DL-whs. If DL-whs hold (multiple) Specs of D*a*P1, then there should in principle be no restrictions on the ordering of DL-whs and non-wh DAs. Note immediately that we have already seen earlier in this chapter that DL-wh phrases may precede or follow non-wh DA constituents. Consider the context and the data below:

Mete and Pelin are invited to Suna's wedding. They see that Suna has kissed at least 20 well-wishers so far, but Suna has not been the only kisser; her husband, Selim, has kissed as many people as Suna has. Mete and Pelin have noticed that the people Suna kisses, Selim does not kiss, and vice versa, obviously to minimize the amount of kissing as there are still quite many guests in line, although some people have been kissed multiple times by Suna and Selim:

Selim'in öptüklerini gördüm. Peki...

I saw those people Selim kissed, but...

a. Kim(-ler)-i /hangi konuk-lar-1 Suna öp-tü?
who(-pl)-acc/which guest-pl-acc S-nom kiss-past
'Who did Suna kiss?'/'Which guests did Suna kiss?'
b. Suna kim-(ler)-i /hangi konuk-lar-1 öp-tü?
S-nom who-(pl)-acc/ which guest-pl-acc kiss-past
'Who did Suna kiss?'/'Which guests did Suna kiss?'

The subjects of the sentences above are clearly discourse anaphoric. The context also provides a *range-based presupposition* for the *wh*-phrase(s) (bare or inherently DL), which is thus DL. The felicity of the sentences in (52) demonstrates that DL wh-phrases may precede or follow non-wh DAs. These sentences present sufficient evidence to exclude Spec,IntP as the position for DL wh-phrases; if this were the position that DL-whs target, the order DA»DL-wh would be impossible, contrary to what is attested. (52) also presents an argument against Spec,TopP as the landing site for DL wh-phrases.

Note further that the following sentence is also perfectly felicitous in the context given in (52), where the DL-wh is sandwiched between two DAs:

(53)

Context same as (52)...

Suna kim-(ler)-i /hangi konuk-lar-ı Selim-den daha çok öp-tü? S-nom who-(pl)-acc/ which guest-pl-acc S-abl more than kiss-past 'Who/Which guests did Suna kiss more than Selim did?'

(52) and (53) suggest that DL wh-phrases target the same position as DAs in Turkish, and that there is no restriction as to what their order should be. Since wh-phrases, not only NDL ones but also DL ones, cannot be placed in the post-verbal field, the position DL-whs target must be the higher DaP projection, namely Spec, DaP1. This is in line with the assumption I gave above that DL-wh in Turkish bear [*i*da], [*i*contrast] in addition to their [*i*wh] and [*u*OP] (recall that Da2° does not have the feature [contrast], hence the lack of contrastive elements in the post-verbal field in Turkish).

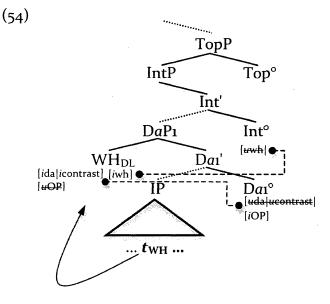
Now that we have confirmed that DL-wh target Spec, D*a*P<sub>1</sub> in Turkish, there remains one more issue that needs to be addressed. If DL-whs and DAs all check

features against Da1° (and the former also checks features against Int°), a question arises as to how this is possible in a system in which feature checking involves deletion/elimination of relevant features. This problem is quite general, and has been discussed in the literature (see Bošković 1999 for a discussion of this issue in the context of languages with multiple wh-fronting). One possibility is to assume that the relevant uninterpretable features of Da1° (i.e., [uda|ucontrast]) can survive checking (i.e., are not deleted after checking), as a result of which they can be checked multiply.<sup>18</sup> It should be noted that a solution of this sort should also be available for the checking of [uwh] features of Int° given that multiple whquestions are possible and multiple Agree with Int° (in the case of questions with multiple NDL-whs) and/or multiple movement to Spec,IntP (in the case of questions with multiple DL-whs) are attested. I discuss the issue of Agree between Int° and multiple wh-phrases in more detail in Section 4.2.

I propose that a DL wh-phrase that moves to Spec,  $DaP_1$  establishes an Agree relation with  $Da_1^\circ$ , checking the [uda|ucontrast] features of  $Da_1^\circ$  and its [uOP]. After checking of the [uOP] feature, the DL wh-phrase may not move further. However, since Int° has [uwh], Int° may establish an Agree relation with the [iwh] feature of the DL-wh in Spec, DaP. The scenario that I assume for the derivation of wh-questions with DL wh-phrases is illustrated below (dotted lines

<sup>&</sup>lt;sup>18</sup> Željko Bošković (p.c.) points out to an alternative, which disallows deletion/elimination of a feature before further embedding of the relevant phrase. This in principle allows checking of a [uF] of X multiple times until it is embedded under another projection. Either alternative does the job.

with bullet heads indicate Agree relations, straight lines indicate movement; irrelevant projections/steps are omitted):



Notice that in the derivation depicted above the DL-wh enters into another Agree relation once it reaches the Spec position of  $DaP_1$  to establish an initial instance of Agree. In other words, Move *plus* Agree, i.e., an Agree operation where the relevant element is a Probe, feeds another Agree operation, where the relevant element is a Goal, which is perfectly licit under the system adopted here.<sup>19, 20</sup>

- (i) a. Hangi çocuk hangi kitab-ı oku-du?
   which kid-nom which book-acc read-past
   'Which kid read which book?'
  - b. Hangi kitab-1 hangi çocuk oku-du? which book-acc which kid-nom read-past

<sup>&</sup>lt;sup>19</sup> Note that no superiority effects are attested with multiple DL wh-phrases that target multiple Specs of D*a*P1 as shown in (i):

### 4.2 Agree Closest, Focus, and Wh

The data on wh-questions examined in Section 3 showed that a DL wh-phrase may co-occur with a non-wh Focus in questions, and when this is the case, the linear order of these elements is 'DL-wh»non-wh-Focus'. However, no example of a question was given in which a NDL wh-phrase co-occurs with a non-wh Focus (in any order). This is not without a reason: NDL-wh and Foci are mutually exclusive in Turkish. As a matter of fact, similar observations have been made in the literature for other languages. Italian is also such a language, as noted in Rizzi (1997). Such mutual exclusivity is often handled under the assumption that Focus phrases and wh-phrases move to the same position. The mutual exclusivity of NDL-wh and Foci in Turkish raises a challenge under the present analysis of Focus/Wh-V adjacency, which is a syntactic 'accident' that arises as a consequence of the lack of movement of Focus/Wh and obligatory movement of non-Focus. It is then somewhat unexpected that Foci cannot co-occur with NDL-wh in Turkish. In what follows, I will show that there are independent reasons for the non-cooccurrence of Foci and NDL-wh.

### 'Which kid read which book?'

Significantly, in Bošković's (1999) account of superiority, superiority effects do not obtain when the same feature triggers multiple movement to the same position. In the data under discussion, the movement of DL wh-phrases is indeed triggered by the same feature, and targets the same position, hence the absence of superiority effects.

<sup>20</sup> That movement may feed Agree is also observed in other syntactic contexts (see Şener 2008, 2010a for an investigation of subjects of ECM clauses in Turkish).

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I would like to begin by pointing out an observation from Turkish that has also been made for many languages, including Japanese and Korean (cf. Beck 1996, Beck and Kim 1997, Miyagawa 2004, Pesetsky 2000). The observation is this: A C-Focus constituent associated with the focus particle *yalnızca* 'only' cannot linearly precede a wh-phrase in Turkish, while the reverse order is well-formed, as illustrated below:

(55)

a. \*Yalnızca Pelin kim-i gör-dü?

only P-nom who-acc see-past 'Who did only Pelin see?'

b. *Kim-i*<sub>i</sub> yalnızca Pelin *t*<sub>i</sub> gör-dü?

who-acc only P-nom see-past

'Who did only Pelin see?'

The Korean counterparts of the Turkish sentences in (55) show the exact same behavior, as noted in Beck and Kim (1997,370:73):

(56)

a.\*Minsu-man nuku-lûl po-ass-ni?

Minsu-only who-Acc see-Past-Q

'Who did only Minsu see?'

b. *Nuku-lûl*<sub>i</sub> Minsu-man  $t_i$  po-ass-ni?

who-Acc Minsu-only see-Past-Q

'Who did only Minsu see?'

Beck and Kim (1997) propose an analysis of the contrast in (56) from Korean in terms of a proposal made in Beck (1996) regarding intervention effects induced by quantifiers. Beck's (1996) suggestion is given below:

### (57) <u>Quantifier induced Barrier (QUIB)</u>

The first node that dominates a quantifier, its restriction, and its nuclear scope is a Quantifier Induced Barrier (QUIB).

### (58) <u>Minimal Quantified Structure Constraint (MQSC)</u>

If an LF trace  $\beta$  is dominated by a QUIB  $\alpha$ , then the binder of  $\beta$  must also be dominated by  $\alpha$ .

I assume that Focus constituents associated with *yalnızca* 'only' in Turkish are barrier inducing quantificational elements, just like their Korean counterparts. I will call these elements *scope bearing elements* (*SBEs*). A wh-phrase that is dominated by an SBE such as *yalnızca-XP* in Turkish violates the MQSC, as illustrated below:

@LF: 
$$[ wh ... [_{QUIB_{\alpha}} yalnızca-XP ... [ ... t_{wh}=\beta ... ]_{QUIB_{\alpha}} ] ... ]$$

The fact that the binder of  $\beta$ , i.e., the trace of the LF moved wh-phrase, is not within the domain of  $\alpha$ , is what causes the ungrammaticality of (55)a. The grammaticality of (55)b) is also predicted under Beck's (1996) proposal given that the wh-phrase is moved in overt syntax crossing the SBE *yalnızca-XP*, thereby escaping its barrierhood prior to LF. At LF, then, the trace/copy the moved wh-phrase leaves behind is not dominated by the SBE, and as a result of which no violation of the MQSC arises.

Although Beck and Kim's (1997) analysis provides a simple account for the contrast in (55), it resorts to the mechanisms of LF movement, which is not adopted in the present dissertation. Since I have been adopting an Agree-based system throughout, I refrain from appealing to a system that employs LF-movement and Agree simultaneously.

It is in principle possible to propose an amendment to the MQSC under the Agree framework as in the following (the QUIB requires no amendments, and it may remain intact):

(60) <u>Minimal Quantified Structure Constraint (MQSC) [modified]</u>

If  $\beta$  is dominated by a QUIB  $\alpha$ , then the Probe (/binder) of  $\beta$  must also be dominated by  $\alpha$ .

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As no movement of the wh-phrase is needed under the Agree approach, what remains within the domain of the SBE *yalnızca*-XP in (55)a is the wh-phrase itself, and not its trace. This is what produces a violation of the MQSC under its modified version in (60):

(61) 
$$\begin{bmatrix} Int^{\circ} \dots \begin{bmatrix} QUIB_{n} \ yalnızca-XP \dots \begin{bmatrix} \dots \ wh_{r} \dots \end{bmatrix} \end{bmatrix} \dots \end{bmatrix}$$
AGREE

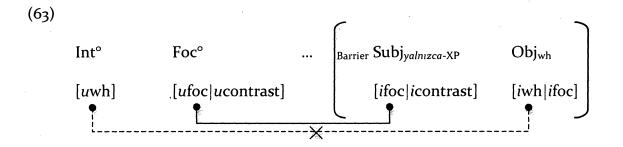
A question arises as to whether the MQSC is needed as an independent constraint that regulates the application of Agree. This is particularly a relevant question in the presence of the locality condition *Agree Closest*, an updated version of Rizzi's (1990) *R*[elativized] *M*[inimality]. Does the MQSC offer anything that *Agree Closest* does not? I address this question below.

Under the present system, not only Int<sup>o</sup> but also Foc<sup>o</sup> acts as a Probe. Being Probes they establish an Agree relation with a proper Goal in their c-command domain. To make it more precise, the following set of Probes/Goals and features given in (62) is present in the derivation of a sentence like (55)a (ignoring the feature [OP] here):

(62)

Int°	•••	Foc°	•••	Subj <sub>yalnızca-XP</sub>	Obj <sub>wh</sub>
[ <i>u</i> wh]		[ufoc ucontrast]		[ifoc icontrast]	[iwh ifoc]

Agree can in principle reach into phases in the present system since Agree is not subject to the phases/PIC. In (62), when the functional head Foc<sup>o</sup> is introduced into the derivation, it establishes an Agree relation with the subject NP, and checks its *u*F against this Goal. At this point there is no need for a feature interaction between Foc<sup>o</sup> and the object wh-NP; Foc<sup>o</sup> has checked its [*u*F], and the relevant feature of the subject NP, i.e., [*i*foc], needs no checking since it is interpretable. It is in principle possible to assume that the first step of Agree between Foc<sup>o</sup> and the subject NP that checks [foc|contrast] features turns the subject NP into an *active* operator, and its domain into a *quantifier induced barrier*, which is what leads to an MQSC violation: Int<sup>o</sup> and the object wh-NP have a matching [wh] feature, but they cannot establish an Agree relation as Int<sup>o</sup> cannot probe into the barrier node that contains the wh-phrase. This is illustrated in (63):



This analysis is based on a modification of the MQSC under an Agree-based system. A question however arises whether this mechanism is needed in the presence of a locality constraint such as the Agree Closest. Can Agree Closest handle the data given above? I will now address that question. Starke (2001) argues that syntactic elements are not only classified into orthogonal classes but also into some classes that have sub-classes and superclasses, which has important effects regarding movement dependencies as well as RM. Rizzi (2004) provides the following typology of features, adopting this basic idea of Starke (2001):

(64)

a. Argumental: person, number, gender, case

b. Quantificational: Wh, Neg, measure, focus...

c. Modifier: evaluative, epistemic, Neg, frequentative, celerative, measure, manner, ...

d. Topic

Rizzi (2004) assumes that specifiers are licensed by the substantive featural content of their heads, hence the typology of specifiers corresponds to the typology of the licensing substantive features listed above. The key to the Rizzi/Starke proposal is that RM effects arise within the same feature class, but not across classes. It is thus important for my present purposes that Wh and Focus belong to the same class (at least for the purposes of locality). The claim that Focus and Wh belong to the same class entails that they induce a locality violation for each other. When interpreted under the Agree framework, the following Agree relations are then predicted to be impossible:

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- a. \* $\alpha$  ...  $\alpha$  ...  $\alpha$  [where  $\alpha$  is a member of a quantificational class; Wh/Foc]
  - a'. \*wh ... Foc ... wh
  - a". \*Foc ... wh ... Foc
- b.  $\beta$  ...  $\alpha$  ...  $\beta$  [where  $\alpha$  and  $\beta$  are members of distinct classes]

Going back to the ill-formed (55)a and its derivation in (63), we observe that the subject NP that establishes an Agree relation with Foc<sup>o</sup> stands in the way of another potential Agree relation that has to be established between Int<sup>o</sup> and the object wh. Since Focus and Wh belong to the same class, they induce locality restrictions for each other as illustrated in (65)a'. The higher Probe Int<sup>o</sup> then cannot target the object-wh in (63) due to Agree Closest. There is thus no need to adopt (60) to account for the data under consideration.<sup>21</sup>

- (i) \*Kim yalnızca Pelin-i öp-tü? (OK as echo Q/DL-wh)
  who-nom only P-acc kiss-past?
  'Who kissed only Pelin?'
- (ii) [IntP Int° [FocP Foc° ... [ ... Subject-wh [ ... Object-XP<sub>yalnizca</sub> ] ] ] ] [uwh] [ufoc|ucontrast] [iwh|ifoc] [ifoc|icontrast]

I assume that the presence of the [wh] feature on the subject wh-phrase is what triggers an RM violation when Foc<sup>o</sup> attempts to establish an Agree relation with the object NP associated with *yalnizca*, which bears the full set of features that Foc<sup>o</sup> bears.

<sup>&</sup>lt;sup>21</sup> I suggested above that the impossibility of 'Focus»NDL-wh' is a result of the violation of Agree Closest induced by the constituent with the [focus] feature. A question arises why the string (i) is illicit, when a NDL-wh precedes Focus. Consider the rough derivation of (i) given in (ii) below:

Consider now the example in (55)b, repeated below for convenience:

(66)

*Kim-i*<sub>i</sub> yalnızca Pelin *t*<sub>i</sub> gör-dü? who-acc only P-nom see-past 'Who did only Pelin see?'

We have already seen in this chapter that a wh-phrase that is not adjacent to the V as in (66) must be a DL-wh. This is indeed the case: It is impossible to find a context in Turkish in which the subject is contrastively focused and the wh-phrase is NDL. A wh-phrase in such a configuration always requires either a range-based presupposition or a specificity-based one. The following further illustrates this fact through a context in which the wh-phrase is specified as NDL, and its nonadjacency to V results in the infelicity of the sentence:

(67)

Suzan and Mete, both teachers, see from the window of the teacher's lounge that Pelin and Suna each kissed a boy in the schoolyard. Mete, not wearing his eyeqlasses, asks Suzan to elicit more information about the kissing event:

\*Kim-i yalnızca Pelin öp-tü?
who-acc only P-nom kiss-past
'Who did only Pelin kiss?'

As expected, a question like (66)/(67) is perfectly well formed in a context in which the wh-phrase has a range-based presupposition:

(68)

Mete and Pelin are invited to Suna's wedding. They see at the wedding ceremony that Suna has kissed at least 10 well-wishers so far, and her husband, Selim, has kissed as many people as Suna has. Thinking that Pelin has been a better observer of all that than he has, Mete asks Pelin:

> kim(-ler)-i yalnızca Suna öp-tü? who(-pl)-acc only S-nom kiss-past 'Who did only Suna kiss?'

The contrast between the sentences in (66)/(68) and (55)a presents an interesting challenge: I have accounted for the ungrammaticality of (55)a via an intervention effect induced by the [focus] feature on the subject NP for the Agree relation between Int° and the object wh-phrase. Why does no intervention effect obtain in (66)/(68)? I suggest that the difference is that the DL object wh-phrase undergoes movement (having [*u*OP] and not having [focus]) in (66)/(68) across the Focus NP<sub>subj</sub> to Spec,D*a*P1 prior to the establishment of an Agree relation between Int° and the object wh-phrase. This derivation is illustrated below (irrelevant details are omitted in the derivation):

(69)  

$$[IntP Int^{\circ} [DaP1 whDL Da1^{\circ} [FocP Foc^{\circ} [... [vP Subjyalnizca-XP ... [vP t_{Obj-wh}] [uwh] [iwh|ida|contr|uOP] [ufoc|ucontr] [ifoc|icontrast]
AGREE (step 3) AGREE (step 1)$$

A similar conclusion was reached in Bošković (2007b) on the basis of data from French. Consider the following set of examples cited from Bošković (2007b:34-5):

(70)

a. \*Jean et Pierre croient que Marie a vu qui?
Jean and Pierre believe that Marie has seen whom
'Whom do Jean and Pierre believe that Marie saw?'
b. Qui Jean et Pierre croient-ils que Marie a vu?

- c. Maria a vu qui?
  - Maria has seen whom

The grammaticality contrast between (70)a and (70)c shows that the in-situ option is not available when the wh-phrase is within the embedded clause but it is available when the wh-phrase is in a root clause. The grammaticality contrast between (70)a and (70)b also shows that unlike the in-situ option, movement of a wh-phrase crossing a clausal boundary yields a well-formed output. This latter contrast is rather similar to the contrasts we have found in Turkish in a different syntactic context, especially when interpreted under the present system where licensing of wh-phrases (and also Focus) involves Agree. It turns out that Agree may be less local than Move under certain syntactic contexts despite the fact that Agree is not constrained by the PIC unlike Move as I outlined in Chapter 2. The particular syntactic contexts involve the intervention of a feature that belongs to the same class as the Probe and the non-local Goal.

As for the account for the examples in (70), Bošković (2007b) suggests that the matrix C, the embedded C, and the wh-phrase should all be lexically specified for the wh-feature, as assumed here, setting aside the exact specification (+/and/or valued/unvalued). Given Agree Closest, the matrix C in (70)a cannot establish an Agree relation with the wh-phrase inside the embedded clause since the embedded complementizer is specified for the wh-feature, and thus it acts as an intervener for Agree(C°<sub>Matrix</sub>,Wh<sub>Emb</sub>). This provides an explanation for the clause-boundedness of the wh-in-situ in French. The intervention problem does not arise in (70)b since the wh-phrase moves to the embedded SpecCP and crosses the embedded C, thanks to the [uF] that triggers its movement and prevents it from getting caught in the domain that is sent to Spell-Out. RM-style effects are thus stronger with Agree because movement can cross a potential Agree intervener because it has a *different* driving force. This is essentially the idea behind the analysis of (55)b given in (69).

A question arises at this point as to whether Int<sup>o</sup> enters into an Agree relation with all wh-phrases in Turkish. An answer to this question may be given

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by the data under consideration presently. If Int<sup>o</sup> enters into an Agree relation with all wh-phrases in its c-command domain, we expect an intervention effect to surface when the *yalnızca*-NP is sandwiched between two wh-phrases. The ungrammaticality of (71) below suggests that Int<sup>o</sup> does Agree with all wh-phrases:<sup>22</sup>

(71)

\*Hangi çocuk yalnızca kitab-ı kim-e ver-di? which kid-nom only book-acc who-dat give-past 'Which kid gave only the book to whom?'

Importantly, if Int<sup>°</sup> were to Agree with only one of the wh-phrases, it would only Agree with the highest one, with no intervention of the *yalnızca*-NP. If Int<sup>°</sup> establishes an Agree relation not only with the higher wh but also with the lower one, the intervention of the *yalnızca*-NP, hence the ungrammaticality of (71) is accounted for.

A question arises now as to what happens in questions where Int<sup>o</sup> Agrees with all (i.e., multiple) wh-phrases. I propose that the locality restriction in (65a) (i.e., \* $\alpha$  ...  $\alpha$  ...  $\alpha$ ) only holds when  $\alpha$ 's in (65a) represent distinct members of a unique quantificational class (one  $\alpha$  is Wh and the other Foc, or vice versa). In other words, Agree by a single Probe with multiple Goals for exactly the same features can take place without a locality problem. What we are dealing here is

<sup>&</sup>lt;sup>22</sup> We may be dealing here with a pure Agree counterpart of Bošković's (1999) Attract-All.

essentially Hiraiwa's (2001) Multiple Agree (see also Nomura 2005). Hiraiwa (2001) in fact explicitly proposes that Goals involved in multiple Agree do not induce Agree Closest effects for the Agree relation in question.

Having discussed the Agree relations involved in wh- and Focus-licensing, in the next section I turn to an investigation of certain elliptical sentences in Turkish that contain wh-elements as the remnants of ellipsis.

## 5. 'Sluicing' in Turkish is not sluicing

Sluicing is an ellipsis construction noted by Ross (1967), which is illustrated in (72) by an example from English (ellipsis site indicated by the strikethrough):

(72)

Bill saw someone but nobody knows [ who [Bill saw t<sub>who</sub>] ]?

Merchant (1999, 2008) argues for an analysis of sluicing that involves IP/TP-ellipsis following the movement of the wh-phrase to Spec,CP, where, Merchant claims, a feature **E** on C<sup>o</sup> (or I<sup>o</sup>) is what triggers deletion in PF deriving the relevant syntactic, phonological, and semantic effects attested in such elliptical constructions.<sup>23</sup> From this point forward, I will call this account the *ME-analysis* 

<sup>&</sup>lt;sup>23</sup> Craenenbroeck and Liptak (2006) argue for a slightly different analysis of 'sluicing' constructions in Hungarian in which wh-movement is to Spec,FocP. Craenenbroeck and

for ease of reference, which stands for *Move & Elide*. A major question that arises under the *ME-analysis* concerns languages that have similar constructions to that of the English sentence in (72) but do not have wh-movement.<sup>24</sup>

Takahashi (1994) argues for an analysis of Japanese 'sluicing' constructions (*Sluicing-like Costructions, SLCs* from this point forward following Sugawa 2008, and Chiu, Fujii and Sugawa 2008) in a fashion similar to the ME-analysis, though later work on these constructions in Japanese has convincingly shown that the ME-analysis is not tenable; a certain type of cleft plus deletion analysis provides a better analysis of the relevant phenomenon as I will review below (cf. Kizu 1997, Kuwabara 1996, Nishiyama, Whitman, and Yi 1996, Saito 2004, Sugawa 2008, Chisu et al. 2008 among others).

The ME-analysis has been applied to Turkish in Ince (2006, 2007). Ince argues for an ME-analysis of SLCs in Turkish assuming that wh-phrases move in ellipsis contexts in particular by showing that an elliptical cleft approach to Turkish SLCs of the kind applied to Japanese SLCs is not possible. I will review

Liptak (2006) propose a typology of sluicing on the basis of what position a wh-phrase targets.

<sup>24</sup> Merchant (1999) suggests in an appendix some tentative analysis for *wh*-in-situ languages such as Hindi and Turkish with the assumption that sluicing structures in these languages pattern with those in English. Under one alternative, wh-phrases undergo a 'scrambling' type movement to IP, which is followed by the deletion of the lower IP segment. Another alternative is that wh-phrases move to Spec,CP even in *wh*-in-situ languages, and "...whatever constraint prevents overt movement into SpecCP is ameliorated by the deletion itself, however such an idea is implemented..." (Merchant 1999, 102). Ince's (2006,2007) ME-analysis of Turkish and argue that there is no compelling evidence supporting it.

As noted in fn.24 above, the ME-analysis of sluicing anticipates movement of wh-phrases even in languages that otherwise do not allow movement of whphrases, and we have already seen that Turkish presents a good example of a language that lacks movement of (NDL) wh-phrases. It should be noted at the very outset that though Turkish lacks movement of NDL wh-phrases, there may in principle be nothing disallowing movement of wh/Focus in sluicing contexts in Turkish (see here fn.24). This is because sluicing typically allows structures that are not otherwise allowed. English, for example, allows multiple wh-fronting in sluicing contexts although it disallows multiple wh-fronting in non-sluicing contexts, as shown in (73):

(73) (Data due to Lasnik 2007)

a. <sup>?</sup>One of the students spoke to one of the professors,

but I don't know [which] [to which].

b. \*One of the students spoke to one of the professors,

but I don't know [which] [to which] spoke.

Nevertheless, I would like to show in this section that SLCs in Turkish may be accounted for under an analysis that does not resort to movement of wh/Foci. A non-movement analysis is plausible particularly if one recognizes that Turkish, as opposed to a language like English, allows all kinds of ellipsis phenomena that may be appealed to in the derivation of SLCs, such as argument ellipsis, N'-ellipsis, and both Backward and Forward Gapping (Bozşahin 2000, Göksel and Kerslake 2005, Hankamer 1972, İnce 2006, 2007, Kornfilt 1997a, 2000, Sener and Takahashi 2009, Sener 2010b, Öztürk 2006). Assuming that there are no compelling reasons to posit wh-movement in 'sluicing' contexts in Turkish, and that more importantly Turkish has constructions that are identical to SLCs with the exception of an indefinite and a wh-phrase, I argue that SCLs and their non-wh counterparts are a product of an interaction of distinct ellipsis operations that are independently available in the grammar of Turkish. The analysis is built on a condition on ellipsis articulated in den Dikken, Meinunger, Wilder (1999), whose main objective was to provide an ellipsis account for one type of specificational pseudocleft in English and elsewhere. I show that the ellipsis condition in question can be employed in providing an account for SLCs in Turkish and some other ellipsis operations. This indicates that the *ellipsis condition* covers more ground than it is argued for in den Dikken, Meinunger, Wilder (1999).

This section is organized as follows: Section 5.1 presents a review of the elliptical cleft analysis of SLCs proposed mainly for Japanese and Chinese. In Section 5.2, I present a number of empirical arguments against an elliptical cleft analysis of SLCs in Turkish. In Section 5.3, I first provide an outline of the analysis formulated in Dikken, Meinunger, Wilder (1999), and then offer an

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implementation of this analysis for Turkish SCLs and other constructions that are structurally identical to SLCs but lack wh-phrases.

### 5.1 'Sluicing' in Japanese and the elliptical cleft analysis of 'sluicing'

Takahashi (1994) notes that Japanese allows a construction similar to sluicing in English (data due to Takahashi 1994):

(74)

John-wa zibun-ga naze sikarareta ka wakattenai ga, J-top self-nom why scolded-was Q know-not but Mary-wa [naze ka] wakatteiru M-top why Q know

'John doesn't know why he was scolded, but Mary knows why.'

Despite its apparent similarities to sluicing in English, this *Sluicing-Like Construction* (SLC) displays certain properties not attested in English sluicing.

Saito (2004) notes that SLCs in Japanese do not exhibit the effects of island repair, a phenomenon found in English sluicing (cf. Ross 1967, Merchant 1999, Bošković 2010b), and proposes an analysis built upon earlier analyses of SLCs as elliptical clefts such as Kizu (1997), Kuwabara (1997), Nishiyama et al. (1996) with the incorporation of another proposal that Japanese has argument ellipsis (cf. Kim 1999, Oku 1998). The relevance of the cleft analysis to SLCs has to with the presence of copula. Chiu, Fujii and Sugawa (2008) (henceforth, CFS08) note that Japanese and Chinese have no SLCs that *prohibit* the use of copula although they allow the drop of copula (in different syntactic environments). The Japanese SLC in (74) is analyzed under Saito's (2004) elliptical cleft proposal as in the following:

(75)

... Mary-wa [[<sub>CP</sub>- $OP_i$ -[<sub>TP</sub>-zibun-ga  $t_i$ -sikarareta ] no ]-ga

M-top self-nom scolded-was no -nom

naze<sub>i</sub> (da) ka] wakatteiru

why cop Q know

The string isolated by the bold square brackets has the structure of a cleft, and the elided CP corresponds to the subject of the cleft construction. Ellipsis of the CP-subject is allowed given that argument ellipsis is independently possible in Japanese, just as in Turkish (cf. Şener and Takahashi 2009).

CFSo8 note that SLCs in Japanese and Chinese share three basic properties, one of which we have already reviewed above, namely the presence of the copula. The second property that those two languages share is that they both allow sloppy interpretation as was reported in Takahashi (1994) for Japanese. Thus, the SLC in (74) above may have either of the following readings: a. Mary knows why he [=John] was scolded. [strict interpretation]b. Mary knows why she [=Mary] was scolded. [sloppy interpretation]

The third shared property CFSo8 note is that SLCs in Japanese and Chinese both allow non-wh-remnants, as was reported in Nishiyama et al (1996). I cite a Japanese example below from CFSo8 ( $\Delta$  indicates the material that is missing):

(77)

(76)

Yamada-sensei-wa Yoko-ga tosyokan-de benkyoositeiru-to omotteiru-ga Prof.Yamada-top Y-Nom library-at is.studying-C think-though Tanaka-sensei-wa Δ gakusyoku-de da-to omotteiru Prof.Tanaka-top student cafeteria-at cop-C think 'Professor Yamada thinks that Yoko is reading a book at the library, but Professor Tanaka thinks that Δ is at the student cafeteria.'

CFSo8 suggest the second conjunct/clause of (77) can be paraphrased as in the following:

(78)

... Tanaka-sensei-wa <u>[Yoko-ga benkyoositeiru-no]-wa</u> Prof. Tanaka-top Y-Nom is.studying-no]-top

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### gakusyoku-de da-to omotteiru

#### student cafeteria-at cop-C thinks

'Prof. Tanaka thinks that it is at the student cafeteria that Yoko is studying.'

Notice that the paraphrase in (78) involves a copula construction (underscored), whose clausal subject is elided as seen in the actual sentence in (77).

The properties noted above are shared by Japanese and Chinese SLCs, but not by sluicing in English. They present sufficient evidence to treat them differently from sluicing constructions in English.

In what follows, I turn my attention to Turkish and show that Turkish cannot be analyzed under an elliptical cleft analysis of the sort proposed for Japanese.

## 5.2 SLCs in Turkish and the elliptical cleft analysis

Ince (2007) gives two strong arguments against an elliptical cleft analysis of SLCs in Turkish, which I present below. The first one highlights a major point of divergence between Turkish and Japanese in that Turkish disallows case marked NPs as pivots of clefts, unlike Japanese.<sup>25</sup> Witness the following contrasts between

<sup>&</sup>lt;sup>25</sup> Pivotal NPs might be treated as either caseless/bare, where case is deleted or marked nominative case, which is phonologically null in Turkish. Nothing hinges on this choice in my analysis.

the examples below with bare and dative pivots, and bare and ablative pivots, respectively:

(79)

a. Pelin	kim-e	ders	ver-iyor?	
P-nom	who-dat	lesson	give-pres	
'Who d	oes Pelin	tutor p	orivately?'	
b. [Pelin-	in ders	ver-di	ğ-i]	kim?
P-gen	lessor	n give-r	10ml-3s.poss	who-nom
'Who is i	t that Pel	in tuto	rs privately?'	
c. *[Pelin	-in ders	ver-d	iğ-i]	kim-e?
P-gei	n lesso	n give-r	10ml-3s.poss	who-dat
'Who is i	t that Pel	in tutoi	rs privately?'	

(8o)

P-nom who-abl hate do-aor

'Who does Pelin hate?'

b. [Pelin-in nefret et-tiğ-i] kim?

P-gen hate do-noml-3s.poss who-nom 'Who is it that Pelin hates?'

c. \*[Pelin-in nefret et-tiğ-i] kim-den?

P-gen hate do-noml-3s.poss who-abl 'Who is it that Pelin hates?'

Unlike what is observed in cleft constructions, *wh*-phrases in Turkish matrix and embedded SLCs must match their correlates in case, as illustrated by the examples below:

(81)

a. A: Pelin birisin-e ders ver-iyor.
P-nom someone-dat lesson give-pres
'Pelin tutors someone privately.'
B: Kim-e?
who-dat
'To whom?'

b. Pelin birisin-e ders ver-iyor, ama kim-e bil-mi-yor-um.
P-nom someone-dat lesson give-pres but who-dat know-neg-pres-1s
'Pelin tutors privately but I do not know who.'

a. A: Pelin birisin-den nefret ed-iyor.
P-nom someone-abl hate do-pres
'Pelin hates someone.'
B: Kim-den?
who-abl

'From whom?'

b. Pelin birisin-den nefret ed-iyor, ama kim-den bil-mi-yor-um.P-nom someone-dat hate do-pres but who-abl know-neg-pres-1s'Pelin hates someone, but I do not know who.'

The second argument Ince (2007) introduces against an elliptical cleft analysis of SLCs in Turkish draws on the contrast between clefts and SLCs in terms of the availability of (wh) adjuncts. Specifically, (wh-)adjuncts cannot be pivots of clefts while they may appear in SLCs:

 $(8_3)$ 

a. \*Pelin-in konuş-tuğ-u ne zaman?
P-gen speak-noml-3s.poss what time
'When is that Pelin spoke?'

b. \*Pelin-in konuş-tuğ-u neden?

P-gen speak-noml-3s.poss why 'Why is that Pelin spoke?'

(84)

a. Pelin bir ara konuş-muş, ama ne zaman bil-mi-yor-um.
P-nom some time speak-e.past but what time know-neg-pres-1s
'Pelin allegedly spoke some time, but I do not know when.'

b. Pelin bir sebeple konuş-muş, ama neden bil-mi-yor-um.

P-nom for-a-reason speak-e.past but why know-neg-pres-1s 'Pelin allegedly spoke for some reason, but I do not know why.'

I would like to add two more empirical arguments against an elliptical cleft analysis of SLCs in Turkish. The first one concerns the absence of non-whremnants in Turkish, where Turkish again contrasts with Japanese and Chinese, which allow non-wh-remnants, as noted by CFSo8. This is shown below by the Turkish examples modeled on the Japanese example of CFSo8 given in (77) (subject and the predicate gaps indicated by the underscore):<sup>26</sup>

<sup>&</sup>lt;sup>26</sup> Of course, this sentence is well formed if the second conjunct is interpreted in such a way that it is Susan, not Mete, who ponders sitting at the student cafeteria. On this reading, where the second conjunct is a full sentence, there is actually no ellipsis. This reading is not relevant for my present purposes.

\*Pelin [Mete-nin kütüphane-de çalış-tığ-ı-nı] düşün-üyor,
P-nom M-gen library-loc study-noml-3s.poss-acc think-pres
Suzan-sa [\_\_\_\_\_ öğrenci kafeteryası-nda \_\_\_\_] düşün-üyor.
S-nom-however student cafeteria-loc think-pres
'Pelin thinks that Mete is studying in the library, while Susan thinks that he is studying at the student cafeteria.'

Note that CFSo8's paraphrase for the second conjunct of the Japanese sentence in (77), which involves a cleft construction, is not available for the second conjunct of the Turkish sentence in (85). The reason for this is clear: A locative marked NP cannot be the pivot of a cleft in Turkish. A potentially relevant ungrammatical example from Turkish that roughly corresponds to the Japanese paraphrase in (78) is given below:

(86)

\*... Suzan-sa [[Mete-nin çalış-tığ-ı yer-in]
 S-nom-however M-gen study-noml-3s.poss place-gen
 öğrenci kafeteryası-nda (ol-duğ-un-u)] düşün-üyor.
 student cafeteria-loc be-noml-3s.poss-acc think-pres
 'Susan thinks that the place that Mete is studying is the student cafeteria.'

Another potential argument against an elliptical cleft analysis of SLCs in Turkish involves NPs to which the Q-particle, which is used to form polarity questions, is attached. As shown below, the particle follows an NP in contexts that are identical to SLCs in Turkish:<sup>27</sup>

(87)

a. A: Pelin birisin-e ders ver-iyor-muş.

P-nom someone-dat lesson give-prog-e.past 'Pelin is allegedly tutoring someone privately.'

- (i) Kustata li? Kogo li?house-the Q whom Q'The house?' 'Whom?'
- (ii) A: Odobrixa statijata za pečat.
   approved article-the for publication

'They accepted the paper for publication.'

B: Mariianata li?

Maria's-the Q

'The one which Maria wrote?'

Instead of analyzing the above data as involving movement to the Spec of CP headed by *li*, Bošković (2001) argues that *li* is lexically attached to what precedes it, which means that the element preceding *li* does not move to Spec,CP. The reason for this is that some elements that precede *li* are otherwise immobile in Bulgarian. The Q-particle in Turkish may be analyzed in a similar fashion, without any need to force the movement of elements associated with *mI* to the domain of CP.

<sup>&</sup>lt;sup>27</sup> Discussing similar data from Slavic, Bošković (2001) argues that the Q element in Bulgarian, *li*, also allows ellipsis (data due to Bošković 2001,36:53, and 235:117a):

B: Mete-ye mi?

M-dat Q

'To Mete?' (lit: Could it be Mete?)

b. Pelin birisin-e ders ver-iyor-muş,

P-nom someone-dat lesson give-pres-e.past

ama Mete-ye mi bil-mi-yor-um.

but M-dat Q know-neg-pres-1s

'Pelin is allegedly tutoring someone privately but I do not if it was Mete.'

Once again, we see that the source for the second conjunct that is formed of the 'dative marked-plus-Q-particle-attached' NP cannot be a cleft construction as shown below:

(88)

\*[Pelin-in ders ver-diğ-i] Mete-ye mi?
P-gen lesson give-noml-3s.poss M-dat Q
'Was it Mete that Pelin tutors privately?'

It is worth noting that sentences like (87) not only disfavor an elliptical cleft analysis but also an ME-analysis of these constructions particularly under a nonmovement analysis of Q-attachment in Turkish (fn.27). The similarities of these constructions to SLCs (involving wh-phrases) are evident, and a non-movement analysis of one of them may be taken as an argument for the non-movement analysis of the other.

I conclude on the basis of the facts introduced in this section that elliptical cleft is not tenable as an analysis for SLCs in Turkish. There is also no strong evidence that favors an ME-analysis of SLCs in Turkish, although it should be stressed once again that the ME-analysis may be an alternative if no other alternative is found to account for the data above, since an ME-analysis of Turkish SCLs would not necessarily have negative implications for the analysis of non-sluicing structures analyzed in Chapter 2 and thus far in the present chapter, especially under Merchant's suggestion that movement of wh-phrases is possible in wh-in-situ languages in sluicing contexts because of the ameliorating effect of ellipsis. It is clear however that adopting a wh/focus-movement analysis of wh-phrases in 'sluicing' constructions in Turkish would require some non-trivial assumptions.

In what follows, I will show that there is actually an alternative that does not require movement of wh-phrases in Turkish even in the constructions under consideration, which is a must under the ME-analysis. The main motivation behind this proposal is this: If SLCs in Turkish can be accounted for without resort to movement of wh-phrases, which I have argued to be non-existent for (at least) NDL wh-phrases, then we should favor the non-movement analysis for reasons of parsimony.

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### 5.3 SLCs in Turkish as non-constituent deletion

# 5.3.1 Ellipsis and gapping in specificational pseudoclefts: Den Dikken, Meinunger, and Wilder (2000)

In this section I propose an analysis of SLCs in Turkish that conforms with the present analysis of Focus and wh-phrases in Turkish for it posits no movement of such elements in overt or covert syntax. The analysis is built on a proposal made in den Dikken, Meinunger, and Wilder (2000) (henceforth, DMW) to account for one type of specificational pseudocleft (their *Type A*), which, according to DMW, involves 'a self-answering question' in that it involves a question and its answer. DMW credits Higgins (1979,86) for this observation, who notes that Type A specificational pseudoclefts "...have arisen historically by analogy to question answer pairs." Below is an example of Type A specificational pseudocleft from DMW:

(89)

What Mary didn't buy is/was any wine.

Following Hankamer (1974) and Drubig (1997), DMW assume that such constructions have a *topic-comment* structure, where the wh-CP is generated in Spec,TopP, while the counterwight (=IP) is the complement of a functional Top<sup>°</sup> with the function of *comment*:

(90)

[TopP [CP what Mary didn't buy] [Top' Top°=is/was [IP she didn't buy any wine]]]

An important aspect of DMW's analysis of Type A specificational pseudoclefts is that they argue for an ellipsis analysis of these constructions, which was proposed in Ross (1967) and Schlenker (2003). The analysis takes the counterweight IP in (90) as a full IP that is reduced by ellipsis (indicated by the strikethrough).<sup>28</sup> DMW propose the following condition on ellipsis, which they claim governs ellipsis within the counterweight IP:

### (91) <u>Maximality Condition on Ellipsis</u>

If A undergoes ellipsis, ellipsis must be maximal (all the way down to, but *not* into XP) [where 'A' is the answer/counterweight; and 'XP' is the focused constituent in A].

The data in (92) and (93) cited from DMW illustrate how the maximality condition fares with respect to ellipsis in Q-A pairs and Type A specificational pseudoclefts, respectively. The requirement that ellipsis must be 'all the way down to focus' has the effect observed in (92)a, where deletion of the answer up to VP is possible as

<sup>&</sup>lt;sup>28</sup> Though not relevant for my present purposes, it might be useful to note for the sake of completeness that Ross and Schlenker's ellipsis proposal aims to capture all types of specificational pseudoclefts while DMW adopt the ellipsis analysis for only the analysis of Type A specificational pseudoclefts. I refer the interested reader to DMW for the details.

the question determines VP as the focus. Ellipsis of the VP is not possible in the answer in (92)bA2 and in the corresponding specificational pseudocleft in (93)b, where the question/topic-CP determines the object NP as the focus this time, and not the VP. The condition in (91) captures the fact that since the verb *can* be deleted, either it *must* be deleted along with the subject and Aux as shown by the contrast between (92)bA2/A3 and (93)c, or else no deletion applies, as in (92)bA1 and (93)a.<sup>29</sup>

<sup>&</sup>lt;sup>29</sup> The data in the main text illustrate only the first half of the maximality condition on ellipsis. The second half of the maximality condition, which says that "...all the way down to, *but not into XP*", predicts that ellipsis cannot remove subparts of a phrase that is specified as focus. DMW present the examples in (i) claiming that the answer in (ia) is unacceptable because it does not constitute a well-formed elliptical response although the adjective *fast* may suffice semantically to answer the question in (i):

(i)	a. Q: What kind of car does he drive <i>t</i> ?	A: *fast	
	a'. => [ <sub>A</sub> <del>he drives</del> [ <sub>XP</sub> a [fast] <del>car</del> ]]		
	b. Q: What kind of car does he drive <i>t</i> ?	A: a fast car/a fast one	
	b'. => [ <sub>A</sub>		
	c. O: How does he drive?	A: fast	

DMW argue that even though elision of '(a) car' would be recoverable from the question, (i) is illicit because the maximality condition on ellipsis ensures that ellipsis cannot elide anything inside a constituent (=XP) that is identified as focus. The moved wh-phrase identifies the object DP as the focus constituent in the answer in (ib). The answer in (ic) is licit since the constituent identified as Focus (by the corresponding wh-phrase *how*) is not a constituent larger than the adjective *fast*; the use of the adjective alone does not violate any part of the condition in (93). a. Q: What did John do? A: [XP buy a book]
b. Q: What did John buy? A1: [he bought [XP a book]]
A2: \* [buy [XP a book]]
A3: [XP a book]

(93)

a. <sup>??</sup>What John bought was [IP=A he bought [XP a book]]

b. \*What John bought was [buy [XP a book]]

c. What John bought was [XP a book]

DMW also present data involving finite verb gapping in coordinations involving Type A specificational pseudoclefts, which show that the pivotal copula of Type A specificational pseudoclefts may not be gapped, unlike simple predicate sentences and predicational pseudoclefts. Compare the sentences in (94) cited from DMW (2000,69:87a-c):

(94)

- a. \*What Bill is is overbearing, and what Sue is  $\emptyset$  timid.
- b. Bill is overbearing, and Sue Ø timid.
- c. What Bill wrote was boring and what Sue wrote Ø interesting.

(92)

Despite the ungrammaticality of (94)a, citing Heycock & Kroch (1996:34), DMW note that gapped simple predicative copula clause (i.e., an IP) can be conjoined with a Type A specificational pseudocleft as shown below:

(95)

<sup>?</sup> What Bill is is overbearing, and Sue Ø timid.

DMW assume that (95) is derived from a sentence like (96)a, with the rough structure in (96)b, where the second conjunct is an IP conjoined with TopP:

(96)

a. What Bill is is overbearing, and Sue is timid.

b. [<sub>TopP</sub> [what Bill is] is [<sub>IP</sub> Bill is overbearing]], and [<sub>IP</sub> Sue Ø timid]

The main verb of the second conjunct is gapped under identity with the main verb of the first conjunct. That verb in turn is elided under identity with the verb of the wh-clause.<sup>30</sup>

What is more important for my present purposes is that the same pattern of gapping mediated by 'question-answer' ellipsis is found in question answer pairs as

<sup>&</sup>lt;sup>30</sup> Note that under a non-ellipsis analysis of Type A specificational pseudoclefts, the main verb of the second conjunct must be gapped under identity with the verb of the wh-clause since the IP complement will have no verb; the presence of this intermediary verb is a direct consequence of the ellipsis analysis of these constructions.

illustrated below. Note that this is not surprising given DMW's assumption that Type A specificational pseudoclefts are self-answering questions:

(97)

a.	Q: ?	What did John buy?	A: a bagel, and sue Ø a croissant.
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b. Q: What is Sue like? A: timid, and Bill Ø overbearing.

Having outlined DMW's analysis of ellipsis in the context of Type A specificational pseudoclefts and Q-A pairs, I turn to examining data from Turkish involving SLCs and their kins.

### 5.3.2 Ellipsis in Turkish SLCs

### 5.3.2.1 Matrix instances of SLCs in Turkish

The purpose of this section is to articulate an analysis of SLCs and related constructions in Turkish that is compatible with the main theme of the present dissertation that NDL wh-phrases and Foci stay in-situ while everything non-Focus moves. Keeping the present analysis of NDL-wh and Foci intact, I formulate an analysis of the Turkish data under consideration that takes seriously the *maximality condition on ellipsis* as proposed in DMW. I propose that the *maximality condition on ellipsis* is a condition that applies in Turkish in a more liberal fashion than it does in English, where it only applies in a certain type of specificational pseudocleft construction. As I interpret it here, the *maximality* 

*condition on ellipsis* is a more general condition on ellipsis because it also applies in Turkish to questions that follow declaratives and to declaratives that follow other declaratives:

### (98) <u>Maximality Condition on Ellipsis</u>

If A undergoes ellipsis, ellipsis must be maximal (all the way down to, but *not* into XP) [where 'A' is the answer to a question/counterweight/(*indirect*) *question* (with an antecedent); and 'XP' is the focused constituent in A].

Consider now an example of matrix sluicing repeated below:

(99)

A: Pelin birisin-e ders ver-iyor.

P-nom someone-dat lesson give-pres

'Pelin tutors someone privately.'

B: Kim-e?

who-dat

'To whom?'

C: \*Kim-e ders?

who-dat lesson

D: \*Pelin kim-e?

P-nom who-dat

E: \*Pelin kim-e ders?

P-nom who-dat lesson

F: Kim-e ders veriyor? who-dat lesson give-pres

G: <sup>#</sup>Pelin kim-e ders ver-iyor?

P-nom who-dat lesson give-pres

'Who does Pelin tutor privately?'

The dative marked wh-phrase in the question in (99)B marks the Focus (=XP). As illustrated below, ellipsis applies all the way down to XP/Focus:

(100)

The impossibility of the question in (99)C follows from the condition that ellipsis must be maximal and reach all the way down to Focus. As shown below in (101)/(99)C, there is an item that may be elided (not being determined as Focus or part of XP) but did not get elided running afoul of the maximality principle of ellipsis; such items are indicated by an underscore below:

(101)

The ill-formedness of (99)D may be related to a general dispreference for repeating subjects in Turkish when they are given in the minimal discourse.<sup>31</sup> This suggests that any example with an overt subject is out independently:

(102)

The ungrammaticality of (99)E then follows as a result of both the presence of an overt subject and a violation of the maximal condition on ellipsis:

(103)

<sup>31</sup> A prominent property of continuing topics in Turkish is that they *must* be null. Subjects are typical examples of continuing topics, and the fact that they must be realized as *null/pro* is then not surprising since the overt use of a subject in Turkish implies a shift of Topic, and thus it is impossible when the overt subject is referentially identical to the subject in the antecedent clause (see Frascarelli and Hinterhölzl 2007 for similar observations in Italian).

The contrast between (99)F and (99)G also receives a straightforward account since only in the latter the subject is overtly present in a sentence that is a full repetition of the antecedent clause, which is clearly dispreferred. The observation that (99)F is perfectly fine supports the above claim that overt subjects are dispreferred when given in the antecedent.<sup>32</sup>

Consider now another example of matrix sluicing that involves a ditransitive verb, where the Accusative object is determined as the Focus in the antecedent:

(104)

A: Pelin kitab-1-n1 birisi-ne ver-miş. P-nom book-3s.poss-acc someone-dat give-e.past 'Pelin gave her book to someone.'

(i) A: Pelin Mete-ye ders veriyor.

P-nom M-dat lesson give-pres 'Pelin is tutoring Mete privately.'

B: Pınar da Suzan-a \_\_\_\_\_.

P-nom and S-dat (lesson give-pres)

'And Pinar is also tutoring Susan privately.'

<sup>&</sup>lt;sup>32</sup> In some of the examples in (99) the inflected verb is gapped (along with the 'incorporated' bare object). It is worth noting here that Turkish allows ellipsis of verbs (plus bare N) even when they do not belong to a single speaker's discourse:

B: Kim-e? who-dat 'To whom?' C: \*Pelin kitab-1-n1 kim-e? P-nom book-3s.poss-acc who-dat D: \*Kitab-1-n1 kim-e? book-3s.poss-acc who-dat

The contrast between (104)B and (104)C,D is at the center of the discussion below. (104)B is well-formed under the maximality condition; nothing but the wh-phrase is Focus, which then cannot be elided, as illustrated below:

(105)

=(104)B: [IP=A pro kitabını [XP kim-e] ver-miş] [=Pelin-nom] book-3s.poss-acc who-dat give-e.past The problem with (104)C and (104)D is that ellipsis fails to target elements that are non-Focus, which is what violates the maximality condition. This is illustrated below for both examples:<sup>33</sup>

(106)

=(104)C: \*[<sub>IP=A</sub> Pelin kitab-1-n1 [<sub>XP</sub> kim-e] *ver-miş*] P-nom book-3s.poss-acc who-dat give-e.past =(104)D: \*[<sub>IP=A</sub> pro kitab-1-n1 [<sub>XP</sub> kim-e] *ver-miş*] book-3s.poss-acc who-dat give-e.past

The analysis above provides an account for the Turkish SLCs in matrix contexts without resort to movement. It is worth pointing out at this time that Turkish has sentences that are very similar to the SLCs given above, except that these sentences do not involve the use of a wh-phrase, which is considered the hallmark of sluicing constructions. Witness the sentences below that allow the kind of ellipsis operations that are attested in SLC examples:

<sup>&</sup>lt;sup>33</sup> The ungrammaticality of (106C) is not only due to the lack of ellipsis but also to the overt use of the subject NP, which must be null in Turkish when *given* in the context, as noted earlier.

(107)

A: Pelin Suzan-a ders ver-iyor.

P-nom S-dat lesson give-pres

'Pelin tutors Susan privately.'

B: Can da.

C-nom also

'So does John (=John also tutors Susan privately).'

C: Aylin-e de.

A-dat also

'Pelin also tutors Aylin privately.'

In (107)B the remnant of ellipsis is the subject of the sentence, and it is Focus. This sentence receives a straightforward account under the analysis articulated above: Both the dative object and the inflected V (with the incorporated object) are elided because they are not Foci; they are discourse anaphoric (and non-contrastive), hence nothing blocks their deletion.

(108)

=(107)B: [IP=A [XP Can da] [*Suzan-a* [*ders ver-iyor*]]]. C-nom also S-dat lesson give-pres In (107)C, every other element but dative object is elided. The well-formedness of this sentence follows from the dispreferrence of overt subjects (where the subject is *pro*), and everything else that is not a subject is elided in conformity with the maximality condition on ellipsis:

(109)

A-dat also lesson give-pres

As predicted, the variant of (107)C where the subject is overt is not possible in the same context:

(110)

A: Pelin Suzan-a ders ver-iyor.

P-nom S-dat lesson give-pres

'Pelin tutors Susan privately.'

C': \*Pelin Aylin-e de.

P-nom A-dat also

'Pelin also tutors Aylin privately.'

As a matter of fact, the parallelism with the SLCs does not stop there. The data below show that all the sentences in (107)C show the exact same pattern with those in (99) with respect to ellipsis:

(m)

A: Pelin Suzan-a ders ver-iyor.

P-nom S-dat lesson give-pres

'Pelin tutors Susan privately.'

C": \*Aylin-e de ders.

A-dat also lesson

C"': \*Pelin Aylin-e de ders.

P-nom A-dat also lesson

C"": Aylin-e de ders ver-iyor.

A-dat also lesson give-pres

The sentence in (111)C'' is out because the incorporated object survives ellipsis running counter to the maximality condition on ellipsis. The sentence in (111)C''' is out since both the maximality condition on ellipsis and the condition on the overt use of subjects are violated. The sentence in (111)C''' is well-formed as it violates neither condition.

The data examined in this section reveal that Turkish SLCs in matrix contexts can be accounted for without resort to a movement analysis. That SLCs

are not special in the ellipsis properties they display is supported by the observations that Turkish has sentences that are very similar to SLCs with respect to the type of ellipsis they are subject to except that the remnants are wh-phrases in the former but non-wh-phrases in the latter.

I now turn to instances of SLCs in subordinate clauses.

#### 5.3.2.2 Embedded SLCs in Turkish

In this section I consider data from Turkish involving embedded SLCs, and show that (i) embedded SLCs in Turkish should not be treated as a unique construction like English sluicing as there are other elliptical sentences in Turkish that are virtually identical to embedded SLCs, and (ii) embedded SLCs in Turkish are amenable to the ellipsis analysis articulated in the previous sections.

Let us begin our investigation with a simple example of an embedded SLC from Turkish:

(112)

Pelin birisin-e ders ver-iyor, ama kim-e bil-mi-yor-um. P-nom someone-dat lesson give-pres but who-dat know-neg-pres-1s 'Pelin tutors someone privately but I do not know who.'

The assumption under the ME-analysis of Merchant (1999) adopted in Ince (2007) and used for the analysis of Turkish sentences like (112) is that the subordinate

clause in the second conjunct is identical to the antecedent root clause prior to ellipsis with one exception: The indefinite in the antecedent is replaced by a whphrase in the second conjunct as indicated below:<sup>34</sup>

(113)

Pelin **birisin-e** ders ver-iyor, ama

P-nom someone-dat lesson give-pres but

[Pelin **kim-e** ders ver-iyor] bil-mi-yor-um.

P-nom who-dat lesson give-pres know-neg-pres-18

'Pelin tutors someone privately but I do not know who Pelin tutors privately.'

<sup>34</sup> An alternative source for (115) must be noted here. In (116), I have illustrated that the embedded clause is almost an exact 'copy' of the antecedent root clause except for the indefinite-wh switch. It is however possible that the embedded clause is a nominalized embedded clause as in (i):

(i) Pelin birisin-e ders ver-iyor, amaP-nom someone-dat lesson give-pres but

[Pelin-in kim-e ders ver-diğ-i-ni] bil-mi-yor-um. P-gen who-dat lesson give-noml-3s.poss-acc know-neg-pres-1s 'Pelin tutors someone privately but I do not know who (Pelin tutored privately).'

It is not an easy matter to figure out which one of the two sentences above, namely the one in (116) or (i) here, is the source of (115) given that both (116) and (i) are possible as non-elliptical continuations of (115). I continue with the alternative in the main text in the absence of evidence for one or the other.

Ince (2007) claims that in the second conjunct of a coordinated sentence like (112)/(113), the wh-phrase moves to the Spec position of FocP and the TP is elided as illustrated below:

(114)

The analysis in (114) is not the only analysis however, and the kind of ellipsis approach adopted in the previous section for matrix SCLs can be extended to capture embedded SLCs in Turkish. The maximality condition on ellipsis dictates that deletion affects all constituents down to the wh-element/Focus, and this condition should in principle apply in the embedded contexts as freely as it does in the matrix domains. The rough derivation given below only illustrates ellipsis in the embedded clause:

(115)

# ... [<sub>CP=A</sub> [<sub>IP</sub> pro [<sub>XP</sub> kim-e] ders ver-iyor]] who-dat lesson give-pres

Under the approach to ellipsis articulated in the previous section, a *pro*-subject is the preferred option when it is given in the discourse, hence discourse anaphoric, and the inflected verb and the bare object incorporated into it get elided under the maximality condition on ellipsis since they are not identified as Focus. This specific instance of gapping is forward gapping, but Turkish is a language that allows both forward and backward gapping (cf. Hankamer 1972, 1973, Kornfilt 1997a, 2000).

The key observation here is that the kind of ellipsis observed above is not dependent on the availability of an indefinite in the antecedent clause and a whphrase in the subsequent clause. As shown below, exactly the same type of ellipsis operations apply to sentences in Turkish that do not involve an indefinite and a wh-phrase:

(116)

Pelin öğretmen-i öp-müş, ama Mete müdür-ü san-dı. P-nom teacher-acc kiss-e.past but M-nom principle-acc believe-past 'Pelin has allegedly kissed the teacher, but Mete believed (that Pelin kissed) the principle.'

The sentence in (116) is only licit if the elided parts in the second conjunct (i.e., the subject of the subordinate clause and its predicate) are identical to those of the first conjunct as indicated by the full form of the coordinated sentence below:

Pelin<sub>i</sub> öğretmen-i öp-müş,

P-nom teacher-acc kiss-e.past

ama Mete [Pelin/proi müdür-ü öp-müş] san-dı. but M-nom P-nom principle-acc kiss-e.past believe-past 'Pelin has allegedly kissed the teacher, but Mete believed (that Pelin kissed) the principle.'

Assuming that a sentence like (117)is how (116) looks prior to ellipsis, the derivation of (116) should be almost identical to that of the embedded SLC in (115), with the minimal difference that (115) has a wh element surviving ellipsis whereas (116) has a non-wh Focus:

(118)

... [<sub>CP=A</sub> [<sub>IP</sub> pro [<sub>XP</sub> müdür-ü] <del>öp-müş</del>] ... (=Pelin) principle-acc kiss-e.past

Since the accusative marked remnant of ellipsis in the embedded clause is determined as the Focus (=XP) of the embedded CP (=A) by a formal feature [focus], ellipsis applies all the way down to the XP in (118), a domain that encompasses the inflected verb. That the subject is null is also what is expected given our discussion in the preceding section.

The observation that SLCs in Turkish are not unique in the kind of ellipsis processes they undergo and that there are sentences like (116) suggests that SLCs should not be singled out, and thus there is no need to posit ellipsis operations that specifically apply to SLCs. In other words, whatever one's approach to ellipsis is, the ellipsis processes should apply to both SLCs and their non-wh counterparts as in (116).

The facts noted above raise an interesting challenge for a claim made in Hankamer (1972), Kornfilt (2000), İnce (2010) that Turkish disallows forward gapping (and also backward gapping) in complement clauses. Below are examples from Kornfilt (2000), where the coordinated clauses have the form of nominalized complement clauses and finite complement clauses, respectively:

(119)

\* Zeynep [[Hasan-ın karides-i ye-diğ-i-ni], Z-nom H-gen shrimp-acc eat-noml-3s.poss-acc [Mehmet-in de istiridye-yi \_\_\_\_\_]] duy-du. M-gen and oyster-acc hear-past

'Zeynep heard that Hasan ate the shrimp, and Mehmet (ate) the oyster.'

(120)

\* Ahmet [[Hasan karides-i ye-di],

A-nom H-nom shrimp-acc eat-past

[Mehmet de istiridye-yi \_\_\_\_\_]] san-ıyor.

M-nom and oyster-acc believe-pres

'Ahmet believes Hasan ate the shrimp and Mehmet (ate) the oyster.'

Despite the fact that the instances of forward gapping in the above examples are clearly impossible, it is clear that those sentences do not constituent a potential source for the sentences in (112) and (116). The question of how to account for the impossibility of V-ellipsis/forward gapping in (119) and (120) is an independent issue, and I will not make an attempt to resolve it. I will, however, dwell a bit more on the absence of (forward) gapping in subordinate contexts in Turkish, and briefly review solutions by Kornfilt (2000) and İnce (2010).

Kornfilt's (2000) proposal is based on an example that shows that (forward) gapping is actually possible in subordinate contexts particularly when both conjuncts are placed to the right of the matrix verb as shown below (Kornfilt 2000:15):

(121)

ZEYNEP duy-du [[Hasan-ın karides-i ye-diğ-in-i], Z-nom hear-past H-gen shrimp-acc eat-noml-3s.poss-acc [Mehmet-in de istiridye-yi \_\_\_\_\_]] M-gen and oyster-acc

'Zeynep heard that Hasan ate the shrimp, and Mehmet (ate) the oyster.'

Kornfilt (2000) proposes to account for the grammaticality contrast between (119)/(120) and (121) through a condition of Turkish syntax that precludes the generation of non-verb-final embedded clauses which are internal to a higher clause. The motivation behind this condition, according to Kornfilt (2000), is that the embedded verb forms a perceptual clue to mark the right edge of the embedded clause and the higher clause. This makes it possible to account for the grammaticality of (121), where the embedded clause is not internal to the higher clause. Since there is no phonological material belonging to the higher clause that follows the embedded coordinate construction, no need arises for the embedding to be delimited by the verb at the right of its clause, and consequently, forward gapping can apply in such sentences.

İnce (2010) dismisses Kornfilt's (2000) condition as a stipulation, and suggests that examples like the following, where the second conjunct with gapping is postposed, should be analyzed as involving the coordination of root clauses.<sup>35</sup> Consider the relevant example cited from İnce (2010) below:

(122)

Ahmet [Hasan-ın pasta-yı ye-diğ-i-ni] bil-iyor ,

A-nom H-gen cake-acc eat-noml-3s.poss-acc know-pres

<sup>&</sup>lt;sup>35</sup> Ince (2010) does not provide an account for (124) cited from Kornfilt (2000) above, but this is an important example since it does not seem to be amenable to a coordination-ofroot-clauses-analysis. If it really is not, then the grammaticality of (124) is a problem for Ince (2010).

#### Meral-in (de) dondurma-yı.

M-gen also ice.cream-acc

'Ahmet knows that Hasan ate the cake and Meral the ice-cream.'

The source for (122) under İnce's (2010) proposal is as in (123):

(123)

Ahmet [Hasan-ın pasta-yı ye-diğ-i-ni] bil-iyor, A-nom H-gen cake-acc eat-noml-3s.poss-acc know-pres Ahmet [Meral-in (de) dondurma-yı ye-diğ-i-ni] bil-iyor. A-nom M-gen also ice.cream-acc eat-noml-3s.poss-acc know-pres 'Ahmet knows that Hasan ate the cake and Ahmet knows that Meral also ate the ice-cream.'

Details aside, Ince (2010) claims adopting Merchant's (1999) ME-analysis that the remnants in the second conjunct move to the domain of CP, which is followed by the elision of the AgrSP in the second conjunct:

(124)

Ahmet [Hasan-ın pasta-yı ye-diğ-i-ni] bil-iyor,

A-nom H-gen cake-acc eat-noml-3s.poss-acc know-pres

 $[_{CP} Meral-in_i (de) dondurma-y_i \{_{AgrsP}-t_i-t_j Ahmet ye-diğ-i-ni bil-iyor.\}$ 

M-gen also ice.cream-acc A-nom eat-noml-3s.poss-acc know-pres 'Ahmet knows that Hasan ate the cake and Ahmet knows that Meral also ate the ice-cream.'

The key assumption that Ince (2010) makes in his analysis of (122) is that it involves the coordination of root clauses. Such an analysis is mainly motivated by the assumption that gapping is only possible in root clauses, although we have seen earlier that gapping is actually possible in embedded clauses in Turkish. Furthermore, it is not clear under İnce's (2010) coordination-of-root-clauses analysis why the sentences in (112) and (116) are grammatical. If they involve coordination of subordinate clauses, the grammaticality is unexpected since ince (2010) relies on the assumption that gapping inside subordinate clauses is impossible. If they involve coordination of root clauses, their grammaticality is predicted but another problem arises in that the overt presence of the embedded V is a problem under Ince's (2010) ME-analysis. Assuming that matrix V escapes deletion site may not be sufficient since an example like (125) would then be incorrectly predicted to be perfectly fine under the assumption that it involves coordination of root clauses:

\*Can [öğretmen-in Mete-yi gör-düğ-ün-ü] söyle-di,
C-nom teacher-gen M-acc see-noml-3s.poss-acc say-past
Pelin-se [müdür-ün Suzan-1 \_\_\_\_\_] söyle-di.
P-nom-however principle-gen S-acc say-past
'John said that teacher saw Mete, whereas Pelin said that the principle (see the same sec to be added as the principle (see to be added as the p

'John said that teacher saw Mete, whereas Pelin said that the principle (saw) Susan.'

If escaping the ellipsis site were an option for the matrix V, (125) would be grammatical under Ince's (2010) proposal since all remnants would reach their respective final positions, which are higher than the ellipsis site.

The discussion above clearly shows that there is no easy solution to the problem at hand, and an ME-analysis based approach as defended in Ince (2010) faces challenges in the face of data presented in this section.

It is worth noting before finalizing this section that the ellipsis analysis I have adopted presently predicts that, in the unmarked case, (forward) gapping and ellipsis in general should be possible within complement clauses, an expectation that is met by the data in (112) and (116). The ungrammaticality of the examples given in (119) and (120) must then be due to independent restrictions regulating gapping in Turkish. Perhaps a more elaborate form of the condition stated in Kornfilt (2000) is relevant here. As a matter of fact, the data in (121) and (122) already suggest that V-ellipsis/gapping in subordinate clauses should not be

categorically out. I have to leave a full treatment of this non-trivial problem for future research.

### 6. Conclusion

I have demonstrated in this chapter that interrogatives in Turkish show a fairly parallel behavior to declaratives studied in Chapter 2 with respect to their mapping to information structures. NDL wh-phrases are like Foci in that they remain low in the structure, which is not surprising as they also bear the [focus] feature, hence lack the feature that triggers movement in the present system, namely [OP]. DL wh-phrases move like DAs do, but again this is not surprising as DL wh-phrases have the [da|contrast] feature in addition to their [wh] and [OP] features.

This bifurcation between NDL and DL wh-phrases presents the first step toward an understanding of the V-adjacency 'tendency' of wh-phrases in Turkish. The second key ingredient for the analysis is the claim articulated in Chapter 2 that all non-Focused elements must move in Turkish. This produces the result that only NDL wh-phrases, which do not move, must be adjacent to the verb. This provides a rationalization for the previous claims that V-adjacency is a 'tendency' and not a strong requirement in Turkish. V-adjacency is a strong requirement for some types of wh-phrases, while others are not subject to this requirement at all. In other words, the requirement is there or not, depending on the type of a whphrase, NDL or DL. The investigation presented in this chapter has also provided further support for the proposal made in Chapter 2 that all movement in Turkish is driven by discourse-features, and that there are no movement operations that are not feature-driven.

Another issue that I have tackled in this chapter concerns the cooccurrence restrictions on wh-phrases and Foci in Turkish, while Turkish allows multiple wh-phrases and declaratives with multiple Foci, questions with a whphrase and a (non-wh) Focus are disallowed. I proposed an analysis of this state of affairs under a recent version of the Relativized Minimality, namely, Agree Closest.

The investigation of 'sluicing-like constructions' in Turkish has demonstrated that they may be handled without resort to movement of whphrases although a movement analysis of those constructions would not be incompatible with the general approach defended in this dissertation where (NDL) wh-phrases/Foci do not move in non-sluicing contexts. Nonetheless, a nonmovement approach to ellipsis, which does not require any modifications of the current analysis of wh-questions in non-sluicing contexts, has been shown to be feasible, even preferable, particularly because Turkish has constructions that are identical to 'sluicing-like constructions' in terms of their elliptical characteristics, except for the fact they do not show an indefinite-wh switch from the antecedent clause to the subsequent one. The observation that there are elliptical constructions in Turkish that are virtually identical to 'sluicing-like constructions' in this language, whereas such constructions are not attested in English, suggests that the 'sluicing-like construction' in Turkish has a different source from English sluicing.

## **Chapter IV**

### Conclusion

In this dissertation, I have explored the nature of word order variation in Turkish, arguing that it is fully determined by discourse-pragmatics factors. Simply put, for every instance of variation in word order, there is a corresponding effect in discourse-pragmatics. I have argued that the attested word order variation in Turkish is due to movement operations that are driven by the formal counterparts of discourse-pragmatic functions. This has allowed an alignment of word order flexibility with the principle of Last Resort, which forces all movement operations to be feature driven; movement in Turkish is in full conformity with the principle of Last Resort.

I have provided evidence that the potentially problematic (from the perspective of this dissertation) movement operations, namely 'scrambling' and subject movement to Spec,IP (under the EPP analysis of the latter), in fact, do not exist in Turkish. The system developed in this dissertation forces the elimination of these operations, at least in the context of Turkish, and the data sets examined, particularly those on variable binding, provide strong support for this prediction of the system, justifying the elimination of 'scrambling' and subject movement to Spec,IP as independent operations.

I have argued that the feature-driven system does not require movement of all elements with a discourse function. In fact, Foci of all sub-types are immobile in Turkish, while all non-Foci move to the peripheries. This *non-peripheral* behavior of Focus is tied to the lack of a feature, namely [OP], that drives movement of non-Foci, which in turn has been tied to a proposal put forth in Rooth (1985), for whom Focus does not require the establishment of an operator-variable relation (via movement). This has provided a straightforward account for the V-adjacency of Focus in Turkish, where V-adjacency is nothing but an *accident* of the overall system, where non-Foci are in-situ and Foci move. The identical behavior of Non-Discourse-linked wh-phrases to Foci with respect to V-adjacency has made it possible to extend the analysis to cover Non-Discourse-linked wh-phrases as well. Issues concerning the non-co-occurrence of Non-Discourse-linked wh-phrases and Foci have been handled in terms of Agree Closest.

The overall picture that emerges from this dissertation is that mapping to discourse-pragmatics is rather straightforward with non-ambiguous mapping to the interfaces as a result of movement to the left and right peripheries and no word order variations that have no discourse-pragmatics effects. Turkish thus has a rather strictly regulated mapping of syntactic units to discourse-pragmatics, and can be considered to be the 'optimal' solution at least in the context of syntaxdiscourse-pragmatics in Turkish mapping.

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