Towards a Unified Account to Clause-initial Scrambling in Turkish: a feature analysis

Selçuk İşsever
Ankara University

DTCF Dibilim Bölümü
Sihhiye 06100 Ankara / Turkey
issever@humanity.ankara.edu.tr

ABSTRACT

Clause-initial scrambling in Turkish exhibits both A- and A′-properties. Some authors suggest that it is into an A-position, while others consider that it targets an A′-position. There is also another view, which suggests that both A- and A′-scrambling exist in Turkish. On the other hand, considering the interaction between scrambling and information structure, i.e. topic and focus of the sentence, this study shows that previous proposals cannot account for the issue. Following Saito (2003), it is proposed that a derivational approach to scrambling where lexical features of the items undergoing scrambling are interpreted on a selectional basis allows us to deal with the issue in Turkish more properly, with no need to refer to the A/A′-contrast. Using this framework, I claim that clause-initial scrambling in Turkish is a uniform operation, which moves scrambled elements into a position where reconstruction is allowed. This study also reveals that the phenomenon called ‘lethal ambiguity’ (McGinnis, 2004) can help to understand the focusing effects in clause-initial scrambling in Turkish, which confused most of the proposals previously made.

1. Introduction

Turkish is a scrambling language that allows morphologically Case-marked elements to occur freely in both pre-verbal and post-verbal positions. Post-verbal scrambling is uniformly into an A′-position (non-argument-position) in Turkish (Kural, 1992; Temürcü, 2005). As for the pre-verbal field, this study is concerned with only scrambling into the clause-initial position. As opposed to post-verbal scrambling, clause-initial scrambling exhibits both A- (argument) and A′-properties. Merchant (1995), Aygen (2003), and Temürcü (2005) suggest that clause-initial scrambling is into an A-position, while Kural (1992) claims that it can best be analyzed as A′-movement. Öztürk (2004), on the other hand, argues that clause-initial scrambling in Turkish can be into either an A-position or an A′-position.

Recent studies, on the other hand, have revealed that scrambling can be accounted for without referring to the A/A′-contrast. Saito (2003), for instance, proposes that scrambling is a uniform phenomenon and is derived not from the A/A′-properties of landing sites but from the way in which lexical features of linguistic items are interpreted in the process of movement. Following this proposal, I suggest that clause-initial scrambling in Turkish is also uniform, and that the apparent contrast between A- and A′-scrambling in Turkish can be explained by considering the lexical features of the items that take part in this operation. The present study also aims to show that the issue is also related with a specific configuration called ‘lethal ambiguity’ by McGinnis (2004), in which binding is impossible. Hence, taken together, these two accounts can help us explain the issue in Turkish.

Section 2 reviews the evidence for Turkish A- and A′-scrambling given in previous studies. In section 3, we discuss and evaluate the previous proposals. In section 4 it is shown that the feature analysis allows a unified account to clause-initial scrambling in Turkish. 4.1 introduces Saito’s (2003) derivational account to scrambling, which is applied in the analysis in 4.2. Section 5 concludes the study.

1 ‘Clause-initial scrambling’ is termed ‘object preposing’ (Kural, 1992; Temürcü, 2005), ‘local scrambling’ (Aygen, 2003), or just ‘scrambling’ (Merchant, 1995; Öztürk, 2004) in Turkish literature. Although the phenomena to be investigated in this study are the same as these, I will use the expression ‘clause-initial scrambling’.
2. The Data: evidence for A- and A′-scrambling in Turkish

The difference between the A/A′-positions is traditionally defined by syntactic phenomena such as Case, Weak Crossover (WCO), binding, and reconstruction. Movement to an A-position is traditionally considered to be triggered by Case reasons. This is the type of movement in which WCO can be overridden, a binding relation between an antecedent and a variable can be established, and no reconstruction is allowed. Regarding these features, movement to A′-positions reflects the opposite properties: A′-movement is not triggered by the need for Case. Again, WCO cannot be overridden from an A′-position, binding is impossible from such a position, and all elements scrambled into an A′-position must undergo radical reconstruction (Saito, 1989). In addition, A-movement is considered to be subject to locality, i.e. to be clause-bound, while A′-movement is not.

There is evidence for both A-scrambling and A′-scrambling in Turkish. In this section, the evidence for each will be explicated.

2.1. Evidence for A-scrambling Analysis

In this section, we will see that anaphora and pronominal binding as well as the relative scopes of quantifiers can be considered as evidence for A-scrambling analysis. As for anaphora binding, the following set of data, where the item immediately left of the verb is in the default focus position,

(1) a. Adamlar, BİRİBİRLERİNİ, görmüş. (Kural 1992, [44])
   man-PL.NOM eachother-PL-POSS-ACC see-PAST.3SG
   ‘The men saw each other’
   b. *Birbirlerini, ADAMLAR, tı, görmüş.

(2) a. Adam, KENDINI, gördü. (Temürcü 2005, [18, 27])
   man.NOM self-ACC see-PAST.3SG
   ‘The man saw himself.’
   b. #Kendini, ADAM, tı, gördü.  

(3) a. Ahmet adamları, BİRİBİRLERIYLE, tanıttırmış, (Kural 1992, [46])
   A.NOM man-PL-ACC eachother-PL-POSS-with introduce-PAST.3SG
   ‘Ahmet introduced the men to each other.’
   b. *Birbirleriyle, Ahmet ADAMLARI, tı, tanıttırmış.

2 For a detailed critical review on the properties of A/A′-positions, see Karimi (2005).
3 Turkish is an in situ focusing language (Kural, 1992; Gökşel & Özsoy, 2000). On the other hand, on the surface, the immediate left of the verb is generally considered to be the default focus position (e.g. Erguvenli, 1984; Erkü, 1983; Hoffman, 1995; Kennelly, 1997; Kornfilt, 1997). The reason for this contrast is that information (= presentational) focus and identificational (= contrastive) focus, in the sense of Kiss (1998), syntactically differ in Turkish (İşsever, 2003). Although all the items to the left of the verb can be identificational focus, only those items that appear to the immediate left of the verb in the surface can be construed as information foci (İşsever, 2003; but see Gökşel, 1998 and Gökşel & Özsoy, 2003 for a different view).
4 Focused items will be indicated by small capitals throughout the text. Also note that moving the item in the default focus position results in the other one next to it, which is in situ, receiving the focus accent and appearing in the default position for focus. Previous studies on scrambling in Turkish choose to keep the position of focus constant (i.e. immediately left of the verb) when comparing the grammaticality of the derived sentence with that of the original. In § 3.1, this view will be criticized.
5 Numbers in [ ] are used to indicate the number of the example in the original text.
6 Temürcü uses # sign to indicate that the sentence is grammatical only in a ‘highly restricted context’, i.e. one where more information is needed to interpret it. For instance, (2)b can answer an echo question (e.g. “Kendini KİM gördü?” ‘Who saw himself/herself?’) or can be used as a reply to a sentence such as “Kadın KENDINI gördü” ‘The woman saw herself’ where the discourse entities adam ‘the man’ and kadın ‘the woman’ are contrasted (a similar example is provided in (28)). According to the intuition of my informants as well as my own intuition, sentences of this kind can be used in neither out-of-the-blue contexts nor other contexts where there is no contrast. The expression ‘highly restricted context’ must be understood in this sense. This explanation also holds for (1)b which is very similar to (2)b with respect to anaphor preposing, although Kural marks it as ungrammatical.
The preposed anaphors in (1)-(3) cannot be bound by their antecedents due to lack of reconstruction. This leads to the violation of condition (A) of the binding theory (Chomsky, 1993), which states that an anaphor must be bound in its local domain. These sentences are also ruled out by the condition (C) of binding theory, according to which an R-expression (e.g. referential nouns) must not be bound. Since they do not reconstruct, the preposed object anaphors bind their antecedents in s-structure, violating condition (C). According to the standard assumptions, all these occur if the landing site of the preposed item is an A-position, since reconstruction is banned from such positions.

In (1)-(3), we saw that sentence-initial scrambling of lexical anaphors (direct objects (cf. (1)-(2)) and obliques (cf. (3))) leads to binding anomalies. The sentence in (4) illustrates that nothing changes when the anaphor is embedded in a larger DP (The pro analysis is from Temürçü, 2005):

(4) a.  Adamı [pro, KENDi, KOMŞUSU]NU vedere. (Temürçü 2005, [20, 28])
   man.NOM self neighbor-POSS-ACC see-PAST.3SG
   ‘The man saw his own neighbor.’
   b.  #[pro, kendi, komşusu]nu ADAMI, ti vedere.

The same ungrammaticality is observed with subject anaphors as well. This is expected since this configuration places the anaphor as base-generated in a c-commanding position with respect to its antecedent. Thus, (5)a is ruled out by both conditions (A) and (C). Interestingly, the sentence cannot be saved even if the object antecedent is scrambled to a c-commanding position (cf. (5)b):

(5) a.  *Kendi, ADAMI vedere. (Temürçü 2005, [21, 24])
   self.NOM man-ACC see-PAST.3SG
   ‘(Lit.) The man, himself saw.’
   b.  ??/*Adamı, KENDi, ti vedere.

However, as opposed to (5)b, antecedent preposing can save the sentence when the subject anaphor is in a larger DP:

(6) a.  *[pro, kendi, komşusu] ADAMI, ti vedere. (Temürçü 2005, [22, 26])
   self neighbor-POSS,NOM man-ACC see-PAST.3SG
   ‘(Lit.) His own neighbor, he saw the man.'
   b.  Adamı, [pro, KENDi, KOMŞUSU] ti vedere.
   ‘(Lit.) The man, his own neighbor saw him.’

The contrast between (5)b and (6)b is, in fact, surprising since we expect the anaphor to be bound in both cases if the landing site of the antecedent is uniformly an A-position. Following Miyagawa (1997) for a similar issue in Japanese, Temürçü (2005: 135), advocating the A-scrambling analysis, explains this contrast with Rizzi’s (1986) Chain Condition. He states that if the antecedent is landed in an A-position, the anaphor will locally c-command the trace of its antecedent in (5)b, leading to a violation of the Chain Condition. According to him, (6)b is grammatical due to the fact that the anaphor kendi ‘self’ is embedded in a larger phrase, which he analyzes as PossP, from where it cannot c-command the trace of its antecedent. However, the position of the anaphor kendi ‘self’ in (6)a is the same as that of the anaphor in (6)b. Thus, it cannot c-command its antecedent in this sentence either. Hence, the ungrammaticality of (6)a cannot be due to the violation of the condition (C). Condition (A) is not violated here either, since the anaphor is locally bound by pro. We will deal with this issue in section 4.2.3., where subject anaphors will be discussed.

Pronominal binding facts pattern with those of anaphora binding.7 As a pro-drop language, Turkish seems to obey the Avoid Pronoun Principle (Chomsky, 1981), to which Temürçü (2005) (following Kornfilt 1984) attributes the selection of pro when both pro and an overt pronoun are accessible. According to this principle, “… overt pronouns cannot be too close to their antecedent. … In positions where [an overt pronoun and] an empty category pronominal [are] possible, it is the latter that must occur” (Kornfilt 1984: 24). This is a very consistent fact in Turkish; so the data in this part include pro rather than overt pronouns.

---

7 As a pro-drop language, Turkish seems to obey the Avoid Pronoun Principle (Chomsky, 1981), to which Temürçü (2005) (following Kornfilt 1984) attributes the selection of pro when both pro and an overt pronoun are accessible. According to this principle, “… overt pronouns cannot be too close to their antecedent. … In positions where [an overt pronoun and] an empty category pronominal [are] possible, it is the latter that must occur” (Kornfilt 1984: 24). This is a very consistent fact in Turkish; so the data in this part include pro rather than overt pronouns.
both conditions (A) and (C) are violated. On the other hand, object preposing remedies the original ungrammaticality in both (8)b and (9)b. This implies that the landing site of the objects is an A-position since, according to standard assumptions, binding is possible only from such a position.

(7) a. Herkes, [proi SEKRETERIN]i aramış. (Kural 1992, [49])
   ‘Everybody called his secretary’
   b. *[proi, sekreteri]i HERKESi tı aramış.

(8) a. *[proi, sekreteri], HERKESi aramış. (Kural 1992, [50])
   ‘His secretary called everybody’s’
   b. ?Herkesi, [proi SEKRETER]i tı aramış.

(9) a. *[proi arkadaşı] HERKESi gördü. (Temürçü 2005, [34])
   ‘(Lit.) Everybody, his friend saw.’
   b. Herkesi, [proi, ARKADAŞI]i tı gördü.

In summary, the anaphora and pronominal binding data given so far provide very convincing evidence for the A-scrambling analysis of clause-initial scrambling in Turkish. Thus, the examples considered reveal that clause-initial scrambling in Turkish is not vacuous; namely, it provides new binding possibilities. Let us now see if quantifier scope data verify this conclusion.

The relative scopes of quantifiers are used as another diagnostic tool in defining the A vs. A’ status of the phrase moved. If the interpretation of the sentence changes after one of the quantifiers has been moved, this is considered as evidence for the fact that the moved phrase cannot reconstruct and that the landed site of the moved quantifier is an A-position. Otherwise, the landed site is considered an A’-position. As for Turkish, Kural (1992) gives the following examples, stating that a preposed object quantifier phrase (QP) takes unambiguous scope over a subject QP:

(10) a. [Üç kişi] [her arabaya] binmiş. (Kural 1992, [22])
   ‘Three people got in every car.’
   = Three people were such that…
   3 > every
   b. [Her arabaya], [üç kişi] ti binmiş.
   = every car was such that…
   every > 3

(10)b implies that the object QP stays in a position where it cannot reconstruct to its base position, because it takes unambiguous wide scope over the subject QP. Temürçü (2005) considers similar data, given below:

(11) a. Herkes ÜÇ KİŞİYI suçladı. (Temürçü 2005, [17])
   ‘Everyone accused three people.’
   All > 3 (Distributed reading: ‘Everyone accused any three people.’)
   3 > All (Collective reading: ‘There are three people such that everyone accused them.’)
   b. Üç kişi HERKESİ suçladı.
   ‘Three people accused everyone.’
   3 > All (Collective reading: ‘There are three people such that they accused everyone.’)
(12) a. Üç kişi, HERKES, tı suçladı. (Temürçü 2005, [23])
   three people-ACC everyone.NOM accuse-PAST.3SG
   ‘Everyone accused three people.’
   3 > All (Collective reading: ‘There are three people such that everyone accused them.’)

b. Herkesi, ÜÇ KİŞİ suçladı.
everyone-ACC three people.NOM accuse-PAST.3SG
   ‘Three people accused everyone.’
   All > 3 (Distributed reading: ‘Everyone was accused by any three people.’)
   3 > All (Collective reading: ‘There are three people such that they accused everyone.’)

As seen from the contrast between (11)a/(12)a and (11)b/(12)b, sentence-initial scrambling of the object QP changes the scopal relations between the object QP and the subject QP. Considering this, Temürçü concludes that object preposing in Turkish is contentful, since it creates new interpretations. This is considered as further evidence for the A-scrambling analysis of clause-initial scrambling.

2.2. Evidence for A’-scrambling Analysis

Having seen that there is ample evidence for A-scrambling analysis in Turkish, let us now look at the opposing evidence, arguing for an A’-scrambling analysis instead. Kural (1992) correctly observes that the sentence in (1)b, repeated below in (13)a, becomes grammatical if the antecedent of the preposed object is not focused (cf. (13)c). To attest this, he inserts a focus-bearing item in the default focus position, being the immediate left of the verb (cf. (13)b-c):

(13) a. *Birbirlerini, ADAMLAR, tı görüş. (=1)b
   eachother-PL-POSS-ACC man-PL.NOM see-PAST.3SG
   ‘The men saw each other.’

b. Adam-lar, birbir-ler-i-ni, DÜN gör-muş. (Kural 1992, [58])
   man-PL-NOM eachother-PL-POSS-ACC yesterday see-PAST.3SG
   ‘The men saw each other yesterday.’

c. Birbirlerini, adamlar, tı DÜN görüş. (Kural 1992, [58])
   eachother-PL-POSS-ACC man-PLR.NOM yesterday see-PAST.3SG

The following examples verify that it is not the adverbial which is responsible for the grammatical reading in (13)c. What is crucial here is that the binder must not be focused in order to bind the anaphor. This can be achieved either by placing another item into the preverbal focus position (cf. (14)c) or by focusing the verb (cf. (15)a-b):

(14) a. *Birbirleriyle, Ahmet ADAMLARI, tı tanıtırmuş. (=3)b
   eachother-PL-POSS-with A.NOM man-PLR-ACC introduce-PAST.3SG
   ‘Ahmet introduced the men to each other.’

b. Adamlar, birbirlerini, AHMET’LE tanıtırmuş. (Kural 1992, [60])
   man-PLR-NOM eachother-PL-POSS-ACC A.-with introduce-PAST.3SG
   ‘The men introduced each other to Ahmet.’

c. Birbirlerini, adamlar, tı AHMET’LE tanıtırmuş (Kural 1992, [60])

(15) a. ?Birbirlerini, adamlar, tı # GÖRİMŞ (Kural 1992, [67])
   eachother-PL-POSS-ACC man-PLR.NOM see-PAST.3SG
   ‘The men saw each other’

b. ?Birbirleriyle, Ahmet adamları, tı # TANİŞTIRMİŞ (Kural 1992, [68])
   eachother-PL-POSS-with A.NOM man-PLR-ACC introduce-PAST.3SG
   ‘Ahmet introduced the men to each other’

8 By #, Kural indicates comma intonation, a short pause between linguistic items, which is required when the focus is on the verb.
Preposed pronominal binding exhibits the same fact: while the pronominal inside a DP cannot be bound when the binder is in focus (cf. (16)b), it gets bound if the binder is defocused (cf. (17)):

16. a. Herkesi \[pro_i \text{SEKRETER} i_j \text{NI}_j \text{aramış.} \]
   everyone.NOM secretary-POSS-ACC call-PAST.3SG
   ‘Everybody called his secretary’

   b. *[pro_i \text{SEKRETER} i_j \text{HERKES}_i \text{t_j aramış.}]

17. \[pro_i \text{SEKRETER} i_j \text{herkes} \text{t_j DÜN aramış.} \]
   secretary-POSS-ACC everyone yesterday call-PAST.3SG
   ‘Everybody called his secretary yesterday’

The examples given in this section indicate that conditions (A), (B), and (C) can be satisfied in preposed anaphor and pronominal binding contexts if the binder does not receive the focus. If binding can be achieved only when the preposed item reconstructs to its base-position and if this is possible only in A*-scrambling situations, as suggested elsewhere in the relevant literature, then the examples given in this section provide sufficient evidence to suggest that there is some kind of A*-scrambling in object preposing operation in Turkish, as well. Given this, the question that immediately arises is how the apparent conflict posed by the data considered so far can be accounted for. There are some proposals in the literature to account for this contrast, which will be discussed in the next section.

3. Previous Proposals: an evaluation

To put it explicitly, the data considered in sections 2.1 and 2.2 have revealed that clause-initial scrambling in Turkish exhibits both A- and A*-properties. Thus, (18) sets up the minimal pair for the issue that we will consider in the remainder of the study:

18. a. *Birbirlerini, \text{ADAMLAR}_i t_i \text{görümiş.}\)
   eachother-PL-POSS-ACC man-PL.NOM see-PAST.3SG
   ‘The men saw each other.’

   b. Birbirlerini, \text{ADAMLAR}_i t_i \text{DÜN görümiş.}
   eachother-PL-POSS-ACC man-PL.NOM yesterday see-PAST.3SG
   ‘The men saw each other yesterday.’

Essentially, the problem is that the two identical strings given above argue for different analyses; namely, A-scrambling analysis for the former and A*-scrambling analysis for the latter. In fact, this is exactly what Öztürk (2004) proposes. Namely, she proposes that clause-initial scrambling in Turkish can be either A- or A*-movement. Kural (1992), on the other hand, suggests that Turkish clause-initial scrambling is a uniform A*-movement. However, (18)a apparently argues against this suggestion. Kural, correctly stating that the main issue here is the interaction between scrambling and focus, claims that the ungrammaticality in (18)a results from a sort of blocking effect of focus for the reconstruction of the preposed anaphor.

The goal of this section is to discuss previous proposals for the issue posed by (18). We begin with Kural (1992), and then move on to Öztürk (2004).


---

\textsuperscript{9} As pointed out by a reviewer, this sentence can be judged as grammatical in a context where \textit{adamlar} ‘the men’ is contrasted with another discourse entity, e.g. \textit{kadınlar} ‘the women’ (see also ft. 6). Although it is hard to define the grammaticality status of sentences of this kind, considering the judgments of my informants, and the apparent grammaticality contrast between (18)a-b, I agree with Temürçü (2005) who states that the binding relation between the anaphor and the antecedent in such cases is established out of syntax (also see the discussion surrounding (28)).
Kural’s main idea for the apparent contrast observed in (18) is that the ungrammaticality in the (a) sentence derives from the fact that the scrambled item cannot reconstruct to its base position at LF. As a result, the scrambled anaphor violates both the (A) and (C) conditions. Kural (1992: 78) proposes the following generalizations:

(19)  
(a) Scrambling is always to a position higher than the focus.  
(b) A scrambled anaphor cannot be reconstructed to position lower than the focus.

Thus, (19)b is claimed to explain the contrast in grammaticality in (18). According to Kural, (19)b derives from a principle in grammar, whose aim is to preserve the focus structure in both s-structure and LF. Hence, he proposes the following Focus Preservation Principle (FPP) (Kural, 1992: 75):

(20) Focus Preservation Principle (FPP):  
A constituent c that is focused at S-structure must also be focused at LF.

Thus, although the lexical anaphor birbirlerini ‘each other’ in (18)a is in a position where it can reconstruct, FPP blocks it to do so, since after reconstruction, the LF representation will not represent the s-structure in terms of focus (Kural, 1992: 76), violating (20). Thus, the ungrammaticality of this sentence is not because the anaphor is in an A-position, but due to FPP. This account also explains the grammaticality of (18)b, since reconstruction of the anaphor does not affect the focus relations in this case. Therefore, Kural claims that clause-initial scrambling in Turkish is always into an A’-position.

Although I agree with Kural that, in Turkish, clause-initial scrambling is a uniform movement operation into a position where reconstruction is allowed, I think that his analysis can be maintained on neither theoretical nor empirical grounds. First, Kural’s account starts with a wrong assumption that the focus structure (henceforth, f-structure) is recalculated at LF so that the item in the immediate left of the verb is (re-)interpreted as focus in this level. However, as discussed in Zubizarreta (1998), focus-marking (henceforth, f-marking) is established prior to LF and must be interpreted as is at this level (LF). Thus, f-structure and f-marking must remain constant in both s-structure and LF. Hence, there is no need to recalculate the focus in terms of its position at LF. The f-structure of (21), before and after scrambling applies (f-marking is indicated by [+F]):

(21)  
(a) ADAMLAR[+F] birbirlerini; görmüş.  
man-PL.NOM eachother-PL-POSS-ACC see-PAST.3SG

(b) *Birbirlerini; ADAMLAR[+F] tı görmüş.  
THE MEN saw each other.’

Given (21), it is rather difficult to maintain the idea that the ungrammaticality in (18)a (= (21)b) results from the blocking effect of a principle like FPP, since scrambling, in principle, does not affect the information structure of the sentence in terms of focus.

On the other hand, the generalization given in (19)b, which is assumed to be derived from the FPP, faces empirical problems as well. Under the assumption that the relative order of objects in Turkish is DO-IO (Underhill, 1972; Erkü, 1983; Erguvanlı, 1984; Kornfilt, 1997), (22) shows that a scrambled anaphor can reconstruct to a position below the focus:

(22)  
(a) Ali; bu pastayı KENDINE; ayırdı.  
A.NOM this cake-ACC self-DAT save-PAST.3SG  
‘Ali saved this cake for HIMSELF.’

(b) Kendine; Ali; bu PASTAYI tı ayırdı.  
HIM-DAT Ali; this CAKE save-PAST.3SG  
‘Ali saved THIS CAKE for himself.’

---

10 In fact, Kural (1992: 76) states that “… a focus preservation principle such as [FPP] … is unnecessary, and it follows from the way [the] levels [of grammar] operate”. However, for ease of discussion, I assume here that there is such a principle.
The result will be the same even if the relative order between these constituents is taken as IO-DO (Lewis, 1967), as shown in (23):

    A.NOM this work-DAT self-ACC devote-PAST.3SG
    ‘Ali devoted HIMSELF to this work.’

    ‘Ali devoted himself to THIS WORK.’

Having seen that focus does not need to block reconstruction, we have to look for another reason for the contrast in grammaticality observed in (18). In 4.2., following Saito (2003), I will propose an account which depends on the interpretation of the lexical features of the items undergoing scrambling. However, before moving on to my proposal, let us consider another proposal, which argues against the focus-based account of Kural and suggests that the facts considered so far can be accounted for by positing A-scrambling and A′-scrambling as two possible scrambling types in Turkish.

3.2. Öztürk (2004): Two Types of Scrambling

Öztürk (2004) argues against a uniform analysis of clause-initial scrambling in Turkish, and, following Mahajan (1990) for Hindi-Urdu and Miyagawa (1997, 2003) for Japanese, proposes that A- and A′-scrambling are both possible in Turkish. She states that the main empirical challenge for the uniform A′-scrambling analysis of Kural’s results from the fact that a universal quantifier can take scope below or above the negative scope. Consider the examples taken from Öztürk (2004: 248):

(24) a.  Bütün çocuklar o teste girmedi.  
    all children.NOM that test-DAT take-Neg-PAST-3SG
    ‘All children did not take that test.’       (*all>not, not>all)

b. Bütün çocuklar Allahtan o teste girmedi-*(ler).  
    all children.NOM luckily that test-DAT take-Neg-PAST-3PL
    ‘All children luckily didn’t take that test.’     (all>not, *not>all)

The quantified subject in (24)a is unambiguously interpreted to be in the scope of negation. According to Öztürk, this implies that the subject does not leave its base position, which she considers to be AgentP. She proposes the following configuration for Turkish:

(25) \[[\text{TopP} \quad [\text{FocP} \quad \text{TP} \quad [\text{AgentP} \quad [\text{ThemeP} \quad ]]]]]\]

According to Öztürk, there is no vP in Turkish due to lack of Case-driven Agree. Arguments receive Case in their base positions (which are AgentP and ThemeP for the subject and the object, respectively) in the (Neo-Larsonian) argument structure. NegP is situated between TP and AgentP. Thus, the subject in (24)a is in its base position, i.e. Spec,AgentP. On the other hand, she argues that the subject in (24)b takes scope over negation, which means that it is scrambled into a position higher than NegP. She suggests that this is supported by the facts that the subject precedes the high adverb Allahtan ‘luckily’, which is above NegP, and that the subject agrees with the verb in person and number—the obligatory plural marker on the verb attests the agreement relation between the verb and the plural subject. Since there is no reconstruction in this case, she suggests that the scrambled position of the subject is an A-position. According to Öztürk, this is true for clause-initial scrambling of the object as well. Consider the examples below (taken from Öztürk, 2004: 249-250):

    A.NOM all test-PL-DAT take-Neg-PAST.3SG
    ‘Ali did not take all the tests.’       (*all>not, not>all)

'Ali did not take all the tests.' (all>not, *not>all)

As in the case of the subject in (24), the quantified object in (26) can take either narrow scope or wide scope with respect to negation, as seen in the (a) and (b) examples respectively. Again, according to Öztürk, the position of the scrambled object in (26)b must be an A-position, since reconstruction cannot take place. Following her argumentation, we can state that if reconstruction had applied in (26)b, it would have placed the object back into its base position, i.e. ThemeP, which is below NegP, contra to fact. Therefore, the data presented in (24) and (26) allow Öztürk to suggest that A-scrambling is possible in Turkish.

She suggests that both the scrambled subject in (24)b and the scrambled object in (26)b are in Spec,TP, an A-position. Öztürk convincingly argues that this scrambling operation is not EPP-driven, as opposed to Japanese scrambling in similar cases (Miyagawa, 2003), since the EPP-feature of T₀ is satisfied by the agreement morphology on the verb, which always undergoes movement to T₀, in Turkish. Therefore, EPP-driven scrambling into Spec,TP is not an option in Turkish. Following Miyagawa (2004), Öztürk claims that it is the [+focus] feature that triggers scrambling into Spec,TP in both (24)b and (26)b. According to this proposal, the [+focus] feature, which is in C', percolates down into T₀ and works in tandem with the EPP-feature. If the [+focus] feature is informational, as opposed to being identificational, “… the leftmost element in Spec,TP is interpreted as the topic and the remainder of the sentence provides new information about this topic” (Öztürk, 2004: 261). Öztürk states that this is exactly the case in Turkish, since the pre-verbal focused elements in (24)b and (26)b do not receive contrastive interpretation, i.e. they are interpreted informationally –according to her analysis, these elements receive the nuclear sentence stress, showing that they do not constitute narrow focus.

As for A'-scrambling, on the other hand, Öztürk suggests that elements undergoing this type of scrambling land in Spec,TopP, an A'-position. According to her analysis, this explains the grammaticality of (28)b, repeated below, since reconstruction is obligatory in an A'-position:

(27) Birbirleriniₐ eachother-PL-POSS-ACC, adamlarₐ man-PL.NOM, t₁ yesterday DÜN see-PAST.3SG, görmüşₐ see-PAST.3SG,

‘The men saw each other yesterday.’

Öztürk also states that the sentence in (28)a, repeated in (28)a, is not ungrammatical as Kural (1992) and Temürcü (2005) think. Giving a very similar example shown in (28)b, she states that under the contrastive focus reading of the pre-verbal subject the sentence is completely grammatical, as attested by the context-providing sentence given in brackets:

(28) a. *Birbirleriniₐ eachother-PL-POSS-ACC, ADAMLARₐ man-PL.NOM, t₁ see-PAST.3SG, görmüşₐ see-PAST.3SG,

‘The men saw each other.’

b. Birbirleriniₐ eachother-PL-POSS-ACC, ADAMLARₐ man-PL.NOM, aradı call-PAST.3SG (kadınlar değil) women not, (kadınlar değil) women not,

‘The men called each other, not the women.’

According to Öztürk, in (28)b, where the subject adamlar ‘the men’ is contrastively focused, the object birbirlerini ‘each other’ undergoes an A'-scrambling into Spec,TopP where it can reconstruct to its base position; hence the sentence is grammatical. Since Öztürk attributes the A'-scrambling of the object in (28)b to the contrastive focusing of the pre-verbal subject, it follows that it would A-scramble if the subject receives non-contrastive (= informational or presentational) focus. Although she does not discuss such an option, following her argumentation, we can safely draw this conclusion. In such a case, the object would have to undergo A-scrambling into Spec,TP under her analysis.

Although Öztürk’s analysis is a theoretically considerable contribution to the discussion of the issue in Turkish, especially the empirical problems weaken her account. First, none of my informants agree with Öztürk in terms of a wide scope reading of both the universally quantified subject and the object in (24)b.
and (26)b, respectively. Thus, bütün çocuklar ‘all children’ in (24)b and bütün testlere ‘all the tests’ in (26)b must be interpreted under the scope of negation. Kelepir (2003) also convincingly argues that universal quantifiers such as bütün ‘all’ and herkes ‘all, everybody’ should be interpreted inside the scope of negation in Turkish. This means that both the subject and the object in the relevant examples can (and must) reconstruct from their scrambled positions. This fact on its own considerably weakens the proposed A-scrambling analysis based on the idea that reconstruction is not allowed from an A-position. Therefore, if Spec,TP is a position where reconstruction cannot take place, and if the position of the high adverb Allahtan ‘luckily’ guarantees that the position of the subject is higher than NegP, then we can safely assume that the subject in (24)b and the object in (26)b are in a position higher than Spec,TP where reconstruction is allowed. Note that this patterns both (24)b and (26)b with (27), where the scrambled object is argued by Öztürk to be in Spec,TopP, an A'-position.

Second, according to my informants, (28)a is in fact very ‘weird’, if not totally ungrammatical, while (28)b is acceptable (with the context given in parenthesis). Drawing on these judgments as well as my own, I think that the grammaticality of the latter must have another source since the grammaticality of the sentence heavily depends on the context. Temürçu (2005) analyzes this as a case of sloppy identity – therefore, the binding relation between the arguments involves a non-syntactic (discursive) domain. As Gardent (1997) points out, one of the characteristics of sloppy interpretation is that it involves two clauses with parallelism between the clauses being the key factor in triggering sloppiness. Accordingly, the binding relation between birbirlerini ‘each other’ and adamlar ‘the men’ in (28)b is uninterpretable in the absence of the clause kadınlar değil ‘not the women’, which provides the context in which the first clause is interpreted. Note that the second clause (i.e. kadınlar değil) implies that the clause Birbirlerini ADAMLAR aradı ‘The men called each other’ is uttered as a reply to an utterance such as Kadınlar BİRBAIRLERINI aradı ‘The women called each other’ (and not to *Birbirlerini KADINLAR aradı, which is infelicitous/ungrammatical discourse-initially due to empty context). Therefore, assuming Purver & Kempson (2004), prior to (28)b a metavariable associated with the reciprocal has been projected. In the sentence Kadınlar BİRBAIRLERINI aradı, this metavariable takes the value kadınlar ‘the women’. (28)b updates the context adding adamlar ‘the men’, whereby the metavariable can take the value ‘adamlar’ by way of the reciprocal. Thus, in (28)b, we can say that it is the existence of the metavariable from the previous context which makes the anaphoric relation between the anaphor birbirlerini and the antecedent adamlar possible.

If this is on the right track, the A'-scrambling option proposed by Öztürk for this case lacks validity, and this brings us back to the same issue of the grammaticality contrast we posed at the beginning of this section, discussed in relation to (18). On the other hand, if we assume that (28)b is grammatical under the contrastive focus reading of the subject, this raises the question of why the type of focus should dramatically affect the type of scrambling. As stated above, Öztürk claims that the object undergoes A'-scrambling into Spec,TopP in (28)b. According to her proposal, this is attested by the fact that the subject receives contrastive focus, and this type of focus can be licensed only in Spec,FocP. Accordingly, the only place that the object can land is Spec,TopP, because it is higher than the subject (cf. (25)). However, as there is no rule against the subject to have a non-contrastive focus, we have to assume that the subject would be in situ, i.e. in Spec,AgentP, if non-contrastively focused. This requires the object to undergo A-scrambling to Spec,TP this time. Why should there be such a difference between the two very similar cases? Considering that there would be no difference in the topic status of the object between these cases, it is obvious that assuming two different types of scrambling for the object does not make sense.

Finally, it must be noted that the account that Öztürk follows, i.e. Miyagawa (2004), also needs discussion. Under Miyagawa (2004), topics are attracted to Spec,TP by the [+focus] feature. This clearly violates the condition of Greed (Chomsky, 1995), which states that the application of an operation to a constituent to benefit another one is not allowed. Therefore, attracting of topics by the [+focus] feature for the benefit of another element to receive informational focus is something that must be avoided in grammar. However, since a discussion of Miyagawa’s (2004) account is beyond the limits of this study, I leave this issue for future research.

To conclude, neither Kural’s (1992) blocking account nor Öztürk’s (2004) proposal can allow us to properly account for the grammaticality contrast observed in (18). Thus, it is still unclear whether clause-initial scrambling in Turkish is into an A- or an A'-position. In the next section, I will try to answer this question.
4. The Feature Analysis to Scrambling

Although there exist quite different views on the A/A′-properties of clause-initial scrambling in the literature, Saito (2003) suggests that it can be accounted for as a uniform operation, which is theoretically a desirable solution.

Drawing on Chomsky’s (1993, and subsequent work) ‘copy theory of movement’, Saito (2003) develops a movement approach to scrambling based on the selectional interpretation of lexical features. According to this approach, each feature of a scrambled item is interpreted where it is selected in the copy chain, and deletes at those copies where it is not selected. Therefore, a feature-selection mechanism brings about the A/A′-scrambling effects without referring to A/A′-positions. In the next subsection, this approach will be summarized.

4.1. Saito (2003): eliminating the A/A′-contrast in scrambling

Arguing for a uniform movement analysis, Saito claims that all instances of scrambling, i.e. both long-distance and clause-initial, are to a position where A-binding is possible. He also suggests that scrambling is subject to radical reconstruction. Reconstruction from an A-position, however, is an idea which contradicts much of the work in the literature. Saito nevertheless claims that this conflict can be resolved under the copy theory of movement, and this approach gives the desired result of dissociating the A/A′-dichotomy and scrambling. Before moving on to discuss how this approach works, it must be noted here that Saito differentiates scrambling (= A-scrambling in his terms) from NP-movement. Although both types of movement are to an A-position, Saito assumes that NP-movement is not subject to reconstruction, since, different from scrambling, it does not leave a trace. Having summarized the main proposals, let us see the details of the approach.

In brief, Saito argues for an analysis where each copy in a copy chain is interpreted derivationally. Drawing on Chomsky (1993), he states that all features of an item undergoing movement are copied into the next target position in the derivation and then deletion applies on the relevant copy. However, Saito states that deletion is not free; rather, “… [it] is constrained by selection …, and … the features [must] remain … in positions where they are selected” (Saito, 2003: 491), while non-selected features must be deleted. For instance, the initial movement of the wh-phrase in (29)a, taken from Saito (2003:491), creates the structure in (29)b after deletion applies (deleted features are shown in strikethrough):

(29)  a.  Who do you think John saw
     b.  [CP who [TP John saw who]]
         {P, O, D}  {P, O, D}

The item who has three features: {P} (phonetic features), {O} (operator feature), and {D} (referential feature). Since this is an overt movement, the P-features retain at the head of the chain. The D-feature must delete at the Spec,CP, since it is selected in the object position. Finally, the O-feature retains at the Spec,CP due to its selection by a feature of C0 (which is EPP-O feature, as Saito calls it). Following Chomsky (1998), Saito notes here (Saito, 2003: ft. 13) that the EPP-O feature on C0 deletes prior to interpretation after its selectional requirement is satisfied, since otherwise it takes scope on the embedded sentence, but not on the matrix sentence, leading to an LF-crash.

Saito states that interpretation takes place as a chain is created, so (29)b must be sent to the interpretive component. Note here that this portion of the sentence cannot be interpreted as a question since the EPP-O deletes prior to its interpretation. The next step in the derivation, wh-movement from the embedded Spec,CP to the matrix Spec,CP, creates the following structure (note that by the deletion of the O-feature, the copy at the object position is appropriately interpreted as a variable):

(30)  [CP who[CP do [TP you think [CP who ([TP John saw x)]]]]]
     {P, O}  {P, O}
In this step, all the features at the intermediate copy must be deleted since neither the O-feature nor the P-feature is selected there. The O-feature is selected by the matrix [+Q] C0, while the selection of the P-feature is due to overt movement. The intermediate copy disappears as all of its features are deleted.

The example given above instantiates a wh-movement. Since wh-movement is to an A’-position, the moved category has to reconstruct. In this system, the reconstruction effect is explained easily by the presence of the D-feature of the wh-phrase at the initial copy (cf. (29)b), where it is both selected and interpreted.

As for NP-movement, on the other hand, all features of the moved item at the initial copy delete. This is evidenced, as mentioned above, by the fact that NP-movement is not subject to reconstruction. Consider the example given below: \(^{11}\)

\[
(31) \quad \text{Himself, seems to John, [himself to be very smart]} \\
\{P, D\} \quad \{P, D\}
\]

Considering the anti-reconstruction effects in this sentence, Saito states that condition (C) is an LF condition (Chomsky, 1993), i.e. an ‘everywhere’ condition, since otherwise this sentence would be grammatical. Due to lack of reconstruction, the anaphor A-binds its antecedent and cannot be A-bound by it, leading to the observed ungrammaticality.

However, as opposed to NP-movement, scrambling (= A-scrambling) is subject to reconstruction, as mentioned above. Consider the Japanese example taken from Saito (2003: 497):

\[
(32) \quad \text{[TP Zibunzisin-o, } \text{[Taroo-ga } t_i \text{ semeta]} (koto) \\
\text{self-ACC T.-NOM blamed fact} \\
\text{‘Himself, Taro blamed } t_i \text{’}
\]

The grammaticality contrast between (31) and (32) implies that the preposed anaphor in the latter reconstructs. As a result, the sentence does not violate both conditions (A) and (C). As in the case of wh-movement, reconstruction can be explained here too by the presence of the D-feature at the object position after deletion applies, due to selection. Consider the derivation of (32): \(^{12}\)

\[
(33) \quad \text{a. [TP Zibunzisin-o, [... Taroo-ga ... zibunzisin-o]]} \\
\text{[P, D, A]} \quad \{P, D\} \quad \{P, D, A\}
\]

The anaphor ‘zibunzisin’ ‘self’ has an A-feature, i.e. [+anaphoric] feature, as its categorial feature. Saito states that an A-feature must be bound by an antecedent’s D-feature (p.510). The grammaticality of this sentence implies that this is the case. \(^{13}\) Thus, both the D- and the A-features must retain, at their selected sites, the object position. This gives the reconstruction effect. Accordingly, they are deleted in the head of the chain and only the P-feature remains there since this is an overt movement.

We saw that NP-movement such as in (31) could affect the grammaticality of the sentence. Scrambling, on the other hand, does not have any effects on the grammaticality, as evidenced in (32). As stated above, Saito claims that both types of movement are to A-positions; the only difference is that only scrambling is subject to reconstruction. However, there are also cases of scrambling that pattern with NP-movement concerning the lack of reconstruction. Such a case is given in (34)b, taken from Saito (2003: 485):

\[
(34) \quad \text{a. [Otogai-no sensei]-ga } \text{karera-o hihansita} (koto) \\
\text{eachother-GEN teacher-NOM they-ACC criticized fact} \\
\text{‘Each other’s teachers criticized them’} \\
\text{b. [Karera-o, [[otagai-no sensei]-ga } t_i \text{ hihansita]] (koto)}
\]

---

\(^{11}\) The feature analysis is mine. \\
\(^{12}\) Saito uses only the D- and P-features of zibunzisin ‘self’ in this example, since the A-feature appears later in his text. For convenience, I use the A-feature as well, as this is the categorial feature that every anaphor has to have. \\
\(^{13}\) Note that in the ungrammatical case in (31) the A-feature of the anaphor should be retained at the head of the chain, c-commanding the D-feature of its antecedent.
Them, [each other’s teachers] criticized t’s.

As seen in (34)b, the scrambling of the antecedent karera-o ‘them’ can save the sentence by satisfying both the (A) and (C) conditions. This can be possible only if it does not reconstruct. However, according to Saito, scrambling is a uniform operation and is subject to obligatory reconstruction. Thus, if (34)b patterns with (32), instead of (31), karera-o must reconstruct without leading to ungrammaticality. How can this happen? Basically, Saito’s solution is that karera-o undergoes two consequent movements here; first, it undergoes NP-movement, and then scrambles to the head of the sentence. He proposes this solution by assuming the phase theory advanced in Chomsky (1998).

According to phase theory, a phase is a phrase that acts as a Spell-Out point, where all the material except the ones in its head and Spec is sent off to the interpretive component and there is no further access to the information being interpreted. Thus, only those materials included in the phase head and in its Spec can be accessible in the next phase. This requires for the elements that are subject to any type of movement to move to the Spec position of the phase first. CP and vP constitute the only phases in this system. Thus, if an element in the domain of vP has to move to a position higher than vP, first it must move to Spec,vP. Given this, the grammaticality of (34)b regarding the condition (C) finds a straightforward explanation. According to Saito, karera-o ‘them’ moves to Spec,vP, before its further movement into Spec,TP. The grammaticality of the sentence implies that there is no reconstruction into the initial extraction site, thus, this movement patterns with NP-movement. This item then scrambles to Spec,TP, from where it can reconstruct to Spec,vP at LF.

In summary, the approach proposed by Saito (2003) has an apparent advantage compared to other analyses that are based on A/A′-contrast. In the remaining part of the study, we will see that this feature approach can, in fact, help to resolve the apparent problem that we have stated above in relation to (18) for Turkish clause-initial scrambling.

### 4.2. The Analysis

Since we rejected the solution based on FPP proposed by Kural (1992), as well as Öztürk’s (2004) proposal, the problem posed by (18) is still open. As mentioned above, one of the solutions is to stick to the standard A/A′-analysis and argue for different scrambling types for each of the derivations in (18), as Öztürk (2004) proposes –A-scrambling for (18)a, and A′-scrambling for (18)b. However, a uniform analysis would evidently be better, as stated above. In this section, drawing on Saito (2003), I will try to conduct such an analysis.

#### 4.2.1. Object Anaphors

To begin with, let me clarify the types of each movement seen in (18) in terms of Saito (2003). As there is no observable reconstruction effect in (18)a, the type of movement in this sentence patterns with NP-movement (cf. § 4.1.). (18)b, on the other hand, exhibits all the properties of scrambling. Nevertheless, as (18)a is plausibly derived exactly as (18)b, the phase theoretical analysis that Saito claims for the Japanese NP-movement case in (34)b cannot be used to explain the grammaticality contrast between (18)a and (18)b. In addition, we will see below that these sentences are identical in terms of scrambling type.

Now, let us consider how the derivations in (18) can be stated in terms of the feature-based model:

\[(35)\]

a.  *

\begin{align*}
\text{Birbirlerini,} & \quad \text{ADAMLER,} \\
\text{eachother-PL-POSS-ACC} & \quad \text{man-PL.NOM} \\
\{\text{P}, \text{D}, \text{A}\} & \quad \{\text{D}\} \\
\{\text{P, D, A}\} & \quad \{\text{P, D, A}\}
\end{align*}

\text{görüms.} \text{ see-PAST.3SG}

\text{‘The men saw each other.’}

b.  \text{Birbirlerini,} & \quad \text{adamlar,} \\
\text{eachother-PL-POSS-ACC} & \quad \text{man-PL.NOM} \\
\{\text{P}, \text{D}, \text{A}\} & \quad \{\text{D}\} \\
\{\text{P, D, A}\} & \quad \{\text{P, D, A}\}
\end{align*}

\text{görüms.} \text{ see-PAST.3SG}

\text{‘The men saw each other yesterday.’}
As seen in (35), the derivations of both sentences in terms of their features are, strikingly, the same, which is not surprising considering their overall similarity with the exception of their f-structures (i.e. their foci). Given this, what is surprising is the contrast in grammaticality that they exhibit. The feature inventory of both sentences includes P, D, and A-features. In both sentences, the A-feature of the anaphor birbirlerini ‘each other’ is selected in the object position; thus, it must retain at this position. This feature must delete at the higher copy, since it does not make sense at all to assume that a head needs, and thus selects, particularly an anaphor.

The D-feature is the ‘referential’ feature. Hence, it must retain in those positions where the referential properties of an item are needed. For instance, the EPP-feature that some heads such as T₀ and C₀ (Chomsky, 2000) have has such a requirement. Since EPP is a [-interpretable] referential feature of a head, it requires a matching [+interpretable] referential feature, which is [+D], to check its referential properties. In this sense, the D-feature is ‘selected’ by the EPP-feature of a head. T₀ is such a head, which is assumed to have the EPP universally. Recall that in section 3.2., following Öztürk (2004), we stated that the EPP-feature of T₀ is satisfied by head movement in Turkish – morphological agreement on the verb satisfies the EPP of T₀ when it adjoins to T₀. On the other hand, Ura (1996) argues that there is a multiple feature-checking parameter. Ura suggests that in Japanese, but not in English, features of T₀ can be multiply checked by different elements. In this way, multiple nominatives in Japanese can be licensed under the same TP. Following Ura, Kawamura (2004) suggests that the EPP-feature of T₀ in Japanese can check, i.e. can select, D-features of multiple DPs. Assume that this is the case for Turkish as well. If this is correct, it follows that the scrambled object birbirlerini ‘each other’ in (35)a is attracted by EPP to Spec,TP to check its D-feature. Since the D-feature is selected in Spec, TP, it retains there.

As for the P-feature, on the other hand, it is clear that it is selected in the higher copy in both sentences in (35), for these are cases of overt movement.

As mentioned in section 4.1., Saito (2003) claims that an A-feature of an anaphor must not c-command and must be c-commanded by its antecedent’s D-feature to be properly bound. This leads to the effects of conditions (A) and (C). He also convincingly shows that condition (A) is an ‘anywhere’ condition; namely, it is satisfied derivationally. Thus, once the D-feature of the antecedent c-commands the A-feature of the anaphor at any point of the derivation, condition (A) is satisfied even if the c-command relation between them changes later in the derivation. As it is seen, this is the case in (35); thus, there is no condition (A) violation in both sentences in (35). On the other hand, Saito states that condition (C) is an LF condition. Thus, it must be satisfied after reconstruction applies at LF. We see in (35) that there is no condition (C) violation either, since the D-feature of the antecedent, the R-expression, is not c-commanded by the A-feature of the anaphor in both sentences; therefore, it is free as required by the condition (C). Note that the presence of the A-feature at the lower copy reveals the fact that there is no difference between (35)a and (35)b in terms of reconstruction – both sentences exhibit reconstruction effects. If the main difference between an A-position and an A’-position is the application of reconstruction, this implies that we are dealing here with a uniform type of scrambling. This is one of the main proposals of the present study. Therefore, let me state it more explicitly: the sentences in (35) constitute the minimal pair that exhibits both A- and A’-scrambling effects. However, we see that they do not differ in terms of the type of scrambling they undergo. In both of the sentences, scrambling is into a position where reconstruction can take place.

4.2.2. Lethal Ambiguity

Having shown that the type of scrambling in both cases in (35) is uniform, we have to look for another reason that could be responsible for the observed grammatical contrast. Since the main difference between the two sentences is their f-structures, it is reasonable to compare them accordingly.

When the focus is taken into account, it is clear that the inventory of features given above is by no means complete. Focusing is a syntactic operation and, following a long tradition (e.g. Rizzi, 1997; Kiss, 1998; Lambova, 2001; Miyagawa, 2004, among others), a focused item must have a [+interpretable] focus feature, i.e. F-feature, to check the [-interpretable] F-feature of a syntactic head. Obviously, an F-feature is a syntactic reflex of a discursive property. Another discursive property in syntax is topic, which has also a reflex as a feature in syntax, T(topic)-feature. Since an item without a focal stress and undergoing movement to the sentence-initial position is interpreted as topic (or ‘topical’) in Turkish (e.g. Erguvanlı, 1984; Erkö, 1983; Kural, 1992), the preposed anaphors in both sentences in (35) must obviously have T-
features that are selected in the sentence-initial position. Therefore, with respect to the features that the two sentences have, we have to revise (35) as follows:

(36)  a. *Birbirlerini, ADAMLARi, (birbirlerini,ı) görmüş.
   \{P, D, A, T\} \{D, F\} \{P, D, A, T\}

   b. Birbirlerini, adamları, (birbirlerini,) DÜN görmüş.14
   \{P, D, A, T\} \{D\} \{P, D, A, T\} \{F\}

As seen in (36), we finally have a difference in terms of features between the two sentences: the antecedent adamlar ‘the men’ has the F-feature in (36)a, but not in (36)b. In fact, this constitutes the essential part of the reason for the grammaticality contrast between the two that we are looking for, which is explained below.

A closer look at the features of the antecedent and the anaphor in (36)a reveals that there are two features that can be categorized under the same label: T- and F-features. Both of them are discursive features; therefore, they are of the same type. Let us call the supercategory label of these features \(\Delta\) (delta). Since they are categorized under the same label, it is plausible to think that both T- and F-features (henceforth, \(\Delta_T\) and \(\Delta_F\)) are checked by the same head, \(\Delta_0\). Following Lambova (2001), I assume that they are licensed under \(\Delta P\) as multiple Specs.15 The structure I propose for (36)a is illustrated below (only the relevant part is shown):

(37) \(\ast\)

\[
\begin{array}{c}
\Delta P \\
\downarrow \\
\Delta' \\
\downarrow \\
\Delta_T [+T] \\
\downarrow \\
\Delta' \\
\downarrow \\
\Delta [-T] [-F] \\
\end{array}
\]

The question that immediately arises is why this structure should be ungrammatical. In fact, there is no problem in licensing topic and focus in this mechanism as long as there is no binding relation between the topicalized and focused phrases. The problem occurs when there is such relation. Following McGinnis (2004), I claim that the issue in (37) is a case of lethal ambiguity. She proposes that whenever a phrase undergoes A-movement across a co-indexed phrase and lands in one of the Spec positions of the same head whose other Spec has already been occupied by its co-indexed phrase, it cannot be unambiguously linked to its copy. This case is schematized in (38):

(38) \(\ast[[ \ldots [X YP_1 [X ZP_1 [X X_0]]] \ldots [ \ldots t_i \ldots]]]\)

McGinnis (2004: 66) states that “… binding involves copying the numeration index of the antecedent to the bound element at LF”. Numeration index is also used “… to link a moved phrase with its copy” (McGinnis, 2004: 67). Moreover, to link a phrase with its copy, the address of the moved phrase, which is derived from the syntactic position of the moved element, must be indexed onto its copy. Therefore, “[t]he

---

14 An anonymous reviewer has pointed out that in the following structure where the indirect object birbirlerine ‘each other’ undergoes movement to a sentence internal position, not to the sentence-initial position, it is not clear why a T-feature is necessary:

(i) Kitapları, birbirlerine, adamları, t_i, t_j, DÜN, vermiş.
   book-PL-ACC, eachother-DAT, man-PL.NOM, yesterday, give-PAST.3SG
   ‘The men gave the books each other yesterday.’

Here, the direct object kitapları ‘books’ has the T-feature which motivates it to move to the sentence-initial position. It is quite plausible to assume that the movement of the indirect object birbirlerine ‘each other’ is also triggered by the T-feature, since, as noted elsewhere in the literature, sentences can have multiple topics. This property has been noted for Turkish as well (e.g. İşseven (2003)). If this is on the right track, the landed site of the indirect object should be defined as sentence-initial, not sentence internal.

15 Although I follow Lambova in using AP, I do not adopt her account entirely, which includes a more complicated phrase structure in licensing topic and focus. Due to space constraints I do not go into detail of her analysis here; I only borrow the phrase label and the idea that discursive phrases are licensed under the same projection.
address and the numeration index together can be used at LF to link the moved element with its copy” (McGinnis, 2004: 67). However, when two phrases merge with the same head, they have the same address, since they are projected under the same head. For example, YP and ZP in (38) have the same address; they also share the same numeration index since they are co-indexed. “In this case, the semantic interpretation of the copy of [YP] [i.e. the trace in (38)] cannot be unambiguously linked with [YP]” (McGinnis, 2004: 67). As a result, the configuration in (38) leads to an LF-crash, being an uninterpretable syntactic object.

I claim that this is the case responsible for the ungrammaticality in (18)a/(36)a. As it is shown above, there is violation of neither the condition (A) nor the condition (C) in this sentence. The problem is that the preposed anaphor cannot be linked with its copy because it shares the same numeration index and the same address with its co-indexed antecedent.

There is also additional evidence for the claim that the problem in (18)a/(36)a is not due to the reversed binding relations. When we alter the focus from the antecedent to the anaphor, the sentence considerably improves, as shown below:

(39) ??BİRBİRLERİNİ, adamlar, tı, görmüş.
     eachother-PL-POSS-ACC man-PL-NOM see-PAST.3SG
     ‘The men, saw EACH OTHER.’

Here, the anaphor has the $\Delta_f$-feature while the antecedent does not have a $\Delta$-related feature. Thus, they do not share any feature to be licensed under the same projection, which means that they are in different phrases: the anaphor is in the Spec position of $\Delta P$ to check its $\Delta_f$-feature, while the antecedent is in situ. Accordingly, lethal ambiguity does not arise; hence, the sentence is grammatical. Note also that the grammaticality of the sentence attests that the anaphor can reconstruct. Under the feature-selection account, this means that the A-feature of the anaphor retains at its base position, where it is c-commanded by the D-feature of its antecedent adamlar ‘the men’.

This account explains the grammaticality of (18)b/(36)b as well. Contrary to (18)a/(36)a, adamlar ‘the men’ in (18)b/(36)b does not have the $\Delta_f$-feature. Accordingly, it is not licensed by the same head, i.e. $\Delta^0$, which licenses birbirlerini ‘each other’ that has the $\Delta_f$-feature. As stated in subsection 3.2., arguments can appear in situ in Turkish (Öztürk, 2004). Thus, the subject adamlar in (18)b/(36)b occurs in situ in Spec,AgentP, while the anaphor birbirlerini is in Spec,$\Delta P$. Therefore, although they share the same numeration index, the antecedent and the anaphor have different addresses. Accordingly, lethal ambiguity does not occur.

4.2.3. Subject Anaphors

So far, we have considered cases where the anaphor is contained in the object. In this case, the (A) and (C) conditions are both satisfied due to reconstruction. However, when the anaphor is contained in the subject there is no such possibility in the case of object fronting, because reconstruction always places the object antecedent in a c-commanded position, which is lower than the anaphor. Given this, standard A/A$'$-analyses consider the scrambled position of the object an A-position. One of the examples for this case is (6), repeated below in (40):

(40) a. *[pro, kendı, komşusu] ADAMI, gördü.
     self neighbor-POSS-NOM man-ACC see-PAST.3SG
     ‘(Lit.) His, own neighbor, he saw the man, ’

b. Adami, [pro, KENDI, KOMŞUSU] tı, gördü.
     ‘(Lit.) The man, his, own neighbor saw him, ’

Previous analyses consider (40)b as a clear evidence for A-scrambling. However, as we stated above in relation to (21), the f-marked element must be constant throughout the derivation. Given this, since in (40)b the f-marked element is not the same as that of (40)a, the scrambled version of (40)a would be (41), instead of (40)b:
Note that (41) is good only when it answers an echo question, a case which is subsumed under sloppy identity. In such a case, (40)a can be used as well. As we assume that cases of sloppy identity involve binding outside of syntax, i.e. in discourse, we ignore this possibility here. What is important here, then, is that the scrambling of the antecedent to a c-commanding position cannot change the binding relations, as attested by the ungrammaticality of (41).

Similarly, (40)b is the scrambled version not of (40)a, but of (42):

(42)  [pro, KENDI, KOMŞUSU] adamı, gördü.

Therefore, we see that the scrambling in (40)b does not change binding relations, either. Hence, given (41) and (42), there is no possibility for suggesting an A-scrambling analysis for (40)b. There is of course a difference in terms of the type of foci between (40)b and (42): in the former, the phrase kendi komşusu ‘his own neighbor’ can be either presentational or contrastive focus, while in the latter it can only receive contrastive reading. Namely, in (40)b, but not in (42), the focused element does not have to be included in a contrastive set because it is adjacent to the verb. Adjacency with the verb seems to be the only condition for sentential elements to have a presentational focus\(^{16}\) reading in Turkish (İşsever, 2003). Therefore, this is the only difference between the two.

Another challenge for the A-scrambling analyses for (40)b is the data given in (43), which reveals that, in both (a) and (b), the object antecedent can occur in its base position when it is not focused:

(43)  a.  [pro, Kendi, komşusu] adamı, ŞİKAYET etmiş.

    self neighbor-POSS.NOM man-ACC report-PAST.3SG

    ‘(Lit.) His own neighbor has reported the man, to the police.’

b.  [pro, ÇOÇUĞU] adamı, EVDEN atmış.

    self child-POSS.NOM man-ACC house-ABL throw-PAST.3SG

    ‘(Lit.) His own child has thrown the man, out of the house.’

The sentences in (43), which are the same as (40)a in terms of c-command relations between the antecedent and the anaphor, show that this configuration is in fact possible in Turkish. Actually, this is expected since there is no violation of binding conditions here. Condition (C) is not violated since the anaphor occurs in a larger DP, where it cannot c-command its antecedent. Condition (A) is satisfied due to the presence of the pro: note that the anaphor is locally bound by the pro. As for the condition (B), it is not violated either since Turkish is a pro-drop language where pro can have a co-reference relation with its antecedent without being c-commanded by it. This is evidenced by the following examples as well:

(44)  a.  [pro, Annesi] ALI,‘YI çagırıyor.

    mother-POSS.NOM A.-ACC call-PRES.3SG

    ‘His mother is calling Ali.’

b.  [pro, Arkadaş] ÖZLEM,‘I ÖĞRETMENE şikayet etmiş.

    friend-POSS.NOM Ö.-ACC teacher-DAT report-PAST.3SG

    ‘Her friend has reported Özlem, to the teacher.’

Therefore, the examples considered so far in this subsection shows that there is no need for an A-scrambling analysis in cases such as (40)b. However, we still have the grammaticality contrast in (40) in need of an explanation. The questions we have to ask are: i) Why is (40)a ungrammatical at all if there is no violation of binding conditions?; ii) Why is (40)b grammatical since this sentence is reminiscent of the configuration in ungrammatical (18)a/(36)a, where lethal ambiguity is observed?

\(^{16}\) Note that presentational focus is not always broad focus. In (40)b, the focused phrase constitutes a narrow focus but can receive a presentational reading.
The answer to the second question is quite simple. As in the case of (18)a/(36)a, the preposed object antecedent has the $\Delta_t$-feature, which must be checked by $\Delta^0$ and therefore is attracted to Spec, $\Delta_P$. Likewise, the subject $[^{pro_i} \text{kendi} i \text{kom} \text{susu}]$ ‘his own neighbor’ is attracted to the lower Spec of $\Delta_P$ to check its $\Delta_s$-feature. These arguments share the same numeration index because they are co-referential. However, different from (18)a/(36)a, the anaphor is contained in a larger DP, so its address is different from that of its antecedent. Therefore, the scrambled object antecedent can successfully bind its copy.

Nevertheless, the situation is not that simple in the case of the first question. We saw that the issue in (40)a has nothing to do with any binding condition. This implies that the ungrammaticality in this sentence has another source, which must be accounted for independently. However, we can say that there seems to be a general tendency in anaphor binding that bans the focusing of the antecedent. Recall that (41), where the antecedent is preposed but focused as in (40)a, is not grammatical either. In clear contrast, (40)b, where the scrambled antecedent is defocused, is grammatical. The situation is the same in (43)a-b, as opposed to (40)a, in terms of the defocused antecedents. I do not have any formal account for the issue at this stage, but suffice it to say that the problem we consider in (40) has nothing to do with A/A′-scrambling.

Note, on the other hand, that the comparison of (40)b with (45) clearly reveals that the scrambled object antecedent can reconstruct. Thus, the case in (40)b cannot be taken as an instance of A-scrambling, unless the reconstruction effect is investigated thoroughly. Under the feature-selection account, the derivation of (40)b can be stated as follows:

(45) \[
\text{Adamı, } [^{pro_i} \text{kendi} i \text{kom} \text{susu}] \text{ (adamı) gördü.}
\]

\[
\{P, \text{D}, \Delta_t\} \quad \{P, \text{A, D}, \Delta_T\} \quad \{P, \text{D}, \Delta_F\}
\]

As seen in (45), the D-feature of the antecedent \text{adamı} ‘the man’ is selected in its base position, and thus retains there. Other features are selected in the head of the chain, and they retain at this copy. Since neither condition is violated as discussed above, there is no problem with binding here, so reconstruction is readily allowed. As we stated above, both the antecedent and the anaphor appear at Spec, $\Delta_P$, but there is no lethal ambiguity because their addresses are different.

Also note that, when the f-structure is taken into account, we do not have to assume an intermediate NP-movement (=A-scrambling) in cases such as (40)b/(45), as opposed to what Saito (2003) proposes for the similar cases in Japanese given in (34). This allows us to give a unified account for clause-initial scrambling.

4.2.4. Quantifier Scope

So far we have seen that the A/A′-properties of clause-initial scrambling can be accounted for in a unified manner under the model based on feature-selection. The discussion has shown that clause-initial scrambling is into Spec,TP, a position where reconstruction is allowed. In this section, we will see that apparent A-scrambling effects in terms of scope interactions of quantifiers can also be accounted for under this model.

Öztürk (2004:261) gives the following example, where the universally quantified subject takes ambiguous scope with respect to the existentially quantified object:

(46) Her çocuk bir kitabı okudu.

\[
\text{every child.NOM one book-ACC read-PAST.3SG}
\]

\[
i. \text{Every child read a specific book. } \exists > \forall
\]

\[
\text{ii. Every child read a different book out of a definite set of books. } \forall > \exists
\]

She proposes that the relevant ambiguity can be derived from the A-movement of the distributive subject into Spec,TP. Thus, this proposal explains the ambiguity in (46) without assuming quantifier raising (QR) at LF. Öztürk suggests that the two readings of the sentence given in (46) arise from the following structures:

(47) a. \[
[\text{Spec,TP } \exists [\text{AgentP Her çocuk } [\text{ThemeP bir kitabı okudu}]]] \quad (=\text{(46)i})
\]

b. \[
[\text{Spec,TP Her çocuk } \exists [\text{AgentP t [ThemeP bir kitabı okudu]}]] \quad (=\text{(46)ii})
\]

A-movement
In (47)a, the subject takes narrow scope with respect to the object since it is within the scope of the existential closure (i.e. $\exists$). In (47)b, on the other hand, it takes wide scope due to A-movement into Spec,TP, an operation which takes the subject out of the scope of the existential closure.

In contrast to (46), clause-initial scrambling of the object, exemplified in (48), results in unambiguous wide scope construal of the object over the universally quantified subject. As we saw in section 2.1., this case is generally considered to be clear evidence of A-movement. Consider the example taken from Öztürk (2004:262) (the schematization is mine):

\[
\text{(48) } [\text{Spec,TP } \text{Bir kitab-ı } \exists [\text{AgentP her } \text{çocuk } [\text{ThemeP (bir kitabı) okudu}]]]
\]

Every child read a specific book. $\exists > \forall$

In (48), the object scrambles out of its base position within the scope of existential closure while the subject stays in situ. This results in wide scope construal of the object with respect to the subject. Since (48) is unambiguous, it follows that this movement is into an A-position, where reconstruction cannot take place.\(^{17}\)

However, the A-movement analysis given for (48) is problematic, because it brings about the same interpretation in (46)i)/(47)a but this time as a result of movement. Note that the scope relations in both (46)i and (48) are the same, i.e. $\exists > \forall$. Therefore, the movement in (48) is vacuous; and vacuous movement, by any definition, is necessarily into positions where reconstruction is obligatory. Thus, when considered together with the interpretation in (46)i, (48) shows that the scrambled object undergoes obligatory reconstruction. Following the general assumptions in the literature that Spec,TP is an A-position where reconstruction is not allowed, and that the EPP-feature of T\(^0\) is already satisfied by the agreement morphology on the verb, we can suggest that the scrambling of the object in this sentence is into Spec,$\Delta$P, where reconstruction can take place. The derivation of this scrambling operation under the feature-selection analysis is given below:

\[
\text{(49) } [\text{Spec,$\Delta$P } \text{Bir kitab-ı } [\text{Spec,TP } \exists [\text{AgentP her } \text{çocuk } [\text{ThemeP (bir kitabı) okudu}]]]]
\]

Every child read a specific book. $\exists > \forall$

As seen in (49), the D-feature of the object bir kitabı ‘a specific book’ is selected in the base position, so it retains at this copy and deletes at the head of the copy chain. Assuming that Öztürk’s (2004) analysis is on the right track, this does not affect the wide scope reading of the object since this reading is possible when it is in situ, as seen in (46)i)/(47)a. On the other hand, the P-features and the $\Delta_T$-feature of the object retain at the higher copy due to selection. Thus, the feature-selection analysis can be extended to capture the A-movement effects under the scope interactions of quantifiers as well.

This analysis can also account for cases where the scrambled object is focused, as opposed to be topicalized. (50) exemplifies such a case:

\[
\text{(50) } [\text{Spec,$\Delta$P } \text{BIR KITAB-ı } [\text{Spec,TP } \exists [\text{AgentP her } \text{çocuk } [\text{ThemeP (bir kitabı) okudu}]]]]
\]

Every child read a specific book. $\exists > \forall$

The only difference between (49) and (50) is that the scrambled object is focused in the latter while it is topicalized in the former. As seen in (50), the same reading can be obtained since Spec,$\Delta$P is a position

\(^{17}\) Drawing on similar examples given in (46)-(48), Göksel (1998) proposes that it is the linear order, and not hierarchical relations, which is decisive on the relative scopes of quantifiers. This view contrasts with proposals such as Öztürk’s (2004) as well as the account proposed here. Considering place limitations, I do not undertake a discussion here.
where reconstruction is allowed. Note that, Öztürk’s (2004) account must assume a different type of movement in this case, i.e. A′-movement, because she claims that A-movement of the scrambled object in (48) is triggered by the percolating [+focus] feature on T⁰ while the trigger of the focused object in cases such as (50) is the [+focus] feature on Foc⁰. Since the Spec positions of the two heads (i.e. Spec,TP and Spec,TopP) differ with respect to A/A′-properties, her account must assume two different types of scrambling for the cases considered above. Therefore, the unified analysis proposed above is superior to that of Öztürk (2004).

5. Conclusion

This study has shown that the A/A′-contrast observed in clause-initial scrambling in Turkish can be accounted for in a unified manner by applying the derivational approach to scrambling proposed in Saito (2003), according to which lexical features of the items undergoing scrambling are interpreted on a selectional basis. Suggesting that f-structure must be constant between the levels of grammar (Zubizarreta, 1998), it has been shown that clause-initial scrambling in Turkish is into a position where reconstruction is possible. This study has also shown that, due to lethal ambiguity effects (McGinnis, 2004), scrambled elements must be licensed under the same projection, which is assumed to be AP following Lambova (2001). Therefore, the analysis has revealed that the derivational account proposed in Saito (2003) can be applicable to Turkish when f-structure is taken into consideration.

References


Temürçü, Ceyhan 2005. The interaction of syntax and discourse in word order: data from Turkish. Dilbilim ve Uygulamaları. İstanbul: Multilingual. 123-159.

