

## ATAKAN INCE

The aim of this study is (a) to reduce certain restrictions on scrambling in Turkish to Distinctness and (b) to show that the adjunction site for rightward scrambling in Turkish is CP (a. la. Kural (1997)).

For Richards (2010), Distinctness requires that more than one node of the same functional element cannot occur in an asymmetric c-command relation in the same Spell-Out domain (SOD):

(Richards, 2010:5)

c. \*the singing [of songs] [of the children] (Richards ex. (9a), p. 9)

9

6. a. ??Kojem je čovjeku kojem dječaku pomoći? (Croatian)  
 which.DAT AUX man.DAT which.DAT boy.DAT help.INF  
 ‘Which man is to help which boy?’  
 b. Kojem je čovjeku pomoći kojem dječaku?  
 which.DAT AUX man.DAT help.INF which.DAT boy.DAT  
 ‘Which man is to help which boy?’

(ibid., p. 76 (ex. 159))

## 2. Distinctness in Turkish

As Richards also cites, the Case facts in causativization in Turkish support Distinctness. When an intransitive verb is causativized, the causee bears Accusative Case in Turkish:

7. Mehmet **Hasan-ı** öl-dür-dü  
 Mehmet Hasan-ACC die-CAUS-PAST  
 ‘Mehmet caused Hasan to die’

(Richards (2010: 10), citing from Aissen (1979: 8))

8. Tolga **bebeğ-i** yürü-t-tü  
 baby-ACC walk-CAUS-PAST  
 ‘Tolga had the baby walk’

However, when the causativized verb is transitive with an Acc DO, the causee cannot bear Acc Case; it has to have Dative Case:

9. a. Hasan kasab-a et-i kes-tir-di  
 Hasan butcher-DAT meat-ACC cut-CAUS-PAST  
 ‘Hasan had the butcher cut the meat’

(ibid., p. 10)

- b. \*Hasan **kasab-ı** et-i kes-tir-di  
 Hasan butcher-ACC meat-ACC cut-CAUS-PAST

## 3. Scrambling in Turkish

A phrase can be scrambled to pre-Subject position, post-verbal position as well as a clause-internal position in simplex clauses in Turkish, as the following data from Kural (1992) shows:<sup>1</sup>

10. a. Ahmet bu kitab-ı Berna-ya vermiş. S DO IO V  
 this book-acc -dat gave  
 ‘Ahmet gave this book to Berna.’  
 b. Ahmet Berna-ya bu kitab-ı vermiş. S IO DO V  
 c. Bu kitab-ı Ahmet Berna-ya vermiş. DO S IO V  
 d. Berna-ya Ahmet bu kitab-ı vermiş. IO S DO V  
 e. Bu kitab-ı Berna-ya Ahmet vermiş. DO IO S V

<sup>1</sup> For scrambling in Turkish, see Erkü (1983), Erguvanlı (1984), Kural (1992, 1993, 1997), Aygen (2003), Kornfilt (2005), İşsever (2007), among others.

- |                                      |           |
|--------------------------------------|-----------|
| f. Berna-ya bu kitab-ı Ahmet vermiş. | IO DO S V |
| g. Ahmet bu kitab-ı vermiş Berna-ya. | S DO V IO |
| h. Bu kitab-ı Ahmet vermiş Berna-ya. | DO S V IO |
| i. Ahmet Berna-ya vermiş bu kitab-ı. | S IO V DO |
| j. Berna-ya Ahmet vermiş bu kitab-ı. | IO S V DO |
| k. Bu kitab-ı Berna-ya vermiş Ahmet. | DO IO V S |
| l. Berna-ya bu kitab-ı vermiş Ahmet. | IO DO V S |
| m. Ahmet vermiş bu kitab-ı Berna-ya. | S V DO IO |
| n. Ahmet vermiş Berna-ya bu kitab-ı. | S V IO DO |
| o. Bu kitab-ı vermiş Ahmet Berna-ya. | DO V S IO |
| p. Bu kitab-ı vermiş Berna-ya Ahmet. | DO V IO S |
| r. Berna-ya vermiş Ahmet bu kitab-ı. | IO V S DO |
| s. Berna-ya vermiş bu kitab-ı Ahmet. | IO V DO S |

Scrambling from a complement clause is also possible to the left and right periphery of a matrix clause:

(Aygen 2003: 81)

In this section, I will describe a restriction on scrambling in Turkish given in previous works (Aygen (2003), Kural (1992, 1993)) and give a Distinctness-based account of the restriction. This restriction is restricted to Finite Complement Clauses (FCC) in Turkish. The Nominative Subject of an FCC cannot be scrambled to the left periphery of the matrix clause (12):

(Aygen 2003: 81)

13. a. Ercan-ın<sub>i</sub> Hasan [<sub>t<sub>i</sub></sub> kek-i acele ye-diğ-i]-ni söyle-di.  
           -gen              cake-acc in a hurry eat-nom-agr-acc tell-past  
           ‘Hasan told that Ercan ate the cake in a hurry’

(Aygen 2003: 81)

- b. Hasan [<sub>t<sub>i</sub></sub> kek-i acele ye-diğ-i]-ni söyle-di Ercan-in<sub>i</sub>.  
cake-acc in a hurry eat-nom-agr-acc tell-past -gen  
'Hasan told that Ercan ate the cake in a hurry'

First, it is not clear why a full C head does not allow extraction of a Subject. In both phase-based systems and non-phase-based systems, CP always has an escape hatch.

Second, a DO within a FCC can be scrambled in contrast to the Subject of a FCC, which is predicted not to occur under Ulutaş' account, as Aygen (2003) has already questioned:

14. Kek-i<sub>i</sub> Hasan [Ercan <sub>t<sub>i</sub></sub> ye-di] san-ıyor.  
cake-acc eat-past think-prog  
'Hasan thinks Ercan ate the cake'

(Aygen 2003: 81)

Third, there are cases where the Subject of a nominalized complement clause cannot be scrambled, unlike Ulutaş' expectation. The Subject of a complement clause cannot be scrambled to a higher complement clause (15b), as Aygen (2003: 88) has already noticed:

15. a. Ahmet [Mehmet-in [Nafe-nin kek-i ye-diğ-i]-ni bil-diğ-i]-ni söyle-di.  
-gen -gen cake-acc eat-nom-pos-acc know-nom-poss-acc tell-past  
'Ahmet told that Mehmet knows that Nafe ate the cake'  
b. \*Ahmet [Nafe-nin<sub>i</sub> Mehmet-in [<sub>t<sub>i</sub></sub> kek-i ye-diğ-i]-ni bil-diğ-i]-ni söyledi.  
-gen -gen cake-acc eat-nom-pos-acc know-nom-pos-acc tell-past  
(Aygen 2003: 88)

However, the DO *keki* can be scrambled to the higher complement clause:

16. Ahmet [kek-i<sub>i</sub> Mehmet-in [Nafe-nin <sub>t<sub>i</sub></sub> ye-diğ-i]-ni bil-diğ-i]-ni söyle-di.  
cake-acc -gen -gen eat-nom-pos-acc know-nom-poss-acc tell-past  
'Ahmet told that Mehmet knows that Nafe ate the cake'

All in all, an analysis based on full/defective CPs cannot account for the data above.

In the following parts, I will contend a Distinctness-based account of the data above. The crux of the analysis is that co-occurrence of K's with the same Case feature cannot occur in the same Spell-out Domain in Turkish, as Richards (2010) contends for Japanese and Serbo-Croatian among other languages.

Example (12), repeated as ex. (17) below, is bad because two K's with the same Case feature occur in the same Spell-out Domain:

17. \*Ercan<sub>i</sub> Hasan [<sub>t<sub>i</sub></sub> kek-i ye-di] san-ıyor.  
cake-acc eat-past think-prog  
'Ercan thinks Hasan ate the cake'  
\*in the intended reading

√ as matrix subject

(Aygen 2003: 81)

18. a. \*Ercan[+nominative], Hasan[+nominative]  
b. \*<K[+nominative], K[+nominative]>

I will follow Ulutaş (2008) and assume that a Nominative Subject occurs in Spec, FinP, who follows Rizzi (1997). I will also assume that a scrambled phrase occurs in Spec, TopP within the CP domain and that both TopP and FinP are in the same SOD. Therefore, both K's of the scrambled Subject of the FCC and the matrix Subject are SOD-mate, Distinctness is violated.

This also accounts for (13a), repeated as ex. (19) below, where the matrix Subject is Nominative and the scrambled Subject of the complement clause is Genitive:

19. Ercan-in<sub>i</sub> Hasan [<sub>t<sub>i</sub></sub> kek-i acele ye-diğ-i]-ni söyle-di.  
-gen cake-acc in a hurry eat-nom-agr-acc tell-past  
'Hasan told that Ercan ate the cake in a hurry'

(Aygen 2003: 81)

20. a. sizin [+genitive], biz [+nominative]  
b. <K [+genitive], K [+nominative]>

As seen in (20b), although both K's are SOD-mate, they differ in Case; therefore, no violation of Distinctness occurs. In (13b), where the embedded Genitive Subject occurs in postverbal position in the matrix clause, no SOD violation occurs because the two Subjects bear different Cases, though later I will argue that postverbal Subjects occur in a different SOD than preverbal elements.

In (14), repeated as ex. (21) below, in the same way, the K's are in the same SOD but differ in their Case feature, so Distinctness is not violated:

21. Kek-i<sub>i</sub> Hasan [Ercan <sub>t<sub>i</sub></sub> ye-di] san-ıyor.  
cake-acc eat-past think-prog  
'Hasan thinks Ercan ate the cake'

(Aygen 2003: 81)

22. a. Keki [+accusative], Ercan [+nominative]  
b. <K [+accusative], K [+nominative]>

In (15b), repeated as (23) below, both KPs are genitive and SOD-mate, and Distinctness is violated:

23. \*Ahmet [Nafe-nin<sub>i</sub> Mehmet-in [<sub>t<sub>i</sub></sub> kek-i ye-diğ-i]-ni bil-diğ-i]-ni söyledi.  
-gen -gen cake-acc eat-nom-pos-acc know-nom-pos-acc tell-past  
(Aygen 2003: 88)

24. a. Mehmetin [+genitive], Nafenin [+genitive]  
 b. <K [+genitive], K [+genitive]>

In (16), repeated as ex. (25) below, on the other hand, the scrambled DO and the embedded Subject differ in Case, Accusative vs. Genitive, respectively:

25. Ahmet [kek-i<sub>i</sub> Mehmet-in [Nafe-nin *t<sub>i</sub>* ye-diğ-i]-ni bil-diğ-i]-ni söyle-di.  
 cake-acc -gen -gen eat-nom-pos-acc know-nom-poss-acc tell-past  
 ‘Ahmet told that Mehmet knows that Nafe ate the cake’

26. a. keki [+accusative], Mehmetin [+genitive]  
 b. <K [+accusative], K [+genitive]>

Since the K’s differ in Case feature in spite of being SOD-mate, Distinctness is not violated.

To sum, the grammatical and ungrammatical cases of scrambling in Turkish given above can be accounted for in terms of Distinctness. In Turkish, two K’s with the same Case feature cannot occur in the same Spell-out Domain.

Aygen (2003) accounts for the ungrammatical instances of scrambling of a KP (she uses ‘DP’) over another KP with the same Case as follows:

27. The DP which bears the same feature with the highest head within the phase is inactive for extra-clausal syntactic processes.

(Aygen 2003: 89)

However, her account does not account for the causative structures where no KP moves over another (9a&b repeated as 28a&b):

28. a. Hasan kasab-a et-i kes-tir-di  
 Hasan butcher-DAT meat-ACC cut-CAUS-PAST  
 ‘Hasan had the butcher cut the meat’  
 b. \*Hasan **kasab-ı** et-i kes-tir-di  
 Hasan butcher-ACC meat-ACC cut-CAUS-PAST

Distinctness, on the other hand, accounts for both scrambling and causativization facts in Turkish.

## 5. A Note on Post-verbal Scrambling in Turkish

Kural (1997), giving arguments based on quantifier-scope interactions, contends that post-verbal constituents are higher than pre-verbal constituents (see also Kornfilt 2005). Assuming that V raises to C, he concludes that PVCs right-adjoin to CP since they linearly follow V:

29. a. Herkes dün  $t_i$  aramış [üç kişi-yi]<sub>i</sub>. (3y  $\forall x$ , \* $\forall x$  3y)  
 everybody yesterday called three person-acc  
 b.  $t_i$  Üç kişi-yi dün aramış herkes<sub>i</sub>. ( $\forall x$  3y, \*3y  $\forall x$ )  
 three person-acc yesterday called everybody  
 (Kural 1997: ex. 18a-b (traces and indexes mine))

However, Aygen (2002) argues that V raises to T in Turkish (matrix clauses), which makes it hard to argue that PVCs are right-adjoined to CP.

Kornfilt (2005), while remaining unclear about whether rightward adjunction targets CP or IP, raises doubts with regard to depending on scope relations between post-verbal and pre-verbal QPs. She states that whether a post-verbal QP scopes over a pre-verbal QP depends on whether the PVC QP is Subject, reporting her own and her consultants' judgements:

30.  $t_i$  Üç kişi-ye dün akşam yardım etmiş herkes<sub>i</sub>. ( $\forall x$  3y, \*3y  $\forall x$ )  
 three person-dat yesterday evening help did everybody  
 'Everybody helped three people yesterday evening.'  
 (Kornfilt 2005: ex. 21 (traces and indexes mine))
31. Herkes bu yıl  $t_i$  kitap-lar-ın-ı ithaf etmiş [üç kişi-ye]<sub>i</sub>. ( $\forall x$  3y, \*3y  $\forall x$ )  
 everybody this year book-plu-poss-acc dedication did three person-dat  
 'Everybody dedicated his book to three people this year.'  
 (Kornfilt 2005: ex. 22 (traces and indexes mine))

32. Üç kişi dün akşam  $t_i$  yardım etmiş herkes-e<sub>i</sub>. (3x  $\forall y$ , \* $\forall y$  3x)  
 three person yesterday evening help did everybody-dat  
 'Three people helped everybody yesterday evening.'  
 (Kornfilt 2005: ex. 23 (traces and indexes mine))

Kural (1997) does not state whether he checked the relevant data with any native speakers; Kornfilt (2005), on the other hand, does not state that she has given any context/story to her consultants to get the relevant scopal judgements above.

In this section, I will give evidence based on Distinctness that PVCs adjoin to CP.

As shown in the previous section, the Nominative Subject of a FCC cannot be scrambled to the matrix clause, preceding the matrix Subject (ex. (12) repeated as ex. (33)):

33. \*Ercan<sub>i</sub> Hasan [ $t_i$  kek-i ye-di] san-ıyor.  
 cake-acc eat-past think-prog  
 'Ercan thinks Hasan ate the cake'  
 \*in the intended reading  
 ✓ as matrix subject

(Aygen 2003: 81)

However, when the Subject of an FCC is scrambled to the post-verbal position in the matrix clause, the structure is much better:

34. a. Ben 'Ayşe Ankara-ya gitti' sanıyordum.  
       I                         -dat went thought  
       I thought that Ayşe went to Ankara.'  
       b. Ayşe<sub>i</sub>, ben 't<sub>i</sub> Ankara-ya gitti' sanıyordum.  
       c. ?Ben 't<sub>i</sub> Ankara-ya gitti sanıyordum' Ayşe<sub>i</sub>.

When asked to grade ex.s (34b-c) between 1-7 for grammaticality, all native speakers found ex. (34b) completely ungrammatical, two found ex. (34c) completely ungrammatical, and others gave a score of '4' or above to ex. (34b). The average of the score nine native speakers who do not find ex. (34b) ungrammatical is five '5'. This shows that there is a clear contrast between ex. (34b) vs. ex. (34c).

The grammaticality of ex. (34c) then shows that the Subject of the matrix clause *ben* 'I' and that of the FCC *Ayşe* are not in the same Spell-out Domain. Otherwise, both K's being [+nominative], a Distinctness violation would occur. However, if a post-verbal constituent is adjoined to CP, then that element and the matrix Subject in Spec, FinP cannot be SOD-mate, FinP being (within) the domain of the phase head C:

30. [CP [CP [FinP *biz*. . . ]] *siz*]

All in all, Kural's claim that PVC adjoin to CP in Turkish still holds.

#### *An Asymmetry Regarding Bare Nominals*

As noticed by others, a bare nominal Object cannot be scrambled to pre-Subject position (31b):

31. a. Uğur elma yedi.  
       apple ate  
       'Uğur ate an apple.'  
       b. \*Elma<sub>1</sub> Uğur t<sub>1</sub> yedi.  
       'An apple, Uğur ate.'

However, it was also noticed that a bare nominal Object can be scrambled to the post-verbal position:

32. Uğur t<sub>1</sub> yedi elma<sub>1</sub>.

There are different assumptions regarding the Case of bare nominal Objects. One camp assumes that bare nominal Objects are (pseudo-)incorporated and do not bear Case (Aydemir (2004), Kornfilt (1997, 2003), Öztürk (2005), among others). Another camp assumes that bare nominal Objects bear Case (Ketrez (2005)). Ketrez (2005), for instance, assumes that Accusative Case on bare nominal Objects is deleted under left-adjacency to the verb. In this study, I will join the second camp and assume that bare nominal Objects bear Case.



To go back to the contrast between (31b) vs. (32), Distinctness can also account for this contrast. However, we need to make an additional assumptions regarding Distinctness. Notice that the Case of the Subject and the bare nominal Object in (31a) are homophonous:

33. Uğur-Ø, elma-Ø

In other words, we have a syncretic morpheme that appears on both matrix Subjects (Nominative) and bare nominal objects. Let us call this Case morpheme ‘Nominative’, just for expository purposes.<sup>2</sup>

Such cases, where the relevant morphemes are syncretic, they cannot occur in the same SOD, as Richards (2010) observes in Greek:

34. GREEK DATA’YI KOY

The same occurs with Turkish bare nominal Objects. When the K of a bare nominal Object and a Nominative Subject occur in the same SOD, a Distinctness violation occurs, as in (31b):

35. a. Uğur [+nominative], elma [+nominative]  
b. <K [+nominative], K [+nominative]>

In ex. (32), on the other hand, a bare nominal Object can be scrambled to the post-verbal position because no violation of Distinctness occurs. The reason is that the two occurrences of the syncretic morpheme are in different SODs, the Nominative Subject being in Spec, FinP and the bare nominal Object adjoined to CP:

36. [CP [CP [FinP *Uğur*. . .]] *elma*]

As seen, Distinctness can also account for the contrast between pre-Subject and post-verbal scrambling of bare nominal Objects in Turkish.

One final note is on Şener (2006), which claims that elements occurring in post-verbal position in Turkish are base-generated and lower to their assigner in LF. He assumes that there are strong and weak  $\theta$ -features. So, for Şener, a noun has two versions in the lexicon: with strong/weak  $\theta$ -features, which requires a loaded Lexicon. Also, the strength of a DP depends on the strength of its  $\theta$ -features. If  $\theta$ -features are weak, Case features also have to be weak. Otherwise, it needs to lower in overt syntax.

Further, lowering operation seems indefinable in terms of set theory. After the application of a merge/concatenation operation at time T, we get a set that includes a set in time T – 1 as its member:

37. a.  $A = \{a, b\}$   
b. Merge/Concatenate the set A with c:  $c + A$   
c.  $D = \{c, \{a, b\}\}$

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<sup>2</sup> I am not making any assumption/claim that matrix Subjects and non-specific Objects check their Case in the same position.

However, in a lowering operation, this is not observed. Let's have the following set:

38.  $A = \{a, \{b, \{c, d\}\}\}$

Now, when we lower the member 'a' to the set whose members are 'c' and 'd', we get:

39.  $\{a, \{b, \{c, d, a\}\}\}$

However, the set A in (38) is not a member of the new set in (39). Therefore, lowering is indefinable. So, I conclude that a 'base-generation & lowering' approach to post-verbal elements in Turkish (and in other languages) is untenable.

## 6. Conclusion

This study has shown that certain restrictions on scrambling in Turkish can be accounted for Richards' (2010) *Distinctness* and that post-verbal elements in Turkish adjoin to CP, as Kural (1997) proposed.

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