The Turkish NP[*]

Željko Bošković and Serkan Şener

This paper investigates the Turkish NP, with emphasis on the structural position of possessors (both overt and null possessors--they will be shown to be located in different positions), demonstratives, numerals, and adjectives as well as the interpretation of possessors in different contexts. We also investigate in detail ellipsis within Turkish NPs, which turns out to be a particularly useful tool for probing NP structure, due to rather strong constraints on such ellipsis that Turkish displays. Thus, in stark contrast with English, Turkish disallows simple possessor-stranding ellipsis, a fact which we will show has important consequences for the structure of NP in Turkish. Turkish in fact displays rather complex paradigms regarding word order and interpretation of NP-internal elements, as well as NP-internal ellipsis, which make it a perfect testing ground for various approaches to these phenomena.

The paper is organized as follows. We start by considering in section 1 how Turkish, an article-less language, fares with respect to Bošković's (2008a, 2012a) generalizations regarding DP/NP languages. In principle, even if some article-less languages don't have DP, it may not be out of the question that some could have it, hence we first test Turkish regarding Bošković's generalizations. We show that Turkish patterns with NP, not DP languages, which has an important impact on the analysis we develop in later sections based on c-command tests, linear order, interpretation, and ellipsis of NP-internal elements. Sections 2 and 3 are the main parts of the paper. Section 2 establishes an outline of NP structure in Turkish, based on c-command tests, word order, and the interpretation of possessors, which is subjected to further testing with respect to ellipsis in section 3. Section 4 is the conclusion.

1.   NP/DP Generalizations and Turkish

Bošković (2008a,2012a) argues for a no-DP analysis of languages without definite articles, based on a number of cross-linguistic generalizations acknowledging the fact that the presence/absence of articles in a language plays a crucial role. These generalizations show that there is a fundamental difference between the traditional Noun Phrases (TNPs)[1] of languages with and without articles ~~and article-less languages~~, that cannot be reduced to phonology (overt vs null articles) since the generalizations involve syntactic and semantic, not phonological, phenomena. Below, we will test Turkish with respect to these generalizations, which are given in subsection headings. (The generalizations are only briefly summarized here; see Bošković 2012a for detailed discussion of these generalizations, including the precise definitions and additional cross-linguistic illustrations of the phenomena referred to in these

[1]TNP is a neutral term that does not take a stand on the potential presence of functional projections in this domain.

generalizations as well as their deductions under the DP/NP analysis, which provides a uniform account of all the cross-linguistic differences noted below, where a single factor is responsible for all of them.)[2]

1.1 Article-less languages disallow clause-mate NPI-licensing under Negative Raising, article languages allow it

With *negative raising* (NR), negation behaves as if it were lower than where it surfaces, as confirmed by clause-mate Negative-Polarity Items (NPIs). The NPI in (1) (*in at least two years*) requires a clause-mate Negation, as witnessed by (2), involving the non-NR verb *claim*. Negation must therefore be present in the embedded clause of (3) when the NPI is licensed:

(1)   John hasn't/*has visited her in at least two years.

(2)   *John doesn't claim [that Mary has visited her [$_{NPI}$ in at least two years]]

(3)   John doesn't believe [that Mary has visited her [$_{NPI}$ in at least two years]]

Bošković (op.cit.) notes that whether or not a language allows clause-mate NPI-licensing under NR out of indicative clauses depends on whether it has articles, establishing 1.1. (Thus, article-less languages such as Serbo-Croatian (SC), Czech, Slovenian, Polish, Russian, Ukrainian, Korean, Japanese, and Chinese disallow such licensing, while English, German, Spanish, French, Portuguese, Romanian, and Bulgarian, which have articles, allow it. Note that the generalization concerns only indicatives (i.e. finite complement clauses), not gerunds, subjunctive(-style) and infinitival clauses. Turkish clause-mate NPIs cannot be licensed long-distance within typical indicatives, even under typical raising verbs like *san* 'think/believe'. Turkish thus patterns with NP languages here.

(4)   Pelin   Mete-yi *en az   iki yıl-dır*   ziyaret et-me-di/*et-ti.
        P.-nom   M.-acc   at least two year-for visit   do-neg-past/ do-past
        'Pelin hasn't/*has visited Mete in at least two years.'

(5)   Mete   [Pelin-ø/-i   (*en az   iki yıl-dır) Timbuktu-ya git-ti]   san-m-ıyor.
        M.-nom P.-nom/-acc   at least two year-for T.-dat   go-past think-neg-pres
        'Mete doesn't think Pelin went to Timbuktu in at least two years.'

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[2]Although we will here investigate Turkish with respect to the generalizations in question, it should be noted that since these generalizations involve typological arguments, they really cannot be dissolved by looking at a single language even if the language should turn out to provide some exceptions; this would merely turn some of the generalizations below into strong tendencies, which would still call for an explanation. (Needless to say, even showing conclusively that some of the generalizations below are incorrect would not affect other generalizations.)

1.2 Article-less languages disallow transitive nominals with two lexical genitives

This section concerns the availability of structures where both the external (not simply a possessor, but a true external argument) and the internal argument of a noun are genitive, with the genitive realized via a clitic/suffix or a dummy preposition. Such cases are disallowed in article-less languages (which don't otherwise allow multiplication of the same case like Japanese; e.g. Polish, Czech, Russian, Latin, SC, Ukrainian, Chinese, and Quechua disallow it). The same holds for Turkish.

(6)   a. *Osmanlılar-ın İstanbul-un   feth-i

      Ottomans-gen İstanbul-gen conquest-3s.poss

    'Ottomans' conquest of Istanbul.'

   b. cf. İstanbul-un feth-i

1.3. Only article-less languages may allow scrambling

Bošković (2008a, 2012a) observes that traditional scrambling languages (e.g. Chukchi, Chichewa, Hindi, Japanese, Korean, Latin, Serbo-Croatian, Polish, Czech, Slovenian, and Warlpiri) all lack articles.[3] As is well-known, Turkish is a scrambling language, hence fits 1.3 as an NP language.

1.4 Radical pro-drop is possible only in article-less languages

Bošković (2012a) defines radical pro-drop as the productive pro-drop of subjects and objects in the absence of rich verbal agreement. This type of pro-drop differs from pro-drop in Spanish, which is licensed by verbal morphology. As a result, since Spanish has subject but not object agreement, pro-drop is allowed only with subjects. Radical pro-drop is allowed in Japanese, Chinese, Korean, Kokota, Hindi, Wichita, Malayalam, Thai, Burmese, and Indonesian, all NP languages. Turkish has subject agreement and Spanish-style subject-drop. However, it also has productive object-drop although it lacks object agreement (see Şener and Takahashi 2010), hence fits 1.4 as an NP language.

1.5 Negative concord reading may be absent with complex negative constituents only in article negative concord languages

In some negative concord languages, like Italian, the negative concord reading is unavailable with complex negative constituents.

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[3]What is meant by scrambling here is the kind of movement referred to as scrambling in Japanese, which can take place long-distance out of finite clauses, not the type discussed for German, whose "scrambling" is a very different operation with very different semantic effects from Japanese scrambling (importantly, it also cannot take place long-distance).

(7) a. Non ho visto nessuno.
        NEG have seen nobody
        'I didn't see anybody.   (Negative Concord only)

    b. Nessuno studente ha letto nessun libro.
        no   student has read no   book   (Double Negation only)

Bošković (2012a) shows that while DP languages differ as to whether the double negation reading is forced in examples like (7)b, in NP languages (e.g. SC, Russian, Polish, Ukrainian, Japanese, and Korean) only the negative concord reading is allowed here. The same holds for Turkish:

(8) Hiçbir   çocuk   hiçbir kitab-ı   oku-ma-dı.
     no   child-nom no   book-acc   read-neg-past
     'No child read any book.'   (Negative Concord/*Double Negation)

        1.6 Possessors may induce an exhaustivity presupposition only in article languages
Partee (2006) notes that while (9) has the presupposition 'Zhangsan has exactly three sweaters,' (10) in Mandarin doesn't have that exhaustivity presupposition, although it is definite:

(9)   Zhangsan's three sweaters
(10) Zhangsan de   [san   jian maoxianyi]
      Z   DE$_{POSS}$ three CL   sweater
      'Zhangsan's three sweaters'

Bošković (2012a) shows that we are dealing here with a broader generalization, with the exhaustivity presupposition absent from NP languages (e.g. Russian, SC, Chinese, Japanese, Korean, Hindi, Bangla, Malayalam, and Magahi) in such contexts. Turkish again patterns with NP languages: (11) doesn't have the exhaustivity presupposition:[4]

(11) Can-ın   üç   bisiklet-i
      John-gen three bicycle-3s.poss
      'John's three bicycles'

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[4]The interpretation of the possessor may vary according to the syntactic context, in Turkish and Chinese, see section 2.

Bošković (2012a) shows that only article-less languages may allow AP left-branch extraction (LBE). (Thus, such extraction is allowed in Russian, Polish, Czech, Ukrainian, Slovenian, Latin, Mohawk, Southern Tiwa, Gunwinjguan languages, Hindi, Bangla, Angika, and Magahi, all article-less languages). Note that the development of a definite article has led to the loss of such LBE in Ancient Greek and Colloquial Finnish.)

(12)   Doroguju$_i$ on videl [t$_i$ mašinu]   (Russian)

         *Expensive$_i$ he saw   [t$_i$ cars]

It seems Turkish should be classified as a non-LBE language (Turkish does allow possessor extraction)

(13)   a. Pelin   [kalın kitap] oku-du.   b. *Kalın$_1$ Pelin [t$_1$ kitap] oku-du.

           P-nom thick book read-past

           'Pelin read a thick book.'

This still wouldn't provide an argument for DP in Turkish, given the one-way correlation status of 1.7. In fact, Bošković (2012a) notes that LBE often requires A-N agreement, which Turkish doesn't have. However, LBE is actually allowed in Turkish: an adjective can be postposed to the post-verbal field (Kornfilt 2003, Göksel and Kerslake 2005).

(14) $^?$Pelin [t$_1$ kitap] oku-du *kalın$_1$*.

Note that postposing in Turkish only involves non-contrastive elements that are given in the previous discourse, classified as [-contrastive,+discourse anaphoric] in Şener (2010). Fronting however typically involves [+contrastive] constituents, which may also be [+topic] or [+discourse anaphoric]. As for foci, they remain in-situ—they cannot undergo movement no matter whether they are + or - contrastive (Şener 2010). *Kalın* in (13)a, for instance, must remain inside the NP if it is [+focus]. We therefore conclude that adjectival LBE is not categorically ruled out in Turkish, its impossibility in fronting contexts being due to discourse factors (such adjectives must be [-contrastive,+discourse anaphoric] and all movement of such elements in Turkish is to the right).[5]

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[5]See Kural (1997), Kornfilt (2005), and Şener (2010) for arguments based on c-command relations, showing that postposing involves rightward movement (it cannot be handled in terms of base-generation or remnant movement). Note that Slavic adjectival LBE is also subject to discourse restrictions. There are also syntactic constraints on it: e.g., it is disallowed from an NP that is an argument of another noun (Bošković 2012a, in press b). Significantly, Turkish patterns

Živanovič (2008) reports that (15) in Slovenian only allows the plurality reading.

(15) Največ ljudi pije pivo.
most people drink beer
Plurality reading (PR): 'More people drink beer than any other beverage (though it could be less than half the people).'
Majority reading (MR): *More than half the people drink beer.'

English *most* allows both readings, though in different contexts. German *most* also has both readings: (16) is ambiguous in this respect (PR requires focus on beer).

(16) Die meisten Leute trinken Bier.
the most people drink beer.

Živanovič (2008) notes that a broader generalization is at stake here, where the Majority Reading is allowed only in article languages (Živanovič 2008 and Bošković 2012a note that English, German, Dutch, Hungarian, Romanian, Basque, Arabic, Macedonian and Bulgarian, which have articles, allow the Majority Reading, while Slovenian, Czech, Polish, SC, Hindi, Chinese, Punjabi, Angika, and Magahi, which do not have articles, disallow it. Note that 1.9 concerns only traditional determiners, not the cases where the Majority Reading is expressed by nouns such *majority* or Turkish *çoğu* (as in *insanlar-ın çoğ-u* 'majority of (the) people').

Gajewski (2011) shows that Turkish disallows the Majority Reading: the most natural interpretation of (17) is that events of beer drinking outnumbered events of drinking any other beverage.

(17) İnsanlar *en çok* bira iç-ti.
people-nom most beer drink-past
'People drank beer the most.'

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with Slavic, which suggests that AP post-posing in Turkish should be indeed treated in the same way as Slavic adjectival LBE. ((i) is fine if *yaşlı* modifies the higher N.)

(i) *Pelin [[pro t_i teyze-m]-in arkadaş-ı]-nı gör-müş *yaşlı$_i$*.
P-nom aunt-1s.poss-gen friend-3s.poss-nom see-evidential.past old
'Pelin saw the friend of my old aunt.'

Gajewski notes that the Majority Reading can be contextually inferred from the Plurality Reading. Thus, (17) may be interpreted indirectly as counting other objects with certain background assumptions; i.e., one might get the Majority Reading as an inference. However, Gajewski shows that the Majority Reading is unavailable in (17) under the scenario in (18), although it enforces it ((17) cannot be truthfully uttered in this context). Turkish thus again patterns with NP languages.

(18) Suppose people at a dinner were allowed more than one beverage. 60% of the people had a beer. 75% of the people had a glass of wine.

1.10 Inverse scope is unavailable in article-less languages (in some examples)

Another generalization from Bošković (2012a) concerns inverse scope interpretation of examples like (19), with the unmarked word order (not involving movement) for the language. This interpretation is available in English.

(19) Someone loves everyone.

Bošković (2012a) observes that while DP languages differ as to whether or not they allow inverse scope in such contexts (with most DP languages examined allowing it), this interpretation is as a rule disallowed in NP languages (e.g. Japanese, Korean, Turkish, Persian, Hindi, Bangla, Chinese, Russian, Polish, Slovenian, Ukrainian, and SC). As is well known, Turkish exhibits here the general behaviour of NP languages. Thus, the object cannot scope over the subject in (20).

(20) iki öğrenci   her   sandalye-yi kır-mış.
      two student-nom every chair-acc   crush-evidential.past
      'Two students crushed every chair.'

1.11 Number morphology may not be obligatory only in article-less languages

Consider (21), where the N can be interpreted as plural in the absence of plural morphology.

(21) Susumu-ga   hon-o   yonda.   (Japanese)
      Susumu-nom   book-acc bought
      'Susumu bought a/the book/books.'

Bošković (2012a) notes languages without obligatory number morphology in non-numeral contexts (where some or all countable Ns can receive plural interpretation without number morphology, as in Japanese, Korean, Chinese, Hindi, Bangla, Malayalam, Mohawk, Dyirbal, Warlpiri, Kuku-Yalanji, Warrgamay, Indonesian, Vietnamese), all lack articles, establishing 1.11. Note however that 1.11 doesn't conversely require all NP languages to lack number morphology. While Turkish may seem to require it, it also productively allows cases like (22), where 'book' can be interpreted as plural in the absence of plural morphology (its accusative counterpart cannot be so interpreted, see Aydemir 2004, Ketrez 2005, Öztürk 2004, Şener 2010).

(22) Can   (kalın) kitap   oku-muş.
      John-nom   thick book   read-evidential.past
      'John read a (long) book / (long) books.'

Based on the above, we conclude that Turkish patterns with other article-less languages studied by Bošković (2012a), which provides motivation for classifying it as an NP rather than a DP language.[6] In what follows we will therefore adopt this position.

2.   The structure of Turkish NPs

Before investigating word order within Turkish TNPs, we will determine the position of possessors, which we will use as a pivot in the attempt to understand the distribution of other TNP-elements. The reason for this is that there is a rather straightforward test proposed in Despić (2011, 2013) that determines the position of possessors.

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[6]One of the NP/DP generalizations involves adjunct extraction from TNPs, as in *From which city$_i$ did Peter meet [girls t$_i$]*. It is claimed that such extraction may be possible only in NP languages. Turkish, however, disallows it:
(i)   a.*okul-dan$_i$ Mete [t$_i$ kız-lar]-la   sinema-ya git-ti.
            school-abl M-nom   girl-pl-with movies-dat go-past
         b.*Mete [t$_i$ kız-lar]-la sinema-ya git-ti okul-dan$_i$.
            'Mete went to the movies with girls from school.'
However, we are dealing here with a one-way correlation: such extraction cannot be possible in DP languages, but can be allowed or disallowed in NP languages (the lack of articles is not the only factor, see Bošković in press b for discussion of the phenomenon).
        A number of Bošković's generalizations are irrelevant because Turkish doesn't have the relevant constructions. This concerns the generalizations regarding head-internal relatives, pronominal clitics, multiple-wh-fronting, obligatory classifiers, and focus-movement (see also a suggestion made in Bošković 2012a regarding Turkish and a generalization concerning negative constituents). Regarding the focus-movement generalization, according to which elements undergoing focus-movement are subject to a V-adjacency requirement only in DP languages, it should be noted that Turkish requires linear adjacency of (non-D-linked) wh-phrases/foci to V. However, Şener (2010) argues this doesn't stem from the movement of Wh/Foci and V to the Spec and Head position of a single projection in the left periphery, but is a consequence of left-peripheral movement of all but Wh and Foci; Wh/Foci remain adjacent to V in Turkish because only Wh/Foci and the verb don't undergo movement. This makes the focus-movement generalization irrelevant to Turkish.

In his NP analysis of Serbo-Croatian (SC), Bošković (2012a) treats SC possessors and demonstratives as NP-adjuncts. One of the arguments for this analysis, noted by Despić (2011, 2013), is provided by (24), which contrasts with English (23) in that the pronoun and the name cannot be co-indexed. Given that the possessor is an NP-adjunct and that SC lacks DP, the possessor c-commands out of the TNP, which results in Condition B/C violations in (24).[7]

(23) a. His$_i$ latest movie really disappointed Tarantino$_i$.

  b. Tarantino$_i$'s latest movie really disappointed him$_i$.

(24) a.*[$_{NP}$ Kusturicin$_i$ [$_{NP}$ najnoviji film]] ga$_i$ je zaista razočarao.

  Kusturica's   latest   movie him is really disappointed

  'Kusturica$_i$'s latest movie really disappointed him$_i$.'

  b.*[$_{NP}$ Njegov$_i$ [$_{NP}$ najnoviji film]] je zaista razočarao   Kusturicu$_i$.

  his   latest   movie is really disappointed Kusturica

Significantly, Turkish patterns with SC, not English. As (25) shows, the possessor apparently c-commands out of its TNP, as these sentences are clear violations of Conditions B/C. We therefore assume that possessors are also NP-adjoined in Turkish, with the DP-layer missing in this language.

(25) a.*[Özpetek^i-in film]-i   o^i-nu   hayal kırıklığına uğrat-tı.

  Ö.-gen   movie-3s.poss he-acc disappoint-past

  'Özpetek's movie disappointed him.'

  b.*[o^i-nun film]-i   Özpetek^i-i hayal kırıklığına uğrat-tı.

  he-gen movie-3s.poss Ö.-acc   disappoint-past

  'His movie disappointed Özpetek.'

Now consider word order within Turkish TNPs:[8]

(26) a. *Poss»Dem»(A)»Num»(A)»N*

  Can-ın   şu (eski) üç   (eski) bisiklet-i

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[7]Japanese and Chinese pattern with SC (Bošković 2012a, Cheng 2013, Takahashi 2011). It is, however, not out of question that in some NP languages possessors could be in SpecNP or even function as N-complements (like English *of*-genitives), in which case they wouldn't c-command out of the TNP. Takahashi notes that for some speakers, relational nouns (like 'father') behave differently due to an interfering factor which is not relevant here. Since contrastive focus can affect binding relations, it also needs to be controlled for, see Bošković (2012a) (the co-indexed elements shouldn't be focused). Note also that Condition A cannot be tested here due to interfering factors, see Despić (2011).

[8](26)e/(27)d are possible on the irrelevant interpretation where there are multiple individuals with the name *John* and the one that is considered as the *former* (for whatever reason) is talked about here.

John-gen   that old three   bicycle-3s.poss

'those three old bicycles of John's'

b.*Poss»Num»Dem»A»N

*Can-ın üç   şu   eski bisiklet-i

c.*Num»Poss»Dem»A»N

*üç Can-ın şu eski bisiklet-i

d.*Poss»A»Dem»Num»N

*Can-ın eski şu   üç   bisiklet-i

e. *A»Poss»Dem»Num»N

*eski Can-ın şu üç bisiklet-i

(27) a. Dem»Poss»(A)»Num»(A)»N

şu Can-ın (eski) üç (eski)   bisiklet-i

b.*Dem»Num»Poss»A»N

*şu üç Can-ın eski bisiklet-i

c.*Num»Dem»Poss»A»N

*üç şu Can-ın eski bisiklet-i

d.*Dem»A»Poss»Num»N

*şu eski Can-ın üç bisiklet-i

e.*A»Dem»Poss»Num»N

*eski şu Can-ın üç bisiklet-i

Poss must precede Num/Adj, but can precede or follow Dem. Num and Adj may shift order but these are the only options for them. As regards Poss/Num/A, their order follows if Poss is an NP-adjunct, as discussed above, and if Num and Adj hold NP spec positions. The free order for Num and Adj is then a consequence of the free order for the specifiers, but they both must follow Poss.[9]

Recall that Bošković (2012a) argues that both possessors and demonstratives are NP-adjuncts in SC. (27)a, where Dem precedes Poss, can be accounted for if Dem is also NP-adjoined in Turkish.

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[9]We are treating numerals and adjectives differently from Bošković's account of SC. Numerals actually have a rather peculiar behaviour in SC, and SC adjectives differ in several respects from Turkish adjectives (e.g. they are much more mobile and agree in case/phi-features). We leave open the question whether these differences can be unified with the different structures for the elements proposed here and in Bošković (2012a). (However, note that we follow Bošković's 2009, 2012b analysis of adjectives, where adjectives are located in multiple Specs of the same phrase, rather than Cinque's 1994 approach.)

This provides a simple account for the fact that Dem precedes Num and Adj, but may precede or follow Poss.[10]

(28)

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                           NP
                    ┌───────┴───────┐
               Poss|Dem            NP
                            ┌───────┴───────┐
                        Dem|Poss           NP
                                    ┌───────┴───────┐
                                 Num|Adj            N'
                                            ┌───────┴───────┐
                                        Adj|Num            …
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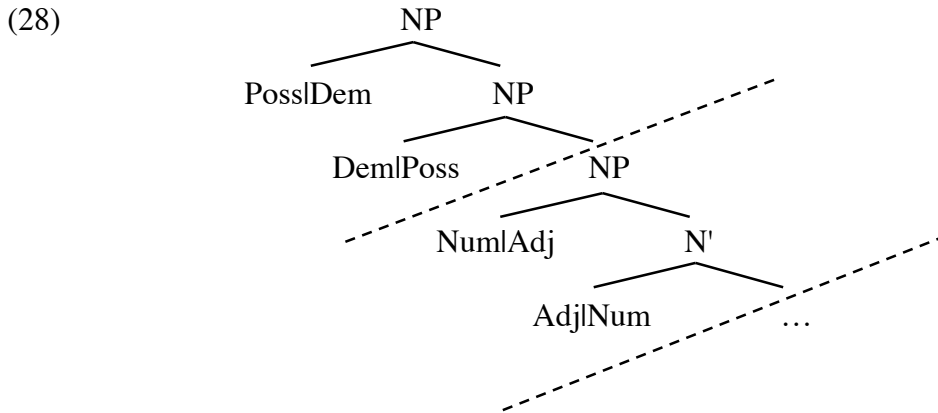
A significant prediction of this structure is this: Poss should c-command out of its TNP even when preceded by Dem, since even in this case Poss is not dominated by the TNP. The prediction is borne out. (SC behaves in the same way, see Despić 2011, Bošković 2012a.)

(29) a.*[şu Özpetek[i]-in film]-i   o[i]-nu   hayal kırıklığına uğrat-tı.

        that Ö.-gen   movie-3s.poss he-acc   disappoint-past

      'That movie of Özpetek's disappointed him.'

      b.*[şu o[i]-nun film]-i   Özpetek[i]-i hayal kırıklığına uğrat-tı.

        that he-gen movie-3s.poss Ö.-acc   disappoint-past

      'That movie of him disappointed Özpetek.'

The violations of Conditions B/C in (29) provide clear evidence that the Dem that precedes Poss is not in a separate projection (it doesn't close off the c-command domain of Poss).[11] We take this to be a strong argument for the claim defended here that Turkish TNPs lack DP.

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[10]*Bir* is traditionally claimed to be homophonous between an indefinite article and the numeral 'one'. Even if *bir* were an indefinite article, this wouldn't require adopting a DP analysis for Turkish, given that Slovenian, which clearly has indefinite but not definite articles, behaves like NP languages in all respects, including in cases where indefinite articles are present (Bošković 2008b). Ketrez (2004), however, shows that the "two" *bir*s have identical syntactic distributions and that they are furthermore distributionally identical with other cardinal numbers. Thus, like other numerals, *bir* can precede or follow adjectives. Turkish TNPs in general can be interpreted as specific or non-specific, depending on the context and prosody. The same holds for *bir*/numeral phrases. Thus, while *bir/iki* can either follow or precede *mavi* in (i), phonological prominence on *bir/iki* in either position favours the specific interpretation, while the lack of phonological prominence favours the non-specific interpretation (see also Ketrez 2004, Öztürk 2004; for another parallel, see footnote 16). It thus appears that there is no reason to give *bir* a fundamentally different treatment from other numerals (due to space limitations we cannot discuss *bir* further here).
(i)   a. Ali   mavi *BİR/İKİ* bisiklet al-dı.
         A-nom blue   one/two   bicycle buy-past
         'Ali bought one/two blue bicycle(s).'
       b. Ali *bir/iki* mavi bisiklet al-dı.

To complete the paradigm, we provide examples where Poss precedes Num, Num+Classifier, and Adj, which are all ungrammatical, due to Condition B violations:

(30) a.*[Özpetek^i-in iki (tane) film]-i   o^i-nu   hayal kırıklığına uğrat-tı.
        Ö.-gen   two CLL movie-3s.poss he-acc disappoint-past
       'Two movies of Özpetek's disappointed him.'
     b.*[Özpetek^i-in eski film]-i   o^i-nu hayal kırıklığına uğrat-tı.
        Ö.-gen   old movie-3s.poss he-acc disappoint-past
       'Özpetek's old movie disappointed him.'

We now return to Generalization 1.6, exploring its relevance for TNP-structure. Recall that, in contrast to English (9), Turkish (31) and Mandarin (32) don't have the presupposition 'Z has exactly three sweaters':

(31) Can-ın   üç   bisiklet-i
      John-gen three bicycle-3s.poss
      'John's three bicycles'
(32) Zhangsan de   [san   jian maoxianyi]
      Z   DE$_{POSS}$ three CL   sweater
      'Zhangsan's three sweaters'

Mandarin also allows the order in (33), which implies that Zhangsan has more than three books (see Partee 2006):

(33) san   ben [Zhangsan de]   shu
      three CL   Z   DE$_{POSS}$ book
   'three of Zhangsan's books'

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[11]We leave open the question why (i) is only somewhat degraded.
(i) $^?$[Özpetek^i-in şu   film]-i   o^i-nu   hayal kırıklığına uğrat-tı.
        Ö.-gen   that movie-3s.poss he-acc disappoint-past
Notice that (ii) is fully unacceptable (due to a Condition C violation).
(ii)   *[o^i-nun şu   film]-i   Özpetek^i-i hayal kırıklığına uğrat-tı.
        he-gen that movie-3s.poss Ö.-acc   disappoint-past
       'That movie of his disappointed Özpetek.'

Recall that Poss»Num»N is the only licit order in Turkish. The order can yield different interpretations in different contexts, which can be seen when NPs are placed in clauses. Thus, (34), where the possessive NP is embedded in a sentence with a locative predicate, implies that John has more than three bicycles:

(34) Can-ın   üç   bisiklet-i   garaj-da.
      John-gen three bicycle-3s.poss garage-loc
      'John's three bicycles are in the garage.'

If we take the Mandarin word order to transparently reflect LF, (33) should be taken as indicating that the more-than-# reading requires Poss to be interpreted within the scope of Num. If in Turkish NPs with this reading, Poss should also be interpreted inside Num, there should be a Poss position below Num. We therefore modify (28) by assuming Poss is merged below Num, presumably as an N-complement, and then adjoins to NP.[12]

(35)
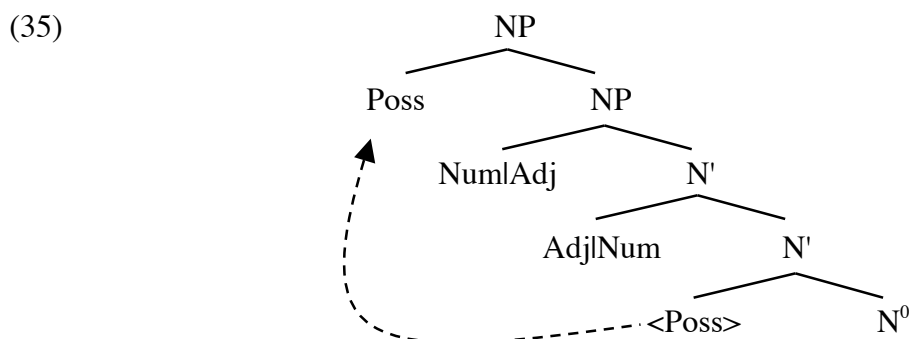
On the 'more-than-#' reading, which in Mandarin requires the Num»Poss order, Poss is therefore interpreted in its reconstructed position.

   Bošković (2007) shows that SC possessors can precede or follow adjectives. The order permutations in (36) have semantic effects. (36)b can only refer to the pants John formerly owned. To refer to an object John now possesses and that used to be pants (it could be shorts now) (36)a must be used. Importantly, Larson and Cho (1999) argue that under the former but not the latter reading, Poss must be interpreted within the scope of A, which is transparently reflected in the SC word order.

(36) a. Jovanove bivše   pantalone
         John's   former pants

---

[12]This movement violates Bošković's (2005, in press b) version of anti-locality, which requires movement to cross at least one full phrase. Larson and Cho (1999), however, argue such examples involve richer structure (a null PP, with Poss starting as a P-complement), in which case (35) can be modified so that the anti-locality problem doesn't arise.

b. bivše Jovanove pantalone

While Turkish only allows the Poss»A order, (37) is ambiguous. Extending the above analysis to Turkish requires Poss to start below A, where it would reconstruct on the reading it shares with (36)b.

(37) Can-ın   eski   pantolon-u
      John-gen former pants-3s.poss
      'John's former pants'

The proposal is then that Poss in Turkish is base-generated low but moves to a higher position. An interesting prediction arises when this proposal is combined with Takahashi's (1996, 2000, 2001) claim that *pro* doesn't move (see these works and Ochi 2005 for evidence to this effect). The prediction is that null possessors inside subject NPs should not induce Condition C violations, unlike overt possessors, since such possessors wouldn't move to the NP-adjoined position (see Kornfilt 1984, Sezer 1991 on *pro* possessors in Turkish, which are agreement-licensed). This prediction is borne out (compare (38) and (29)b; the binding violations from (29)-(30) are all avoided with *pro* possessors).

(38) [şu   *pro*[i] film]-i   Özpetek[i]-i hayal kırıklığına uğrat-tı.
      that   movie-3s.poss Ö.-acc   disappoint-past
      'That movie of his disappointed Özpetek.'

Furthermore, (39) has the implication that I have more than three books (which is not forced with overt possessors like *Pelin-in*). This also follows if *pro*-poss doesn't move, but stays in the scope of Num.[13,14]

(39) [üç   *pro* kitab-ım]-ı   ev-de   bırak-tı-m.

---

[13]The impossibility of stressing *pro* interferes with the adjectival interpretation test.

[14]Another construction that can be captured by the *pro*-doesn't-move analysis is (i), where what appears to be an anaphor does not induce a Condition C effect.

(i)   [kendi[i] film]-i   Özpetek[i]-i hayal kırıklığına uğrat-tı.
       own   movie-3s.poss Ö.-acc   disappoint-past
       'His own movie disappointed Özpetek.'

Given that *kendi* can co-occur with overt possessors (cf. (ii)) and given its interpretation, we analyse it as an emphatic element here. We can then account for the lack of Condition-C effects in (i) by assuming that the subject NP in (i) has a *pro* possessor, with *kendi* right-adjoined to it (see Aygen 2002 and Şener 2008 for such adjunction analyses of emphatic *kendi*). Since *pro* doesn't move, there is no Condition C violation in (i). As expected, an overt pronominal possessor accompanied by *kendi* induces a Condition-C violation (iia). (iib), on the other hand, involves a Condition-B violation.

(ii) a. *[on-un kendi[i] film]-i   Özpetek[i]-i hayal kırıklığına uğrat-tı.
        he-gen own   movie-3s.poss Ö.-acc   disappoint-past
        'His own movie disappointed Özpetek.'
     b. *[Özpetek[i]-in kendi[i] film]-i   o[i]-nu   hayal kırıklığına uğrat-tı.
        Ö.-gen   own movie-3s.poss he-acc   disappoint-past
        'Özpetek's own movie disappointed him.'

14

three   book-1sg.poss-acc home-loc leave-past-1sg

'I left three of my books at home.'

To conclude, we have shown that only the orders listed in (40) are allowed in Turkish and accounted for this by treating Poss and Dem as NP-adjuncts and Num and A as NP-Specs. Overt possessors move to this position, while *pro* possessors stay in a lower position.

(40) a.*Poss»Dem »Num»A»N*   b.*Poss»Dem»A»Num»N*

      c.*Dem»Poss»A»Num»N*   d.*Dem»Poss»Num»A»N*

3.   NP/N'-ellipsis
3.1. Impossible cases

We now turn to TNP-internal ellipsis, referred to below as NP/N'-ellipsis. Notice first that ellipsis inside bare objects with numerals is disallowed.

(41) *Pelin   her   gün [beş elma] ye-r,   Can-sa   [iki   ~~elma~~] ye-r.

       P.-nom every day five apple eat-aor J.-nom-however two   eat-aor

       'Pelin eats five apples every day, while John eats two.'

Ellipsis inside bare objects with adjectives is also disallowed (the NP's number is irrelevant):[15]

(42) a.*Pelin   [eski kitap] sat-tı,   Suzan-sa   [yeni ~~kitap~~] sat-tı.

          P.-nom old book sell-past S.-nom-however new   sell-past

         'Pelin sold old books, while Susan sold new ones.'

      b.*Pelin   [eski araba-lar] sat-tı,   Suzan-sa   [yeni ~~araba~~-ler] sat-tı.

          P.-nom old car-pl   sell-past S.-nom-however new   -pl   sell-past

         'Pelin sold old cars, while Susan sold new ones.'

NP/N'-ellipsis also cannot strand possessors:

(43) *[Pamuk-un kitab-ı-nı]   oku-du-m,

P.-gen   book-3sg.poss-acc read-past-1sg

ama [Oe-nin ~~kitab-ı-nı~~] oku-ma-dı-m.

but   O.-gen   read-neg-past-1sg

'I read Pamuk's book, but I didn't read Oe's.'

The unacceptability of all the examples in (41)-(43) receives a simple unified account under the present proposal that numerals, adjectives, and possessors are all NP-specifiers/adjuncts in Turkish, as in (44), given that only phrases (not segments or bar-level categories) can be elided. We take this to be a strong argument for the current analysis.[16]

(44)   a.   NP   b.   NP   c.   NP

---

[16]It is well-known that, in contrast to accusative objects, bare objects must incorporate into the verb in Turkish. There is a potential alternative analysis of the ellipsis facts that relies on the assumption that Ns with numerals/adjectives must incorporate, which would make ellipsis of Ns that strand V impossible. (This analysis is inapplicable to possessive NPs, which require accusatives as direct objects.) However, a test from Aydemir (2004) shows that Ns with numerals are not V-incorporated, though Ns with adjectives may be analysed as V-incorporated. Consider (i), where deleting N leads to ungrammaticality (ia), whereas ellipsis of the entire nominal complement clause is grammatical (ib). Deleting *Bir*+NP is allowed, with or without V-ellipsis (ii).

(i)   a. Bütün gün kitap oku-du-m, *san-a da ~~kitap~~ oku-ma-n-ı   tavsiye ed-er-im.
       all   day book read-past-1sg you-dat too   read-nom-agr.2sg-acc recommend-aor-1sg
       'I read books all day, I recommend to you to read too.'
     b. Bütün gün kitap oku-du-m, san-a da ~~kitap oku-ma-n-ı~~ tavsiye ed-er-im.

(ii)   Dün   bir kitap oku-du-m,   san-a   da {~~bir kitap~~ oku-ma-n-ı/~~bir kitap oku-ma-n-ı~~} tavsiye ed-er-im
        yesterday one book read-past-1sg you-dat too   read-nom-agr.2sg-acc   recommend-aor-1sg
        'I read a book yesterday, I recommend to you to read (it) too.'   Aydemir (2004)

This can be taken as a test for obligatory incorporation: given that the bare NP in (i) must incorporate into the verb it cannot be elided without it. It must then be the case that the *bir* NP doesn't (have to) incorporate.

       This test indicates numeral NPs don't (have to) incorporate:

(iii)   Dün   iki kitap oku-du-m, san-a da   ~~iki kitap~~ oku-ma-n-ı   tavsiye ed-er-im.
       yesterday two book read-past-1sg you-dat also   read-noml-2s.poss.acc recommend-aor-1sg
       'I read two books yesterday, I recommend you read them too.'

(iv)   Dün iki kitap oku-du-m, san-a da ~~iki kitap oku-ma-n-ı~~ tavsiye ed-er-im.

Bare NPs with adjectives behave differently:

(v)   a. Ben   soğuk çay iç-eceğ-im, [??]san-a   da   ~~soğuk çay~~ iç-me-n-i   tavsiye ed-er-im.
       I -nom cold tea drink-fut-1sg you-dat also   drink-noml-2s.poss.acc recommend-aor-1sg
       'I will drink cold tea, I recommend you drink it too.'
     b. Ben soğuk çay iç-eceğ-im, san-a da ~~soğuk çay iç-me-n-i~~ tavsiye ed-er-im.

However, the grammaticality status of (va) is not the same as that of (42). We interpret this as indicating that an additional factor is at play with (42), which we have discussed above.

      Also, ellipsis is impossible in the subject NP in (via), where incorporation is clearly not an issue. The incorporation analysis therefore cannot be extended to this case. (Partial subject ellipsis is also impossible with numerals and possessives.)

(vi)   a.*[Yaşlı bakıcı]   çocuk-ları azarla-dı, ama [genç ~~bakıcı~~] onlar-ı   teselli et-ti.
       old   caretaker-nom kid-pl-acc scold-past but young   they-acc console-past
      'The old caretaker scolded the students, but the young one tried to console them.'
     b.*Bu dönem [üç   öğrenci] sınıfta kal-dı, ama geçen dönem   [beş ~~öğrenci~~] sınıfta kal-mış-tı.
      this semester three student flunk-past   but last   semester five   flunk-past.perfect
      'This semester three students flunked, whereas in the past semester five students had flunked.'
     c.*[Pelin-in anne-si]   dün   gel-di,   [Mete-nin ~~anne-si~~] bugün gel-di.
      P.-gen mother-3s.poss yesterday come-past M.-gen   today come-past
      'Pelin's mother came yesterday, Mete's came today.'

```
       Num        N'      Adj       N'      Poss        NP
```

We now turn to classifier constructions. Count nouns quantified by a numeral don't require a *Classifier-like* element (*CLL*). However, CLL can be present, bringing in an individuating function (Öztürk 2004).

(45)   a. üç   kitap   b. üç   *tane*   kitap
         three book   three CLL   book
                               'three (items of) books'

Importantly, NP/N'-ellipsis is possible if Num is accompanied by CLL, in contrast to (41), where there is no CLL and ellipsis is disallowed.[17]

(46)   Pelin   her   gün [üç   tane elma] ye-r,   Can-sa   [iki   tane   ~~elma~~] ye-r.
       P.-nom every day three CLL apple eat-aor J.-nom-however two CLL   eat-aor
       'Pelin eats three apples every day, whereas John eats two.'

Bošković (2012a, in press a,b) and Despić (2011) argue that non-adjectival numerals in SC have a distinct projection above NP, namely QP. (SC also has adjectival numerals which don't project additional structure.) Assuming that Turkish numerals accompanied by a CLL also project a larger structure than those without a CLL provides us with a straightforward account for (46). Consider (47).

(47)
```
                    CLLP
                   /    \
               Num       CLL'
               iki      /    \
                    CLL⁰      NP
                    tane     /  \
                           t_Num  elma
```

Recall numerals are base-generated in SpecNP (28). We suggest that Num moves to SpecCLLP in the presence of overt classifiers. (46) thus involves simple NP-ellipsis.[18],[19]

---

[17]Such examples require a linguistic antecedent, which confirms that we are indeed dealing here with ellipsis (with occasional exceptions, cf. e.g., Elbourne 2005): true ellipsis requires a linguistic antecedent, cf. Hankamer and Sag (1976). Thus, (i) cannot be used in this situation: *Two people are shopping for groceries. Pointing to apples, A says*:
(i)   #Pelin   her   gün   üç   tane ye-r.
        P.-nom every day three CLL eat-aor
[18]Note that bare Num+CLL NPs don't incorporate (see footnote 16).
(i)   Dün   üç   **tane** kitap oku-du-m,   san-a   da ~~üç **tane** kitap~~ oku-ma-n-ı   tavsiye ed-er-im.
       yesterday three **CLL** book read-past-1sg you-dat also   read-noml-2s.poss.acc recommend-aor-1sg

Recall that possessors cannot be stranded under NP/N'-ellipsis. Under a DP analysis of Turkish, possessors are analysed as occupying SpecDP, which naturally predicts that Poss-stranding ellipsis should be possible. The ungrammaticality of (48)-(49) therefore shows that the DP approach to Turkish TNPs fails: Turkish differs sharply from English regarding the possibility of Poss-stranding ellipsis.

(48) *[Auster-ın kitab-ı-nı]   oku-du-m

    A.-gen   book-3s.poss-acc read-past-1sg

       ama [Pamuk-un ~~kitab ı nı~~]   oku-ma-dı-m.

       but   P.-gen   read-neg-past-1sg

    'I read Auster's book, but I didn't read Pamuk's.'

(49) *[Auster-ın iki   kitab-ı-nı]   oku-du-m,

    A.-gen   two book-3s.poss-acc read-past-1sg

       ama [Pamuk-un ~~iki   kitab ı nı~~] oku-ma-dı-m.

       but   P.-gen   read-neg-past-1sg

    'I read two books of Auster's, but I didn't read two books of Pamuk's.'

As discussed above, in contrast to the DP analysis, the impossibility of possessor-stranding ellipsis in Turkish, and the Turkish/English contrast in this respect, is straightforwardly accounted for under the current NP analysis of Turkish, where Turkish possessors are NP-adjoined hence cannot be stranded under NP-ellipsis. Notice also that the ill-formedness of (49) is absolute in that stranding Num doesn't change the judgment (see (50)). The same holds for demonstratives (51).[20]

(50) *[Auster-ın iki   kitab-ı-nı]   oku-du-m,

    A.-gen   two book-3s.poss-acc read-past-1sg

      ama [Pamuk-un üç   ~~kitab ı nı~~] oku-du-m.

      but   P.-gen   three   read-past-1sg

(51) a.*[Sartre-ın şu   kitabı-nı] oku-du-k   ama [Beckett'in ~~şu   kitabı nı~~] oku-ma-dı-k.

---

[19]We assume that Num is in SpecCLLP and *tane* in CLL°. Another possibility is that Num, which, being non-branching, is an ambiguous XP/X⁰ element, is head-adjoined to *tane* (hence the ellipsis here wouldn't conform to Saito and Murasugi's 1990 Spec-Head agreement requirement, but this requirement anyway has exceptions, see Bošković in press a). CLLP is then head-initial, which is not implausible given that there are other cases of mixed-headedness languages (the nominal domain is a separate domain that doesn't necessarily have to show the exact same properties as the clausal domain in terms of headedness). There are, however, alternatives where CLLP can be head-final. One alternative is the following: The head of CLLP is null and *tane* is in SpecCLLP. Num can be in the outer SpecCLLP, or adjoined to *tane* in SpecCLLP. We will compare these options below.

[20](51) (and the same holds for other unacceptable possessor-stranding examples) remain unacceptable if Acc is not elided (see below for case and demonstratives).

S.-gen   that book-acc read-past-1pl but   B.-gen   read-neg-past-1pl

'We read that book of Sartre's but didn't read that book/one of Beckett's.'

b.*[Sartre-ın şu kitabı-nı] oku-du-k ama [Beckett'in şu kitab ı nı] oku-ma-dı-k.

c.*[Şu Sartre-ın kitabı-nı] oku-du-k ama [şu Beckett'in kitab ı nı] oku-ma-dı-k.

All of this is expected under the current analysis, where (48)-(51) in fact receive a uniform account: NP-ellipsis fails to elide elements that "belong" to the NP.

Significantly, Poss-stranding ellipsis is not always disallowed; it is possible in the presence of CLL.[21]

(52) ?Pelin   [Chomsky-nin üç   tane   kitab-ı-nı]   oku-muş,

  P.-nom   C.-gen   three CLL   book-3s.poss-acc   read-evidential.past

  ama [Foucault-nun   iki   tane kitab ı nı] oku-muş.

  but   F.-gen   two   CLL   read-evidential.past

  'Pelin read three books of Chomsky's, but s/he read 2 books of Foucault's.'

(53)   cf. *…ama Foucault-nun iki oku-muş.

The contrast between (50)/(53) and (52) is accounted for under the present proposal that CLL projects its own phrase, assuming Poss is CLLP-adjoined. (Poss must precede Num here, which, as discussed above, can be accounted for if Poss is adjoined to the phrase whose Spec Num occupies.)

(54)

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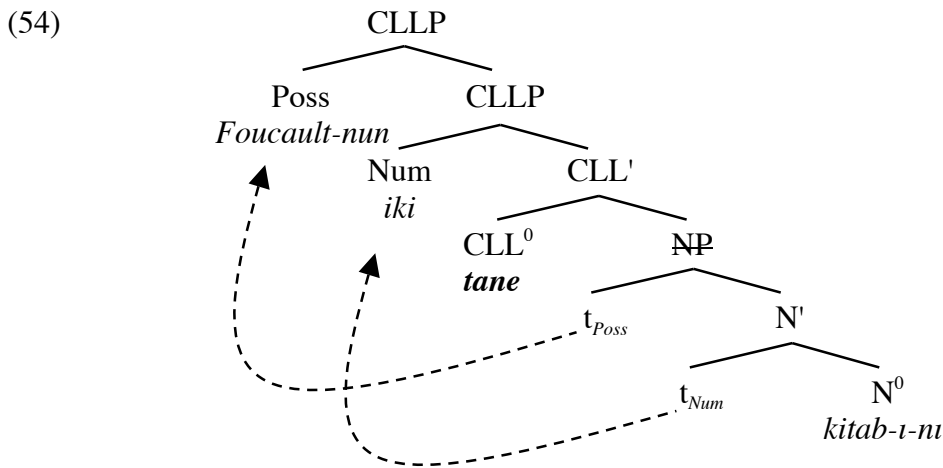
[21]The reduced NP in such examples requires a linguistic antecedent, which shows we are dealing with ellipsis. Thus, (i) cannot be used in this situation: *A and B are in a bookstore. Pointing to Foucault's books, A says*:

(i)   #Pelin Foucault-nun iki tane   oku-muş.

    P-nom F-gen   two CLL read-evidential.past

We take the contrast between (48)/(49) and (52) to provide a strong argument for the current analysis. The analysis also accounts for (55), where Num+CL is elided. ((55) would have to involve segment deletion, which is disallowed.)

(55) *Pelin   [Chomsky-nin üç   tane   kitab-ı-nı]   oku-muş,
     P.-nom C.-gen   three CLL   book-3s.poss-acc read-evidential.past
     ama [Foucault-nun ~~üç tane kitab ı nı~~] oku-ma-mış.
     but   F.-gen   read-neg-evidential.past

Regarding the binding properties of possessors, Condition-B/C effects are predicted to show up in this context too since CLLPs don't change Poss's c-command properties:

(56) a.*[Özpetek^i-in iki   tane   film]-i   o^i-nu   hayal kırıklığına uğrat-tı.
         Ö.-gen   two CLL movie-3s.poss he-acc disappoint-past
       'Özpetek's two movies disappointed him.'
     b.*[o^i-nun iki   tane   film]-i   Özpetek^i-i hayal kırıklığına uğrat-tı.
         he-gen two CLL movie-3s.poss Ö.-acc   disappoint-past
       'His two movies disappointed Özpetek.'

Recall that adjective-stranding ellipsis is impossible, which is not surprising under the current analysis: since the adjective is in SpecNP, (57) cannot involve full phrasal ellipsis.

(57) *Pelin   [eski (iki) kitap] sat-mış   ama Mete   [yeni ~~(iki) kitap~~] sat-mış.
      P.-nom old   two book sell-evidential.past but M.-nom new   sell-evidential.past

Significantly, adjectives that precede CLL survive ellipsis, which can be easily accounted for if the adjective is in CLLP here (whether it moves or is base-generated there is irrelevant).[22]

(58) Pelin   [kalın üç   tane kitap] oku-du, Pınar-sa   [ince üç   tane ~~kitap~~] oku-du.
     P.-nom thick three CLL book read-past P.-nom-however thin three CLL   read-past
     'Pelin read three long books, but Pınar read three short ones.'

---

[22]This kind of reduced NPs also require a linguistic antecedent, which indicates we are dealing with ellipsis here. Thus, (i) cannot be used in this situation: *We are in a bookstore. Pointing to the books on the shelves, I say*:
(i)   *Pınar ince üç   tane oku-du.
          P-nom thin three CLL read-past

Furthermore, (59) is unacceptable. This is also expected: since the adjective is part of CLLP, other elements in CLLP cannot be elided without the adjective.

(59) *Pelin [kalın üç tane kitap] oku-du, Pınar-sa [ince ~~üç tane kitap~~] oku-du.
    P.-nom thick three CLL book read-past P.-nom-however thin read-past

Adjectives in this context still must follow Poss, which indicates that they are located in SpecCLLP. They can either follow or precede Num, which is not surprising, given that both Num and Adj are Specs. Interestingly, adjectives cannot intervene between Num and CLL, which may help us tease apart the options from footnote 19.

(60) a. Pelin-in eski üç tane masa-sı
      P.-gen old three CLL desk-3s.poss
  b.*Eski Pelin-in üç tane masa-sı
  c. Pelin-in üç tane eski masa-sı
  d.*Pelin-in üç eski tane masa-sı

If *tane* is CLL^0, we need to assume that in (60)c we are dealing with a PF re-ordering (unless *eski* is NP-adjoined, see below). If *tane* and Num are in different CLLP-Specs, we need to assume that there is a PF-adjacency requirement between the two, but PF re-ordering is not required for (60)c. Finally, if Num is adjoined to the CLLP-Spec where *tane* is located, no additional assumptions are required: *eski* can then only precede or follow the Num+*tane* complex, depending on whether it is located in the higher or lower CLLP-Spec.

    The above discussion leads us to assume that *eski* in (60)c is located in CLLP, not NP. Independent evidence for this is provided by (61): to survive NP-ellipsis here, *ince* must be located in CLLP. Is SpecNP still an option for adjectives that follow CLL? This depends on what is elided in (62): deleting *kalın+kitap* under NP-ellipsis would require this option to also be available. However, it's not easy to determine what is elided here, given that *kitap*-deletion doesn't prevent the interpretation where Pınar read two long books (which is the only interpretation under *kalın+kitap* deletion, and is the most natural interpretation here).

(61) Pelin [üç tane kalın kitap] oku-du,
    P.-nom three CLL thick book read-past

Pınar-sa　　　　[üç　　tane ince ~~kitap~~] oku-du.

P-nom-however　three CLL thin　　　read-past

'Pelin read three long books, while Pınar read three short ones.'

(62)　Pelin [üç tane kalın kitap] oku-du, Pınar-sa [iki tane {~~kalın kitap~~/kitap}] oku-du.

Returning to possessors, there is one context where possessor-stranding ellipsis is possible even without CLLP: this is when possessives are used as predicates:

(63)　a. Senin kuzeninin bu kazağı çok sevdiğini biliyorum.

　　　　I know your cousin likes this sweater a lot.

　　　　　O yüzden,　　　bu　kazak　　artık [kuzen-i-nin　　　~~kazağ-ı~~].

　　　　　because-of-that, this sweater-nom now　cousin-3s.poss-gen　sweater-3s.poss

　　　　'Because of that, the sweater is now your cousin's.'

　　b. Bu　benim kazağım.

　　　　this is my sweater.

　　　　　Bu　da　[sen-in/Pelin-in/kuzen-in-in　　　　~~kazağ-ı~~]

　　　　　this too　you-gen/Pelin-gen/cousin-3s.poss-gen　sweater-3s.poss

　　　　'And this is yours/Pelin's/your cousin's sweater.'

Following Bowers (1993) and Koster (1994), we assume that the relevant NPs here are dominated by a predicate projection, PredP, with the possessor generated inside the NP and then moved up to SpecPredP (or adjoined to PredP). This provides a simple account for Poss-stranding under NP ellipsis in this case, as in (64):

(64)

```
                      PredP
              _____|_____
            Poss          PredP/Pred'
                        _____|_____
                       NP           Pred⁰
                    ___|___
                 t_Poss    N⁰
```

$$\text{(64)}\quad\begin{array}{c}\text{PredP}\\ \diagup\quad\diagdown\\ \text{Poss}\quad\text{PredP/Pred'}\\ \diagup\quad\diagdown\\ \text{NP}\quad\text{Pred}^0\\ \diagup\quad\diagdown\\ t_{Poss}\quad N^0\end{array}$$
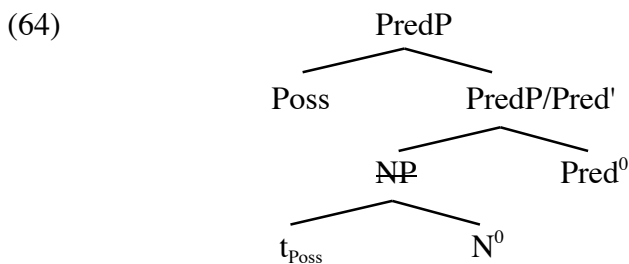
However, a number of authors have argued that at least some cases of "stranded" possessors in predicate positions involve an intransitive use of possessors, without any kind of null elements (Partee and Borschev 2001, Tremblay 1989, Zribi-Hertz 1997; note that, as discussed in section 3.2.1, Turkish

stranded possessors allow only the possession reading,[23] which is the one argued to involve no null element and, according to Tremblay, is confined to predicate positions; it is, e.g., disallowed with objects). Under this approach, (63) doesn't involve ellipsis, hence there is no need to posit PredP and Poss-movement here.

In fact, such constructions don't require a linguistic antecedent, which suggests we indeed may not be dealing with ellipsis here (see Zribi-Hertz 1997).

(65) a.*A and B are planning to buy desks for several friends. In a store, A points to a desk and says*:

Bu   (masa) Pelin-in ol-malı.

this (desk) P.-gen be-deontic.necessity

'This desk should be Pelin's.'

b.*A linguist is doing an experiment. She turns to the colleague and says (turning the informant over to his colleague)*:

Şu andan itibaren (o)   sen-in.

from-now-on   he-nom you-gen

'From now on, he's yours.'

Finally, we take a brief look at NPs containing demonstratives. Consider (66)a, which we argue below does not involve ellipsis, i.e. it should not be analysed as in (66)c.

(66) a. [Şu [iki kitab]]-ı oku-du-m   ama bu-nu   oku-ma-dı-m.

that two book-acc read-past-1sg but   this-acc read-neg-past-1sg

Intended Reading: 'I read these two books but didn't read those two books.'

b.   … bu-nlar-ı...

'this-pl-acc'

'these'

c. Şu [iki kitab]]-ı oku-du-m   ama [bu ~~iki kitap~~]-nu   oku-ma-dı-m.

that two book-acc read-past-1sg but   this two book-acc   read-neg-past-1sg

Intended Reading: 'I read these two books but didn't read those two books.'

Two forms, *bu-nu* and *bu-nlar-ı,* can be used in the second conjunct. (66)a presupposes that the entity Dem picks out is a unique/single entity, which indicates that the second conjunct cannot involve

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[23]On the possession reading *this book is yours* can be paraphrased as *this book belongs to you* and on the relational reading as *this book is your book* (see section 3.2.1).

Num+N ellipsis (as in (66)c) because it simply is not semantically identical to the antecedent NP. (66)b seems like a more likely candidate for an ellipsis analysis but we contend that it shouldn't be analysed as ellipsis either. In (66)b, Dem bears plural marking; the elided constituent is thus potentially identical to the antecedent. However, (66)b may mean 'these ten books' in a relevant context; it doesn't have to be interpreted as 'these two books' (although this option is not excluded since *two* is plural).

(67) shows it is impossible to strand a numeral in the second conjunct NP:[24]

(67) *[Şu [iki kitab]]-ı oku-du-m   ama [bu iki ~~kitab~~]-yi oku-ma-dı-m
      that two book-acc read-past-1sg but   this two   -acc read-neg-past-1sg

This is expected under the current analysis: being located in SpecNP, Num cannot survive NP ellipsis.

Most importantly, stranding Dem+Num is possible with classifiers. As (68) shows, the presence of CLL makes such ellipsis, which was disallowed without CLL, possible.

(68) [Şu [iki (tane) kitab]]-ı oku-du-m   ama [bu iki tane ~~kitap~~]-yi oku-ma-dı-m
      that two (CLL) book-acc read-past-1sg but   this two CLL   -acc read-neg-past-1sg
      'I read those two books but didn't read these two.'

This is exactly what is expected: the numeral here moves to SpecCLLP, *kitap* is then a full NP, hence can be deleted alone under NP-ellipsis.[25]

Summarizing, simple Poss/Dem/Adj/Num-stranding ellipsis is disallowed in Turkish. The NP analysis of Turkish provides a uniform account for this set of constraints: since these elements are part of NP, it is not possible to elide NP while stranding them. TNP-internal ellipsis is possible in classifier constructions, where CLL^0 takes NP as its complement. NP can then be elided, with the material located in CLLP surviving ellipsis. We have considered two possibilities for stranded possessors in predicate positions. Such examples either involve PredP, with the possessor located in PredP hence outside of NP, or they do not involve ellipsis at all, i.e. they involve an intransitive use of possessors.

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[24]We assume that (67) involves ellipsis (see also (51)), unlike only-demonstrative examples like (66). Acc is left behind in the elliptical TNP in (67) since demonstrative TNPs generally require it (i); (67), however, remains unacceptable if Acc is elided.
(i)   a.[bu iki kitap]*(-ı) oku-ma-dı-m.
         this two book-acc read-neg-past-1sg
     b.Bu-*(nu) sev-er-im
        this-acc like-aor-1sg
        'I like this.'
[25]We assume that, like Poss, Dem is CLLP-adjoined here (Dem can either precede or follow Poss, but it must precede Num and Adj). Whether it moves to this position or not is immaterial.

Finally, only-demonstrative TNPs do not involve ellipsis; however, cases where demonstratives co-occur with other material are not amenable to such an analysis. While the NP analysis provides a rather straightforward, uniform account of all the facts discussed in this section, it is very difficult to see how these facts can be explained (especially in a uniform manner) under the DP analysis.

3.2 No ellipsis

In this section we discuss two cases which appear to involve ellipsis, arguing they shouldn't be analysed in this way.

3.2.1   Pronominal *ki*

We have seen Turkish possessors cannot be stranded under NP/N'-ellipsis:

(69) *[Pamuk-un kitab-ı-nı]   oku-du-m,

     P.-gen   book-3sg.poss-acc read-past-1sg

              ama [Oe-nin ~~kitab-ı-nı~~] oku-ma-dı-m.

              but   O.-gen   read-neg-past-1sg

   'I read Pamuk's book, but didn't read Oe's.'

However, (69) becomes acceptable in the presence of *ki,* which attaches to Poss:

(70) [Pamuk-un kitab-ı-nı]   oku-du-m,

     P.-gen   book-3sg.poss-acc read-past-1sg

              ama [Oe-nin-*ki*-ni] oku-ma-dı-m.

              but   O.-gen-ki-acc read-neg-past-1sg

   'I read Pamuk's book, but didn't read the one by Oe.'

This *ki* has been identified as a pronominal element in the literature, referred to as *pronominal ki* (see e.g. Lewis 1967, Göksel and Kerslake 2005).[26] Adopting this analysis, we argue that *ki*-NPs don't involve ellipsis, which is what Hankamer (2004) also argues for. Evidence for this analysis comes from the observation that *ki* can only attach to a possessor if the NP is reduced; it cannot be used when the NP is fully represented. This means *ki* stands for the ellipsis site.

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[26]*Ki* also attaches to locative/temporal expressions, turning them into nominal modifiers:
(i)   dün-*kü*   hava
      yesterday-ki weather
      'yesterday's weather'

(71) *[Pamuk-un kitab-ı-nı]   oku-du-m,

P.-gen   book-3sg.poss-acc read-past-1sg

ama [Oe-nin-*ki* kitab-ı]-nı   oku-ma-dı-m.

but   O.-gen-ki book-3s.poss-acc read-neg-past-1sg

The claim that *ki* is a (pro)nominal element receives support from the observation that *ki*-NPs must receive case and can bear plural morphology. Consider also the following:

(72) [Auster-ın iki kitab-ı]-nı   oku-du-m

A.-gen   two book-3s.poss-acc read-past-1sg

ama [Pamuk-un-*ki*]-ni oku-ma-dı-m.

but   P.-gen-ki-acc   read-neg-past-1s

'I read two books by Auster, but didn't read the one by Pamuk.'

(73) [Auster-ın iki kitab-ı]-nı   oku-du-m

A.-gen   two book-3s.poss-acc read-past-1sg

ama [Pamuk-un-*ki*-ler]-i oku-ma-dı-m.

but   P.-gen-ki-pl-acc   read-neg-past-1sg

'I read two books by Auster, but didn't read the ones by Pamuk.'

In (72), the *ki*-object cannot be interpreted like the first object, i.e. as 'two books'. This is expected under the no-ellipsis analysis. In (73), the *ki*-object bears plural marking. Importantly, it is not necessarily interpreted as denoting 'two books'; there can be any number of books as long as it's more than one.

Further support for the no-ellipsis analysis is provided by NPs containing other nominal elements. The *ki*-NP in (74) cannot be interpreted as '*that* book by Beckett'; it is simply interpreted as Beckett's book.[27]

(74) [Sartre-ın şu kitab-ı-nı]   oku-du-k   ama [Beckett-in-*ki*]-ni oku-ma-dı-k.

S.-gen   that book-3s.poss-acc read-past-1pl but   B.-gen-ki-acc   read-neg-past-1pl

---

[27]*Ki* can only be supported by possessors (along with temporal/locative expressions, though these could involve a different *ki*), not by a demonstrative (or Adj/Num/CLL, even if Poss precedes them). We assume this is a morphological restriction.
(i)*[Sartre-ın şu kitabı-nı] oku-du-k   ama [Beckett-in {şu-nu-*ki*/şu-*ki*-ni}]   oku-ma-dı-k.
    S.-gen   that book-acc read-pst-1pl but   B.-gen   that-acc-ki/that-ki-acc read-neg-past-1pl
  'We read that book by Sartre but we didn't read that one by Beckett.'
(ii) [Şu Sartre-ın kitabı-nı] oku-du-k ama [şu Beckett-in-*ki*-ni] oku-ma-dı-k.

'We read that book by Sartre, but didn't read the one by Beckett.'

Finally, *ki*-NPs don't require a linguistic antecedent, which confirms they don't involve ellipsis.

(75) *I know my friends are sending me presents for my birthday. I come home and find a number of presents on the table. Having opened one of them, I say*:

Bu (hediye) Pelin-in-*ki* ol-malı.

this (present) P.-gen-ki   be-epistemic.modal

'This (present) must be Pelin's.'

Regarding possible crosslinguistic counterparts of *ki*, *ki* seems similar to the Japanese pronoun *sore*, which can also be modified by possessives (Takahashi 2008).

(76) [Taroo-no   taido]]-wa   yoi   ga,   [Hanako-no   sore]–wa yoku nai

 -GEN attitude-TOP good though   -GEN it-TOP   good not

'Though Taroo's attitude is good, Hanako's isn't.'

Another parallel might be provided by English *mine*. Like *ki*-NPs, *mine* occurs only with ellipsis (*this is mine (*book)*). However, *ki*-examples allow only the relational, not the possessor reading (see Zribi-Hertz 1997 on these readings). Thus, *ki* can occur instead of the gap in (63)b (on the relational reading), but not (63)a, which is unambiguously possessive (see Partee and Borschev 2001). *Ki* is also inappropriate in (65) and (77), which are also possessive.

(77) [Pelin-in bu kitab]-ı   aslında Mete-nin-(*ki)

   P.-gen   this book-1s.poss in-fact   M-gen(-ki)

'This book of Pelin actually belongs to Mete.'

Ki is similar here to English *one* (while *mine* is ambiguous, *my one* is only relational, see Allen 2008).

(78)   a. Çantalarımız masada; benim*(-ki-ni) verir misin?

    Our bags are on the table; Can you pass me my one/mine?

  b. Borçları bittikten sonra ev benim(*-ki) olacak.

    *After I pay off the mortgage, the house will be mine/*my one.*

Interestingly, *ki* is obligatory in the unambiguously relational (75), which suggests non-*ki* stranded possessors may be unambiguously possessive. Note also that *ki* is impossible in (79), which is possessive, but obligatory in (80).

(79) Bu kitap kim-in?   Ben-im(*-ki)
      this book who-gen   I-gen-ki
      'Whose book is this?'   mine

(80) Bu kitap-lar-ın hangi-si   İngilizce?   Ben-im*(-ki)
      this book-pl-gen which-3s.poss English   I-gen
      'Which of these books is in English?'

At any rate, what is most important for our purposes is that *ki*-NPs don't involve ellipsis. We discuss another similar case in the next section.

3.2.2   Stranded adjectives

We have seen that adjectives cannot be stranded under ellipsis in examples like (42). In many languages, adjectives can be used in what seem to be ellipsis contexts without a noun, but in such cases adjectives are essentially used as nouns, hence such cases shouldn't be treated as involving ellipsis. Such cases often require overt manifestation of this special use of adjectives, such as special morphological marking on the adjective or use of an article, as in English 'the rich'. Bošković (2005) observes that NP languages seem much more productive in this respect. (For an explanation of this fact, see Bošković 2013, who establishes a semantic condition—i.e., a type-shifting condition—on the nominalization of adjectives which is easier to satisfy in NP languages, due to a difference in the semantic type of TNPs in NP and DP languages). Turkish patterns with other NP-languages in that such usage of adjectives is quite productive.[28] However, as in other languages, it generally requires special morphological marking (see Bošković 2013 on this morphological requirement). Thus, such adjectives in object position must be accusative-case-marked, as (81), which contrasts with (42), shows.

(81) a. Pelin   eski kitab-ı   sat-tı,   Suzan-sa   yeni-*yi* sat-tı.
        P.-nom old book-acc sell-past S.-nom-however new-acc sell-past

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[28]See Kornfilt (1997), Göksel and Kerslake (2005), who note that many adjectives in Turkish can be used as nouns. Turkish adjectives can also quite generally bear typical nominal morphology.

'Pelin sold the old book while Susan sold the new one.'

  b. Pelin   eski araba-lar-ı sat-tı,   Suzan-sa   yeni-*ler-i*   sat-tı.

    P.-nom old   car-pl-acc sell-past S.-nom-however new-pl-acc sell-past

    'Pelin sold the old cars while Susan sold the new ones.'

Our claim is then that the reduced NPs above are simply nominalized adjectives; they don't involve ellipsis. That this is indeed the case is confirmed by the fact that such reduced NPs don't require a linguistic antecedent. Thus, (82) can be used in the following context: *John and Mary are planning to buy a table. They go into a shop, where there are a number of tables of different shapes and colours, one old, others new. Pointing to one of them John says*: (82) ((83) can be used in a similar context involving car-buying.)[29]

(82) Eski-yi/Yuvarlağ-ı/Yeşil-i   isti-yor-um.

      old-acc/round-acc/green-acc want-pres-1sg

      'I want the old/round/green one.'

(83) Hızlı-yı isti-yor-um.

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[29]Consider also adjectives "stranded" in subject position. Note that nominative case has no morphological exponence in Turkish. Some adjectives in subject position require plural marking, some are only slightly degraded without it, and some are fully acceptable without it. (Plural should be taken as present or absent in both conjuncts in each coordination. Note that the partitivity marker *–(s)I* improves some degraded cases (ii), which confirms the relevance of overt nominal morphology.) A linguistic antecedent is not necessary.

(i)   Yaşlı bakıcı-(lar)   çocuk-lar-ı azarla-dı, ama genç-*(ler)   onlar-ı   teselli et-ti.
        old   caretaker-nom-pl kid-pl-acc scold-past but   young-nom-pl   they-acc console-past
        'The old caretaker(s) scolded the students, but the young one(s) tried to console them.'

(ii)   Yeni araba-(lar)   çok işe yara-dı ama eski-?*(ler/si)   epeyce sorun çıkar-dı.
        new car-nom-pl   very useful-past but old-nom-pl-partitive quite   trouble cause-past
        'The new car(s) was/were very useful but the old one(s) was/were very troublesome.'

(iii)   Hızlı araba-(lar) biz-i   etkile-di,   ama yavaş-?(lar)   hayal kırıklığına uğrat-tı.
        fast car-pl-nom we-acc impress-past but   slow-pl-nom disappoint-past
        'The fast car(s) impressed us, but the slow one(s) disappointed us.'

(iv)   Güçlü insan-(lar)   biz-i   etkile-r,   ama zayıf-(lar)   hayal kırıklığına uğrat-ır.
        strong person-pl-nom we-acc impress-aor but weak-pl-nom disappoint-aor
        'Strong people impress us, weak ones disappoint us.'

(v)   Eski-*(ler) herşey-i   bil-dik-leri-ni   düşün-ür-ler.
        old-nom-pl everything-acc know-noml-3pl.poss-acc think-aor-3pl
        'The elderly think they know everything.'

(vi)   Zengin(-ler) Bush-u   sev-er.
        rich   (-pl) Bush-acc like-aor
        'The rich like Bush.'

(viii) *Mete is lying on the ground, after being hit by a car. There is a green and a red car parked in the middle of the street. Pointing to the green car I tell the policeman*:
        Yeşil vur-du   o-na
        green hit-past he-dat
        'The green one hit him.'

fast-acc want-pres-1sg

Although Turkish is much more productive than, e.g., English, in this respect. Some adjectives in Turkish resist nominal usage even under the morphological conditions noted above.

(84) *Senato   gerçek soykırım iddiaları-nı tartış-tı,   ama sözde-*ler-i* tartış-ma-dı.
      Senate-nom true   genocide claims-acc discuss-past but   alleged-acc discuss-neg-past
      Lit. 'The senate discussed the true claims of genocide, but it didn't discuss the alleged ones.'
(85) *Pelin sıradan tablo-lar-ı   sev-me-z   ama muhteşem-*ler-i*   sev-er.
      P-nom ordinary painting-pl-acc like-neg-aor but magnificent-pl-acc like-aor
      Lit. 'Pelin doesn't like ordinary paintings, but she likes magnificent ones.'

Given such cases and examples like (42), which are quite generally unavailable, we assume that the cases of stand-alone adjectives noted above involve adjectives used as nouns, as confirmed by the associated nominal morphology and the fact that such adjectives can occur in no-ellipsis contexts.

To summarize, we have argued that NP/N'-ellipsis in Turkish is only licensed by CLL^0 and (possibly) $Pred^0$; there is no ellipsis licensed by D since there is no D. This provides a straightforward account for why simple possessor-stranding ellipsis is disallowed in Turkish, unlike in English, and a strong argument against a potential DP analysis of Turkish. We have also argued that several cases that appear to involve ellipsis (in particular, only-demonstrative TNPs, *ki*-NPs, nominalized adjectives, and possibly predicate possessives) do not actually involve ellipsis.

4. Conclusion

We have argued for a no-DP analysis of Turkish TNP. We have provided an account of word order and interpretation of elements within the Turkish TNP where Poss and Dem are NP-adjoined and Num and Adj are NP Specs. Overt possessors move to this position, while *pro* possessors stay in a lower position, which provides evidence for Takahashi's (2000, 2001) claim that *pro* does not undergo movement. We have shown that Turkish disallows Poss/Dem/Adj/Num stranding under ellipsis, which follows under the NP analysis, given that these elements are "part" of NP, hence cannot be stranded under NP ellipsis. We have argued that a functional projection is present above NP in classifier and possibly predicate constructions. Such cases allow TNP-internal ellipsis, with elements located within the functional projection(s) in question (and outside of NP) surviving ellipsis.

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