CASE AS AN UNINTERPRETABLE FEATURE

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by

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Abstract

Case as an uninterpretable feature

The aim of this dissertation is to discuss the syntactic properties of nominals in Turkish, their Case properties and the implications of a theory of grammar in which the dislocation of arguments is not motivated by the Extended Projection Principle (EPP), but by structural Case checking. It is proposed that Turkish referential nominals possess a Determiner Phrase (DP) layer where D° assigns referentiality to the nominal. DP in turn is argued to select a Number Phrase (NumP)/Classifer Phrase (ClP) both subcategorizing for an NP. Non-referential nominals are argued to be bare NPs without the functional categories that referential nominals bear, which accounts for the fact that they behave in a different manner than DPs. It is argued that DPs undergo dislocation from their base-generated positions to Spec positions of higher functional heads with which they form a φ-*Agree* relation, whereas NPs remain in their merge positions. Moreover, NPs and DPs are also argued to behave differently in their Case properties. NPs bear weak Case feature and they undergo *adhesion* to the verb to be licensed; whereas DPs bear strong Case feature. It is argued that the analysis where dislocation is motivated by the EPP feature of the functional heads faces several economy problems. This study claims that it is the strong Case feature of nominals which forces them to undergo dislocation.

Kısa Özet

Yorumlanmaz bir özellik olarak Durum

Bu çalışmanın amacı Türkçe ad öbeklerinin sözdizimsel özelliklerini, Durum özelliklerini ve üye kaydırmanın Genişletilmiş Yansıtma İlkesi (GYİ) yüzünden değil, yapısal Durum özelliklerinden kaynaklandığı bir dilbilgisi kuramını tartışmaktır. Çalışmada Türkçe'deki gönderimli adların Tanımlayıcı baş tarafından ada gönderim verdiği Tanımlayıcı Öbeği (TÖ) yapısına sahip oldukları iddia edilmektedir. TÖ'nün Sayı Öbeği/Sınıflayıcı Öbeği seçtiği ve bunların da Ad Öbeği (AÖ) seçtiği kaydedilmektedir. Gönderimsiz adların ise yalın Ad Öbeği yapısına sahip oldukları ileri sürülmekte ve bunun da AÖ ve TÖ yapıları arasında görülen sözdizimsel farkları açıkladığı öne sürülmektedir. TÖ'nün üretildiği konumdan yukarıda üretilmiş olan ve onunla φ-Uyum gerçekleştiren işlevsel ulamların Belirleyici konumuna kaydığı, AÖ'nün ise üretildiği yerde kaldığı iddia edilmektedir. TÖ ve AÖ ayrıca Durum özellikleri bakımından da farklı davranır. AÖ zayıf Durum özelliği taşır ve eyleme *yapışma* yoluyla sözdizimde yetkilenir. TÖ ise güçlü Durum özelliği taşır. TÖ'nün kaydırılma sebebinin GYİ olarak sunulduğu inceleme ekonomi sorunlarıyla karşı karşıya kalmaktadır. Bu çalışmada kaydırmanın nedeninin ad yapılarının güçlü Durum özellikleri olduğu öne sürülmektedir.

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This study is dedicated to my *life* Vangelis and Rana.

Early morning November 6th 2006

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LIST OF ABBREVIATIONS

1	1st person
2	2nd person
3	3rd person
abl	ablative *-DAn*
abs	absolutive
acc	accusative *–(y)I*
aor	aorist *–Ir/-Ar/-r/-z*
caus	causative
com	comitative
cop	copula
dat	dative *–(y)A*
emph	emphatic
erg	ergative
evid	evidential/inferential/reported *–mIş*
exc	exclamation
exis	existential copula *var*
fut	future *–(y)AcAK*
gen	genitive
ger	gerundive
impf	imperfective/progressive *–(I)yor*
inf	infinitive *-mAK*

loc	locative *-DA*
neg	negative
neg.exis	negative existential *yok*
nom	nominative
nomin	nominalizer
OP/NSR	object participle/non-subject relative
pass	passive
past	past *-DI*
pl	plural
poss	possessive
Q	yes/no question marker *mI*
recip	reciprocal
refl	reflexive
sg	singular
SP/SR	subject participle/subject relative
vn	verbal noun/nominalizer

CHAPTER 1

INTRODUCTION

1.1 The goal of the study

The aim of this dissertation is to discuss the syntactic properties of nominals in Turkish,

their case-checking properties, and the implications of a theory of grammar in which the

dislocation of arguments is not motivated by the Extended Projection Principle (EPP), but

by Case checking in structural terms. The investigation is confined to the properties of

nominative and accusative, and the behavior of Turkish nominals in the preverbal area. I

claim that Turkish possesses a DP projection. The DP projection has either not been

motivated for Turkish where the common notation has been NP/DP, or has been

challenged (cf. Öztürk 2005). I propose an analysis of Turkish nominals motivating the

projection of a DP layer with a phonologically null head carrying the features of

definiteness and specificity. In particular, I discuss referential and non-referential nominals

in Turkish arguing that the former constitute DP whereas the latter NP. Following

Bošković (2005), I propose an analysis where the case features of arguments force them to

move from their base-generated positions outside the nuclear scope, i.e. *v*P (Diesing 1992).

In the literature, both Case and the EPP have been argued to trigger the dislocation of NPs to Spec positions of functional categories (Chomsky 1981, 1995). The inherent redundancy in a theory encompassing both Case and the EPP has been noted by several linguists since it yields a theory having an uneconomical nature as both Case and EPP were argued to trigger movement to Spec position (see among others Marantz 1991; Martin 1999; Castillo et al 1999, Boeckx 2000).

Attempts to reduce this redundancy can be classified mainly in two camps: (i) those that aim at eliminating the role of Case in syntax and argue in favor of the EPP (Marantz 1991; McFadden 2004; Gohil 2005), and (ii) those that eliminate the EPP and argue in favor of Case (Martin 1999; Castillo et al 1999; Grohmann et al 2000; Boeckx 2000; Bošković 2002, 2005). In this dissertation, by motivating a DP projection in Turkish apart from the NP, I discuss a theory of grammar in which Case and referentiality assignment is mediated via different functional heads. In other words, the two conditions proposed for a nominal to become a syntactic argument, i.e. assignment of referentiality and Case, are achieved separately. Following Bošković (2005), I will argue that the Case features of the nominals force them to undergo dislocation outside the scope of the existential closure (Diesing 1992) in Turkish which gives further support to the studies which argue for the elimination of the EPP. The theoretical framework assumed for the study is the Minimalist framework as proposed in studies such as Chomsky (2000, 2001, and 2004).

1.2 Theoretical framework

The aim of this section is to lay out the theoretical issues important for the understanding of this dissertation which discusses a theory of grammar in which the EPP is eliminated.

With the EPP eliminated, I discuss the role of Case and interpretation in driving operations in natural language taking the Minimalist theory as the theoretical framework (Chomsky 2000, 2001, 2004).

## 1.2.1. Minimalist Analysis

The Minimalist Program (Chomsky 1993, 1995, 2000, 2001, 2004) seeks to investigate the properties of the language design, which is argued to be optimal, "approaching a "perfect solution" to minimal design specifications" (Chomsky 2000:93). These specifications are viewed as "legibility conditions" whereby the expressions generated by a language L are "legible" to systems that access these expressions at the interface between the human language faculty and external systems, i.e. sensorimotor systems and conceptual-intentional systems (Chomsky 2000, 2001, 2004). The study of language in the minimalist framework is guided by the uniformity principle, which states that "in the absence of compelling evidence to the contrary, assume languages to be uniform, with variety restricted to easily detectable properties of utterances" (Chomsky 2001:2). Within the tenets of the program, faculty of human language is assumed to comprise two main components: (a) a lexicon containing a list of the lexical items in their fully inflected forms; and (b) a computational system which uses the lexical items to generate derivations. Lexical items stored in the lexicon fall into two main categories: substantive and functional. The minimalist program is mainly concerned with the *core functional categories* (CFC), which are C (expressing mood/force), T (tense/event structure) and *v* (head of transitive constructions) (Chomsky 2000:102). All the lexical items are specified for phonological, semantic and formal features (i.e. categorial, φ-

and Case features), which are then accessed by the computational system and mapped into expressions. Mapping of lexical items into expressions EXP involves mapping to the interface levels Phonological Form (PF) and Logical Form (LF), to which the phonological, semantic and formal features of lexical items are sent for phonological and semantic interpretation respectively. Thus, an expression EXP is a pairing of sound and meaning: EXP=<PF, LF> (Chomsky 2000:98) or in Chomsky's (2004) terms, EXP=<PHON, SEM>.

Assuming that language design is optimal, languages are argued to make a one-time selection of a *lexical array* LA from the lexicon that will be accessed in the derivation, thereby circumventing the restrictions of memory requirements. It is narrow syntax which maps this LA to a derivation, which is mapped to PHON by the phonological component Φ, and to SEM by the semantic component Σ via the operation TRANSFER. Chomsky focuses primarily on the mapping to Φ, which he calls *Spell-Out* (Chomsky 2004:107). The computation of an expression EXP *converges* at an interface level if it consists solely of elements legible to the external systems, i.e. interpretable by the interface levels. In order to avoid *crash*, the uninterpretable features (structural Case features of nouns and φ-features of functional heads that agree with nouns) must be eliminated before the computation reaches the interface levels LF and PF. For semantic and phonological interpretation, TRANSFER hands the derivation to Φ and SEM in units determined by the lexical array. Chomsky (2000, 2001, 2004) calls these units *phases*, which are "propositional" (Chomsky 2000); "are reconstruction sites and have a degree of phonetic independence" (Chomsky 2001:12). A phase, in other words, is "either a verb phrase in which all theta roles are assigned or a full clause including tense and force" (Chomsky 2000:106): CP and *v*P but not TP. The derivation proceeds phase-by-phase, in that a subarray of LA containing either the C or *v*

head is selected and used to construct a syntactic object. When this is completed, another subarray of LA, again containing either C or *v*, is selected to construct another syntactic object.

Crucial for the derivational component are the operations *Merge, Agree* and *Move*, by means of which structures are built. The selected syntactic objects in the LA are combined by *(external) Merge*, which "takes two elements α, β already constructed and creates a new one consisting of the two; in the simplest case {α,β}" (Chomsky 2004:108). Argument structure is associated with *external Merge*:

(1)

$$
\begin{array}{c}
\alpha \\
\diagup\,\diagdown \\
\alpha \qquad \beta
\end{array}
$$
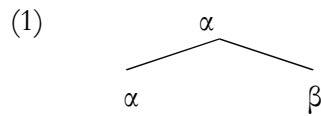
The operation *Agree* establishes an agreement relation between the uninterpretable feature [*u*F] of a functional head (Probe) and the matching interpretable feature of a lexical item (Goal). It is via *Agree* whereby all the uninterpretable features of functional heads in the derivation get eliminated, thus allowing derivations to converge. However, probe and goal must both be active for *Agree* to apply, and the goal must have a complete set of φ-features (i.e. must be φ-complete) in order to delete the uninterpretable features of the matching probe (Chomsky 2001:4):

(2)

α
[*u*F]
          β
          [F]

Agree relation

5
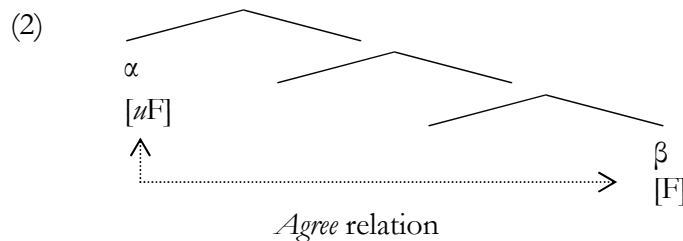
The operation *Agree* and uninterpretable features are *prima facie* imperfections. Chomsky

(2001:3) states that both are "part of an optimal solution to minimal design specifications by

virtue of their role in establishing the property of "displacement," which has (at least

plausible) external motivation in terms of distinct kinds of semantic interpretation and

perhaps processing." It is the operation *Move* which produces displacement by combining

Agree and *Merge* in that it first forms an agreement relation between α and F, and pied-pipes

and merges the phrase determined by F as the Spec of α. See below the schematization:

(3)

β

[F]

α

[uF]

β
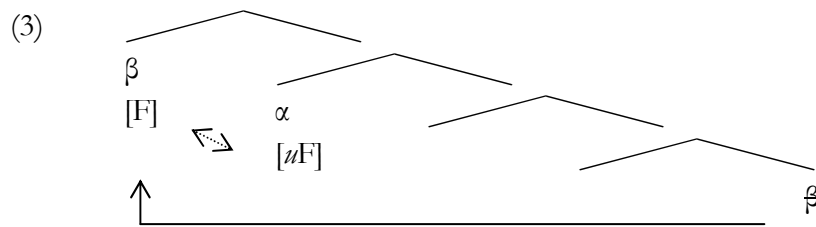
Move (or *internal Merge* as Chomsky (2004) calls it) leaves a copy behind to be deleted before

the derivation reaches the relevant interface ("copy theory of movement"). It is motivated

by the scopal and discourse-related (informational) properties. Since it leaves a copy in its

base-position, there is no reconstruction operation which lowers the element that has

moved higher earlier in the structure for scopal / interpretational reasons.

The operations *Merge*, *Agree* and *Move* apply to the phases introduced in the lexical

array. The head of a phase becomes inert for further operations after the phase is

completed and satisfied (Chomsky 2000:107). Phases are subject to the *Phase Impenetrability*

Condition (PIC) where H is the head of the phase HP (Chomsky 2000:108; Chomsky

2001:13; Chomsky 2004:108):

(4) *Phase Impenetrability Condition (PIC)*

The domain of H is not accessible to operations, but only H and its edge.

According to the PIC, phase head H and its edge α belong to the next phase ZP for the purposes of Spell-Out, i.e. "the interpretation/evaluation for PH_1 is at the next phase PH_2" (Chomsky 2001:13):

(5)

```
        ZP
       /  \
      Z    HP
          /  \
         α    \
             /  \
            H    YP
```
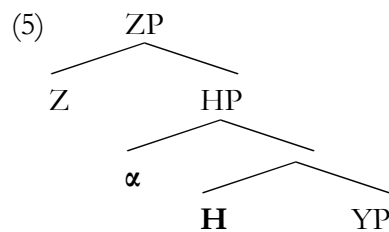
Recall that the core functional categories are C, T and *v*. Chomsky (2000, 2001) assumes that each CFC also allows an "extra" Spec position beyond its s(emantic)-selection, i.e. they have EPP-features:

(6)

```
            HP
           /  \
        XP      \
          (EA)   \
               /  \
              H    YP
```

(adapted from Chomsky 2000:102, ex.4)
(EA: external argument selected by H)
(XP: the extra Spec)
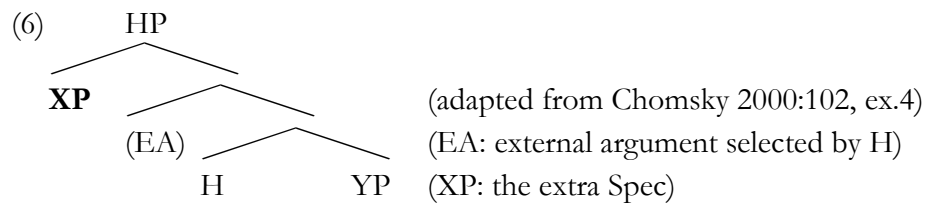
Chomsky (2004) notes that the extra edge position (XP in the above tree) is required optionally by internal Merge (i.e. Move) and has no theta-role. "Assuming options to be determined in LEX, the head H must have a feature that makes this position available: an EPP feature in standard terminology; from another point of view, the feature OCC that

means "I must be an occurrence of some β"…H has OCC only if that yields new scopal or discourse-related properties" (Chomsky 2004:112). This brings us to the discussion of economy and generative complexity.

The issue of generative complexity has been noted since the beginning of the Principles and Parameters approach. Minimal design specifications lead us to expect that the derivational component of the human language faculty is "minimal" and "economical". Simpler operations are preferred to more complex ones, i.e. *Merge* and *Agree* preempt *Move*, which takes place as "last resort" when neither of the former could take place. Least effort conditions seek to eliminate superfluous elements in representation and superfluous steps in the derivation, leading to the general principle that operations take place only when triggered by some reason. PIC reduces the "search space" for computation, leading to successive cyclicity. Another restriction concerns the theta-theoretic principle which states that *pure Merge* (merge that is not part of *Move*) in theta position is required of and restricted to arguments (Chomsky 2000:103,106). However, *Move* (or *internal Merge* as called in Chomsky 2004) is motivated by the non-theta-theoretic conditions such as scopal and discourse-related (informational) properties.

Having pointed out the basics of the Minimalist framework, I would like to discuss in detail the properties of the uninterpretable features and their implementation in the framework producing some kind of a redundancy. It is why certain uninterpretable features, EPP in particular, have been argued to be eliminated from the theory.

1.2.2. Uninterpretable features and redundancy

As already mentioned in the preceding section, the lexical items in the lexicon are specified for phonological, semantic and formal features which are then accessed by the computational system and mapped into expressions. The formal features are of two kinds: they may be interpretable, i.e. legible to the external systems at the interface; or they may be uninterpretable, and hence must be eliminated before the derivation is transferred to the semantic component Σ in order for the derivation to converge. The uninterpretable features for Chomsky (2000, 2001, 2004) are:

(7)   (i) structural Case feature for nouns,

(ii) φ-features for functional categories agreeing with nouns, and

(iii) the EPP (OCC) feature of the core functional categories (generalized EPP).

An uninterpretable feature of a functional category α (probe) must *agree* with the matching interpretable feature of a lexical item β (goal), where matching implies identity of features (unvalued for the probe and valued for the goal). Moreover, Chomsky (2001) claims that:

(8)   i. Probe and goal must both be active for *Agree* to apply

ii. α must have a complete set of φ-features (it must be φ-complete) to delete uninterpretable features of the paired matching element β.

(adapted from Chomsky 2001:6, ex. 3; see also Chomsky 2004)

As seen in (ii), there is a distinction between a φ-complete probe and a φ-deficient one, the former entering into Case-agreement systems, while the latter not. Nouns are always complete since they possess interpretable φ-features (i.e. inherent number, gender and case features). This implies that a noun is active only when it has (uninterpretable) structural Case feature. Once its Case feature is valued, it is "frozen in place" and can no longer enter into any relation (Chomsky 2001:6). C, being φ-complete, must select a T_{comp} (a φ-complete T) for its uninterpretable features to delete. Likewise, a φ-complete *v* with full argument structure (which Chomsky (2001) represents as *v**) must select a φ-complete V (V_{comp}) for its uninterpretable features to delete. When T or V is not selected by the φ-complete C or *v** they are defective, they do not enter into Case agreement relations, and they do not carry an EPP-feature, as in the case of raising T and passive/unaccusative V. Chomsky (2004) points out that it seems unexpected to find the non-phase head T (rather than only the two phase heads *v* and C) to function as a probe for the Case-agreement system. However, T enters into Case-agreement relation only if it is selected by C, and hence is φ-complete. It is, thus, the two phase heads, *v* and C, which are operative elements in the Case-agreement system (Chomsky 2004:115).

The uninterpretable φ-features of a functional category, say T, *agree* with the matching interpretable φ-features of a goal noun and get valued without any need for *Move*. However, the EPP-feature (OCC) behaves differently from all the other uninterpretable features in that it requires an extra Spec position beyond the s-selection of the functional head. In other words, the EPP-feature of the functional head forces a lexical item to fill the Spec position of that head. Apart from the EPP-feature of T, which is the original EPP[1], the

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[1] The Extended Projection Principle (EPP) has been introduced in the theory as a principle stating a universal requirement that all sentences have a (possibly null) subject (Chomsky 1981:26; Chomsky 1982:10). With the move from the Government and Binding Theory to Minimalism, EPP has turned into a feature whose

EPP-feature of the phase heads, *v* and C, allows an "escape hatch", whereby movement proceeds successive-cyclically abiding by the PIC.

The EPP-feature has been challenged by several studies such as Castillo et al (1999); Martin (1999); Boeckx (2000), (2005); Grohmann et al (2000); Boskovic (2002), (2005), among others.[2]

1.2.3 The DP hypothesis and Turkish

As has been mentioned at the beginning, the DP projection has either not been syntactically motivated in Turkish or has been challenged. The aim of this dissertation is to argue that Turkish possesses a DP layer which assigns referentiality to the NP. I will also argue that the Case features of nominals play a role in syntax in the sense that they force the DPs to undergo dislocation from their base-generated positions. This claim is contrary to Öztürk (2005) who has argued that in languages like Turkish, case and referentiality are strongly correlated. She argues that Turkish does not possess a DP layer in its nominal system and that the conditions on argumenthood, i.e. Case assignment for visibility for theta-role assignment (Chomsky 1981, 1995) and referentiality assignment (Longobardi 1994), are achieved within the domain of the same functional projection in such languages.

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presence required a Spec position to be filled. In the early stages of Minimalism, EPP was taken to be a morphological property of Tense in terms of strong vs. weak NP-features (Chomsky 1993). Chomsky (1995) states EPP as the strong D-feature of T. In chapter 4 of Chomsky (1995), categories lacking interpretable features have been shown to be superfluous and thus they were dispensed with. This resulted in the elimination of the Agr heads from the syntactic structure. The disposal of heads that bear only uninterpretable features, such as Agr° and null D°, in turn, effected the phrasing of the EPP, which according to Chomsky (2000) could not be stated as a D-feature now, but in fact as a strong N-feature of T. See the discussion in Chapter 5.

[2] It is also interesting to note that Chomsky himself questions the validity of the EPP. In his discussion about why uninterpretable features and *Agree* exist at all, he notes that there is no answer for the EPP-feature of T, "the original Extended Projection Principle—perhaps universal perhaps not; the jury is still out on that" (Chomsky 2004: 116).

Abney (1987) defends the hypothesis that the noun phrase is headed by the functional element D°, thus forming a parallel between the structure of the noun phrase and that of the sentence. Elaborating on Kornfilt (1984), he considers Turkish genitive-possessive constructions and argues that they instantiate the DP analysis where the presence or absence of agreement (AGR) distinguishes between possessive and non-possessive noun phrases.

Following Abney (1987), I will argue that Turkish has a DP projection even though it lacks overt determiners/articles. Languages have been argued to fall into four classes based on the typology depending on their article system and case morphology. Consider the typological paradigm below:

(1)   a. +Determiner   +Case   (languages like Hungarian)

      b. –Determiner   +Case   (languages like Turkish)

      c. +Determiner   –Case   (languages like English)

      d. –Determiner   –Case   (languages like Chinese)

                                             (adapted from Öztürk 2005:2)

Turkish does not have an overt determiner system but displays case morphology. The fact that there are no overt determiners in Turkish but that the nominals can still be interpreted referentially in semantic terms leads Öztürk (2005) to argue that in Turkish the two conditions on argumenthood, i.e. Case and referentiality, are assigned by the same functional projection which she argues to be a thematic role introducing head within a Neo-Davidsonian model. English type languages have lexical instantiations of D° which assign referentiality to the noun phrase, and Case is argued to be assigned/checked by an *Agree*

relation formed between the DP and the functional categories like TP/*v*P. She exemplifies

the difference between English and Turkish as follows:

(2) English:

```
                YP
               /  \
                   Y'
                  /  \
                 Y    XP
              [+case] /  \
    Agree    ⋀⟶ DP    X'
                /  \    |
               D    NP   X
             [+ref]
```

(3) Turkish:

```
              XP
             /  \
           NP    X'
                 |
                 X
          [+case, +referentiality]
```
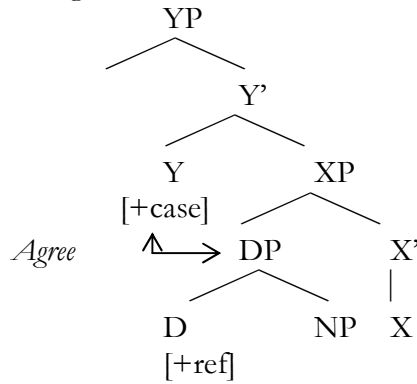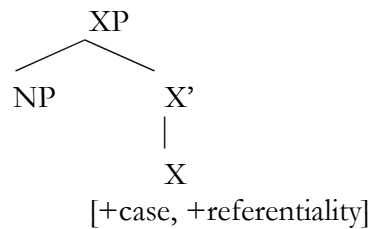
<div align="right">(adapted from Öztürk 2005:12,ex.20-21)</div>

As seen in the diagrams above, case and referentiality are assigned in different domains in

languages like English, whereas, in Turkish, Öztürk argues that they are both assigned by

the same functional projection since there is no overt determiner in the language that would

separately assign referentiality to the noun phrase.[3]

Öztürk's (2005) analysis, focusing on the lack of overt determiners in Turkish, is

based on the claim made in Osawa (1998, 2000) who assumes following Stowell (1991b)

and Longobardi (1994), that NPs are inherently predicative and not referential, and N has

an external R(eferential)-role which must be bound if that NP is to be used as an argument.

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[3] Note that this account annuls any need for the noun phrase to form an *Agree* relation with higher functional
categories (*v*P/TP) to check its case features. In the rest of this study, I will argue to the contrary.

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Osawa (1998:4) argues that if a given language has overt case morphology, case morphology binds the R-role in an NP (i.e. Case decides the referential status of a noun). If this option is not available, that is, if there is no overt case morphology in a language, a syntactic operation becomes necessary where the R-role must be bound by a determiner D. This is what is observed in the history of English, i.e. when morphological case disappears, a syntactic D system is introduced to bind the R-role.[4]

The two claims made in Osawa (1998) are as follows: (i) in languages where case morphology occurs, case imposes interpretation of noun phrases for definiteness and specificity, and (ii) the development of an article/determiner system follows the loss of the case system historically. The first claim that case imposes interpretation of noun phrases implies that case, in the absence of determiners, acts as a semantic type shifter, i.e. it shifts predicates into arguments. The second claim concerns the historical development showing a general tendency where a language acquires a determiner system as a result of the loss of its case system.

A cross-linguistic counterargument to the second claim arises with respect to the diachronic change. Given that the loss of the case system leads to the development of an article/determiner system assumes that historically there must have been a period in which both systems co-existed. This is, in fact, what has been observed in the loss of the case system in a language such as English. Note that this is also implicit in the existence of

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[4] Osawa (1998) argues that demonstratives *se (seo/þæt)* 'that' and *þes(þis/þeos)* 'this' in Old English do not constitute evidence to occupy the D position that the articles *the* and *a/an* do in Modern English. He bases his argument on Abney's (1987)'s observations that (i) one of the defining features of functional elements is that they lack descriptive content and that their semantic contribution is subsidiary; and (ii) articles are strictly inseparable from their complement, i.e. they cannot occur without their complements. Osawa points out that the demonstratives in Old English had stronger meanings than a functional category of type D and made an important semantic contribution of their own. Moreover, demonstratives in Old English were not dependent on the noun or nominal elements, but were independent lexical elements as they were used as demonstrative pronouns without the company of nominals. These two characteristics of demonstratives in Old English, Osawa (1998) argues, constitute evidence to the effect that they do not have the status of D.

languages such as Hungarian in which both the determiner system and the case system co-exist synchronically. This can be interpreted to imply that there can be languages which are at different stages of this transition, if they are undergoing the syntactic change implied in this statement. Furthermore, the existence of languages such as Chinese where neither a determiner system nor a case system exist indicates that neither of the two systems needs to be part of the computational system of a language.

In the rest of this study, I will present semantic and syntactic counterarguments to the claim that Turkish lacks a DP projection. Based on the evidence, I will argue that even though there are no overt determiners in the language, no overt Dº, the language possesses a DP category whose null head is specified for features of [±specificity] and [±definiteness].

1.3. Organization of the dissertation

The organization of the dissertation is as follows. Chapter 2 presents the semantic and syntactic arguments against the claim that Turkish belongs to the group of languages which lack a DP projection. The semantic evidence I provide concerns the behavior of [bir NP] constructions without overt case morphology. I argue that they are referential in the sense of Fodor and Sag (1982). The syntactic evidence concerns first the cross-linguistic generalization that languages that do not have DP do not exhibit island effects in scrambling. I show that Turkish does exhibit island effects in scrambling implying that it cannot be considered as a language without a DP projection. The second syntactic evidence I provide concerns the ECM constructions in Turkish which I argue to involve raising of the ECM subject to the matrix clause. I specifically discuss the behavior of [bir NP]

constructions without overt case morphology and bare nominals (i.e. NPs with neither *bir*
'one/a', nor case morphology) in ECM constructions and show that even though [bir NP]
constructions result in grammatical ECM clauses, bare nominals yield ungrammatical
sentences. The discussion in Chapter 2 shows that Turkish distinguishes between a bare
nominal and a [bir NP] construction neither of which bears overt case morphology. The
implication of this is that referentiality and Case are not assigned within the domain of a
single functional category and that Turkish possesses a DP projection.

Chapter 3 discusses the properties of nominals in Turkish with a focus on their
referential properties. I argue that there is a syntactic difference between referential and
non-referential nominals, the former being DP and the latter NP. I claim that referential
nominals are dominated by either a NumP layer where the number specification of the
noun head is determined by the [±plural] on the Num° or a ClassiferP (ClP) layer at whose
Spec position the numerals occur. I argue that both NumP and ClP subcategorize for an
NP, and are thus in complementary distribution. Dominating NumP/ClP is the maximal
projection DP headed by a phonologically null element specified for the features [±definite]
and [±specific]. I also discuss that DP can be in turn selected by a PossP whose Spec
position is occupied with the genitive marked nominal agreeing with the Poss°.

Chapter 4 discusses the syntactic differences NPs and DPs display in Turkish. I show
that referential arguments, DPs, move to a position outside the scope of the existential
closure (Diesing 1992), whereas non-referential arguments, NPs, remain in their base-
generated positions under the scope of the existential closure. This chapter also discusses
the licensing mechanism of NPs and argues against the head-incorporation and pseudo-
incorporation accounts proposed in the literature. It presents a new approach labeled
adhesion where the NP adheres to the verbal head in syntax. As for the case checking

properties of NPs, I argue, following de Hoop (1996), that they check weak structural Case, as opposed to DPs which bear strong structural Case.

Chapter 5 deals with the dislocation of DPs and the trigger for this dislocation. Focusing on the EPP-effects of v and of T, it discusses several constructions where the dislocation of DPs has been argued to be motivated by the EPP feature of the functional heads. Pointing out the problems unaccounted for by the EPP-based account, I present a Case-based account of facts that argue that the trigger of dislocation is in fact the strong Case feature the DP bears.

Finally, Chapter 6 is the conclusion discussing the claims presented in this dissertation and the issues for further research.

CHAPTER 2

NP and/or DP

2.0 Preliminaries

This chapter lays down the semantic and syntactic evidence for the claim that Turkish

possesses a DP projection in addition to NP. This evidence will indicate that Turkish in fact

does not belong to the class of languages where there is no DP, as has been commonly

assumed (see the typology in Chapter 1). I will first discuss the semantic evidence and then

give two syntactic facts to argue that Turkish needs a nominal projection other than the

bare[1] NP, which I claim is DP.

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[1] I use the term *bare* to refer to nominals which are not modified by the modifier *bir* 'a/one' and which are not overtly case-marked (see example (1d)) below.

2.1 Semantic evidence

Previous studies (Dede 1986; Enç 1991; Diesing 1992; Kennelly 1993, 1994, 1997b; Kelepir 2001, among others) have commonly argued for a distinction to hold between the overtly case-marked nominals and non-case marked ones exemplified below:

(1) a. Ali-ø *kitab-ı* oku-yor-ø.

      Ali-nom book-acc read-impf-3sg

      'Ali is reading the book.'

      b. Ali-ø *bir kitab-ı* oku-yor-ø.

      Ali-nom one book-acc read-impf-3sg

      'Ali is reading a specific book (one of the books).'

      c. Ali-ø *bir kitap-ø* oku-yor-ø.

      Ali-nom one book-ø read-impf-3sg

      'Ali is reading a book.'

      d. Ali-ø *kitap* oku-yor-ø.

      Ali-nom book read-impf-3sg

      'Ali is book-reading.'

Dede (1986) categorizes noun phrases similar to the italicized phrase in (1a) as definite (and hence specific), in (1b) as specific indefinite, in (1c) as nonspecific indefinite and in (1d) as

nonspecific nondefinite, i.e. nonreferential. The canonical analysis of Turkish nominal

phrases, thus, distinguishes between (1a-b), which are overtly case marked specific noun

phrases, and (1c-d) which are non-case-marked non-specific noun phrases interpreted

existentially. This section aims to present semantic evidence to the effect that the nominal

phrase in (1c) behaves in a manner similar to the overtly case-marked ones in (1a-b), and

that the nominal phrase in (1d) behaves differently from all the others in a significant

manner. For the sake of the argument, I will gloss the nominal phrases in (1a-c) as XP, and

the one in (1d) as YP.

As mentioned above, the previous analyses distinguished between an overtly case-

marked object such as *bir kitab-ı* 'a book-acc' vs. a non-case marked one like *kitap* 'book' or

bir kitap 'a book', arguing that overtly case-marked ones are above the existential closure

along the lines of Diesing (1992), whereas the latter pattern similarly in terms of their scope

with respect to an operator or a quantifier in the structure and their mobility restrictions;

and stay under the scope of the existential closure (see, for example, Enç 1991; Diesing

1992, Kennelly 1993, 1994, 1997b; Kelepir 2001; Öztürk 2005 among others). Enç (1991)

focuses on indefinite objects with and without accusative marking, i.e. *bir NP-acc* and *bir NP*

and argues that "NPs with overt case morphology are specific; NPs without case

morphology are nonspecific" (p.4). She proposes an analysis of specificity independent of

scope relations and correlates it with partitivity. She argues that specificity involves a weak

link, that of being a subset of or standing in some recoverable relation to a familiar object;

whereas definiteness involves a strong link, that of identity of reference. She suggests that

the accusative marked indefinites in Turkish are specific and semantically they are

interpreted as partitives.[2] Diesing (1992), following Enç (1991), argues that accusative

marking in Turkish implies specificity and she correlates it with restrictive clause formation.

According to her Mapping Hypothesis, restrictive clause formation is associated with VP-

external NPs:

(2) Mapping Hypothesis   [Diesing 1992:10]

Material from VP is mapped into the nuclear scope.

Material from IP is mapped into a restrictive clause.

(3) $[_{IP}$ Spec I°   ∃ $[_{VP}$ Spec V°   XP]]

$\underbrace{\qquad\qquad\qquad}_{\text{restrictive clause}}$ $\underbrace{\qquad\qquad\qquad}_{\text{nuclear scope}}$
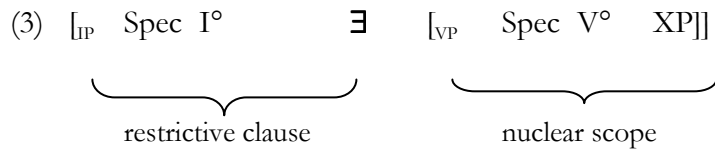
Arguing that accusative marking in Turkish implies specificity, which in turn is correlated

with VP-external NPs, she points out three potential ways to account for the data but does

not choose one among them. As the first approach, she suggests that the object NP may be

moved to a higher position (Spec Agr_oP) to have its accusative case checked at S-structure,

which would imply that accusative marking signals a VP-external object, whereas a non-case

marked NP is VP-internal. As a second possibility, she suggests that one may assume that

the accusative in Turkish acts as a trigger for LF-movement of the object, i.e. quantifier

raising of the object, whereas the non-case marked objects would not trigger QR. As a third

possibility, which she mentions in the footnote, she suggests that one may consider case

marking as a strong determiner triggering QR of the object out of the VP-internal domain.

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[2] Enç (1991:6) uses "the term *partitive* in its syntactic sense to refer to NPs such as *two of the books* with definite adjuncts, and in its semantic sense to refer to the interpretation of such NPs. Partitivity will thus be associated with specificity".

All of these possible ways she puts forth argue for the VP-external nature of the case-marked object as opposed to the non-case marked object which stays in situ in its VP-internal position.

Kennelly (1993, 1994) argues that all non-case marked nominal phrases in Turkish are existential in the sense that they occur in a VP-internal position where they are bound by the existential closure (à la Diesing 1992). She further claims that they are licensed in the structure by getting inherent Case from the verb of which they occur as sisters. Case-marked nominals (including the nominative-marked ones), she argues, are always specific and presuppositional occurring in a position higher than the VP. Kennelly (1997b) follows up on Kennelly (1993 & 1994) and further argues that non-specific arguments, i.e. nominal phrases with no case-marking, occur as the *internal* argument of the verb and never in the Spec position. By means of a study of relative clauses, she demonstrates that nonspecific logical subjects of Unaccusatives (including existentials and passives) remain as internal arguments carrying weak case (de Hoop 1992). Her analysis predicts that transitive and unergative verbs in Turkish will never have a nonspecific subject since they are base generated as external arguments in Spec VP. This approach fails to account for cases where transitive and unergative verbs have non-specific subjects sharing the same properties with the non-specific arguments of unaccusatives as will be discussed in the following chapters.

Focusing on the properties of accusative-marked and zero-marked indefinite objects in Turkish, Kelepir (2001) argues that accusative marked indefinites are not always partitive as claimed by Enç (1991). She claims that accusative marking signals the presupposition that the denotation of the head noun of the indefinite phrase is non-empty. She assumes that accusative-marked indefinite objects occur in a VP-external position as opposed to zero-marked indefinite objects which occur as sisters of V°. As for the wide scope of accusative

marked objects over quantificational elements that c-command them, Kelepir argues that it is the result of a special interpretive mechanism whereby accusative marked indefinites are interpreted as choice-functions.

Öztürk (2005) also argues that case-marked arguments occur in a position different from the ones that are not overtly case-marked. Her analysis differs from the others mentioned briefly above in the sense that she argues that non-referential nominals, i.e. noun phrases with no case marking, are pseudo-incorporated into the verb and enter the structure as part of a complex predicate. She claims that Turkish possesses two *bir*'s resulting in two kinds of *bir+NP* structures with no case. She claims that the unstressed *bir* in the [*bir* N] construction is a predicate modifier, which modifies the NP just like any adjective. The stressed *BİR*, on the other hand, is an adverbial modifying the event formed by pseudo-incorporation.[3] She thus argues that bare nominals with no case-marking and *bir NP* nominals with no case marking undergo the same kind of complex predicate formation via pseudo-incorporation into the verb.[4] The case-marked arguments, however, are introduced in the Spec position of the relevant thematic role introducing head.

In this chapter, I present semantic and syntactic evidence that indicates that *bir +NP* nominals without a case marker as in (1c) behave differently from the nominal phrases as in (1d), contrary to these analyses. The discussion will not only focus on objects as some of the previous analyses cited above, but also on subjects. The semantic evidence that indicates

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[3] Her examples are below:
    (i)   Ali [complex pred bir kitap okudu].
           Ali one book read
           'Ali read a book.'   [Öztürk 2005:68]
    (ii)   Ali BİR [complex pred kitap aldı].
           Ali one book bought
           'Ali bought one book.'   [adapted from Öztürk 2005:70]
[4] Likewise, Kornfilt (1995) has treated bare nouns and [bir N] constructions alike arguing that they undergo Baker (1988) style incorporation to the verb. I will in this study show that analyzing these constructions alike is problematic since there are syntactic differences between *kitap* and *bir kitap*.

that bare nominals behave differently from the *bir NP* nominals comes from number and referential interpretation, scope, modification by adverbs, ellipsis, pronominalization, relative clause formation, and aspectual properties (cf. Erguvanlı 1984, Knecht 1986, Aydemir 2004, Ketrez 2005).

2.1.1 Scope properties

Scope properties give us evidence to treat *bir NP* constructions differently than the bare nominals of the kind exemplified in (1d). Consider the structures below:

(4) Bütün çocuk-lar-ø *bir kitap* oku-du-ø.

 all child-pl-nom one book read-past-3sg

 'All the children read a book.'

(5) Bütün çocuk-lar-ø *kitap* oku-du-ø.

 all child-pl-nom book read-past-3sg

 'All the children did book-reading.'

The scope relations of the object of the form [bir NP] such as the one in (4) have always been analyzed in the literature with respect to its accusative-marked counterpart [bir N-acc] (see, for example, Enç 1991, Kennelly 1994, Kelepir 2001, Öztürk 2005, among others). The scope properties of the [bir NP] and those of the bare nominal [NP][5], have not

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[5] See the next chapter which gives evidence for the claim that bare nominals are phrasal categories (NP).

received much attention. To my knowledge, one study is by Kennelly (1996), who compares the scope of bare object NPs and *bir NP* structures. Consider her examples below:

(6)   Üç çocuk-ø *bir araba* al-mış-ø.   (adapted from Kennelly 1996:26, ex.3)

    three child-nom one car buy-evid-3sg

    'A car is such that three children bought it.'   a car>three children

    *'Each of the three children bought a new car.'   *three children>a car

(7)   Üç çocuk-ø *araba* al-mış-ø.   (Kennelly 1996:28, ex.6)

    three child-nom car buy-evid-3sg

    'A car is such that three children bought it.'   car>three children

    'Each of the three children bought a car.'   three children>a car

Kennelly (1996) argues that the object in (6) above obligatorily takes wide scope with respect to the subject quantifier, whereas the object in (7) can have wide or narrow scope.[6]

    Ketrez (2005) also discusses the scope properties of *bir NP* objects and bare objects. She observes that they have the same features in terms of their scope with respect to negation and adverbs, i.e. they both have narrow scope. I argue, on the other hand, that the wide scope reading of the [bir NP] object in (6) is only possible in the reading where *bir* is interpreted as the numeral 'one' under a contrastive focus reading; thus *bir>üç* 'one>three'. When, however, *bir* is not focused contrastively, the interpretation is such that there is a possibly different car that every kid bought; thus *üç >bir* 'three>one'. The bare object in (7),

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[6] Kennelly's (1996) claim that the non-accusative marked *bir NP* object takes wide scope is contra Kennelly (1994) and Kelepir (2001) who have independently argued that the [bir NP] phrase takes obligatorily narrow scope with respect to an operator in the structure, whereas [bir NP-acc] may be interpreted as having either wide or narrow scope. However, note that Kennelly (1996) compares the scope of [bir NP] and the bare NP.

I argue, does not, and cannot, have any scope with respect to the subject quantifier since it does not have a number interpretation or referentiality which would allow it to have scope properties. It just restricts the meaning of the verb, which has led certain linguists to argue that it has incorporated to the verb either as a result of head incorporation along the lines of Baker (1988) (see among others, Nilsson 1984, 1985; Knecht 1986; Kornfilt 1984, 1995; Aydemir 2004), or complex predicate formation in the sense of Massam (2001) and Dayal (2003) (see Öztürk 2005, and Ketrez 2005) (see chapter 4 for arguments against both the head-incorporation and the complex predicate formation account). The contrast in the following data supports this claim:

(8)   a. #Üç çocuk-ø *bir çekirdek* ye-miş-ø.

three child one seed eat-evid-3sg

#'Three children ate a sunflower seed.'   (adapted from Kennelly 1996:26, ex.4)

b. Üç çocuk-ø *çekirdek* ye-miş-ø.

three child-nom seed eat-evid-3sg

'Three children ate sunflower seeds.'

As seen above, the [bir NP] object in (a) has scope and yields an infelicitous structure due to the pragmatic problem of three children eating a piece of sunflower seed, whereas the bare object in (b) does not have any number interpretation, it does not quantify over individuals and cannot be distributed over.[7]

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[7] The subject in these examples contains a numeral, i.e. üç çocuk 'three children', which *can* be interpreted as a group, i.e. collectively. In cases where the subject has the quantifier *her* 'every/each', the collective reading of the subject is impossible:

2.1.2 Adjectival modification

The second piece of evidence comes from the fact that bare nominals and *bir NP*
constructions yield different interpretations under adjectival modification (cf. Aydemir
2004):

    (9)   a. Mehmet-ø kötü *araba* kullan-ıyor-ø.

           Mehmet-nom bad car use-impf-3sg

           'Mehmet drives badly.'

           b. Mehmet-ø kötü *bir araba* kullan-ıyor-ø.

           Mehmet-nom bad one car use-impf-3sg

           'Mehmet drives a bad car.'   [Aydemir 2004:467, ex. 5]

Aydemir (2004) correctly points out that there is a crucial difference in the interpretation of
the sentences above. In (9a), the immediately available reading is that the adjunct *kötü*
'bad(ly)' modifies the verb *kullan-* 'drive'. In (9b), however, the presence of *bir* blocks the
modification of the verb, and the modifier modifies the noun *araba* 'car'. This difference
indicates that the bare NP in (a) behaves as part of the predicate whereas *bir NP* behaves as
an independent unit from the verb, and thus the modifier *kötü* 'bad' is interpreted as an

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    (i)   Her çocuk-ø bir kitap oku-du-ø.
              every child-nom one book read-past-3sg
              'Every child read a book.'   every>*bir*   (adapted from Kelepir 2001:66, ex.81)
Since the discussion is about the scope properties of [bir NP] constructions and bare nominals, I leave aside
the distinction in the properties of the subject phrase.

adjective modifying the entire nominal. The same can be observed in the case of the subject nominals, as well:

(10) a. ? Ayla-yı fena *arı* sok-muş-ø.

Ayla-acc bad bee sting-evid-3sg

'Ayla got bee-stung badly.'

b. Ayla-yı fena *bir arı* sokmuş.

Ayla-acc bad one bee sting-evid-3sg

'Ayla got stung by a bad bee.'

Just like the case with the objects, the modifier *fena* 'bad/badly' behaves as an adverb modifying the predicate of 'bee-stinging' in the case of a bare nominal in (10a), whereas it behaves as an adjective modifying the *bir NP* nominal in (10b).

2.1.3 Ellipsis

A third piece of evidence against treating bare nominals and *bir NP* constructions similarly comes from the (im)possibility of ellipsis. Even though bare nominals cannot be elided, *bir NP* structures can. Consider Aydemir's (2004) examples below:

(11) a. *Bütün gün *kitap* oku-du-m, san-a da oku-ma-n-ı tavsiye ed-er-im.

all day book read-past-1sg you-dat too read-nomin-poss.2sg-acc recommend-aor-1sg

'*I did book-reading all day. I recommend you to read (it), too.'

b. ✓Dün *bir kitap* oku-du-m, san-a da oku-ma-n-ı tavsiye ed-er-im.

yesterday one book read-past-1sg you-dat too read-nomin-poss.2sg-acc recommend-aor-1sg

'I read a book yesterday. I recommend you to read (it), too.'

[Aydemir 2004:468, ex. 7a&c]

The contrast in (11) in which the object of *oku-* 'read' is elided in the second conjunct sentence indicates that [bir NP] can be elided as opposed to bare nominals which cannot.

2.1.4 Pronominal antecedence

A fourth difference between the bare nominal and *bir NP* constructions comes from the ability of *bir NP* phrases to serve as an antecedent to a pronoun, whereas a bare nominal fails to do so (cf. Erguvanlı 1984, Ketrez 2005).

(12) a. Ali-ø kaç gün-dür *bir resim*$_i$ yap-ıyor-du-ø, nihayet *on-u*$_i$ bitir-di-ø.

　 Ali-nom how.many day-adv one picture make-impf-past-3sg, finally it-acc finish-past-3sg

　 'Ali was painting a picture for days. He finally finished it.'

b. Ali-ø kaç gün-dür *resim*$_i$ yap-ıyor-du-ø, nihayet **on-u*$_i$ bitir-di-ø.

Ali-nom how.many day-adv one picture make-impf-past-3sg, finally it-acc finish-past-3sg

'Ali was picture-painting for days. He finally finished (it).'

[Erguvanlı 1984: 23, ex. 63&64]

Likewise, bare nouns cannot be the antecedent of a covert pronominal element, i.e. *pro* (cf. Öztürk 2005) unlike *bir NP* phrases which can. Compare the following:

(13) a. *Ali-ø *kitap*ᵢ oku-du-ø. [proᵢ Reng-i] kırmızı-ydı-ø.

Ali-nom book read-past-3sg. color-poss.3sg red-past-3sg

*'Ali did book-reading. Its color was red.'   [Öztürk 2005:60, ex. 101b]

b. Ali-ø *bir kitap*ᵢ oku-du-ø. [proᵢ Reng-i] kırmızı-ydı-ø.

Ali-nom one book read-past-3sg. color-poss.3sg red-past-3sg

'Ali read a book. Its color was red.'

The same distinction is observed with subjects as well. Consider the examples below:

(14) a. *Ayla-yı *arı*ᵢ sok-tu-ø. On-uᵢ kov-du-k.

Ayla-acc bee sting-past-3sg. it chase-past-1pl

intended: 'Ayla got beeᵢ-stung. We chased itᵢ away.'

b. Ayla-yı *bir arı*ᵢ sok-tu-ø. On-uᵢ kov-du-k.

Ayla-acc one bee sting-past-3sg. it chase-past-1pl

'Ayla got stung by a beeᵢ. We chased itᵢ away.'

(15) a. *Ayla-yı *arı*ᵢ sok-tu-ø. [proᵢ İğne-sin-]i zor çıkar-dı-k.

Ayla-acc bee sting-past-3sg needle-poss.3sg-acc difficult take.out-past-1pl

intended: 'Ayla got beeᵢ-stung. We took itsᵢ dart out with difficulty.'

b. Ayla-yı *bir arı*ᵢ sok-tu-ø. [proᵢ İğne-sin-]i zor çıkar-dı-k.

Ayla-acc bee sting-past-3sg needle-poss.3sg-acc difficult take.out-past-1pl

'Ayla got stung by a beeᵢ. We took itsᵢ dart out with difficulty.'

The examples above indicate that while a *bir NP* subject can act as an antecedent to an overt pronoun as in (14) or a covert one in (15), a bare subject cannot.

2.1.5 Relativization

A fifth argument against treating bare nominals and *bir NP* constructions similarly concerns the fact that the bare nominal cannot head relative constructions. This is an indication that bare nominals do not behave as independent elements. This is in contrast to *bir NP* nominals which can head relative clauses. Consider first the objects and then the subjects:

(16) a. *Nazan-ø [hazm-ı zor ol-an] *yemek* pişir-iyor-ø.

Nazan-nom digestion-poss.3sg hard be-SP food cook-impf-3sg

b. Nazan-ø [hazm-ı zor ol-an] *bir yemek* pişir-iyor-ø.

Nazan-nom digestion-poss.3sg hard be-SP one food cook-impf-3sg

'Nazan is cooking a dish that is hard to digest.'   [Erguvanlı 1984:24, ex. 67]

(17) a. *[Ayla-yı sok-an] *arı* [8]

Ayla-acc sting-SP bee

intended: 'a bee that stung Ayla'

b. [Ayla-yı sok-an] *bir arı*

Ayla-acc sting-SP one bee

'a bee that stung Ayla'

2.1.6 Aspectual properties

Finally, Aydemir (2004) notes an aspectual difference between *bir NP* nominals vs. bare

nominals as objects. She observes the grammaticality of these structures when they occur

with telic and atelic adverbs in Turkish:

(18) a. Ali-ø bir saat boyunca/*bir saat-te *çay* iç-ti-ø.

Ali-nom one hour along/one hour-loc tea drink-past-3sg

'Ali drank tea for an hour/*in an hour.'

b. Ali-ø bir saat-te *bir (bardak) çay* iç-ti-ø.

Ali-nom one hour-loc one (glass) tea drink-past-3sg

'Ali drank (a glass of) tea in an hour.'   [Aydemir 2004:469, ex. 9]

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[8] Note that this sentence is ungrammatical in the intended reading. It is, however, perfectly acceptable in the reading where *arı* 'bee' is interpreted as a definite entity: 'the bee that stung Ayla'.

As seen in (a) above, the occurrence of a telic adverb is infelicitous with the bare object since it does not single out a member of the class the noun refers to. It is, however, possible with *bir* NP object as seen in the example in (b).

2.1.7 Passivization

Kornfilt (1984) notes another difference in the behavior of *bir* NP vs. bare nominals in passive constructions. She points out that while an indefinite object with *bir* can be passivized with an agentive phrase, a bare object cannot:

(19) a. Hasan-ø *bir pasta* ye-di-ø.

Hasan-nom one cake eat-past-3sg

'Hasan ate a cake.'

b.   ??Hasan tarafından *bir pasta* ye-n-di-ø.

Hasan by one cake eat-pass-past-3sg

'A cake was eaten by Hasan.'   [Kornfilt 1984:250, fn. 27]

(20) a. Hasan-ø *pasta* ye-di-ø.

Hasan-nom cake eat-past-3sg

'Hasan did cake-eating.'

b.   *Hasan tarafından *pasta* ye-n-di-ø.

Hasan by cake eat-pass-past-3sg

intended: 'Cake was eaten by Hasan.'   [Kornfilt 1984:207, ex. 63]

All of these differences indicate that Turkish in fact distinguishes between the bare

nominals and *bir NP* constructions and that these two nominal phrases cannot be analyzed

on a par. The differences indicate that whereas *bir NP* constructions are referential, bare

nominals are not. Note that this is at odds with the previous analyses such as Enç (1991),

Diesing (1992), Kennelly (1993, 1994, 1997b) and Kelepir (2001) in that the latter argue that

only overtly case-marked nominals are interpreted referentially whereas the non-case-

marked ones are not. The differences we have observed between *bir NP* constructions and

bare nominals which do not have overt case-marking, however, indicate that *bir NP*

constructions in fact behave in a manner similar to case-marked nominals. I argue that they

are referential in the sense of Fodor and Sag (1982) where the identity of the referent of the

nominal is known to the speaker or the subject, though not to the listener. I, however,

interpret their *have-in-mind* relation in a different sense. Fodor and Sag (1982) argue that

indefinites are ambiguous between a referential and a quantificational reading. In the

referential reading, the indefinite 'refers' to an individual the speaker has in mind. Consider

their example below:

   (21) A student in the syntax class cheated on the final exam. (Fodor and Sag 1982:475)

Fodor and Sag (1982) argue that the indefinite noun phrase in this structure may be

semantically interpreted in two distinct ways: (i) as a quantified expression such as *each*

student or *few students*, or (ii) as a referring expression such as a proper name or demonstrative phrase. They claim that the indefinite in (21) can be interpreted as follows: someone who utters it might be intending to assert merely that the set of students in the syntax class is not empty (yielding the quantificational reading), or he might be intending to assert of some particular student, whom he does not identify, that this student cheated on the exam (yielding the referential reading).[9] Thus, they claim that in the referential reading of the indefinite, the speaker is making an assertion about the individual/entity he has in mind. Kennelly (2004) states that this can be labeled as a *have-in-mind* relation or epistemic specificity. She quotes Farkas (1994), where she claims that epistemic specificity is characterized in terms of the status of the referent of the indefinite with respect to the speaker's epistemic modal base and not with respect to the common ground.

The discussion of Turkish facts above indicates that *bir NP* constructions without overt case morphology in fact behave similarly to overtly case marked nominals; in other words, they are also referential along the lines described in Fodor and Sag (1982) (cf.

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[9] They point out that there are several factors that trigger the referential reading of the indefinite:

(i)   descriptive content (lengthy descriptions revealing what the speaker has in mind):
a. A friend of mine cheated on the exam. (Fodor&Sag 1982, ex.5)
b. Everyone hates a particularly obnoxious student in the syntax class who shouts at the instructor and hogs the discussion (ibid., ex. 10)

(ii)   topicalization (topicalized indefinites tend to be referential):
A Frenchman that I met in Tokyo, I went and had dinner with (him) in New York last week. (ibid., ex. 13)

(iii)   use of the colloquial non-demonstrative *this*:
This girl in the syntax class cheated on the exam (uttered with no such girl in the immediate neighborhood). (ibid., ex. 16)

(iv)   *there*-insertion (apart from asserting the non-emptiness of a set, another use in discourse tolerating the referential use of the indefinites):
There is a girl in our syntax class who cheated on the exam. (ibid., ex. 20)

(v)   relative clause formation (especially non-restrictive relative clauses):
a.   A student in the syntax class who has a Ph.D. in astrophysics cheated on the exam. (restrictive)
b.   A student in the syntax class, who has a Ph.D. in astrophysics, cheated on the exam. (non-restrictive) (ibid., ex. 22-23)

(vi)   use of *certain* and *particular*:
I accused a certain student of cheating. (ibid., ex. 27)

(vii)   use of numerals favors the quantificational reading rather than the referential one:
One student in the syntax class cheated on the exam. (ibid., ex.31)

Zidani-Eroğlu 1997b).[10] However, I reinterpret the view of *have-in-mind* relation by adopting

the view in Massam (2001) where, following Ghomeshi (1996, 1999), she argues that a

referential nominal is one which has a non-empty reference in a real or imaginary world, i.e.

which exists in a particular universe of discourse (*not* necessarily the world we live in). In

other words, I argue that [bir NP] nominals are referential in the sense that the speaker has

a referent in mind (à la Fodor and Sag 1982) either in the real world or in an imaginary one

(à la Massam 2001). The fact that [bir NP] nominals act as referential nominals in this sense

implies that Turkish in fact projects a category XP for the nominals in (1a-c) and YP for the

nominal in (1d). The next section will posit two kinds of syntactic evidence that supports

this claim.

2.2 Syntactic evidence

This section discusses two kinds of syntactic evidence for the claim that Turkish does not

belong to the class of languages that do not have DPs. Evidence from island effects in

scrambling and the ECM constructions indicates that Turkish indeed possesses a DP

projection to account for the behavior of nominals.

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[10] Note that Kelepir (2001) argues against the "referential" interpretation of zero-marked indefinites in Turkish in the sense of Fodor and Sag (1982). Since my aim is not to discuss scope ambiguities in structures which possess two quantifiers, I refer the reader to Kelepir (2001:59-134) for details of the argument.

2.2.1 Island effects in scrambling

There is a generalization concerning languages with no overt DP in that they are argued not to exhibit island effects in scrambling (Boeckx 2003). Turkish, however, poses a counterexample to this generalization in that we observe island effects in *wh*-scrambling in Turkish.

In Turkish, a *wh*-phrase in an embedded clause remains in its base-generated position regardless of whether it has matrix or local scope.[11] Consider the example below:

(22) [Aylin-ø [Melis-in ne-yi beğen-diğ-in]-i öğren-mek isti-yor-ø]]]./?

Aylin-nom Melis-gen what-acc like-nomin-poss.3sg-acc learn-inf want-impf-3sg

'Aylin wants to find out what Melis likes/d.'

'What$_i$ is it such that Aylin wants to find out that Melis likes/d t$_i$?'

(from Özsoy (in review), ex. 14)

The sentence in (22), where the *wh*-phrase occurs in its merge position, is ambiguous between the narrow scope reading of the *wh*-phrase and the wide scope reading as seen in the corresponding English counterpart.[12] What is significant is that long distance scrambling of the *wh*-phrase out of its clause is possible as seen below:

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[11] See Akar (1990), Özsoy (1996), Arslan (1999) and Görgülü (2006), among others, for *wh*-structures in Turkish.

[12] The ambiguity is resolved prosodically, i.e. by means of stress assignment and intonation pattern. Özsoy (in review) points out that the narrow scope reading of the *wh*-phrase is achieved when a constituent other than the *wh*-phrase is stressed and the sentence is uttered with a falling intonation. In the wide scope reading, on the other hand, the stress is on the *wh*-phrase and the sentence is uttered with a rising intonation.

(23) Ne-yi$_i$ [Aylin-ø [Melis-in t$_i$ beğen-diğ-in]-i öğren-mek isti-yor-ø]]] ?/*.

what-acc Aylin-nom Melis-gen like-nomin-poss.3sg-acc learn-inf want-impf-3sg

'What$_i$ is it such that Aylin wants to find out that Melis likes/d t$_i$?'

*'Aylin wants to find out what Melis likes/d.'

(from Özsoy (in review), ex. 18b)

Also significant is that the long-distance scrambling of the *wh*-phrase is only possible under the wide scope reading in that (23) can only be interpreted as a matrix question. Scrambling facts, thus, pose a problem to the analyses which claim that Turkish does not have DP projection since it would otherwise behave in line with the cross-linguistic generalization that states that languages that do not have DP do not exhibit island effects in scrambling (cf. Boeckx 2003).

There are, however, three island sensitive contexts in Turkish: (i) complex NP, (ii) *wh*-islands, and (iii) sentential subjects. Consider first the complex NPs. The following example in (a) shows that Turkish violates the complex NP constraint (CNPC) (Ross 1967). Scrambling of the *wh*-phrase out of a complex NP results in ungrammaticality as seen in (b):

(24) a. Sen-ø [kim-in yaz-dığ-ı kitab]-ı beğen-di-n?

you-nom who-gen write-OP-poss.3sg book-acc like-past-2sg

'Who (x) is it such that you liked the book x wrote?' (from Arslan 1999:26, ex.12a)

b. *Kim-in$_i$ [sen- ø [t$_i$ yaz-dığ-ı kitab]-ı beğen-di-n?

who-gen you-nom write-OP-poss.3sg book-acc like-past-2sg

The ungrammaticality of (b) above is unexpected given the prediction that Turkish would not exhibit island effects due to the lack of DP. Note, however, that as opposed to (24a), sentences where a *wh*-adjunct occurs are sensitive to the CNPC:

(25) *Sen-ø [o-nun niye yaz-dığ-ı kitab]-ı beğen-di-n?

  you-nom he-gen why write-OP-poss.3sg book-acc like-past-2sg

  intended: 'Why (x) is it such that you liked the book s/he wrote x?'

<div align="right">(from Arslan 1999:26, ex.12b)</div>

Özsoy (1996), following Nishigauchi (1990), accounts for the difference in the grammaticality of (24a) and (25) above via a feature percolation analysis whereby the *wh*-feature is percolated/copied to the head of the phrase containing the *wh*-phrase in those cases in which the category type of the *wh*-element matches that of the containing phrase. In her account, category type (or feature specification in the sense [±N]) is determined by the properties of the item in terms of theta-government. A theta-governed item has the feature [+N], whereas a theta'-governed item (an adjunct) is [-N]. Under this account, the grammaticality of (24a) is accounted for since the category of the *wh*-phrase matches that of the phrase in which it is contained and the *wh*-feature percolates to the head node allowing the whole complex NP to move to Spec CP at LF. The ungrammaticality of (25) is also predicted under this account, since the *wh*-phrase is an adjunct in this case, failing to match the category of the phrase containing it. Hence, no feature percolation takes place yielding an ungrammatical structure. I refer the reader to Özsoy (1996) for details.

 Consider now the *wh*-island effect in the sense of Ross (1967):

(26) a. Aylin-ø kim-e [Zeynep-in kim-i gör-düğ-ün]-ü sor-du-ø?

Aylin-nom who-dat Zeynep-gen who-acc see-nomin-poss.3sg-acc ask-past-3sg

'Whom$_i$ did Aylin ask t$_i$ whom$_j$ Zeynep saw t$_j$?'

b. ✓[Kim-e$_i$ [Aylin-ø t$_i$ [Zeynep-in kim-i gör-düğ-ün]-ü sor-du-ø]]?

who-dat Aylin-nom Zeynep-gen who-acc see-nomin-poss.3sg-acc ask-past-3sg

'To whom$_i$ did Aylin ask t$_i$ whom$_j$ Zeynep saw t$_j$?'

c. *[Kim-i$_i$ [Aylin-ø kim-e [Zeynep-in t$_i$ gör-düğ-ün]-ü sor-du-ø]]?

who-acc Aylin-nom who-dat Zeynep-gen see-nomin-poss.3sg-acc ask-past-3sg

intended: 'Who$_i$ did Aylin ask whom Zeynep saw t$_i$?'

(from Özsoy (in review), ex. 21 a-c)

The ungrammaticality of (c) as opposed to the grammaticality of (b) indicates that long distance scrambling of a *wh*-phrase over another *wh*-phrase is not possible in Turkish. This *wh*-island effect is not expected given the claim that Turkish does not have DP.

Thirdly, sentential subjects provide another piece of argument that indicates that Turkish poses a challenge to the generalization:

(27) a. [Zeynep-in ne-yi oku-ma-sı] herkes-i şaşırt-tı-ø?

Zeynep-gen what-acc read-vn-poss.3sg everyone-acc astonish-past-3sg

'What (x) is it such that [Zeynep's reading x] astonished everyone?'

b. *? Ne-yi$_i$ [Zeynep-in t$_i$ oku-ma-sı] herkes-i şaşırt-tı-ø?

what-acc Zeynep-gen read-vn-poss.3sg everyone-acc astonish-past-3sg

The sentence in (a) above shows that Turkish violates the Sentential Subject Constraint (Ross 1967). The scrambling of the *wh*-element however results in an ungrammatical structure indicating that Turkish does not behave as a language with no determiner phrase given the assumptions of the generalization stated above (Boeckx 2003). Note that as opposed to the grammaticality of (27a), the following sentence in which a *wh*-adjunct occurs in a sentential subject is ungrammatical. In other words, adjuncts seem to show sensitivity to the Sentential Subject Constraint:

(28) *[O-nun niye gel-me-si] iyi ol-du-ø?

he-gen why come-vn-poss.3sg good be-past-3sg

intended: 'Why (x) was it good that he came x?' (Arslan 1999:24, ex. 10a)

Özsoy's (1996) feature percolation analysis discussed briefly above accounts for the ungrammaticality of (28) in that the *wh*-adjunct fails to match the feature of the clause it occurs in, hence no feature percolation is possible.[13]

The fact that Turkish exhibits island effects in *wh*-scrambling in three contexts, i.e. complex NPs, *wh*-islands and sentential subjects, poses a challenge to the cross-linguistic claim for analyses arguing that Turkish does not project a DP. The semantic evidence put

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[13] Arslan (1999), however, points out that the following sentence poses a problem for Özsoy's (1996) account:
   (i)   Film-in kaçta başla-yacağ-ı duy-ur-ul-du-ø?
          film-gen when begin-nomin-poss.3sg hear-caus-pass-past-3sg
          'When (x) is it such that the film was announced to begin x?' (Arslan 1999:42, ex 3a)
The sentence in (i) also contains a *wh*-adjunct within a sentential subject, however it is totally grammatical as opposed to (28) above. See Arslan (1999) for discussion.

forth in the preceding subsection has indicated that there needs to be another category XP besides the commonly assumed YP (i.e. NP). The next section provides the second syntactic evidence to the same effect.

2.2.2 ECM constructions in Turkish

This section mainly provides further support to the claim that Turkish nominal phrases cannot be all analyzed as NPs. The evidence comes from the differing behavior of *bir NP* nominals as opposed to bare nominals in ECM constructions. I will show that the occurrence of bare nominals in ECM clauses results in ungrammaticality whereas that of *bir NP* structures is acceptable. I will discuss the ECM constructions in detail showing evidence to the effect that the ECM subject is in fact base-generated in the ECM clause from whose predicate it gets its theta-role. However, syntactic tests show that it moves to the matrix clause level. (In Chapter 5, I will claim that the trigger of the movement of the ECM subject is the (strong) Case feature of the nominals (cf. Bošković 2005).)

The canonical analyses of ECM constructions in Turkish have commonly approached the data in view of whether there is any movement involved in the derivation of the construction. Based on the nature of the assumptions made, these analyses can be summarized as follows:

(i)   raising analysis: the accusative marked phrase is raised to the matrix clause level (Knecht 1986, Zidani-Eroğlu 1997a, Moore 1998, Özsoy 2001)

(ii)   in-situ analysis: the accusative marked phrase remains in the embedded clause

         (Aygen 2002, Öztürk 2005b, Meral 2005, Oded 2006)

(iii)   base-generation at the matrix clause analysis: the accusative marked phrase is

         base-generated at the matrix clause (İnce 2005, 2006)

In this section, I present evidence to argue first that the ECM clauses are not CPs. This is

significant in that CPs constitute phases and do not allow constituents to be in a syntactic

relation with the higher clause unless they are in the edge position, i.e. Spec CP, according

to the Phase Impenetrability Condition (Chomsky 2000, 2001, 2004). Secondly, I present

evidence to argue that the exceptionally case-marked nominal is in the matrix clause (contra

Aygen 2002, Öztürk 2005b, Meral 2005 and İnce 2006). The arguments I present for this

come from adverb scope facts, pronominal binding, existential sentences and scopal

properties of negation and a QP. In section 2.2.2.3, I will argue against the analysis of the

ECM subject as base-generated in the matrix clause, but claim that the ECM nominal

undergoes raising to the matrix clause level from its base-generated position in the ECM

clause from whose predicate it receives its theta-role.[14] As mentioned earlier, the discussion

provides syntactic support from ECM clauses with bare nominals against the claim that

Turkish does not have a DP projection. An example of the ECM clause in Turkish is given

below:

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[14] Note that arguing for a movement approach implies that the subject of the embedded clause is not exceptionally case-marked in situ (cf. Chomsky 1981) but moved to the matrix object position (or rather the position the object would move to. See further discussion in the text on the issue). Therefore, one can consider the structure under consideration not as ECM per se, but SOR (subject-to-object raising) as initially proposed by Postal (1974). For ease of reference, I will continue referring to these structures as ECM.

(29) Biz-ø sen-i Ankara-ya git-ti-(n) san-dı-k.

  we-nom you-acc Ankara-dat go-past-(2sg) think-past-1pl

  'We considered you to have left.'

The ECM nominal *sen* 'you' is marked with the accusative case. Note that there are two dialects with respect to the occurrence of the agreement on the ECM verb. This study will mainly deal with the dialect where there is no agreement marker on the ECM predicate (see Aygen 2006 for criticism of calling ECM clauses with and without agreement different dialects).

2.2.2.1 Arguments against the CP analysis of ECM in Turkish

As opposed to the analyses that claim that the ECM clause is a CP (Öztürk 2005b, Meral 2005, Oded 2006), I argue, following Kural (1993), Moore (1998), Özsoy (2001) and Aygen (2003), that the ECM clause is not a CP but a TP, which is deficient in nature. The syntactic evidence I give comes from (i) pronominal binding facts, and (ii) the difference in the behavior of topicalized subjects of a fully finite complement clause and an ECM subject.

  Kural (1993) has argued that *–K* in the nominalizing suffixes *-DIK/-(y)AcAK(K)* in Turkish is the overt realization of the C° and the absence of this head allows for the exceptional marking of the embedded subject by the matrix verb. In Aygen's (2003) and Özsoy's (2001) accounts, the T head is deficient and thus cannot check the φ-features of the

embedded subject.[15] In theoretical terms, T is deficient when it is not selected by the phase

head C° (Chomsky 2000, 2001). The pronominal binding facts illustrated below provide the

empirical support for the argument that ECM clauses are not CPs in Turkish. Consider the

data below:

(30) pro$_i$ [sadece sen-ø$_i$ bun-u yap-abil-ir-sin] san-ıyor-sun.   fully finite complement

   pro only you-nom this-acc do-abil-aor-2sg think-prog-2sg

   'You think (that) only you can do this.'

(31) *pro$_i$ [sadece sen-i$_i$ bun-u yap -abil-ir-(sin)] san-ıyor-sun.   ECM

   pro only you-acc this-acc do-abil-aor-2sg think-prog-2sg

   *'You consider only you to be able to do this.'

(32) ✓pro$_i$ [sadece kendi-n-i$_i$ bun-u yap -abil-ir-(sin)] san-ıyor-sun.   ECM

   pro only self-poss2sg-acc this-acc do-abil-aor-2sg think-prog-2sg

   'You consider only yourself to be able to do this.'

Note that the pronominal *sen* 'you-nom' in the fully finite complement clause in (30) is

interpreted coreferentially with the matrix subject pro. In example (31), where the

complement is an ECM clause, however, the occurrence of the pronominal *sen-i* 'you-acc'

as the subject of the ECM clause results in ungrammaticality. This ungrammaticality is not

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[15] Even though both Özsoy (2001) and Aygen (2003) independently argue for the TP$_{def}$ analysis of the ECM clause, they differ in their claims as to the position of the ECM subject. While Özsoy (2001) argues for a raising analysis of the ECM subject (where the ECM predicate is a DP/PP), Aygen (2003) argues that it remains in its own clause forming a long-distance *Agree* relation with the matrix *v*. In the following section, I will criticize Aygen's account where the ECM nominal stays in situ.

expected and cannot be accounted for by arguments stating that the ECM clause in Turkish is a CP. Moreover, the grammatical occurrence of a reflexive pronoun in (32) clearly shows that the claim that ECM clauses in Turkish are CPs cannot be sustained. If they were CPs, we would predict that the pronominal in the ECM clause would get the same interpretational properties of the one in a fully finite clause (see 30), and that the occurrence of an anaphor would yield ungrammaticality violating Binding Condition A. However, the data above shows that the ECM is not opaque to binding relations externally. [16]

Secondly, note that Öztürk (2005b) and Meral (2005) independently argue that the ECM subject occupies the Spec position of the embedded clause, i.e. Spec CP. However, this argument faces a problem in that the claim that the ECM subject occupies the Spec CP of the ECM clause predicts no interpretive difference between ECM clauses and fully finite complement clauses whose subjects are topicalized, thus occupy the Spec CP position. Consider the following:

    (33) Ali-ø [kimse de on-u sev-m-iyor] san-ıyor-ø.   fully finite complement clause

        Ali-nom noone top he-acc love-neg-impf think-impf-3sg

        'Ali thinks noone loves him.'

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[16] Özsoy (2001) shows that the pronoun behaves as free in the ECM clause where the predicate of the ECM clause is a VP or AP:
    (i)   Siz-i biz-den/*kendi-miz-den bahsed-iyor san-dı-k. (Özsoy 2001, ex. 19a)
           you-acc we-abl/self-poss.1pl-abl talk.about-impf think-past-1pl
           'We considered you to talk about us/*ourselves.'
    (ii)   Sen-i ban-a/*kendi-m-e kızgın san-ıyor-du-m. (Özsoy 2001, ex. 19b)
           you-acc I-dat/self-poss.1sg-dat angry think-impf-past-1sg
           'I considered you to be angry at me/*myself.'
Note that in these constructions the matrix subject can be interpreted co-referentially with a *non-subject* in the ECM clause, i.e. *bizden* 'we-abl' and *bana* 'I-dat' respectively. The examples (30-32) I provide above, however, indicate that the ECM subject cannot be interpreted to be co-referential with the matrix subject.

(34) *Ali-ø [kimseyi (de) on-u sev-m-iyor] san-ıyor-ø.   ECM

   Ali-nom noone-acc (top) he-acc love-neg-impf think-impf-3sg

   Intended: 'Ali considers noone to love him.'

Note that the negative polarity item (NPI) *kimse* 'noone' needs to be c-commanded by

negation (Kelepir 2001). As seen in the fully finite complement clause, the occurrence of a

subject NPI is fully grammatical, whereas it yields ungrammaticality in the ECM clause. The

argument that the ECM subject occupies the Spec CP of its own clause, and thus escapes

the c-command domain of negation, does not account for the fully finite complement

clause whose subject is topicalized and has moved to Spec CP. The grammaticality of the

occurrence of the NPI in a fully finite complement clause where it is topicalized is

accounted for following Kelepir's (2001) claim that the position of Neg in the verbal

complex does not determine its c-command domain. The contrast in the grammaticality of

these two sentences above constitutes another argument against the CP status of the ECM

clauses in Turkish and against the claim that the ECM subject is in Spec CP.

2.2.2.2 Arguments for ECM subject in the matrix clause

Kornfilt (1977), Knecht (1986), Zidani-Eroğlu (1997a), Moore (1998), and Özsoy (2001)

independently argue that the ECM subject undergoes raising to the matrix clause level from

within the ECM clause. I will first briefly summarize the arguments in the literature and

then present the syntactic evidence concerning adverb scope facts, existential sentences and

scopal properties of negation and a QP. However, it is important to note that the evidence

can be interpreted as not constituting a solid argument for raising but for the claim along the lines of the base-generation analysis of İnce (2005, 2006) that the ECM subject is in the matrix clause. Section 2.2.2.3 will discuss the problems of İnce's analysis and claim that the evidence should be interpreted only as the raising of the ECM subject to the matrix clause level.

Zidani-Eroğlu (1997a) argues that the accusative marked nominal in ECM constructions is base-generated as the subject of the ECM clause and undergoes movement to matrix object position for Case reasons. She claims that the correct representation of the ECM clauses in Turkish is as follows:

(35) $[_{S1} ...NP\text{-}Acc_i ... [_{S2} t_i ...]...]$ (Zidani-Eroğlu 1997a: 220, (2a))

Zidani-Eroğlu provides as evidence the structures in which an imperfective temporal adverb occurs in an ECM clause with a perfective predicate (cf. Kornfilt 1977):

(36) a. Siz sabah-tan beri [Ali öp-ül-dü] san-ıyor-sunuz.

you morning-abl since Ali kiss-pass-past believe-impf-2pl

'Since this morning, you believe that Ali has been kissed.'

b. *Siz [Ali sabah-tan beri öp-ül-dü] san-ıyor-sunuz. (Zidani-Eroğlu 1997a, ex. 9-10)

you Ali morning-abl since kiss-pass-past believe-impf-2pl

'Since this morning, you believe that Ali has been kissed.'

(37) Siz Ali-yi sabah-tan beri öp-ül-dü san-ıyor-sunuz. (Zidani-Eroğlu 1997a, ex. 11)

      you Ali-acc morning-abl since kiss-pass-past believe-impf-2pl

      'Since this morning, you believe Ali to have been kissed.'

As seen in (36b), the occurrence of the imperfective temporal adverb after the subject of

the finite embedded clause is ungrammatical since the adverb fails to modify the

imperfective matrix verb. In the ECM construction in (37), however, the adverb modifies

the matrix predicate, which indicates that it is in the matrix clause. This leads to the

conclusion that the ECM nominal preceding the adverb is in the matrix clause.

    The second set of structures Zidani-Eroğlu (1997a) analyzes consists of those

containing a negative polarity item (NPI), which is grammatical only in the presence of a

licenser.

(38) Siz [*kimse* bu kitab-ı oku-**ma**-dı] san-ıyor-sunuz. (Zidani-Eroğlu 1997a:225, ex.28a)

      you nobody this book-acc read-neg-past think-impf-2pl

      'You think that noone has read this book.'

(39) *Siz [*kimse*-yi bu kitab-ı oku-**ma**-dı] san-ıyor-sunuz. (ibid, p. 226, ex. 29a)

      you nobody-acc this book-acc read-neg-past think-impf-2pl

      intended: 'You consider noone to have read this book.'

In (38), the occurrence of an NPI in a finite embedded clause with a licenser (the negative

suffix –*mA*) is grammatical. (39) is an ECM construction and the occurrence of an NPI is

ungrammatical. This indicates that the ECM nominal is not within the scope of the licenser; thus, is not within the embedded clause (cf. Kural 1993).

Moore (1998) independently argues for a Subject-to-Object raising analysis of the ECM clauses in Turkish. He claims that similar to the raising constructions in a language like English, the ECM subject overtly moves to the matrix level in Turkish. As for the second dialect which allows the movement of the embedded subject from within a fully finite complement clause, i.e. marked with both tense and agreement, he argues for a Copy-raising analysis where a coindexed *pro* occurs in the base-generated position of the nominal. This analysis allows him to account for the fact that Turkish subject-to-object raising and subject-raising constructions do not exhibit Finite Clause effects, but they do exhibit Specified Subject effects.

Özsoy (2001) also argues that the ECM nominal is base-generated as the subject of the ECM clause but undergoes raising to matrix object position for Case checking reasons due to the deficiency of the T in the ECM clause to check for Nominative. Her analysis differs from the others in that she distinguishes between the structures with an Accusative NP(/DP) and an XP without Agr, depending on the categorial feature of the X. She proposes that the configurations [DP$_{ACC}$ XP$_{-AGR}$] in which XP is either VP or AP behave as Small Clauses and have the structure given below with examples:

(40) [$_{AgroP}$ Spec [$_{VP}$ Subj [$_{TP}$ Spec [$_{XP}$ DP $_{ACC}$ XP$_{-Agr}$] T] V] $_{Agro}$] (Özsoy 2001, ex. 22)

(41) Herkes sen-i Ankara-ya git-ti san-ıyor. (Özsoy 2001, ex. 6a)

    everyone you-acc Ankara-dat go-past think-impf

    'Everyone considers you to have gone to Ankara.'

(42) Ben sen-i yorgun san-ıyor-du-m. (Özsoy 2001, ex. 6b)

   I you-acc tired think-impf-past-1sg

   'I considered you tired.'

The configurations where the XP is either DP or PP, on the other hand, are complex

predicates having the following representation exemplified below:

(43) [$_{AgroP}$ Spec [$_{VP}$ Subj [$_{XP}$ DP $_{ACC}$ XP$_{-Agr}$] V] $_{Agro}$] (Özsoy 2001, ex. 23)

(44) O sen-i avukat san-ıyor. (Özsoy 2001, ex. 6c)

   he you-acc lawyer think-impf

   'He considers you a lawyer.'

(45) Herkes sen-i ban-a yakın san-ıyor. (Özsoy 2001, ex. 6d)

   everyone you-acc I-dat close think-impf

   'Everyone considers you close to me.'

Özsoy points out that in small clause constructions (i.e. configurations where the XP is VP

or AP), the NP marked with accusative occurs in the subject position, defining the

embedded clause as the local domain for binding. In complex predicate constructions (i.e.

where XP is DP or PP), on the other hand, the accusative marked NP does not occur in the

subject position of the lower clause. This argument is against Zidani-Eroğlu (1997a) who

considers that the accusative marked NP occurs always outside the domain of the lower clause.

Özsoy bases her claim that there is a structural difference between small clauses and complex predicates first on the grammaticality of the projection of TP only with the VP and AP predicates.[17] The second piece of evidence for the distinction comes from the occurrence of NegP in ECM clauses. Özsoy argues that NegP can be projected only in ECM clauses with VP/AP as predicates, but not with DP/PP as predicates.[18] The third piece of evidence Özsoy uses to differentiate between different types of ECM concerns binding facts. She points out that the ECM clauses with VP/AP as predicates allow an overt pronominal co-indexed with the matrix subject, whereas the occurrence of a reflexive results in ungrammaticality. The opposite is observed in ECM clauses with DP/PP as

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[17] Her examples are below:

    (i)   Herkes ben-i Ankara-ya git-ti/gid-ecek/gid-iyor san-ıyor. (Özsoy 2001, ex. 12)
              everyone I-acc Ankara-dat go-past/go-fut/go-impf think-impf
              'Everyone considers me to have gone/to be going to go/to be going to Ankara.'
    (ii)   *Herkes ben-i mutlu-ydu/avukat-tı/on-a karşı-ydı san-ıyor. (Özsoy 2001, ex. 13b)
              everyone I-acc happy-past/lawyer-past/he-dat against-past think-impf
              intended: 'Everyone considers me to have been happy/a lawyer/against him.'

Özsoy (2001) gives another example with an AP predicate where the occurrence of an overt T° morpheme does not result in total ungrammaticality:

    (iii)   ?Ben sen-i yorgun-du san-ıyor-du-m. (ibid., ex. 25a)
              I you-acc tired-past think-impf-past-1sg
              'I considered you to have been tired.'

Meral (2005) points out that the ECM clauses with locative predicates behave differently from the ones with a DP/PP predicate in allowing a Tense projection:

    (iv)   Herkes ben-i dün burada değil-di san-ıyor.
              everyone I-acc yesterday here not-past think-impf
              'Everyone considers me not having been here yesterday.'   (Meral 2005, ex. 11)

See Meral for further details and discussion on the issue.

[18] Her examples for the occurrence of the NegP in ECM clauses are as follows:

    (i)   Herkes ben-i Ankara-ya git-me-di san-ıyor. (Özsoy 2001, ex. 16)
              everyone I-acc Ankara-dat go-neg-past think-impf
              'Everyone considers me not gone to Ankara.'
    (ii)   Herkes ben-i mutlu değil san-ıyor. (Özsoy 2001, ex. 17)
              everyone I-acc happy not think-impf
              'Everyone considers me not happy.'
    (iii)   *Herkes ben-i avukat/on-a karşı değil san-ıyor. (Özsoy 2001, ex. 18)
              everyone I-acc lawyer/he-dat against not think-impf
              intended: 'Everyone considers me not a lawyer/against him.'

Based on the examples above, she argues that NegP is possible only with ECM clauses with VP/AP as predicates.

predicates, i.e. the occurrence of an overt pronominal is out, whereas a reflexive coindexed with the matrix subject results in a fully acceptable structure.[19] Based on these differences, Özsoy (2001) argues that the ECM structures with VP/AP as predicates behave as small clauses where the ECM subject, i.e. the accusative marked DP, behaves as the subject of the clause and forms a Complete Functional Complex with the predicate constituting the local binding domain for the anaphor. Since the anaphor fails to be bound in its governing category, the Binding Condition A is violated leading to ungrammaticality. The ECM structures with DP/PP as predicates, however, behave differently in allowing the anaphor and not the pronominal. This leads Özsoy to argue that they form complex predicates with the main predicate within a VP shell analysis in the sense of Larson (1988), whereby the accusative marked DP never occupies a subject position. As for the case checking properties of the accusative marked DP, Özsoy argues that it raises to the matrix Agr_oP to have its case checked before Spell-Out (in line with Zidani-Eroğlu (1997a) and Kural (1997)).

Özsoy's (2001) analysis faces certain problems with respect to using NegP and binding facts to argue for a distinction between ECM constructions with VP/AP vs. DP/PP as predicates. Her claim that NegP cannot occur with ECMs having DP/PP as

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[19] Özsoy (2001) gives the following examples to show that ECM clauses with VP/AP as predicates allow a pronominal to be co-indexed with the matrix subject, whereas ECM clauses with DP/PP predicates do not:

  (i)   (Biz) Siz-i biz-den/*kendi-miz-den bahsed-iyor san-ıyor-du-k. (Özsoy 2001, ex. 19a)
        we you-acc we-abl/self-poss.1pl-abl talk-impf think-impf-past-1pl
        'We considered you to be talking about us/*ourselves.'
  (ii) (Ben) Sen-i ban-a/*kendi-m-e kızgın san-ıyor-du-m. (Özsoy 2001, ex. 19b)
        I you-acc I-dat/self-poss.1sg-dat angry think-impf-past-1sg
        'I considered you to be angry with me/*myself.'
  (iii) (Sen) Ben-i *san-a/kendi-n-e yakın san-ıyor-sun. (Özsoy 2001, ex. 20a)
        you I-acc you-dat/self-poss.2sg-dat close think-impf-2sg
        'You consider me close to yourself/*you.'
  (iv) (Biz) Sen-i *biz-im/kendi-miz-in san-ıyor-du-k. (Özsoy 2001, ex. 20b)
        we you-acc we-gen/self-poss.1pl-gen think-impf-past-1pl
        'We considered you to be our own/*ours.'

predicates is weakened by the fact that the structures result in grammaticality under certain contexts:

(46) Aaa, ben sen-i artık öğrenci değil san-ıyor-du-m, hâlâ bir dersin varmış!

exc I you-acc any.more student not think-impf-past-1sg (you still have one course)

'I thought you not to be a student any more, but you apparently have one more course to take.'

(47) Ben-i savaş-a karşı değil san-ıyor-lar. Çok yanılıyorlar!

I-acc war-dat against not think-impf-3pl (they are mistaken)

'They consider me not against the war. They are mistaken!'

As seen above, the occurrence of NegP within an ECM with DP and PP as predicate is acceptable given the right context (compare ex. iii fn.18 (Özsoy 2001, ex. 18)).

Another problem with Özsoy's (2001) account concerns the binding facts. First of all, note the ungrammaticality of the ECM clause given in (31) above (and see footnote 16). The claim that the occurrence of a pronominal in an ECM with DP/PP as a predicate results in ungrammaticality seems too strong. Consider the following:

(48) Siz-i bu konu-da ban-a/*kendi-m-e karşı san-ıyor-du-m (desteğiniz beni şaşırttı).

you-acc this topic-loc I-dat/self-poss.1sg-dat against think-impf-past-1sg

'I considered you against me/*myself on this issue (your support surprised me).'

(49) Sen-i sadece ben-im/*?kendi-m-in san-ıyor-du-m, yanılmışım.

you-acc only I-gen/self-poss.1sg-gen think-impf-past-1sg (I was mistaken)

'I considered you only mine/*?my own (I was apparently mistaken).'

Compare the examples above to (iii) and (iv) in fn. 19 (Özsoy 2001, ex. 20a-b). The grammaticality of these structures weakens Özsoy's claim that the ECM constructions with DP/PP as predicates form a complex predicate with the matrix verb, not forming a Complete Functional Complex like the ones having VP/AP as predicates. To sum up, it seems more appropriate to treat these structures alike whereby the accusative marked DP behaves at some level as the subject of the ECM clause.

We have briefly seen the accounts provided by Zidani-Eroğlu (1997a), Moore (1998) and Özsoy (2001) who have argued for a raising account of the ECM nominal. Focusing now on the syntactic evidence, I will show that the ECM subject surfaces in the matrix clause level. The arguments I present come from adverb scope facts, existential sentences and scopal properties of negation and a QP. The reader should note that the syntactic evidence provided in this section does not necessarily argue for a raising account per se. It just indicates that the ECM nominal occurs in the matrix level and not in the ECM clause. In the following section, however, I will present evidence for the claim that the ECM nominal in fact *raises* to the matrix level from within the ECM clause.

(i) Adverbial scope

Aygen (2002), Öztürk (2005b) and Oded (2006) have argued that the adverbial in the following structure has only narrow scope reading. Note that, contrary to their claims, many native speakers accept the wide scope interpretation of the data below:

(50) Ben-ø [Kürşat-ı *her zaman* geç kal-ıyor] san-ıyor-du-m.   (from Aygen 2002)

I-nom Kürşat-acc always be.late-prog think-prog-past-1sg

'I thought Kürşat was *always* being late.'   narrow scope of the adverb

'I *always* thought Kürşat was being late.'   wide scope of the adverb

Evidence supporting that the adverb is interpreted at the matrix level comes from the

argumentation of Kornfilt (1977), Zidani-Eroğlu (1997a), Özsoy (2001), İnce (2005):

(51) Zeynep-ø *sabah-tan beri* sinema-da öp-ül-dü san-ıl-ıyor-ø. (Kornfilt 1977: 741, ex. 11)

Zeynep-3sg morning-abl since cinema-loc kiss-pass-past believe-pass-past-3sg

'Since this morning, Zeynep is believed to have been kissed in the cinema.'

(52) Siz Ali-yi *sabah-tan beri* öp-ül-dü san-ıyor-sunuz. (Zidani-Eroğlu 1997a, ex. 11)

you Ali-acc morning-abl since kiss-pass-past believe-impf-2pl

'Since this morning, you believe Ali to have been kissed.'

(53) Ben-i *dün gece* Ankara-ya gid-iyor-(um) san-dı-lar. (Özsoy 2001:227, ex.32)

I-acc last night Ankara-dat go-impf-(1sg) believe-past-3pl

'Last night, they considered me to be going to Ankara.'

(54) Ali-ø Kürşat-ı *asla* sinema-ya gid-iyor san-ma-dı-ø.   (İnce 2005)

Ali-nom K-acc never cinema-dat go-prog think-neg-past-3sg

'Ali *never* thought that Kürşat was going to the movies.'

*'Ali thought that Kürşat was *never* going to the movies.'

(55) a. *Ali-ø asla sinema-ya git-ti-ø.   b. Ali-ø asla sinema-ya git-me-di-ø.

   Ali-nom never cinema-dat go-past-3sg   go-neg-past-3sg

   'Ali never went to the movies/Ali did not go to the movies at all.'

As seen in (51-53) above, the sentential adverbs *sabahtan beri* 'since this morning' and *dün gece*
'last night' are only interpreted at the matrix level. Moreover, the adverb *asla* 'never' in (54),
which needs a c-commanding negation to be interpreted [20] (see 55), follows the ECM
subject and the only interpretation of this sentence is the one in which the adverb modifies
the negated matrix verb *san-* 'think', contra Aygen (2002), Öztürk (2005b) and Oded (2006).
Consider, moreover, the following example where again the adverb is interpreted at the
matrix level only:

(56) Ben-ø sen-i *hep* Ankara-da doğ-du san-ıyor-du-m.

   I-nom you-acc always Ankara-loc get.born.past think-prog-past-1sg

   'I *always* thought you were born in Ankara.'

   *'I thought you were *always* born in Ankara.'

The sentence above is interpreted with the wide scope reading of the adverbial *hep* 'always'.
The narrow scope interpretation is not only ungrammatical, but also pragmatically
impossible.

   Additional support comes from the following example of Meral (2005) which he uses
to show the different behavior of the ECM clauses with locative predicates:

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[20] Kelepir (2001), following Klima (1984), argues that NPIs in Turkish are licensed by a c-commanding
negation.

(57) Herkes-ø ben-i dün burada san-ıyor-du-ø.

everyone-nom I-acc yesterday here think-impf-past-3sg

'Everyone considered me here yesterday.'   (Meral 2005, ex. 7)

In this example, the adverb seems to modify the ECM predicate at first. I argue, however, that it again modifies the matrix predicate. The ungrammaticality of the following sentence supports my argument:

(58) *Herkes-ø ben-i dün bura-da san-ıyor-ø.

everyone-nom I-acc yesterday here-loc think-impf-3sg

intended: 'Everyone considers me to have been here yesterday.'

The matrix predicate in this example is in the present and the occurrence of the past temporal adverb *dün* 'yesterday' in the clause results in ungrammaticality, which shows that the adverb modifies the matrix predicate, and not the embedded one in (57). The intended meaning of (58), i.e. the adverb modifying the embedded predicate, is achieved by having a past tense morpheme on the embedded predicate:

(59) Herkes-ø ben-i dün bura-da-ydı sanıyor-ø.

everyone-nom I-acc yesterday here-loc-past think-impf-3sg

'Everyone considers me to have been here yesterday.'

To sum up, adverb scope facts and the position of the ECM nominal with regard to the adverb indicate that the accusative marked nominal is not in the ECM clause, but rather in the matrix one.

(ii) Existential sentences

The second piece of evidence for the claim that the ECM subject is in the matrix clause comes from existential sentences (see Özsoy 1998, Kelepir 2001, Sezer 2001, among others). Consider the use of the existential particles *var* 'there is/are' and *yok* 'there is/are not' in expressing possession, i.e. possessive existentials in Sezer's (2001) terms:

(60) Sen-in banka-da para-n var.

   you-gen bank-loc money-2sg.poss exist

   'You have money in the bank.'

In this possessive existential structure, Sezer (2001) argues that the genitive NP *senin* does not form a constituent with the possessive marked NP *paran* (cf. Kelepir 2001). As support for his claim, he gives the ECM structure below. Compare the fully finite complement clause in (61):

(61) Ben-ø [sen-in banka-da para-**n** var] san-mıştı-m.   fully finite complement

   I-nom you-gen bank-loc money-poss.2sg exist think-past perf-1sg

   'I had thought you had money in the bank.'

(62) Ben-ø sen-i banka-da para-**sı** var san-mıştı-m.   ECM

     I-nom you-acc bank-loc money-poss.3sg exist think-past perf-1sg

     'I had thought you had money in the bank.'   [Sezer 2001, ex. 66]

The ECM structure of the possessive existential yields a grammatical structure as seen in (62). The interesting fact about this structure is that the ECM subject *seni* does not trigger any agreement on the possessive noun, which indicates that the ECM subject is not in its own clause but in the matrix one. The agreement then is realized as the 3rd person singular default agreement on the possessive marked nominal.

   (iii) Quantifier scope

Thirdly, the scope facts of quantifier phrases with respect to negation also indicate that the ECM subject is not in its own clause. Öztürk (2005b) has argued, contra Zidani-Eroğlu (1997a), that the NPI licensing facts do not show that the ECM subject is in the matrix clause but only indicate that it is higher than the c-commanding domain of negation which results in the failure of its being licensed. Consider the example repeated below:

(63) *Siz-ø [kimse-yi bu kitab-ı oku-ma-dı] san-ıyor-sunuz.

     you-nom anybody-acc this book-acc read-neg-past think-prog-2pl

     intended 'You believe nobody to have read the book.'

                                (Zidani-Eroğlu 1997a:226, ex.29a)

The scope interaction of negation with respect to the quantifiers *her* 'every' and *bütün* 'all', however, indicates that the ECM subject cannot be in its own clause. Let us first consider the scope interaction of these quantifiers with respect to negation in a simplex clause:

(64) Her öğrenci-ø ders-e gel-me-di-ø.   neg>∀; *∀>neg[21]

     every student-nom class-dat come-neg-past-3sg

     'Every student did not come to class.'

(65) Bütün öğrenci-ler-ø ders-e gel-me-di-ø.   neg>∀; *∀>neg[22]

     all student-pl-nom class-dat come-neg-past-3sg

     'All (of the) students did not come to class.'

As seen above, the universal quantifiers *every* and *all* get narrow scope with respect to negation in Turkish (cf. Kelepir 2001). This, however, is not the case when they are exceptionally case-marked. Consider the following:

(66) Ali-ø her öğrenci-yi ders-e gel-me-di san-ıyor-ø.   *neg>∀; ∀>neg

     Ali-nom every student-acc class-dat come-neg-past think-impf-3sg

     'Ali considers every student not to have come to class.'

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[21] S. Özsoy pointed out that there is a group of speakers, including herself, who interpret this sentence as ambiguous. The speakers I have consulted with, however, take only the reading whereby negation outscopes the universal quantifier. I leave this dialectal difference aside in this study.

[22] This sentence does not show any plural agreement between the subject and the verb. Öztürk (2005, 2005b) argues that when there is plural agreement on the verb, the subject is interpreted as having only wide scope with respect to negation. The native speakers I consulted with did not get this interpretation. Therefore, I argue that it is a dialectal difference and the plural agreement on the verb does not necessarily force the subject to move to Spec TP as argued by Öztürk (2005, 2005b) but changes the semantic interpretation of it with respect to group vs. individual reading. See footnote 7 in Chapter 5 for discussion.

(67) Ali-ø bütün öğrenci-ler-i ders-e gel-me-di san-ıyor-ø.   *neg>∀; ∀>neg

　　　Ali-nom all student-pl-acc class-dat come-neg-past think-impf-3sg

　　　'Ali considers all students not to have come to class.'

The quantified noun phrases in the ECM construction get wide scope interpretation with respect to negation, contrary to their interpretation in simple clauses. The ungrammaticality of the wide scope reading of negation (or the lack of ambiguity) implies that they are not in the same clausal domain as the negation.

　　　To summarize, I have shown that the ECM subject is in the matrix clause level using adverb scope facts, existential sentences and scopal properties of negation and a QP.

2.2.2.3 Interim summary and criticism of previous analyses

In sections 2.2.2.1 and 2.2.2.2, I have given evidence for the claim that (i) the ECM clause is not a CP, but a defective TP, and (ii) the ECM subject occurs in the matrix clause level.

　　　As for the previous analyses of ECM in Turkish, the in-situ analyses provided by Öztürk (2005b), Meral (2005) and Oded (2006)[23] fail to account for the evidence I have

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[23] Öztürk (2005b) claims that there is no subject-to-object raising in Turkish and that the embedded subject never leaves its own clause. Claiming that there is no *v*P in Turkish, she further argues that the accusative on the embedded subject does not follow from an *Agree* relation but follows from the distinctions between the properties of syntactic case licensing and morphological case realization in Turkish. Meral (2005) also argues for the in-situ analysis of the ECM subject in Turkish. He follows Öztürk (2005b) in arguing that the ECM nominal raises in its own clause to Spec CP; but he argues for an *Agree* account of the accusative on the ECM nominal (Aygen 2002, 2003). Oded (2006) also claims that ECM nominal remains in its base-generated position in the ECM clause giving data concerning the topic phrases in Turkish (following Bruening 2001):

(i)　　　Cem-ø [bu gece ise Ayşe-yi gel-ecek] san-ıyor-ø.
　　　　　Cem-nom this night as.for Ayşe-acc come-fut think-impf-3sg
　　　　　'Cem thinks that as for tonight Ayşe will come.'
(ii)　　　*Cem-ø Ayşe-yi [bu gece ise gel-ecek] san-ıyor-ø.
　　　　　Cem-nom Ayşe-acc this night as.for come-fut think-impf-3sg (from Oded 2006:73, ex. 63a-b)

presented against the CP status of the ECM in Turkish in 2.2.2.1. Note that Aygen's (2002, 2003) claim that the ECM clause is not a CP but a defective TP seems at first sight to be compatible with the analysis I make. However, she argues that the ECM subject does not leave its own clause and gets into a long distance *Agree* relation with the matrix *v*. This analysis fails to account for the evidence I have given in section 2.2.2.2.

I have noted above that the evidence I have given in section 2.2.2.2 (i.e. adverb scope, existential sentences and scope interaction of negation and quantifiers) shows that the ECM subject is in the matrix level. This seems in line with the claims made in İnce (2005 and 2006). I, however, show that the argument that the ECM subject is base-generated in the matrix clause faces problems and I argue that the ECM subject is in fact base-generated in the ECM clause from whose predicate it receives its theta-role and the evidence presented in section 2.2.2.2 can only be interpreted as indicating that it raises to the matrix level.

Based on the ungrammaticality of the occurrence of the ECM nominal to the left of the topic phrase *bu gece ise* 'as for tonight', Oded (2006) argues for a non-movement analysis of the ECM nominal to the matrix clause. In addition to the problem of not accounting for the data in section 2.2.2.1, I would like to point out that additional problems arise for this analysis. First of all, there is a group of native speakers which do not accept the structure in (i) as grammatical leaving no sentence to compare the ungrammatical (ii) to. Secondly, assuming the judgments of Oded (2006), I argue that the reason for the ungrammaticality of the structure in (ii) is because of the properties of the topic phrase. In particular, as seen in the following examples, the topic phrase, be it subject or adjunct, has to occur in the initial position of its own clause:

(iii)   a. Ayşe-ø dün çalış-tı-ø. [Ben-ø ise] bugün çalış-acağ-ım.
           Ayşe-nom yesterday work-past-3sg. I-nom as.for today work-fut-1sg
           'Ayşe worked yesterday. As for me, I will work today.'
           b.   Ayşe-ø dün çalış-tı-ø. *Bugün [ben-ø ise] çalış-acağ-ım.
           Ayşe-nom yesterday work-past-3sg. today I-nom as.for work-fut-1sg
(iv)   a. Dün Ayşe-ø çalış-tı-ø. [Bugün ise] ben-ø çalış-acağ-ım.
           yesterday Ayşe-nom work-past-3sg. today as.for I-nom work-fut-1sg
           'Yesterday Ayşe worked. As for today, I will work.'
           b. Dün Ayşe-ø çalış-tı-ø. *Ben-ø [bugün ise] çalış-acağ-ım.
           yesterday Ayşe-nom work-past-3sg. I-nom today as.for work-fut-1sg
In the examples in (iii), the subject phrase is topicalized, whereas in (iv) we observe the topicalization of the adjunct phrase. The ungrammatical examples in (iiib-ivb) indicate that the topic phrase must occur in the initial position of its own clause. To sum up, if we accept Oded's (2006) judgments for the ECM structures with topic phrases, her examples just show that the topic phrase must be in a higher position in the structure than the ECM subject. It does not directly argue for the non-movement of the ECM nominal per se.

İnce (2005, 2006) argues that the ECM nominal is base-generated at the matrix level and gets coindexed with a *pro* in the lower clause; thus does not undergo any raising (cf. Moore 1998):

(68) Aslı-ø biz-i$_i$ asla [*pro*$_i$ sinema-ya gid-iyor-(uz)] san-ma-z-dı-ø.

Aslı-nom we-acc never movies-dat go-impf-1pl think-neg-aor-past-3sg

'Aslı would have never thought that we were going to the theatre.'

(adapted from İnce 2006, ex. 3)

İnce (2006) bases his argument on idiom chunks to show that the ECM nominal is base-generated in the matrix clause. He considers object+verb type idiom chunks and shows that the idiomatic reading survives under A-movement, i.e. passive:

(69) Hasan-ın defter-in-i dür-dü-ler.   (İnce 2006, ex. 24)

Hasan-gen notebook-poss.3sg-acc prepare-past-3pl

intended reading: 'Hasan's number's up.'

(70) Hasan-ın defter-i-ø dür-ül-dü-ø.   (İnce 2006, ex. 26)

Hasan-gen notebook-poss.3sg-nom prepare-pass-past-3sg

intended reading: 'Hasan's number's up.'

İnce (2006) shows that the passive version of (69) carries the same idiomatic reading. He further claims that embedding the passive form in (70) as a finite clause yields the same

idiomatic reading (see 71), whereas putting the clause in an ECM structure results in the non-idiomatic reading only (72):

(71) [Hasan-ın defter-i-ø dür-ül-dü-ø] san-ıyor-du-m.   (İnce 2006, ex. 28b)

Hasan-gen notebook-poss.3sg-nom prepare-pass-past-3sg think-impf-past-1sg

'I thought that Hasan's number's up.'

(72) #Hasan-ın defter-in-i [dür-ül-dü-ø] san-ıyor-du-m.   (İnce 2006, ex. 30)

Hasan-gen notebook-poss.3sg-acc prepare-pass-past-3sg assume-impf-past-1sg

Idiomatic reading not available

İnce (2006) argues that the non-availability of the idiomatic reading in the ECM clause in (72) shows that the ECM subject does not raise from inside the ECM clause. If it did raise, it would still be A-movement and the sentence in (70) has shown that idiomatic reading is preserved under A-movement. Therefore, he suggests that the ECM subject merges in Spec VP of the matrix clause and the ECM clause merges as the complement of the matrix V with a null pronoun *pro* in the subject position. The ECM subject further moves to matrix Spec vP to check Accusative case:

(73) … DP_1^{ECM} [*pro*$_1$ …] …   [İnce 2006, ex. 32]

(74)

```
                    vP
                   /  \
            DP_ECM      v'
              ↑        /  \
              |      VP      v
              |     /  \
              |    t    V'
              |        /  \
          Embedded      V
           clause
```

[ibid, ex. 34]
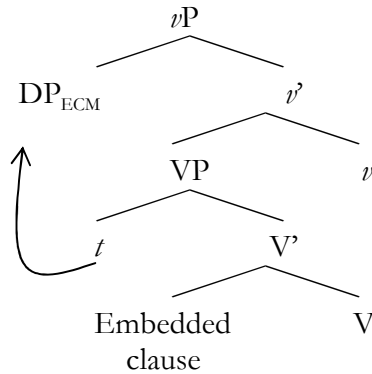
Note that this analysis faces a problem concerning the basis of the argument. First of all,

note that idiom chunks have been used by Meral (2005) to argue for an in-situ analysis of

the ECM subject in its own clause.[24] Secondly, İnce's (2006) claim that idioms retain their

idiomatic reading under A-movement but not in ECM structures is problematic in that

there are certain idioms that do not retain their idiomatic reading under A-movement.

Consider the following:

(75) Can-ım-ı çıkar-dı-lar.

soul-poss.1sg-acc take.out-past-3pl

'They put me through the mill/put my nose to the grindstone.'

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[24] Meral (2005) follows Alexiadou et al. (2000) and argues that the parts of an idiom need to be generated as a unit and the possibility of idiom separation argues for a movement analysis. He gives the following data showing that idioms in ECM constructions result in ungrammaticality:

(i)   *Ben-ø kan-ın-ı kaynı-yor san-dı-m.
        I-nom blood-poss.2sg-acc boil-impf think-past-1sg
        Intended: 'I considered you to be hyperactive.' (from Meral 2005, ex. 19a)

The ungrammaticality of the idiom in an ECM construction leads Meral to argue for the non-movement analysis of the ECM subject. Note however that Meral (2005) acknowledges the difference in behavior among various idioms:

(ii)   ✓Ben-ø baş-ın-ı ağrı-yor san-dı-m.
        I-nom head-poss.2sg-acc ache-impf think-past-1sg
        'I considered you to have a head-ache.' (from Meral 2005, ex. 20a)

To account for the grammaticality of the idiomatic expression in (ii) as opposed to the one in (i), Meral claims that idioms that result in grammatical ECM constructions have in fact lost their idiomatic meanings. See Meral (2005) for discussion. What is significant for the aim in this section is to show that idioms do not provide reliable syntactic tests in Turkish.

(76) #Can-ım-ø çıkar-ıl-dı-ø.

soul-poss.1sg-nom take.out-pass-past-3sg

'My soul is taken out.'

No idiomatic reading available.

As seen above, the passivization of the idiom chunk results in the loss of the idiomatic reading which weakens İnce's (2006) claim that the reading is retained under A-movement. Since he bases his argument that the ECM subject is base-generated in the matrix clause solely on the idiom data, his analysis cannot account for cases like (75-76). [25] See also the following where the ECM structure does not carry the idiomatic reading:

(77) #Can-ım-ı çıkar-ıl-dı san-ıyor-lar.

soul-poss.1sg-acc take.out-pass-past think-impf-3pl

'They considered my soul taken out.'

No idiomatic reading available.

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[25] İnce (2006) uses the following idiom in his paper to argue that the idiomatic reading survives under A-movement:

    (i)   Ana-m-ı belle-di-ler.
             mother-poss.1sg-acc memorize-past-3pl
             'They really messed up with me.'   (adapted from İnce 2006, ex. 25)
    (ii)   Ana-m-ø belle-n-di-ø.
             mother-poss.1sg-nom memorize-pass-past-3sg
             'I am really messed up with.'   (adapted from İnce 2006, ex. 27)

Note, however, that the following provides an additional example to (75) above that shows the non-availability of the idiomatic reading under A-movement, where the idiom used shares the same syntax with the one İnce (2006) used in his paper:

    (iii)   Ana-m-ı ağla-t-tı-lar.
             mother-poss.1sg-acc cry-caus-past-3pl
             'They put my nose to the grindstone.'
    (iv)   #Ana-m-ø ağla-t-ıl-dı-ø.
             mother-poss.1sg-nom cry-caus-pass-past-3sp
             'My mother was made to cry.'

When the idiom chunk is passivized as in (iv), there is no idiomatic reading available (contra İnce's (2006) examples). This weakens his claim.

As seen above, the ECM version also results in ungrammaticality. The fact that the idiomatic reading is not sustained under A-movement in (76) and that the ECM version is ungrammatical in (77) may in fact be used to argue against İnce (2006) in the sense that if we assume that there is no A-reconstruction to the base-generated position, these data can in fact be interpreted to support the raising analysis of ECM nominal. However, due to the contrasting acceptability of the idiomatic reading in (70) & (76), and the fact that the same type of data can in fact be analyzed in favor of the in-situ approach to ECM as has been proposed by Meral (2005), I argue that idioms do not constitute valid argumentation grounds (at least in Turkish). What we have achieved in this discussion is that İnce's (2005, 2006) claim that the ECM nominal is in fact base-generated at the matrix clause is not a strong argument.

An additional problem raised by İnce's (2005, 2006) base-generation-in-the-matrix-clause analysis concerns his claim that the ECM nominal is coindexed with a null pronominal *pro* in the subject position of the ECM clause.[26] The claim that a *pro* occurs in the embedded subject position implies that the ECM structures would behave similarly with structures having *pro* in the lower clause coindexed with the matrix object, i.e. structures like the following:

(78) Ali-ø ban-a$_i$ [*pro*$_i$ ora-ya git-me-me-m$_i$]-i söyle-di-ø.

   Ali-nom I-dat there-dat go-neg-vn-poss.1sg-acc tell-past-3sg

   'Ali told me not to go there.'

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[26] Note that Moore (1998) also argues that the ECM subject is in the matrix clause and is co-indexed with a *pro* in the embedded subject position. He, however, argues for a raising analysis of the accusative marked subject leaving behind *pro*, whereas İnce (2006) argues for a base-generation analysis of that DP in the matrix clause.

Note that, in the structure above, the embedded *pro* is coindexed with the pronoun *bana* 'to me' in the matrix clause. One may argue that this structure does not constitute a comparative pair with the ECM clauses since the matrix level element *pro* is coindexed with is a dative-marked one, whereas in ECM clauses it is accusative marked. Consider, then, the object control structures below:

(79) Ali-ø ben$_i$-i [PRO$_i$ temizlik yap-mağ]-a ikna et-ti/mahkum et-ti-ø.

   Ali-nom I-acc cleaning do-inf-dat persuade-past/condemn-past-3sg

   'Ali persuaded/condemned me to do the cleaning.'

The direct object *beni* in the example above is coindexed with the PRO of the lower clause.[27] Kornfilt (1988) has pointed out that ECM verbs and control verbs in Turkish differ in four respects: (i) ECM verbs are structural case assigners, whereas not all control verbs are (e.g. *çalış-* 'try', *başla-* 'start' assign dative); (ii) ECM verbs take finite complements, whereas control verbs take infinitivals ("NP-complements" in Kornfilt's (1988) terms); (iii) Semantically ECM verbs are factive, whereas control verbs are non-factive; and (iv) ECM verbs can take 'gerundive' complement (*-DIK*), whereas control verbs can take 'agerundive' complement clause (*-mA*). Focusing on the differences of ECM verbs (subject-to-object-raising structures[28]) and control verbs, especially object control structures, Yoon (2005) discusses Japanese and Korean and points out that ECM verbs contrast with object control structures in at least three respects: (i) occurrence of a simple DP as the object, (ii)

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[27] As for the analysis of control structures in minimalist theory, I do not take a stance as to the occurrence of PRO or a DP trace in the lower subject position. See Hornstein (1999) for the elimination of control theory, among others. See Oded (2006) and Meral (2006) for the minimalist analysis of control structures in Turkish.
[28] See footnote 14 for the terminological note on ECM and SOR (subject to object raising).

possibility of scrambling, and (iii) possibility of cleft structures. By using Yoon's (2005) tests, let us focus on Turkish ECM constructions and object control structures to see if they behave similarly as predicted by the *pro* analyses of Moore (1998) and İnce (2006) or if they behave totally differently as pointed out by Kornfilt (1988) and Yoon (2005).

First, let us see if the occurrence of single internal argument results in grammaticality:

(80) Ali-ø ben-i ikna et-ti/mahkum et-ti-ø.

Ali-nom I-acc persuade-past/condemn-past-3sg

'Ali persuaded/condemned me.'

(81) *Ali-ø ben-i san-dı-ø.[29]

Ali-nom I-acc think-past-3sg

'*Ali thought me.'

As seen above, the occurrence of a single internal argument is OK for object control structures, whereas it yields an ungrammatical structure for the ECM verb in Turkish (cf. Özsoy 2001). This implies not only that ECM is different from object control, but also that the ECM nominal is not the argument of the matrix predicate *san-* 'think, consider'. This constitutes a counter-argument to İnce's (2006) claim that the ECM subject is base-generated at the matrix clause. Now consider the scrambled structures:

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[29] Similar to Turkish is Latin as discussed in Lasnik (2004). Lasnik refers to Rouveret and Vergnaud (1980) who provide several examples from Latin where an accusative DP occurs as the subject of an infinitive (ECM clause) even when the matrix predicate is one that cannot take an accusative complement:
(i)   Certum est Petrum uenisse
        certain is Peter-acc come.past.inf
        'It is certain that Peter came.'[from Lasnik 2004: 271, ex.15]

(82) a. Ali-ø [PRO$_i$ temizlik yap-mağ]-a ben$_i$-i ikna et-ti-ø.

Ali-nom cleaning do-inf-dat I-acc persuade-past-3sg

'Ali persuaded me to do the cleaning.'

b. Ben$_i$-i [PRO$_i$ temizlik yapmağ]-a Ali-ø ikna et-ti-ø.

I-acc cleaning do-inf-dat Ali-nom persuade-past-3sg

'It is Ali who persuaded me to do the cleaning.'

c. [PRO$_i$ Temizlik yap-mağ]-a Ali-ø ben$_i$-i ikna et-ti-ø.

cleaning do-inf-dat Ali-3sg I-acc persuade-past-3sg

'Ali persuaded me to do the cleaning.'

(83) a. *Ali-ø [pro temizlik yap-ıyor] ben-i san-dı-ø.

Ali-nom cleaning do-impf I-acc think-past-3sg

Intended: 'Ali considered me to do the cleaning.'

b. * Ben-i [pro temizlik yap-ıyor] Ali-ø san-dı-ø.

c. *[pro temizlik yap-ıyor] Ali-ø ben-i san-dı-ø.

As observed above, the object control structures allow scrambling, whereas the ECM structures do not (cf. Knecht 1986).[30] As a third point, consider the following cleft structures:

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[30] The only possible scrambling in this ECM structure is exemplified below:
  (i)   Ben-i Ali-ø [temizlik yap-ıyor] san-dı-ø.
           I-acc Ali-nom cleaning do-impf think-past-3sg

(84) Ali-nin ben-i ikna et-tiğ-i şey-ø temizlik yap-mak-tı-ø.

Ali-gen I-acc persuade-part-poss.3sg thing-nom cleaning do-inf-past-3sg

'The thing Ali persuaded me (to do) is to do the cleaning.'

(85) *Ali-nin ben-i san-dığ-ı şey-ø temizlik yap-mak-tı-ø/yap-ıyor ol-ma-m-dı-ø.

Ali-gen I-acc think-part-poss.3sg thing-nom cleaning do-inf-past-3sg/do-impf be-vn-poss.1sg-past-3sg

*'The thing Ali considered me was (that I was) cleaning.'

Clefting results in a grammatical structure with control predicates, whereas it yields ungrammaticality with the ECM structures. The contrast in the data patterns with Japanese and Korean ECM/SOR structures as discussed by Yoon (2005) and this, I argue, constitutes a counter-argument to the analyses which claim that the accusative marked subject is coindexed with an empty pronominal in the lower subject position. Moreover, the occurrence of a resumptive pronoun also yields ungrammaticality:

(86) *Ali-ø ben$_i$-i [kendi-m$_i$ temizlik yap-ıyor] san-ıyor-ø.

Ali-nom I-acc self-poss.1sg cleaning do-impf think-impf-3sg

Intended: 'Ali considers me to do the cleaning myself.'

As a final note, consider the structures with a *pro* in the embedded subject position coindexed with a dative marked element in the matrix clause (87) with respect to scrambling (88) and clefting (89):

'Ali considered me to do the cleaning.'

(87) Ali-ø ban-a_i [*pro*_i ora-ya git-me-me-m_i]-i söyle-di-ø.

Ali-nom I-dat there-dat go-neg-vn-poss.1sg-acc tell-past-3sg

'Ali told me not to go there.'

(88) a. [Ora-ya git-me-me-m]-i Ali-ø ban-a söyle-di-ø.

there-dat go-neg-vn-poss.1sg-acc Ali-nom I-dat tell-past-3sg

'Ali told me not to go there.'

b. Ali-ø [ora-ya git-me-me-m]-i ban-a söyle-di-ø.

Ali-nom there-dat go-neg-vn-poss.1sg-acc I-dat tell-past-3sg

'Ali told me not to go there.'

c. Ban-a [ora-ya git-me-me-m]-i Ali-ø söyle-di-ø.

I-dat there-dat go-neg-vn-poss.1sg-acc Ali-nom tell-past-3sg

'It is Ali who told me not to go there.'

(89) Ali-nin ban-a söyle-diğ-i şey-ø ora-ya git-me-me-m-di-ø.

Ali-gen I-dat tell-part-poss.3sg thing-nom there-dat go-neg-vn-poss.1sg-past-3sg

'The thing Ali told me was (for me) not to go there.'

As seen above, the structure in (87) in fact behaves like object control structures as in (79) with respect to scrambling and clefting and totally contrasts with the ECM structures

constituting a problem for the analysis of İnce (2005, 2006) (and also Moore (1998). See footnote 25 above).

This section has shown the inadequacies of the previous analyses of ECM clauses in Turkish which argue that the ECM clauses are CPs and the ECM subject occurs in Spec CP (Öztürk 2005b, Meral 2005, Oded 2006), and of the analyses which assume that the ECM subject is coindexed with a *pro* in the lower clause either as a result of raising (Moore 1998) or base-generation (İnce 2005, 2006). This, in turn, suggests that the evidence given in section 2.2.2.2 can only be interpreted as constituting support for my initial claim that the ECM subject is base-generated as the subject of the ECM clause from whose predicate it receives its theta-role and undergoes raising to the matrix clause level (cf. Zidani-Eroğlu 1997a, Özsoy 2001, among others). The motivation for this dislocation will be discussed in detail in Chapter 5.

2.2.2.4 Behavior of different nominal phrases in ECM

In this section, I provide syntactic evidence that indicates that the *bir NP* nominals in fact behave in a similar manner to the overtly case marked ones (as in (1a-b)), whereas the bare nominals as in ((1d)) have different properties. I will show that *bir NP* subjects result in grammaticality when they function as ECM subjects, whereas bare NP subjects[31] are unacceptable.

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[31] Recall that I use the term *bare* to refer to nominals which are not modified by *bir* 'a/one' and which do not bear a case-marker. The fact that nominative is phonologically a null marker in Turkish seems to present a complicated picture. There, however, is a distinction between a *regular* subject and a bare subject:

(i)   Hırsız-ø ev-e gir-di-ø.
        thief-nom home-dat enter-past-3sg
        'The thief got in the house.'

Consider below the ECM sentences with *bir NP* subjects:

(90) Sınav-a bir öğrenci-yi gir-me-di san-dı-k.[32]

exam-dat one student-acc enter-neg-past think-past-1pl

'We considered a/one student not to have taken the test.'

(91) Köy-de bir terörist-i tutukla-n-dı san-dı-lar.

village-loc one terrorist arrest-pass-past think-past-3pl

'They thought a/one terrorist to have been arrested in the village.'

(92) Arı çiftliğinde Ayla birden bağırınca (Upon Ayla's sudden cry at the bee farm):

Bir arı-yı Ayla-yı sok-tu san-dı-k.

one bee-acc Ayla-acc sting-past think-past-1pl

'We thought a/one bee to have stung Ayla.'

The sentences above indicate that *bir NP* subjects can occur in ECM clauses whose

predicates are an unaccusative verb in (90), a passive (unaccusative) in (91)[33], and a transitive

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(ii)   Ev-e hırsız gir-di-ø.
        home-dat thief enter-past-3sg
        'The house is burgled.' (lit. 'Thief-entering happened to the house.')
Note that based on the motivation presented in this chapter, I will argue that the subject in (i) is a definite subject and has a DP projection, whereas the latter exemplifies a non-referential subject which is representationally an NP. See the following chapters for details.

[32] Note that the following sentence with the same unaccusative verb results in ungrammaticality in the ECM structure:
(i)   *Ev-e bir hırsız-ı gir-di san-dı-k.
        home-dat one thief-acc enter-past think-past-1pl
        intended: 'We thought that a/one thief entered the house.'
The contrast in the grammaticality of (90) in the text and (i) above can be accounted for not by syntax but by semantics, i.e. this contrast indicates that the ECM subject carries a partitive reading (see Enç (1991) for partitivity of the accusative marked nominals). Since a partitive reading sounds odd for the case of *thieves*, the sentence in (i) is infelicitous as opposed to the one in (90).

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in (92).[34] Let us now consider the ECM sentences where instead of *bir NP* subjects we have

bare subjects.

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[33] As is well known, the unaccusative class consists of unaccusative verbs like *gir-* 'enter', passive verbs and also existential sentences. The reason why I haven't given an example of an existential sentence is the fact that it cannot occur in the ECM constructions unless it is a possessive existential in Sezer's (2001) terms:

    (i)   *Dolap-ta bir pasta-yı var san-dı-k.
                fridge-loc one cake-acc exis think-past-1pl
                intended: 'We thought a/one cake to be (exist) in the fridge.'
    (ii)   *Dolap-ta pasta-yı var san-dı-k.
                fridge-loc cake-acc exis think-past-1pl
    (iii)   *Pasta-yı dolap-ta var san-dı-k
                cake-acc fridge-loc exis think-past-1pl

One may think that the ungrammaticality of these structures can be accounted for by the lack of partitive reading mentioned in the previous footnote. Consider the following sentence within a context in a language school, where there are ten students at the beginners level, five at the intermediate and eight at the advanced level, thus allowing for a partitive reading:

    (iv)   *Başlangıç-ta on öğrenci-yi var san-dı-k.
                beginners-loc ten student-acc exis think-past-1pl
                intended: 'We thought ten students to be in the beginners class.'

I do not have an answer as to why existentials (even with a partitive reading) cannot occur in ECM structures, but the grammaticality of the following sentence without the existential particle *var* 'there is/are' indicates that the ungrammaticality of (i-iv) may be due to the properties of *var* itself:

    (v)   On öğrenci-yi başlangıç-ta san-dı-k.
                ten student-acc beginners-loc think-past-1pl
                'We thought ten students to be in the beginners class.'

One should also point out that the ECM constructions of clauses showing possession with *var* result in grammaticality. I repeat the example in (62) below:

    (vi)   Ben-ø sen-i banka-da para-sı var san-mıştı-m.
                I-nom you-acc bank-loc money-poss.3sg exis think-past perf-1sg
                'I had thought you had money in the bank.'   [Sezer 2001, ex. 66]

This sentence casts doubt on the idea that it is the properties of *var* which yields ungrammaticality in ECM clauses. I would like to point out that this structure does not exemplify a canonical existential sentence. I leave this issue for further research.

[34] The word order of the subject and the object of a transitive verb may differ in a simplex clause (i&ii) (leading to different interpretations in terms of specificity) whereas the ECM version needs to have a fixed order (iii&iv):

    (i)   Bir arı Ayla-yı sok-tu-ø.
                one bee Ayla-acc sting-past-3sg
                'A (specific) bee stung Ayla.'
    (ii)   Ayla-yı bir arı soktu.
                Ayla-acc one bee sting-past-3sg
                'A bee stung Ayla.'
    (iii)   Bir arı-yı Ayla-yı sok-tu san-dı-k.
                one bee-acc Ayla-acc sting-past think-past-1pl
                'We considered a/one bee to haves stung Ayla.'
    (iv)   *Ayla-yı bir arı-yı sok-tu san-dı-k.
                Ayla-acc one bee-acc sting-past think-past-1pl
                Intended: 'We considered a/one bee to have stung Ayla.'

Note that the sentence in (iv) is ungrammatical in the intended reading. It is grammatical but infelicitous, however, in the reading where Ayla stings a bee. One can account for the ungrammaticality of (iv) in the intended reading using Aygen's (2002) argument on long distance scrambling. Aygen (2002) argues that Karimi's (1999) condition on long distance scrambling (LDS) is parametrically determined in the sense that

(93) *Bız-ø ev-e [NP hırsız-ı] gir-di san-dı-k.

we-nom home-dat thief-acc enter-past think-past-1pl

intended: 'We thought thief-entering took place to the house.'

(94) *Bız-ø bodrum-da [NP fare-yi] var san-dı-k

we-nom basement-loc mouse-acc exis think-past-1pl

(95) *Bız-ø kütüphane-de [NP kitab-ı] oku-n-du san-dı-k.

we-nom library-loc book-acc read-pass-past think-past-1pl

intended: 'We thought book-reading to have taken place in the library.'

(96) *Bız-ø Ayla-yı [NP arı-yı] sok-tu san-dı-k.

we-nom Ayla-acc bee-acc sting-past think-past-1pl

intended: 'We thought Ayla to be bee-stung.'

(97) *Bız-ø sokak-ta [NP kedi-yi] miyavlı-yor san-dı-k.

we-nom street-loc cat-acc meow-impf think-past-1pl

intended: 'We thought cat-meowing to take place in the street.'

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even though it accounts for Japanese structures, it does not account for Turkish. Consider below the condition on LDS:

(v)   Condition on LDS (Karimi 1999)
      LDS is blocked if
      *YP$_i$α XPα [t$_i$]   (where α represents a specific grammatical function)
      (adapted from Aygen 2002:249)

Aygen (2002) proposes to consider the condition on LDS in terms of *case* rather than *grammatical function* in Turkish, which would then account for the ungrammaticality of (iv) above where the object *Ayla* marked with the accusative is scrambled over the subject which also bears the accusative marker since it is ECMed.

The ECM structures above are ungrammatical in the intended reading (where the subjects of the ECM predicate are not interpreted as definite). This contrasts with the ECM sentences above which had *bir NP* as subjects of the ECM predicate. This, I argue, constitutes an additional syntactic evidence for the claim that the nominals of the kind *bir NP* behave in a different manner than the bare nominals.

2.3 Summary and discussion

This chapter argued against the claim that a distinction can be made between nominals in terms of overt case marking. Previous studies such as Enç (1991), Diesing (1992), Kelepir (2001) among others, have posited a difference among nominals in Turkish with respect to overt case-marking ((1a-c) vs (1d)). This was shown to be problematic since such an approach cannot account for the difference in the syntactic behavior of *bir NP* and bare nominals. Moreover, having focused only on objects, these studies have ignored the different behavior of *bir NP* subjects and bare subjects. I have shown that *bir NP* nominals without overt case-morphology behave in a totally different manner than bare nominals. The discussion above also showed that this is not only the case for objects but also for subjects. I have provided semantic and syntactic evidence to show that nominals of the kind *bir NP* behave in a different manner than the bare nominals. The semantic evidence I have given concerns the fact that *bir NP* nominals are in fact "referential" in the sense that they have a referent in the speaker's mind either in the real or an imaginary world. As for syntactic evidence, island effects in scrambling constructions as well as the behavior of *bir NP* subjects in ECM clauses have indicated that Turkish in fact does not belong to the class

of languages that do not have a DP projection. The semantic and syntactic evidence can be accounted for by the fact that Turkish possesses a DP projection apart from NP. I will argue in the following chapters that, in the course of the derivation of a sentence, NPs remain in their base-generated position. DPs, on the other hand, move out of their merge positions for case checking purposes. This accounts for the grammaticality of *bir NP* nominals and for the ungrammaticality of bare nominals in ECM constructions discussed above. Bare nominals, being NP projections, remain in their merge positions, whereas *bir NP* nominals, being DP projections, move to the matrix clause. In the lack of an overt morphological determiner similar to *the/a* in English, the following chapter will offer a derivational approach to DPs in Turkish.

CHAPTER 3

NOUN PHRASES IN TURKISH

3.0 Preliminaries

Based on the syntactic properties of the phrase and the semantic properties of the head, four types of noun phrases have been distinguished in Turkish as illustrated in (1a-d) repeated from the previous chapter:

(1) a. Ali-ø *kitab-ı* oku-yor-ø.

   Ali-nom book-acc read-impf-3sg

   'Ali is reading the book.'

   b. Ali-ø *bir kitab-ı* oku-yor-ø.

   Ali-nom one book-acc read-impf-3sg

   'Ali is reading a specific book (one of the books).'

   c. Ali-ø *bir kitap-ø* oku-yor-ø.

   Ali-nom one book-ø read-impf-3sg

   'Ali is reading a book.'

d. Ali-ø *kitap* oku-yor-ø.

Ali-nom book read-impf-3sg

'Ali is book-reading.'

We have discussed in the previous chapter that Dede (1986) categorizes noun phrases similar to the italicized phrase in (1a) as definite, in (1b) as specific indefinite, in (1c) as nonspecific indefinite and in (1d) as nonspecific nondefinite, i.e. nonreferential. Based on the semantic and syntactic evidence given in the previous chapter, this chapter will argue that noun phrases in (1a-c) are in fact structurally similar in that they are DPs whose head is a null D°. Specifically, I will argue that nominals similar to (1a-c) are referential where referentiality is defined in the syntactic sense proposed by Abney (1987), Szabolcsi (1994), and Longobardi (1994)[1], among others, in which D° contains the formal features of specificity and definiteness and assigns referentiality to the nominal.[2,3] As has been already pointed out in the previous chapter, my proposal that nominals such as (1c) are referential like the ones in (1a&b) is contrary to previous analyses such as Enç (1991), Diesing (1992), Kennelly (1993, 1994, 1997b) and Kelepir (2001), who consider the former to be non-referential. I have shown that the argument

[1] Coene and D'hulst (2003) label Szabolcsi's (1994) approach the "argument conversion hypothesis", whereby the lexical content of D turns the noun phrase into an argument; and Longobardi's (1994) approach "referentiality conversion hypothesis", where the basic function of D is to convert the predicative category N into a referential expression.

[2] Vangsnes (1999) and Johanson (2003) consider also number to be a sub-property of referentiality. I claim, however, that referentiality is encoded in D° and that there is a separate functional category NumP to encode number.

[3] This analysis of referentiality is similar to Dede (1986) and Sansa-Tura (1986) in that referentiality is taken to be a status of the nominal phrases. See Turan (1998) for an analysis where referentiality is viewed as a relation between language and one or more entities in a discourse model and not as involving a direct relation between linguistic objects. My analysis also incorporates the semantic understanding of referentiality, which discusses the existence or non-existence of an entity that the NP refers to in a real or imaginary world. Massam (2001), for example, follows Ghomeshi (1996, 1999), and argues that a referential nominal is one which has a non-empty reference, i.e. which exists in a particular universe of discourse (not necessarily the world we live in). A non-referential nominal, on the other hand, does not introduce a potential discourse referent, but is used as a label, referring to type and not token (see the discussion in 2.1 in the previous chapter). Another understanding of referentiality is pragmatic reference, i.e. the relation between the speaker's use of nouns and his/her organization of the text with respect to his point in conversation (Nilsson 1985).

that nominals such as the one in (1c) are non-referential like the one in (1d) is

problematic since they behave in a totally different manner with respect to the tests that

I provided in Chapter 2. I will propose, in this chapter, that the nominals in (1a-c) are

dominated by either a NumP layer where the number specification of the noun head is

determined by the [±plural] on the Num° (Ritter 1991, see Bassarak 1998, Öztürk 2004,

Ketrez 2005 for Turkish; contra Yükseker 1995, 2003) or a ClassiferP (ClP) layer at

whose Spec position the numerals occur. I argue that both NumP and ClP

subcategorize for an NP, and are thus in complementary distribution. Dominating

NumP/ClP is the maximal projection DP headed by a phonologically null element

specified for the features [±definite] and [±specific]. I will show that the distinction

between (1a) and (1b-c) is dependent on the definiteness feature of the head D°. In

those cases in which the D° bears the feature [+definite], its Spec position is either

empty or is filled by one of the demonstratives *bu* 'this', *şu* 'that', or *o* 'that over there'. In

those cases in which D° is specified for the feature [-definite], I argue that *bir* is merged

in Spec DP.

3.1 The internal structure of nominals

I propose the following representation for referential nominals in Turkish:

(2)

```
          PossP
         /    \
        /      \
      DP       Poss°
     /  \
    /    \
 NumP/ClP  D°
  /  \
 /    \
NP   Num°/Cl°
```
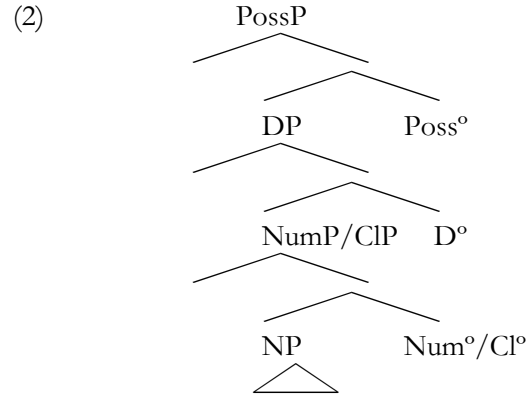
As the above representation indicates, the internal structure of a nominal has a number of functional projections paralleling those of a typical IP structure. The functional projections that are relevant for NP are NumP/ ClP, DP and PossP projecting in the order given.[4]

    A canonical DP structure in Turkish indicating the range of the constituents that can occur in its domain and their respective ordering within the DP is given below:

(3)   [PossP [CP Dün gör-düğ-üm [ClP iki [AP eski [NP arkadaş]-ım]]]]

      yesterday see-OP-poss.1sg two old friend-poss.1sg

      'Two old friends of mine that I saw yesterday'

In the following, arguments supporting the structural proposal in (2) will be presented. I start with the expression of number in the Turkish noun phrase, followed by the discussion of the (non-)existence of determiners.

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[4] Kornfilt (1995, 2003) argues that DP is selected by a KP (CaseP) projection. This is to account for the differences between referential nominals which bear case morphology and non-referential nominals which do not. I argue that this distinction can be captured without projecting morphology to syntax. As will be seen in this and following chapters, I argue that DP checks strong structural case, whereas NP checks weak structural case.

3.1.1 Number Phrase and Classifier Phrase

It has been noted that Number Phrase (NumP) functions as the locus of the number specification of noun phrases (cf. Ritter 1991). In line with previous studies on the structure of Turkish noun phrase constructions (cf. Bassarak 1998, Öztürk 2004 and Ketrez 2005), I hold that Turkish nominal phrase possesses a NumP whose head Num° bears the feature specification [±plural]. This is in contrast to Johanson (2003) who proposes that the feature specification of number in Turkish is [±singular] and [±plural]. Johanson posits a [±singular] feature to differentiate between the nominals which have the modifier *bir* 'a/one' and those which have zero marking, thus accounting for the difference between (1b-c) versus (1d). That such a system can in fact potentially give rise to overgeneration in terms of number specification on nouns is obvious. First of all, the nominal in (1d) above is in fact interpreted as number neutral and I argue, in the following sections, that it lacks a NumP projection (cf. Ketrez 2005). Secondly, the potential combinations formed by the [±singular] and [±plural] features cannot be accounted for in Johanson's (2003) analysis, which makes one to predict a nominal to bear [-sg, -pl] or [+sg, +pl] at the same time. As for the Spec position of the NumP, I argue that it may either be null or filled by number denoting quantifiers such as *bütün* 'all' and *bazı* 'some'.[5]

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[5] The use of the term 'quantifier' is not structural in that I do not argue that they form QPs. The QP analysis (i) of quantifiers such as *çok* 'many', *bazı* 'some' and numerals such as *bir* 'one', *on* 'ten' are problematic for the head directionality of Turkish since they occur to the left of the NP and not to the right:

(i)

```
              QP
          ___/  \___
      Spec      ___/\___
              NP        Q
```

(ii)   [bazı [NP çocuklar]]
        some child-pl
        'some children'

(iii)   *[[NP çocuklar] [Q bazı]]
        child-pl some

I also argue that Turkish possesses a ClP at whose Spec position the numerals [6] and number denoting quantifiers such as *çok* 'many', *birçok* 'a lot of', *birkaç* 'several', *bazı* 'some' and *bütün* 'all' are base-generated agreeing with the feature specifications of the Cl° head.[7] The proposal here is that both NumP and ClP subcategorize for NP and hence are mutually exclusive. The [-plural] feature on Num° is checked by the singularity marker (ø), whereas [+plural] feature on the head Num is checked by the plural marker *-lAr*. As for ClP, I argue that the Cl° can be a null head phonologically. It may also host one of the classifiers *tane* 'unit', *adet* 'unit', *salkım* 'bunch', etc. which I argue to be bound morphemes attaching to the numeral base-generated at the Spec ClP. Note that overt classifiers cannot attach to the quantifiers except *birkaç* 'several'. A partial structure of nominals in Turkish reflecting the Number and Classifier projection is given in the following:

(4)   Partial structure of nominals in Turkish

The representation implies that D° can only select NumP/ClP and not directly a NP. This is in line with the generalization that a referential nominal (DP) in Turkish is always marked for number either via the singular or plural marker, i.e. the projection of NumP,

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I claim that numerals and quantifiers occur in Spec positions of NumP/ClP but their interpretation is quantificational.

[6] The argument that numerals occur in Spec ClP is in fact *contra* Yükseker (1995, 2003) who assumes that numerals in Turkish are adjectivals left adjoining below the DP and above the NP. Öztürk (2005) also argues that numerals are prenominal modifiers in Turkish. My proposal is also contrary to Bassarak (1998), Öztürk (2004) and Ketrez (2005) in that I argue against the claim that the numerals are base-generated at Spec NumP in Turkish.

[7] The argument that the quantifiers *bazı* 'some' and *bütün* 'all' can occur either at Spec NumP or at Spec ClP seems at first problematic. However, as will be shown by examples shortly, their interpretation differs depending on their merge positions.

or via the occurrence of a numeral or possibly a classifier, i.e. the projection of ClP. The syntactic motivation for assuming NumP/ClP for Turkish is given in the following section.

3.1.1.1 Plurality

The reason I propose ClP distinct from NumP in Turkish comes from the fact that there are a number of constraints on the occurrence of the plural marker –*lAr* on the head. The head noun can be marked with the plural marker only in those instances in which there is no numeral or a quantifier (5b). In those cases in which the head noun is modified by a numeral denoting more than one in quantity (5c) or a quantifier (5d), i.e. when there is a number term such as *iki* 'two', *üç* 'three', etc., or a quantifier such as *çok* 'many', *az* 'few', *birkaç* 'several', the head noun cannot be marked with the plural suffix.[8],[9]

(5) a. çocuk

child-nom

'the child

---

[8] Hungarian, Georgian as well as Urarina, Quechua and Tagalog are also reported to exhibit similar behavior by Ortmann (2004). The following are Hungarian structures from his work (p. 232):

(i)	egy alma	(iii)	négy alma
	one apple		four apple
	'an/one apple'		'four apples'
(ii)	almá-k	(iv)	sok alma
	apple-pl		many apple
	'apples'		'many apples'

See Ortmann (2004) for an OT analysis of number marking in different types of languages.
[9] An exception to this are those cases in which the plural agreement occurs on the head noun even when it is modified by numerals as in the following cases where the nominal is interpreted as a specific group (i-ii), or a specific place (iii), i.e. when it is a proper name:

(i) Pamuk Prenses ve yedi cüce-ler	(ii) Ali Baba ve kırk harami-ler	(iii) Üç Kapı-lar
cotton princess and seven dwarf-pl	Ali father and forty thief-pl	three door-pl
'Snow White and the seven dwarves'	'Ali Baba and forty thieves'	'Hadrian's Gate'
		[a place in Antalya]

b. çocuk-lar

child-pl-nom

'children'

c. iki çocuk-(*lar)

two child-(*pl)

'two children'

d. çok çocuk-(*lar) [10, 11]

many child-(*pl)

'many children'

What is significant is that some quantifiers, specifically *bazı* 'some' and *bütün/tüm* 'all', do

not obey this generalization. There are cases in which the plural marked noun is

modified by *bazı* 'some' or *bütün/tüm* 'all':

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[10] Note that there is, however, a group of exception to the generalization that a quantifier cannot occur
with a plural marked nominal. See below the behavior of the quantifier *çok* 'many, much':

(i)	çok teşekkür-ler	(ii)	çok sevgiler
	many thank-pl		many love-pl
	'many thanks'		'much love'
(iii)	Çok şey-ler/zorluk-lar yaşa-dı-k.		
	many thing-pl/difficulty-pl live-past-1pl		
	'We've lived through many things/difficulties.'		

I leave this issue open for further research.

[11] Note also that the verb cannot be marked with the plural morpheme when the subject is a quantifier
/numeral+ noun (cf. Kornfilt 1996):

(i)   İki/çok çocuk(*lar) gel-di-(*ler).
       two/many child-pl come-past-pl

The fact that the verb cannot agree with the plural subject indicates that the inflection head, T°, sees only
the subject head noun. In other words, even though the subject is semantically plural because of the
occurrence of *iki* 'two' or *çok* 'many', it behaves syntactically singular, or rather [-plural]. Semantic plurality
is not capable of checking the φ-features of T°.

(6) a. bazı çocuk-**lar**   b. bütün/tüm çocuk-**lar**

some child-pl   all child-pl

'some children'   'all children'

The plural morpheme in such constructions has been noted to create a distinction in meaning since these quantifiers can also occur without plural agreement on the head noun (see Kornfilt 1984:100, fn.18):

(7) a. bazı çocuk   b. bütün ekmek

some child   all bread

'a type of child'   'a/the whole (loaf of) bread'

The interpretation of the quantifiers *bazı* 'some' and *bütün* 'all' is different when they modify a nominal which is not marked with plural. In the case of *bazı* 'some', the nominal is interpreted to be "a type of x". In the case of *bütün* 'all', on the other hand, it is interpreted to be "whole". Thus, we can argue that the occurrence of the plural agreement on the head noun is not redundant in (6a&b) as opposed to the examples (5c&d).

    Note, however, that even though the modification of a non-plural marked nominal with *bazı* 'some' seems possible with all kinds of nouns, this is not the case with the quantifier *bütün* 'all/whole'. First observe that both *bazı* 'some' and *bütün* 'all/whole' can be used with singular count nouns (8) and mass nouns (9):

(8) a. *Bazı sandalye*-ø insan-ın sırt-ın-ı ağrı-t-ır-ø.

    some chair-nom man-gen back-poss.3sg-acc ache-caus-aor-3sg

    'Some (kind of) chair makes your back ache.'

b. *Bütün kapı-yı/ev-i* boya-dı-m.

all door-acc/house-acc paint-past-1sg

'I painted the whole door/house.'

(9) a. *Bazı pirinç-ø* geç piş-er-ø.

some rice-nom late cook-aor-3sg

'Some kinds of rice cook slowly.'

b. Bahçedeki *bütün çamur-ø* ev-e gir-di-ø.

in.the.garden all mud-nom home-dat enter-past-3sg

'All the mud in the garden came in the house.'

As seen above, both *bazı* 'some' and *bütün* 'all' occur well with singular count and mass nouns. There is, however, a restriction with respect to the behavior of *bütün* in that it sounds odd with singular *animate* nominals:

(10) a. *bütün adam[12]   b. *bütün kedi

all man   all cat

intended: 'the whole man'   intended: 'the whole cat'

As seen above, the quantifier *bütün* 'all/whole' sounds odd with an animate singular noun.[13] The different behavior of the quantifiers *bazı* 'some' and *bütün* 'all' from others can be accounted for by proposing different merge positions as will be discussed below.

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[12] This judgment is contra Kornfilt's (1984:100).

With respect to the nature of the constraint which bans the occurrence of the plural morpheme –*lAr* on the head noun when there is a phonologically realized numeral or a quantifier, Kornfilt (1984) proposes that this is due to a redundancy restriction. Ketrez (2004) proposes a different analysis of the plural suffix –*lAr* on nominals and argues that it is not base-generated in the NumP, but in the functional projection just above NP, which she calls ClP, and carries a function of division (multiple events and multiple types). Ketrez proposes that the suffix –*lAr* has number interpretation (multiple singulars) when it moves to NumP. An alternate analysis in which the numeral is in fact base-generated in the head position of the NumP in Turkish has the problem of accounting for the fact that the numeral appears to the left of the noun, i.e. in the specifier position, rather than to the right. One other possibility very similar to Kornfilt's (1984) is that economy considerations block out the double instantiation of the plural in Turkish, one with the morphological plural marker –*lAr* on Numº and one with the lexical numeral. The question as to why there is such an economy consideration in Turkish, and in a number of other natural languages like Hungarian, Georgian, Urarina, Quechua and Tagalog (see Ortmann 2004) and not in languages like English needs an explanation.

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[13] A. Göksel (p.c.) notes a further difference between the quantifiers *bütün* 'all, whole' and *bazı* 'some'. The singular and plural marked nouns refer *more or less* to the same concept with the latter, but not with the former:

(i)   a. bazı insan   ≈   b. bazı insan-lar
          some man   some man-pl
          some given man   some men
(ii)   a. bütün ekmek   ≠   b. bütün ekmek-ler
          all bread   all bread-pl
          'the whole (loaf of) bread'   'all the loaves of bread'

M. Kelepir (p.c.), however, points out that (ia) can be used only in generic contexts and not in episodic contexts as opposed to (ib):

(iii)   a. *Bazı öğrenci-ø geç gel-di-ø.
          some student-nom late come-past-3sg
          intended: 'Some student arrived late.'
          b. Bazı öğrenci-ler-ø geç gel-di-ø.
          some student-pl-nom late come-past-3sg
          'Some students arrived late.'

My proposal to account for the data is that Turkish possesses both a NumP and ClP.[14] The head of the NumP projection is either specified by the [-plural] feature resulting in the occurrence of the null singularity marker, or by the [+plural] feature resulting in the occurrence of the plural marker –*lAr* on Num°. I argue that the quantifiers *bazı* 'some' and *bütün* 'all' are base-generated at the Spec NumP position when the head bears the plural marker –*lAr*. The interpretation of the quantifiers in this case is 'some' and 'all' respectively. I claim that numerals whose occurrence with the plural marker results in ungrammaticality (except for the lexicalized items mentioned in footnote 9) are base-generated in the Spec position of a projection other than NumP. I claim that this projection is ClP whose head hosts either a null or an overt classifier. Moreover, I argue that the classifiers in Turkish are bound/defective roots based on the following data:

(11) a. iki salkım üzüm

   two bunch grape

   'two bunches of grape'

   b. salkım salkım üzüm

   bunch bunch grape

   'bunches of grape'

   c. *salkım üzüm

   bunch grape

As seen in (11a&b), the occurrence of the classifier *salkım* 'bunch' is grammatical when there is a numeral in the structure or when it is reduplicated. The ungrammaticality of (11c) indicates that it is a bound root attaching to the Spec ClP in the case of the numerals (11a), and forming a compound under reduplication (11b).[15] Note that the overt classifiers cannot attach to quantifiers which occur in Spec ClP except *birkaç* 'several':

(12) a. birkaç tane kalem

   several unit pencil

   'several pencils'

   b. *çok/birçok tane kalem

   many/a.lot.of unit pencil

   c. çok/birçok kalem

   many/a.lot.of pencil

   'many/a lot of pencils'

As seen above, the occurrence of the quantifier *birkaç* 'several' with an overt classifier is grammatical whereas other quantifiers result in ungrammaticality. Since the nature and properties of classifiers in Turkish is beyond the scope of this study, I leave this difference to be studied in future work.[16] However, the significance of the examples in

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[15] The position of the classifiers display a syntax-morphology mismatch. I argue based on the data in (11) that the classifier in Cl° position attaches to the numeral in Spec CP position. See Watanabe (2006) where he conflates NumP and ClP into a single maximal projection called #P with the features [±number] on the head #. I refer the reader to the original work for details.

[16] The following examples illustrate another interesting point:

   (i)   Yağmur-da çok/birçok salkım üzüm mahvol-du-ø.
            rain-loc many/a.lot.of bunch grape destroy-past-3sg
            'Many/A lot of bunches of grape got destroyed/wasted in the rain.'

(12) is that they show that when the head of ClP is filled with an overt classifier, that specific classifier selects the morpheme it attaches to, i.e. it can only attach to a numeral or the quantifier *birkaç* 'several', but not other quantifiers.

The Cl° can also host a null head in which case there is no restriction with respect to what morpheme the classifier attaches to:

(13) iki/çok/birkaç/birçok kişi

two/many/several/a.lot.of person

'two/many/several/a lot of people'

As seen above, since Cl° is filled with a phonologically null classifier, there is no restriction with respect to the nature of quantifiers (either numeral or not) in the Spec ClP position. The only restriction that would arise concerns the behavior of *bütün* 'all/whole' which I have shown above to fail to occur with singular animate nominals (see example (10) above).

(ii) Sen-in çok/birçok somun ekmek ye-me-n gerek.
  you-gen many/a.lot.of loaf bread eat-vn-poss.2sg necessary
  'You need to eat many/a lot of loaves of bread.'
Note that *salkım* 'bunch' and *somun* 'loaf' are grammatical when they occur with the quantifiers *çok* 'many' and *birçok* 'a lot of' as opposed to *tane* 'unit' (or *adet* 'unit') in (12b) above. The following exemplifies another difference with respect to the behavior of *salkım* 'bunch' and *somun* 'loaf':
(iii) üzüm salkımı
  grape bunch
  lit. 'grape bunch'
(iv) somun ekmek
  loaf bread
  'a whole loaf of bread' (as opposed to, say, *dilim ekmek* 'sliced bread')
These examples indicate that *salkım* 'bunch' and *somun* 'loaf' can behave somehow lexically as adjectives in (i&ii) above as opposed to *tane* or *adet* 'unit'. I thank A. Göksel (p.c.) for pointing this out.
  Even *tane* can sometimes behave differently, at least for some speakers:
(v) (?*) Siz tane muz sat-ıyor mu-sunuz?
  you unit banana sell-impf q-2pl
  'Do you sell banana by the piece?'
Even though this sentence is not OK for some speakers, including me, it is reported to be acceptable by others. However, the same structure is out for all speakers when *adet* is used instead of *tane*. The speakers who do not accept (v) as grammatical, use *tane-yle* 'unit-with' meaning 'by the piece' in order to express the same idea. The reader is referred to Schroeder (1999) for discussion on *tane*. I leave the discussion on the exact nature of classifiers in Turkish for future research.

To summarize, I have proposed that Turkish DP selects either a NumP or a ClP. The argument that both NumP and ClP subcategorize for NP in Turkish accounts for their mutual exclusivity.[17, 18] The implication of this analysis is that plurality in Turkish is either expressed grammatically, i.e. syntactically, via the occurrence of the plural marker –*lAr* on Num° or not syntactically via the occurrence of quantifiers and numerals (other than *bir* 'one') in Spec ClP. The fact that numerals do not induce grammatical/syntactic plurality is supported by the fact that they do not induce plurality on the predicate, as well (see footnote 11 above). I have also pointed out a distinction among the quantifiers in that *bazı* 'some/a type of' and *bütün* 'all/whole' can occur either with a plural marked nominal or not. I have proposed that they can be merged either at Spec NumP or at Spec ClP. When *bazı* and *bütün* are merged at Spec NumP they are interpreted as 'some' and 'all' respectively (as in *bazı/bütün insanlar* 'some/all people'). When, on the other hand, they are merged at Spec ClP, their interpretation changes to 'a type of' and 'whole' respectively (as in *bazı/bütün ekmek* 'a type of bread/a whole (loaf of) bread').

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[17] Note that my proposal is different from Ketrez's (2004) who discusses the different interpretations the plural marker –*lAr* expresses in Turkish (namely, multiple singulars, multiple types and multiple events). She argues for a nominal structure where NumP selects a ClP (in the multiple singular reading). She proposes that the plural marker –*lAr* is base-generated in Cl° and marks plurality only in the case where it undergoes movement to Num°. This analysis does not account for the ungrammaticality of the occurrence of a numeral or a number denoting quantifier with a plural marked head noun.

[18] This analysis can also account for the occurrence of lexicalized forms such as *yedi cüceler* 'seven dwarfs' in a ClP modified by a numeral (or in a NumP modified by number denoting quantifiers). Consider the following example:

(i)   Bu harita-da iki tane Beş-ev-ler-(*ler) var.
        this map-loc two unit five-house-pl-(*pl) exis
        'There are two Beşevler's on the map.' (Beşevler: a district name, lit. 'five houses')

One may argue that the plural is not expected on the nominal *Beşevler* but on a null head like *mahalle* 'neighborhood':

(ii)   Bu harita-da iki tane Beş-ev-ler mahalle-si/*mahalle-ler-i var.
                    five-house-pl neighborhood-poss.3sg/*neighborhood-*pl-poss.3sg exis

However, the grammaticality of the following sentence as opposed to (i) indicates that this is not the case:

(iii)   Bu harita-nın Taksim-ler-i silinmiş.
        this map-gen Taksim-pl-poss.3sg erased
        'The Taksim's of this map are erased.'

The ungrammaticality of the occurrence of Beş-ev-ler-(*ler) is morphological and can be accounted for either by Kornfilt's (1986) analysis of stuttering prohibition or by Göksel's (1997) analysis regarding morphological slots.

3.1.1.2 Singularity

As can be concluded from the above discussion, absence of the plural marker on the head noun leads to two possible interpretations of a Turkish nominal. In those cases in which the noun is modified by an item that denotes (semantic) plurality, the phrase is interpreted as expressing a plural nominal. In those cases in which there is no modifier, or there is the numeral *bir* 'one' in Spec ClP, the nominal is interpreted as referring to a singular entity. *Bir* functioning as a numeral meaning 'one' bears stress and I will show it using small capitals, i.e. BİR.

The numeral BİR 'one' behaves differently from the other numerals in certain respects. First of all, it does not co-occur with the demonstratives as opposed to the other numerals which freely do (cf. Yükseker 2003):

(14) a. *[_DP_ Bu *BİR* kitap] çok güzel-ø.

  this one book very good-3sg

  intended reading: 'This one book is very nice.'

  b. [_DP_ Bu iki kitap] çok güzel-ø.

  this two book very nice-3sg

  'These two books are very nice.'

Note that the sequence *bu bir kitap* is only grammatical in the sentential reading, i.e. when [bir kitap] is the predicate as in *this is a book*. The DP reading of this sequence is ungrammatical as seen in (a) above, whereas the co-occurrence of a numeral other than *BİR* 'one' and a demonstrative is totally grammatical. Yükseker (2003), moreover, claims

that *BİR* can have a predicative function as opposed to other numerals as exemplified by the following:

(15) a. [$_{TP}$ [$_{DP}$ Bu] [$_{VP}$ *BİR* yeni kitap]]

this one new book

'This is one new book.'

b. *[$_{TP}$ [$_{DP}$ Bu] [$_{VP}$ iki yeni kitap]]

this two new book

intended reading: 'These are two new books.'   [Yükseker 2003: 167-8, ex. 7]

The contrast in the grammaticality of the examples in (a&b) shows that only *BİR* 'one' can have a predicative function, and not the other numerals. We should, however, consider the following example where instead of *bu* 'this' in (15b), we have *bunlar* 'these':

(16) [$_{TP}$ [$_{DP}$ Bunlar] [$_{VP}$ iki yeni kitap]].

these two new book

'These are two new books.'

The grammaticality of this example indicates that Yükseker's claim that numerals other than *BİR* cannot be predicative is an overgeneralization and that (15b) is ungrammatical because of the lack of number agreement between the subject *bu* 'this' and the predicate *iki yeni kitap* 'two new books'.

Another difference that the numeral *BİR* 'one' displays concerns the word order with respect to the adjectival modifiers of the head noun. *BİR* as opposed to the other numerals does not show freedom with respect to the constituent ordering with the

adjectives, but reflects a difference in interpretation. Compare the behavior of BİR 'one' and *iki* 'two' below:

(17) a. iyi yeni iki kitap

good new two book

'two good new books'

b. iki iyi yeni kitap

two good new book

'two good new books'

c. iyi iki yeni kitap

good two new book

'two new good books'   [Yükseker 2003:166, ex. 2]

(18) a. iyi yeni bir kitap[19]

good new one book

'a good new book'

'*one good new book'

b. bir iyi yeni kitap

one good new book

'one good new book'

'*a good new book'

---

[19] I keep the original form of *bir* (and not BİR) in these examples to show Yükseker's (2003) argument. The grammaticality judgments are also from the original study.

c. iyi bir yeni kitap

good one new book

'one good new book'

'*a good new book'   [Yükseker 2003:167, ex. 5]

The different ordering of the numeral *iki* 'two' and the adjectives in a noun phrase does not change the interpretation; whereas that of *bir* 'one' and the adjectives results in a change in interpretation as observed by Yükseker (2003). In other words, while other numerals are free to occur in any pre-nominal position with respect to adjectival modifiers of the head noun, *bir* is restricted in that its position triggers an interpretation of either the numeral 'one' or an indefinite reading.[20]

It has been noted in the literature that in the indefinite reading, *bir* does not carry stress as opposed to the numeral reading 'one' when it is stressed, i.e. when it receives contrastive focus stress (see, among others, Tura (1973), Schroeder (1999)).[21, 22]

(19) Bir öğrenci-ø sen-i bekli-yor-ø.

one student-nom you-acc wait-impf-3sg

'A student is waiting for you.'

---

[20] Yükseker (2003) claims that when *bir* is right before the head noun it is interpreted as an indefinite article, whereas it is interpreted only as the numeral 'one' elsewhere. She, however, does not take the effect of focus into consideration. For example, if *bir* is focused in (18a) above, the structure is interpreted as 'ONE good new book'. As for the example in (18c), however, there is another possible interpretation where *bir* gives the indefinite reading and the structure is interpreted as 'a new book which is good.' Apart from these criticisms, Yükseker's claim that the ordering of adjectives and *bir* 'one' yields a difference in interpretation as opposed to the ordering of adjectives with other numerals is valid.

[21] Ahmet Cevat (1931:259-260) discusses the two functions of *bir* without discussing differing stress patterns: (i) *sayı isimsisi* 'numeral quantifier', and (ii) *nekre morfemi* 'indefinite morpheme'.

[22] Aygen (1999) and Öztürk (2004, 2005) argue that *bir* is not a marker of indefiniteness. We will discuss this in detail in the following section.

(20) **BİR** öğrenci-ø sen-i bekli-yor-ø, (iki değil).

one student-nom you-acc wait-impf-3sg (two not)

'One student is waiting for you (not two).'

The example (19), where *bir* is not stressed, yields the indefinite reading of the subject, while in (20), in which *BİR* is stressed, it is interpreted as the numeral 'one'. As has been noted at the beginning of this section, a noun can also be interpreted as singular without the occurrence of *bir* as exemplified below: [23]

(21) Öğrenci-ø sen-i bekli-yor-ø.

student-nom you-acc wait-impf-3sg

'The student is waiting for you.'

In the last two subsections, we have seen how plurality and singularity is expressed in Turkish. In the next subsection, let us see if Turkish makes a distinction between mass vs. count nominals.

---

[23] This, however, is the case when that nominal is the subject. When it does not function as the subject, the interpretation differs. Consider the example below, where the nominal is the internal argument of the verb *oku* 'read':

(i)   Ayla-ø *kitap* oku-yor-ø.
        Ayla-nom book read-impf-3sg
        'Ayla is reading a book/books/Ayla is doing book-reading.'

The italicized noun in this structure is not interpreted as singular or plural; it is the notion or concept of book that is being conveyed without pointing out a particular token. This type of nouns has been called 'transnumeral' by Schroeder (1999) and 'categorial' by Nilsson (1985). What the noun *kitap* denotes is not that Ayla is reading 'a book'; it is rather an abstracted form of 'book' where it functions as the modifier of the verb *oku-* 'to read'. Nilsson (1985) claims that the nominal in this case has a 'category naming' function, i.e. it describes the activity of 'book-reading' as opposed to, say, 'magazine-reading'. I will claim that nominals as exemplified in (i) are NPs not selected by a NumP projection where their number features would be checked as opposed to DPs.

3.1.1.3 Mass/Count distinction in Turkish

It has been noted that languages that do not have a systematic article system differ with respect to the mass/count specification. Vangsnes (1999) observes that in Icelandic, which has no definite article, nominals are interpreted ambiguously between mass and count reading. In Finnish, on the other hand, where there are no definite or indefinite articles, the count/mass distinction is marked by case morphology; partitive case entailing mass reading, accusative count reading of the noun phrase. Vangsnes demonstrates that in Norwegian the indefinite article optionally occurs in a noun phrase with a difference in the interpretation:

(22) Peter has bought himself *(a) car.

(23) Peter has kjøpt seg (en) bil.

Peter has bought self (a) car

'Peter has bought himself a car.'   (Vangsnes 1999, exx. 62-3)

He notes that when the indefinite article occurs, the noun phrase is interpreted as indefinite. In those cases in which the article is not found, however, the sentence denotes the notion/concept of 'car' rather than an instance of a car, i.e. "one has abstracted away from the physical manifestation of the referent".

It is well known that mass nouns in English, that is, nouns used for substances that are not individualized, can be used for both countable and uncountable entities; count nouns fail to do so:

(24) a. I want tea. (mass, not individualized)

b. I want two teas please. (individualized, two glasses of tea)

(25) a. Can I have a glass? (individualized)

b. *Can I have glass?   [adapted from Vangsnes 1999]

See below the Turkish examples of a mass and a count noun respectively:

(26) a. Çay al-abil-ir mi-yim?

tea take-abil-aor Q-1sg

'Can I have tea?'

b. İki çay al-abil-ir mi-yim?

two tea take-abil-aor Q-1sg

'Can I have two teas?'

(27) a. Bir bardak ver-ir mi-sin?

one glass give-aor Q-2sg

'Can you give me a/one glass?'

b. Bardak ver-ir mi-sin?

glass give-aor Q-2sg

lit. 'Can you give me glass?'

These examples show us that, unlike English, count nouns in Turkish can be used as

bare.[24] Moreover, both mass and count nouns can be pluralized and both individualized

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[24] Recall that I use the term *bare* to refer to nominals which are not marked for case and which are not modified by any kind of adjectival/numeral modifier.

in Turkish, i.e. occur with the plural suffix *–lAr* and with the numeral *BİR* 'one' respectively:

(28) a. Su-*lar*-ø kes-il-miş-ø.

water-pl-nom cut-pass-evid-3sg

lit. 'The waters have been cut.' ('Water supply is cut down'.)

b. Zavallı kuş-*lar*-ø virüs nedeniyle öl-dür-ül-üyor-ø.

poor bird-pl-nom virus because.of die-caus-pass-impf-3sg

'Poor birds are being killed because of the virus.'

(29) a. *Bir*/ *BİR* su isti-yor-um.

one water want-impf-1sg

'I want a/one (bottle of) water.'

b. Geçen hafta çok değişik *bir*/ *BİR* kuş gör-dü-k.

last week very different one bird see-past-1pl

'We saw a/one very strange bird last week.'

The occurrence of the plural suffix {*–lAr*} on count nominals expresses a 'set of tokens' (28b); whereas its occurrence on mass nominals which are indifferent to quantification and individualization expresses large amounts or units in the sense of distinct individual portions of kinds of the entity in question according to Johanson (2003) (see 28a). Johanson (2003) further points out that with count nominals, *bir*/*BİR* expresses

individualization as a distinct singular entity, i.e. 'a token'. With mass nouns, however, it expresses an individual unit in the sense of 'a portion' or 'a kind' (29a&b).[25]

To sum up, we have seen in this section how singularity and plurality is expressed in Turkish. I claim that the nominal carries [+plural] meaning when either *–lAr* is base-generated at Num°, or when there is an agreement relation formed between the number denoting quantifiers in Spec ClP. When, on the other hand, the nominal is interpreted as [-plural], it is reflected either by the phonologically null singular marker on Num° or by the merge of the numeral *BİR* 'one' at the Spec ClP. In other words, numerals do not induce grammatical plurality which is expected since they are argued to be *not* base-generated in Spec NumP but in Spec ClP where they agree with either the null Cl head, or overt classifiers like *tane, adet* 'unit' which are bound roots occurring at Cl°. Consider the partial structure below:

(30)   Partial structure of nominals in Turkish

NumP   ClP
Spec   NP   Num°   Spec   NP   Cl°

---	NP	-*lAr*		*bir*	NP	null/overt
bütün[†]	NP	-*lAr*		1<numerals	NP	null/overt
bazı[†]	NP	-*lAr*		quantifiers	NP	null
---	NP	ø				

[†]: when *bütün* and *bazı* are merged in Spec NumP, their interpretation is 'all' and 'some' respectively. However, when they are merged in Spec ClP like the other quantifiers they are interpreted as 'whole' and 'a type of'.

I have claimed that Turkish referential noun phrases are dominated either by a NumP projection whose head is specified for [±plural] features or by a ClP whose head hosts either a phonologically null classifier or an overt one. I have argued that since both

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[25] Johanson (2003) claims that the items which are not marked either by *bir* or by the plural suffix {-*lAr*} are unmarked for both 'plurality' and 'singularity', and that they just represent the absence of number marking. Ahmet Cevat (1931:258) argues nominals such as *elma* in *elma ticareti* 'apple trade' denote plural entities even though they are singular in form.

NumP and ClP subcategorize for an NP, they are mutually exclusive. The numerals and quantifiers whose occurrence with the plural morpheme –*lAr* results in ungrammaticality are argued to be merged in the Spec position of the ClP in Turkish. The Spec position of NumP, on the other hand, either hosts no lexical item or the quantifiers *bazı* and *bütün* which are interpreted as 'some' and 'all' with the plural marker on the head noun.

   As opposed to studies which claim that Turkish nominal structure possesses a NumP layer (cf. Bassarak 1998, Öztürk 2004, Ketrez 2005), there are studies which argue against it (Yükseker 1995, 2003). Yükseker (2003), for example, claims that Turkish DP structure does not have a NumP and that all numerals are adjectives left adjoining below DP and above the NP.[26]

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[26] Yükseker (2003) posits a KP above the DP. She claims that accusative morpheme in K° head selects a DP complement (a), whereas a null accusative in her terms selects an AP complement (b).

(i) a.

```
            KP
          /    \
        DP      K
       /  \     -ı
     bu    D'
          /  \
        NP    D
       /  \
     AP    N
     iki   △
          kitab-
```

b.

```
          KP
        /    \
      AP      K
     /  \     -ø
   iyi   NP
         △
        kitap
```
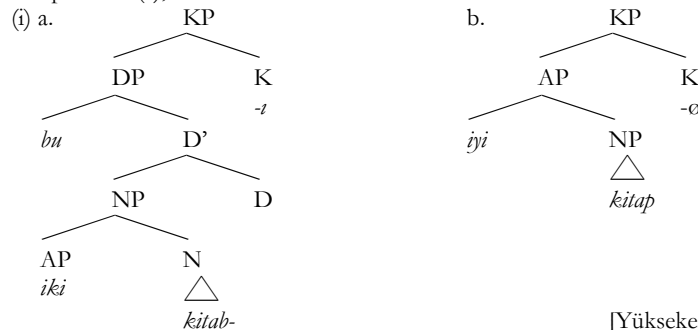
[Yükseker 2003:169, ex.9a&c]

Note that the structure Yükseker (2003) proposes for null accusative has significant problems concerning the syntactic properties of NPs. As seen in (b) above, she assumes an NP which behaves as the complement of an A° head. This implies that the head of the phrase [iyi kitap] 'good book' is the adjective *iyi* 'good'. Yükseker's (2003) claim is against the directionality parameter of Turkish, a head final language, in the sense that the AP structure she is positing is head initial taking a complement on its right. Her analysis also has to adopt a controversial structure for a nominal like *bu iyi iki kitap* 'these two good books' since she argues that [iki kitap] is an NP whereas [iyi kitap] is an AP.

(31)

```
              DP
         ┌─────┴─────┐
        bu           D'
                 ┌────┴────┐
                NP          D
             ┌───┴───┐
            AP        N
            iki       △
                     kitap
```
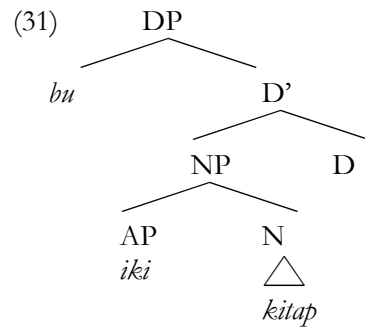
[adapted from Yükseker 2003:169, ex.9]

This analysis is problematic in the sense that arguing that numerals are adjectivals in Turkish would predict that there would be no restriction as to the occurrence of the plural morpheme on the head noun. This, however, is not attested. Consider the examples below:

(32) a. iki kitap   b. *iki kitap-lar

       two book   two book-pl

       'two book'   'two books'

(33) a. iyi kitap   b. iyi kitap-lar

       good book   good book-pl

       '(a/the) good book'   'good books'

According to the claim that numerals are adjectivals, no difference is expected between *iki* 'two' and *iyi* 'good' when they occur with a plural marked nominal. However, as seen above, the occurrence of the plural morpheme on the head noun modified by the numeral *iki* is ungrammatical.

Having thus posited a NumP/ClP for referential nominals in Turkish, I will argue in the following section that NumP/ClP is selected by a DP (Bassarak 1998, Öztürk 2004, among others; contra Öztürk 2005). I will furthermore show that *bir* can be

merged in the Spec DP position as a result of which it is interpreted not as the numeral but as a lexical item signaling the [-definite] feature of D°.

3.1.2 DP in Turkish

There is a controversy in the literature with respect to whether Turkish nominals have a DP projection. The controversy stems from the fact that unlike languages that have a fully developed determiner system, Turkish lacks a definite article. Crisma (1997) and Longobardi (2001) have observed that no languages have been attested to have an indefinite article but lack a definite one, whereas the opposite has been shown to hold, i.e. there are languages which possess a definite article but lack an indefinite one. Aygen (1999, 2002) and Öztürk (2005) have independently argued that Turkish does not possess an indefinite article and have pointed out that arguing that *bir* is an indefinite determiner would make Turkish a highly exceptional language cross-linguistically.

A number of investigations, on the other hand, have proposed that while Turkish lacks a definite article, it possesses an indefinite one (see, for example, Ahmet Cevat 1931; Tura 1973; Underhill 1976; Nilsson 1985; Banguoğlu 1990; Stoop and Coppen 1992; Kennelly 1994, 1996, 1997; Schroeder 1999, among others). In this section, I will present evidence to the effect that Turkish nominals do in fact have a DP projection whose head marks the noun phrase referential with the features [±specific] and [±definite]. I will, however, depart from the above mentioned studies in that I will not posit *bir* as an indefinite determiner, but as a lexical item occurring in Spec DP position.

In this work, I take referentiality in the syntactic sense[27] and argue that D° contains the formal features of specificity and definiteness [28] (cf. Dede 1986 and Sansa-

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[27] See footnote 3 above.

Tura 1986). Under this view, an NP of the predicate type (i.e., <e,t>) needs to be assigned referentiality by a determiner to become an argument (i.e., <e>) (Abney 1987, Szabolcsi 1994, Longobardi 1994, among others; cf. Öztürk 2005).

(34)

```
                        DP
                    ╱      ╲
              Spec          ╲
                         ╱      ╲
                   NumP/ClP      Dº
                  ╱    ╲      [±definite] [±specific]
              Spec      ╲
                     ╱      ╲
                   NP        Numº/Clº
```
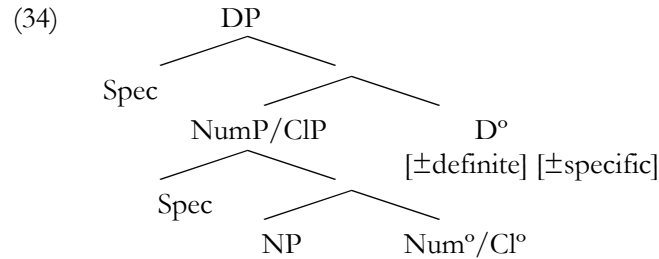
As seen in the partial structure above, I claim that referential nominals in Turkish are headed by a DP projection whose head, Dº, is specified for [±definite] and [±specific] features. The head Dº in Turkish does not have a phonological reflex, i.e. it is an empty head functioning to assign referentiality to the nominal and thus making it an argument (<e>). Let us consider the properties of this head in detail.

The head Dº carries the features [±definite] marking the referential argument either as definite or indefinite. The general definition of definiteness holds that when an NP is definite, the implication is that it is identifiable both for the speaker and the listener (see, among others, Heim 1982). The source of identifiability can be either anaphoric reference or deictic reference, in the sense that the entity may have been introduced in the preceding discourse, or that information about it may be available in the discourse taking place at the moment of speech. According to Dik (1989), definite NPs establish identifying reference, whereas indefinite NPs are used to establish constructive reference. In other words:

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[28] See footnote 2 above.

(35) a. By means of a definite nominal, the speaker invites the listener to identify a

referent which the speaker presumes is available to the listener,

b. By means of an indefinite nominal, the speaker invites the listener to construe

a referent conforming to the properties specified in the nominal.

[adapted from Dik 1989: 139]

Johanson (2003) notes that a definite nominal is an invitation to identify a referent

which the speaker assumes to be identifiable to the listener. Schroeder (1999) also points

out that definiteness is a marked status of identifiability since the referent of the NP is

thought to be identifiable by both parts of the communication process, i.e. the speaker

and the listener. As opposed to definiteness, indefiniteness is an unmarked status where

the NP is given as indefinite since the listener is thought not to be able to identify its

referent. In Johanson's (2003) terms, indefinite nominals "invite the hearer to imagine,

i.e. to construe a mental picture of an intended referent". Their typical function is to

introduce a referent into the discourse. Recall that Fodor and Sag (1982) analyze

indefinite phrases such as *a student* in the following example to be ambiguous between a

quantificational and a referential reading:

(36) A student in the syntax class cheated on the final exam. (Fodor&Sag 1982, ex.1)

They argue that under the quantificational interpretation of the indefinite, the speaker

merely asserts that the set of students in the syntax class who cheated on the final exam

is not empty. Under the referential reading, however, the speaker asserts of some

particular student, whom he does not identify, that this student cheated on the final

exam. Their view of referentiality is significant for the claim in this study that D^{o} assigns

referentiality to the nominal via the features [±definite] and [±specific]. Specifically, the

claim here that nonspecific indefinites are also referential in Turkish resembles the referentiality view of Fodor and Sag (1982) interpreted in a la Massam (2001) where the speaker knows the referent of the nominal in the real or an imaginary world (see the discussion in the previous chapter).

As for the [±specific] feature of D°, an NP has been analyzed as specific when it takes wide scope with respect to some operator in the structure. All definite NPs are considered to be specific, whereas indefinite NPs can be specific or nonspecific. This implies that the properties of D° are interdependent:

(37) properties of D°:

    [+definite] → [+specific]

    [-definite] → [±specific]

Enç (1991) establishes a definition of specificity without recourse to scope relations, through which specificity is recognized as an independent semantic phenomenon. Elaborating on Heim's (1982) theory of definiteness, she proposes that all NPs carry a pair of indices, the first of which represents the referent the NP has. Each index has a definiteness feature. The feature on the first index tells us that the NP is definite, and the feature on the second index determines the specificity of the NP. It constrains the relation of the referent to other discourse referents (Enç 1991:7). Enç's (1991) analysis correlates specificity with partitivity, which means that there is a previously established common ground for the speaker and the listener, from which one or more individuals are introduced into the domain of discourse. Kennelly (1993) also argues that a specific DP implies the partitive, whereas a non-specific DP asserts the existence of the individual(s) described by the nominal. Johanson (2003) notes that the intended referent of an indefinite specific nominal is one or more particular, i.e. non-arbitrary, individual

items of the entity designated. The intended referent of a non-specific nominal, on the other hand, is the entity designated by it, without consideration of any particular item(s). According to Schroeder (1999), specificity is a "halfway status" between marked and unmarked identifiability, in the sense that the referent of the specific noun phrase is identifiable for the speaker but not for the listener since the speaker does not establish the referent in the discourse. He claims, in other words, that the identifiability of an indefinite specific noun phrase is not expressed as a mutual category shared by both the speaker *and* the listener. This has also been pointed out by Vangsnes (1999), who adopts Abbott's (1992, 1993) view of specificity where it is defined in terms of speaker intentions. If the speaker uses a specifically referring noun phrase, s/he assumes a relation between that noun phrase and actual or imagined entity. The listener, however, is not able to identify the relation assumed.

As mentioned earlier the head of the DP projection, i.e. D°, is an empty head in Turkish.[29] It, however, has a syntactic reflex in that it turns a predicative nominal to an argument marking it with the features [±definite] and [±specific]. Moreover, it hosts certain categories in its Spec position. Let us now discuss the properties of the Spec DP position. When the D° has the feature [+definite] and hence [+specific] (see 37 above), the Spec position of DP may be lexically empty or may be filled by one of the demonstratives *bu* 'this', *şu* 'that' or *o* 'that over there'. Consider the structures below:

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[29] As has been mentioned, there are analyses arguing that Turkish has an indefinite article, which is the unstressed *bir* (Ahmet Cevat 1931; Tura 1973; Underhill 1976; Nilsson 1985; Banguoğlu 1990; Stoop and Coppen 1992; Kennelly 1994, 1996, 1997; Schroeder 1999, among others). Note that these analyses face problems not only with respect to the crosslinguistic generalization that Crisma (1997) and Longobardi (2001) independently mention, that there are no languages attested with an indefinite article lacking a definite one; but they are also problematic with respect to the head-directionality parameter in the sense that Turkish being a head final language, would have the determiner following the noun. See example (55b) in the text.

(38) a. [_DP_ Kitap-ø] yer-e düş-tü-ø.

　　　book-nom floor-dat fall-past-3sg

　　　'The book fell on the floor.'

　　　b. [_DP_ Şu kitap-ø] yer-e düş-tü-ø.

　　　that book-nom floor-dat fall-past-3sg

　　　'That book fell on the floor.'

As seen in the first sentence, the nominal *kitap* 'book' is interpreted as a definite book without the occurrence of a demonstrative in Spec DP position. In (b), however, we have a lexical item, the demonstrative *şu* 'that', in Spec DP position agreeing with the [+definite] feature of the head D°.

　　　As for the demonstratives in Turkish, Öztürk (2005) has claimed that they fail to constitute evidence for the presence of DP based on co-occurrence facts of demonstratives with other modifiers. She argues that demonstratives in Turkish are not functional categories but are pre-nominal modifiers. I argue to the contrary and hold that demonstratives in Turkish are functional categories occurring in Spec position of the DP projected above the NP. The evidence for this argument comes from the fact that demonstratives in Turkish cannot occur in any order with respect to numerals or adjectival modifiers. They have to precede a numeral (39a-b) or an adjective (40a-b) within the DP:

　(39) a. bu iki kitap

　　　this two book

　　　'these two books'

b. *iki bu kitap

two this book

intended: 'these two books'

(40) a. [Bu kırmızı kitap] benim-ø.

this red book mine-3sg

'This red book is mine.'

b. *[Kırmızı bu kitap] benim-ø.

red this book mine-3sg

intended: 'This red book is mine.'

The structures in (39) illustrate that demonstratives in Turkish precede any numeral

modifier[30] and the ones in (40) show that they also have to precede any adjectival

modifier within a noun phrase.[31] This supports the claim that demonstratives occur in

Spec DP position. Öztürk (2005) argues that the ordering of demonstratives with other

modifiers is not restricted in Turkish. She claims that both *kırmızı bu kitap* and *bu kırmızı

kitap* mean 'this red book' (Öztürk 2005:25).[32] There are a number of native speakers,

however, who do not agree with this judgment. Note that in those cases in which the

sequence [Adj-Dem-N] functions as the subject of its clause, the linearization is not

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[30] Note that Öztürk (2005) does not discuss the co-occurrence of numerals with demonstratives in her work.

[31] Additional support comes from the following where there is one more adjectival in the phrase and the occurrence of *bu* 'this' is restricted to the initial position:
- (i)   bu yeni kırmızı kitap
          this new red book
          'this new red book'
- (ii)   *yeni kırmızı bu kitap
          new red this book
          intended: 'this new red book'

[32] The speakers who consider *kırmızı bu kitap* to mean 'this red book' may be parsing it as a relative clause. In other words, for them this phrase may have the intonational contour of a relative clause. I leave this aside.

licensed; that is, when the constituents of the NP are ordered in a specific manner in a particular syntactic environment, the two sequences are not interchangeable as Öztürk argues since one leads to ungrammaticality. Thus Öztürk's (2005) claim that demonstratives in Turkish do not behave like functional categories but are pre-nominal modifiers is not sustainable (cf. Stoop and Coppen 1992).

(41)

```
                    DP
          ┌──────────┴────────┐
        Spec           ┌──────┴──────┐
         │          NumP/ClP         D°
         │        ┌─────┴─────┐       │
         │      Spec      ┌────┴────┐  │
         │       │       NP    Num°/Cl° │
         │                              │
         ▼                              ▼
      ┌─────────────────────────────────────────┐
      │ ---                          [+definite] │
      ├─────────────────────────────────────────┤
      │ bu, şu, o                     [+definite] │
      └─────────────────────────────────────────┘
```
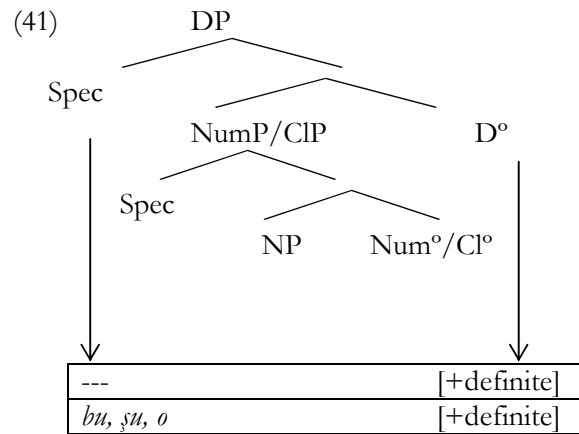
We have discussed the properties of the Spec DP position when the head, D°, is marked with the [+definite] feature. As shown in the structure above, when D° bears the feature [+definite], the Spec position may be lexically filled by a demonstrative or not filled by a lexical item at all. Let us now see the properties of Spec DP when D° is marked with the [-definite] feature.

When D° bears the feature [-definite], the Spec position of the DP projection is filled by the lexical item *bir* and the nominal is interpreted as indefinite. I argue that when D° bears the feature [-definite], the lexical item *bir* is merged in Spec DP position. In other words, when *bir* is merged in Spec ClP it bears stress (*BİR*) and is interpreted as the numeral 'one', whereas when it is base-generated in Spec DP it does not carry stress (*bir*) and does not carry the numeral reading:

(42) a. *BİR* kitap

   one book

   'one book'

   b. *bir* kitap

   one book

   'a book'

With respect to the nature of *bir*, a number of analyses exist in the literature. As has

been mentioned earlier, Tura (1973), Underhill (1976), Nilsson (1985), Banguoğlu

(1990), Stoop and Coppen (1992), Kennelly (1994, 1996, 1997), Schroeder (1999),

among others, have taken *bir* to be ambiguous between the numeral reading 'one' and

the indefinite article reading 'a/an'. An alternate view, however, is held by Aygen (1999,

2002, 2002b) who has argued against the claim that *bir* carries an indefinite article

reading. Aygen (1999 and 2002) argues that *bir* bears the numeral meaning only, while

Aygen (2002b) proposes that it is ambiguous between the numeral and the existential

interpretation 'some'. I claim, however, that in nominals which have *bir* the entity in

question is interpreted to be indefinite, and that *bir* is base-generated in the Spec

position of DP (cf. Tura 1973). [33] To capture the generalizations discussed above, I

modify the partial structure for Turkish nominals as follows:

---

[33] I argue that the lexical items occurring in Spec DP position are the distributive quantifier *her* 'each, and
the demonstratives *bu* 'this', *şu* 'that' and *o* 'that over there':
   (i)   Her iki öğrenci de çok başarılı.
            each two student also very successful
            'Both of the students/each of the two students are very successful.'
   (ii)   Bu üç kitab-ı al-ıyor-um.
            this three book-acc buy-impf-1sg
            'I am buying these three books.'
In (i&ii) *her* 'every' and *bu* 'this' are base-generated at Spec DP whereas the numerals *iki* 'two' and *üç*
'three' are merged at Spec ClP. In the case with *bir*, the quantifiers *her* 'each' and *bütün* 'all' and only the
demonstrative *şu* can occur:
   (iii)   Her bir kitab-ı oku-du-m.
            each one book-acc read-past-1sg

(43)

```
              DP
           /      \
        bir     /      \
             NumP/ClP      D°
           /      \      [-definite]
        NP       Num/Cl
```
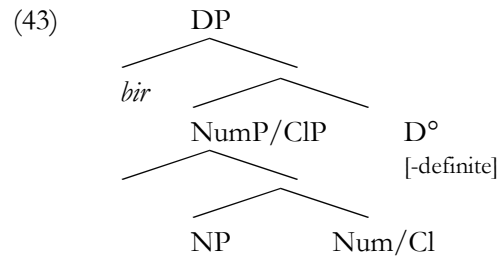
This proposal is based on the following arguments which support the claim that *bir* as opposed to other numerals can be merged at Spec DP. As mentioned earlier, the numeral *bir* is base-generated in Spec ClP. However, it contrasts with other numerals, which are also base-generated in the same position, in that while other numerals are free to occur in any position with respect to adjectival modifiers of the head noun, *bir* is restricted in this respect in that the position that it occurs in triggers a difference in the interpretation. Recall Yükseker's (2003) examples in (17&18) above, which I partially repeat below for convenience:

(44) a. iyi yeni iki kitap

   good new two book

   'two good new books'

   b. iki iyi yeni kitap

   two good new book

   'two good new books'   [Yükseker 2003:166, ex. 2]

         'I read each and every one of the books.'
   (iv)   Bütün bir gece-yi kitap oku-yarak geçir-di-m. (M. Kelepir, p.c)
           all one night-acc book read-conv pass-past-1sg
           'I spent the whole night reading books.'
   (v)   Şu bir kitap bana yeter.
           that one book I-dat enough
           'That single book is enough for me.'
See example (47) in the text and footnote (36) below for discussion where I argue that *bir* in these cases is in fact merged at Spec ClP and not at Spec DP and is interpreted as a numeral.

(45) a. iyi yeni bir kitap

good new one book

'a good new book'

b. bir iyi yeni kitap

one good new book

'one good new book'   [Yükseker 2003:167, ex. 5]

We have already discussed above that *bir* behaves differently from the other numerals in that its different ordering with respect to the adjectival modifiers has a semantic reflex. That is, when it occurs after the modifiers as in (45a) it induces an indefinite reading of the nominal, whereas its position to the left of the modifiers (45b) yields the numeral reading 'one'.

   Another property of *bir* distinguishing it from the other numerals is the ungrammaticality of its occurrence with one of the demonstratives, *bu* 'this', *şu* 'that' and *o* 'that over there'. Recall (14a) above, repeated below:

(46) *[Bu bir kitap] çok güzel-ø.

   this one book very good-3sg

   intended reading: *'This a book is very nice.'

The ungrammaticality of the co-occurrence of demonstratives and *bir*, as opposed to other numerals (14b above), supports the argument that *bir* in these cases occur in the same syntactic position as the demonstratives, i.e. in Spec DP.[34]

The occurrence of *bir* with the demonstrative *şu* 'that' is grammatical[35]:

(47) Şu bir kitap-ø hayat-ım-ı kurtar-dı-ø.

that one book-nom life-poss.1sg-acc save-past-3sg

'That one book saved my life.'

---

[34] The non-cooccurrence of an indefinite article/numeral 'one' and a demonstrative can be observed in some other languages as well:

(1)	a. *this a book/this one book	b. *one/a this book	[English]
(2)	a. *dieses ein Buch	b. *ein dieses Buch	[German]
	this one book	one this book	
(3)	a. *afto ena vivlio	b. *ena afto vivlio	[Greek]
	this one book	one this book	
(4)	a. *ce un livre	b. *un ce livre	[French]
	this one book	one this book	

Note first of all that the indefinite articles in German, Greek and French, i.e. *ein*, *ena*, and *un*, are all synonymous with the numeral one in the corresponding language. (Since these languages possess grammatical gender, the article/numeral has different forms, which I do not list here.) I claim that the ungrammaticality of the co-occurrence of the demonstrative and the indefinite article is due to the fact that they occupy the same syntactic position. The similar behavior of *bir*, i.e. its non-cooccurrence with the demonstratives in Turkish lends support to the claim that it can also occur in Spec DP.

When we look at the behavior of the definite article and its co-occurrence with the demonstrative in the languages mentioned above, we see the following contrast:

(i)	a. *this the book	b. *the this book	[English]
(ii)	a. *dieses das Buch	b. *das dieses Buch	[German]
(iii)	a. *ce le livre	b. *le ce livre	[French]
(iv)	a. ✓afto to vivlio	b. *to afto vivlio	[Greek]

As seen above, only Greek allows the co-occurrence of the definite determiner and the demonstrative. Progovac (1998) notes that Hungarian and Javanese also allow this co-occurrence:

(v)	es a haz	[Hungarian]
	this the house	
(vi)	ika n anak	[Javanese]
	this the boy	[from Progovac 1998:166]

The ungrammaticality of the co-occurrence of the demonstrative and the definite article in English, French and German can be accounted for by the fact that they occupy the same syntactic position. The fact that Greek, Hungarian and Javanese allow for the co-occurrence of a definite article and a demonstrative, however, may imply that these languages have different positions within the nominal phrase for these items. Since this is beyond the scope of this study, I leave this issue for further typological research.

[35] This has been pointed out by A. Göksel (p.c.).

As seen in the translation, *bir* in this structure is interpreted as a numeral and not as a marker of indefiniteness. In fact, the nominal is interpreted as [+definite] due to the occurrence of the demonstrative *şu* 'that' in Spec DP. This indicates that *bir* in this case is not base-generated in Spec DP but in Spec ClP like the other numerals.[36]

(48)

```
              DP
         ┌─────┴─────┐
        şu          ┌─┴──────┐
                   ClP       D°
              ┌─────┴──┐    [+definite]
            BİR     ┌───┴───┐
                   NP      Cl°
                   △        ø
                  kitap
```
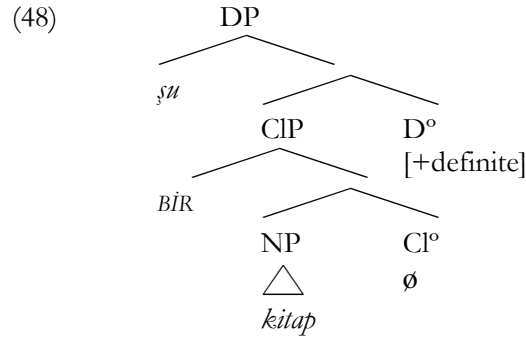
The discussion until now has shown us that *bir* exhibits a totally different behavior than the other numerals in that it does not occur with any demonstrative, unlike the other numerals; and its ordering with respect to adjectivals results in a different semantic interpretation, whereas the different ordering of other numerals with respect to adjectivals does not. I take all these facts as evidence that *bir* can be merged in Spec DP (resulting in the non-numeral reading) as opposed to other numerals which can only be base-generated at Spec ClP.

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[36] Note that even though it is possible for the demonstrative *şu* 'that' to occur with *bir*, the following shows that the co-occurrence of either *bu* 'this' or *o* 'that over there' with *bir* is ungrammatical:

    (i)   *Bu *BİR* kitap ban-a yeter.
            this one book I-dat enough
            intended: *'This one book is enough for me.'
    (ii)   *O *BİR* kitap ban-a yeter.
            that one book I-dat enough
            intended: *'That one book is enough for me.'

The only possible way to express the intended meaning is by the means of *tek* 'single':

    (iii)   Bu/O tek kitap ban-a yeter.
            this/that single book I-dat enough
            'This/that single book is enough for me.'

These examples show us that *şu* 'that' behaves differently from the other demonstratives (see also footnote 43 where the behavior of *şu* 'that' is again different in its ordering with respect to the genitive marked nominal). Moreover, the referential properties of *şu* 'that' differ from *bu* 'this' and *o* 'that over there', as well. Whereas *bu* and *o* refer to an entity or a fact that has just been mentioned, *şu* refers to an entity or a fact that will be mentioned. I leave the thorough analysis of the differences among the demonstratives to a future study.

Another piece of evidence for its occurrence in the Spec position of DP comes from the possibility of the occurrence of *bir* with plural marked nouns. Consider the following:

(49) *Bir şey-ler* ye-di-m.

one thing-pl eat-past-1sg

'I ate something.' (lit. some things)

(50) Bu hafta sonu *bir yer-ler*-e gid-e-lim mi?

this week end one place-pl-dat go-opt-1pl Q

'Shall we go somewhere (some places) this weekend?'

(51) *Bir zaman-lar* burada eski bir konak var-mış.

one time-pl here old one mansion exis-evid

'Once upon a time there used to be an old mansion here.'

(52) Mutfak-tan *bir ses-ler* gel-iyor-ø.

kitchen-abl one sound-pl come-impf-3sg

'I hear some noises/sounds coming from the kitchen.'

(53) Onlar *bir iş-ler* çevir-iyor-lar galiba.

they one business-pl run-impf-3pl probably

'They are hatching a plot, I think.'

As seen above, *bir* occurs with a plural nominal of different kinds. Csató (1988) observes that the plural nouns with which *bir* can occur are of two groups. The first group

contains "lexical pro-forms, as … *şey* 'thing', *yer* 'place', *zaman* 'time' " (see 49-51 above).

The second group, on the other hand, contains "nouns denoting sensory perception as *ses* 'sound', *ışık* 'light', or *gürültü* 'noise' " (p. 131) (see 52). Schroeder (1999), however, notes that even though most of the occurrences of *bir* with plural nouns belong to the two groups mentioned in Csató (1988), there is a considerable number of nouns in Turkish[38] that do not (see, e.g. 53). He gives the following list:

(54) bir anlaşma-lar;   bir artış-lar;   bir çıkış-lar;

  one agreement-pl   one increase-pl   one instance-pl

  bir müzisyen-ler;   bir konu-lar;   bir zorluk-lar;

  one musician-pl   one topic-pl   one problem-pl

  bir tabir-ler;   bir iş-ler

  one expression-pl   one work-pl   [Schroeder 1999:60, ex.12]

Schroeder claims that the uses of the occurrence of plural nouns with *bir* can be unified by the fact that all of them are non-referential semantically.[37] What is important for our discussion is the total grammaticality of occurrence of the numeral *bir* with nominals marked for plurality. In all these examples the entity in question is interpreted to be indefinite, hence support for the claim that *bir* is base-generated in Spec DP in these cases.

As have been mentioned earlier, Aygen (1999, 2002) and Öztürk (2004, 2005) argue against the analyses that claim that *bir* is an indefinite determiner in Turkish[38], and

---

[37] A. Göksel (p.c.) claims that the usage of *bir* with plural nouns in Schroeder's (1999) examples is more of a modality or a discourse marker since, for example, it sounds very odd to have one of the examples in (54) in a question. I leave the thorough discussion of this for future research.

[38] Recall from Chapter 2 that Öztürk (2005) assumes that there are two *bir*'s in Turkish. She argues that the unstressed *bir* in the [*bir* N] construction is a predicate modifier, which modifies the NP just like any adjective. The stressed *BİR*, on the other hand, is an adverbial modifying the event formed by pseudo-incorporation (see the following chapter for details). This claim is problematic in the sense that it would predict that the following is a potentially grammatical structure, contrary to fact:

point out that if those analyses were on the right track Turkish would behave exceptionally according to the general observation made by Crisma (1997) and Longobardi (2001), who state that no languages have been attested to have an indefinite article but lack a definite one; whereas the opposite is attested, i.e. there are languages which possess a definite article but lack an indefinite one. Note that the analysis I make is also contrary to the argument that *bir* is the indefinite determiner in Turkish. I claim that *bir* is not a determiner (Dº) but is a numeral which behaves differently from the other numerals in that it can also be base-generated in Spec DP position inducing an indefinite reading of the nominal. [39] The claim that it is not the head category, i.e. D° itself, is also consistent with the syntactic typology of Turkish. Turkish is a head-final language and *bir* cannot be the head category of DP since it does not occur to the right of the noun:

(55) a. [$_{DP}$ [$_{Spec}$ bir] [$_{NP}$kitap] [$_{D^{\circ}}$ ø]]

one book

'a book'

b. *[$_{DP}$ [$_{NP}$ kitap] [$_{D^{\circ}}$ bir]]

book one

intended: 'a book'

As for Yükseker's (2003) analysis of *bir*, there are certain problems. Yükseker proposes that *bir* 'one' has the feature specification [-plural] and [-specific] as opposed to the other

---

(i)   *Ali BİR [$_{complex \ pred}$ bir kitap okudu].
          Ali one one book read
          intended: 'Ali read a book once.'

[39] Recall the cross-linguistic hypothesis that no language would utilize an indefinite article in the absence of a definite one. Ahmet Cevat (1931:259) in his discussion about the role of *bir,* which he claims to function as the numeral *one* and also as *nekre morfemi* "the indefinite morpheme", notes that historically speaking *bir* was not used for indefinite entities, but this usage was implemented later on.

numerals, which are [+specific]. By claiming that *bir* is [-specific] and the other numerals are [+specific], she proposes that there is a feature dependency between plurality and specificity in Turkish. This, she argues, is the reason for the ungrammaticality of the co-occurrence of *bir*, which is [-specific], with the demonstratives, which are inherently [+specific]. However, her analysis is problematic for instances where *bir* occurs with a head noun marked by the accusative morpheme. [40]

(56) Ayla-ø bir kitab-ı arı-yor-ø.

     Ayla-nom a book-acc search-impf-3sg

     'Ayla is looking for a (specific) book.'

Another problem for her analysis is that arguing that numerals other than *bir* are [+specific], the occurrence of non-Case marked nouns with those numerals is expected to be ungrammatical. This is not borne out:

(57) Ayla-ø iki kitap oku-yor-ø.

     Ayla-nom two book read-impf-3sg

     'Ayla is reading (any) two books.'

The grammaticality of this structure indicates that positing a [+specific] feature for numerals other than *bir* is problematic, as they can occur with non-case marked, hence nonspecific nominals.

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[40] One should note that Yükseker (2003) bases her analysis on data collected from an informant who, she states, does not speak the standard dialect. She points out that the occurrence of *bir* and the accusative marking is unacceptable for her informant. See her example below:
    (i) *Patricia-ø bir kitab-ı oku-du-ø.
     Patricia-nom a book-acc read-past-3sg
     'Patricia read a book.'   (Yükseker 2003:166, ex.4b)

In this section, we have seen that the Spec DP position may be lexically empty or filled with one of the demonstratives *bu* 'this', *şu* 'that' or *o* 'that over there' when D° bears the feature [+definite]. I have also shown that *bir* which is interpreted as the numeral 'one' when it is base-generated at Spec ClP, can also be base-generated at Spec DP position inducing an indefinite reading of the nominal at hand, i.e. when D° bears the feature [-definite].

Before going on to the next section, I would like to point out why I do not argue that the quantifiers are also merged at Spec DP. Recall that, in the previous section, I argued that the classifiers *çok* 'many', *birçok* 'a lot of', *birkaç* 'several', *bazı* 'a type of' and *bütün* 'whole' are merged at Spec ClP. I have also argued that the quantifiers *bazı* and *bütün* can also be merged at Spec NumP where they occur with plural marked nominals and are interpreted as 'some' and 'all' respectively. Consider the examples below where the co-occurrence of demonstratives and quantifiers result in ungrammaticality except for *bütün* 'all' and *birkaç* 'several':

(58) a. *bu/şu/o bazı kitap-lar

   this/that/that.over.there some book-pl

   intended: *'these/those some books'

b. *bu/şu/o bütün kitap-lar

   this/that/that.over.there all book-pl

   intended: *'these/those all books'

c. ✔bütün bu/şu/o kitap-lar

   all this/that/that.over.there book-pl

   'all of these/those books'

d. *bu/şu/o çok/birçok kitap

this/that/that.over.there many/a.lot.of book

intended: 'these/those many/a lot of books

e. ✔bu/şu/o birkaç kitap

this/that/that.over.there several book

'these/those several books'

The examples in (58a-b) indicate the ungrammaticality of the co-occurrence of the

demonstratives with the quantifiers *bazı* and *bütün*. These data may be accounted for by

assuming that both demonstratives and these quantifiers are base-generated at Spec DP

position. The problems for this argument will be discussed very shortly. Before going

on to the case of the other quantifiers, note that the co-occurrence of demonstratives

and *bütün* is grammatical when their order is reversed (58c). The gloss indicates that in

this case the interpretation is more like a partitive. Therefore, I take this example to be

of different syntactic structure, which I leave for future research. (58d) indicates that the

quantifiers *çok* 'many' and *birçok* 'a lot of' cannot co-occur with the demonstratives[41].

The fact that demonstratives can occur with *birkaç* 'several' needs an explanation. I have

mentioned earlier that *birkaç* 'several' also behaves differently than the other quantifiers

in allowing overt classifiers to attach to it (as in *birkaç tane kitap* 'several (units of)

books'). I do not provide a thorough analysis of *birkaç* in this study but I would like to

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[41] The same applies to *bazı* and *bütün* when they are merged at Spec ClP, and are interpreted as 'a type of'
and 'whole':
    (i)   *bu/şu/o bazı kitap
           this/that/that.over.there a.type.of book
           intended: *this/that a type of book
    (ii)   *bu/şu/o bütün kitap
           this/that/that.over.there whole book
           intended: this/that whole book

hint that the different behavior of *birkaç* may lie behind its morphology, i.e. *bir+kaç* 'one+how many'. The details of the exact analysis, however, await further research.

Going back to the ungrammaticality of (58d), one can argue that this can also be accounted for by assuming that those quantifiers are base-generated at the same syntactic position with the demonstratives, i.e. at Spec DP. However, the argument that the quantifiers are base-generated at Spec DP (58 a-b-d) faces two serious problems: First of all, it would not account for why the occurrence of the plural marker on the nominal results in ungrammaticality. That is, since D° can merge with a NumP whose head bears the plural marker –*lAr*, this argument would predict structures like the following to be grammatical, contrary to fact:

(59) *çok/birçok/birkaç kitap-lar

    many/a.lot.of/several book-pl

    intended: 'many/a lot of/ several books'

The second problem is in fact similar to the first. Assume that the quantifiers are base-generated in Spec DP (and not in Spec ClP). In this case, further assume that DP selects a ClP (instead of a NumP) whose Spec position hosts the numerals. This account would predict the co-occurrence of quantifiers to be acceptable with numerals, contrary to fact:

(60) *birçok/çok/birkaç/… iki kitap

    a.lot.of/many/several two book

    intended: *'a lot of/many/several two books'

As (59-60) indicate, the argument that the quantifiers are base-generated in Spec DP position is problematic and cannot account for the facts. Then the question arises as to

how the structure I propose can account for (58a-b-d). Since I posit that demonstratives

occur in Spec DP, whereas the quantifiers are merged in Spec ClP (/NumP), the co-

occurrence is predicted to be grammatical. I claim that (58a-b-d) are ungrammatical not

because of their syntactic position but because of a semantic clash between the two

categories. As for (58e), the grammaticality may be because of the internal morphology

of *birkaç* 'several'. However, the grammaticality of the co-occurrence of *bütün* 'all' with a

demonstrative in the order given in (58c) is left unaccounted for in this study.

3.1.3 PossP in Turkish

In this section, I will discuss the possessive construction and the position of the genitive

marked phrase within the nominal. Consider the following example:

(61) Ayla-nın bu iki kitab-ı

     Ayla-gen this two book-poss.3sg

     'these two books of Ayla'

As seen above, the genitive marked nominal *Ayla-nın* 'Ayla's' agrees with the head of the

noun phrase *kitap* 'book' in its φ-features, i.e. 3rd person singular. The genitive marked

phrase expresses different semantic properties in languages (see, for example, Quirk et

al. 1985 for English; Ritter 1991 for Hebrew; Kornfilt 1997 and Göksel and Kerslake

2005 for Turkish; Schuh 2004 for Bole). It may express alienable or inalienable

possession, subject, source/origin, container-content relationship, or partitive in

Turkish.[42]

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[42] The examples below indicate the different usages of possession in Turkish:

As for its syntactic properties in Turkish, the genitive marked phrase occurring at Spec PossP agrees with the head Poss° in φ-features as seen in (61) above. The examples below indicate that movement out of the DP and left-adjunction to PossP is outlawed:

(62) *[Bu iki Ayla-nın kitab-ı]

this two Ayla-gen book-poss.3sg

intended: 'these two books of Ayla'

(63) *[bu Ayla-nın iki kitab-ı] [43]

this Ayla-gen two book-poss.3sg

(i)	ben-im çanta-m	alieanable possession
	I-gen bag-poss.1sg	
	'my bag'	
(ii)	o-nun mide-si	inalieanable possession
	he-gen stomach-poss.3sg	
	'his stomach'	
(iii)	Ali-nin Ankara-ya git-me-si	subject
	Ali-gen Ankara-dat go-vn-poss.3sg	
	'Ali's going to Ankara'	
(iv)	bura-nın su-yu	source/origin
	here-gen water-poss.3sg	
	lit. 'here's water' (water from here)	
(v)	hediye-nin kutu-su	container-content
	gift-gen box-poss.3sg	
	'the box of the gift'	
(vi)	elma-lar-ın üç-ü	partitive
	apple-pl-gen three-poss.3sg	
	'three of the apples'	

[43] A. Göksel (p.c.) notes that the demonstrative *şu* behaves differently from the other determiners *bu* 'this' and *o* 'that (over there)' in its ordering with respect to the genitive marked phrase:

(i)	Şu benim iki kitab-ım-ı/kitab-ı ver.
	that my two book-poss.1sg/book-acc give
	'Give those two books of mine.'
(ii)	*Bu benim iki kitab-ım-ı/kitab-ı ver.
	this my two book-poss.1sg-acc/book-acc give
	intended: 'Give these two books of mine.'
(iii)	*O benim iki kitab-ım-ı/kitab-ı ver.
	that my two book-poss.1sg-acc/book-acc give
	intended: 'Give those two books of mine over there.'

These structures can be analyzed as movement of the element at Spec DP and its left adjunction to PossP. However, as can be noted, this movement is restricted to those circumstances in which only *şu* appears in Spec DP. Why there is a constraint on the nature of the element at Spec DP needs to be further investigated. See also footnote 33, 36 for the different behavior of *şu*.

The above examples under the non-contrastive focus interpretation show that the genitive marked noun has to occur to the left of demonstratives, numerals (and adjectivals) in the noun phrase. These facts support the claim made earlier for the structure of the Turkish noun phrase. I repeat the tree structure below:

(64)

```
                        PossP
                    ╱          ╲
          Ayla-nın         ╱        ╲
                        DP          Poss
                    ╱      ╲          -ı
                bu       ╱      ╲
                      ClP          D
                    ╱    ╲        [+def]
                iki    ╱    ╲
                     NP       Cl
                    ╱  ╲
                  kitab
```
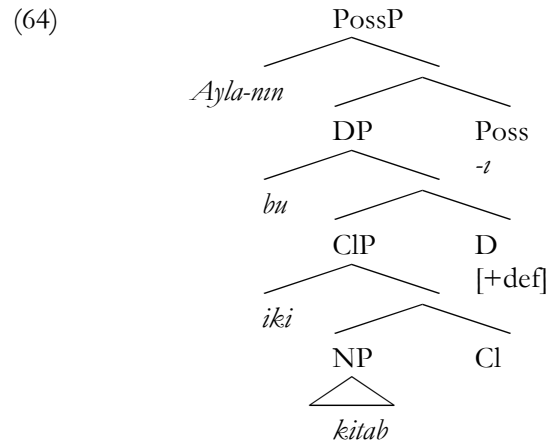
As seen in this syntactic structure, the ClP hosts the numeral *iki* 'two' in its Spec position. The DP, which takes ClP as a complement, is headed by a null D° specified with the feature [+definite] and agrees with the demonstrative *bu* 'this' in its Spec position (Longobardi 2001). DP is in turn selected by the PossP whose Spec position is occupied with the genitive marked nominal agreeing with the Poss°.

3.2 Non-referential nominals

Recall the sentences introduced at the very beginning of this chapter, which I repeat below for convenience:

(65) a. Ali-ø *kitab-ı* oku-yor-ø.

Ali-nom book-acc read-impf-3sg

'Ali is reading the book.'

b. Ali-ø *bir kitab-ı* oku-yor-ø.

Ali-nom one book-acc read-impf-3sg

'Ali is reading a specific book (one of the books).'

c. Ali-ø *bir kitap-ø* oku-yor-ø.

Ali-nom one book-ø read-impf-3sg

'Ali is reading a book.'

d. Ali-ø *kitap* oku-yor-ø.

Ali-nom book read-impf-3sg

'Ali is book-reading.'

We have seen in the previous sections the syntactic properties of the referential

nominals exemplified in (a-c) Turkish. I have argued that they are headed by a DP layer

whose head, a phonologically null head, assigns referentiality to the noun via the feature

specifications [±definite] and [±specific].[44] The non-referential nominal in (d), however,

differs from the others in one or more of the following:

(66) a. semantic properties

b. phonology, i.e. stress pattern

c. word order restrictions

---

[44] Recall that PossP selects DP as a complement. In cases where there is no possessive phrase, a PossP will not be posited.

I argue that non-referential nominals are not headed by a DP layer but are phrasal categories of the kind NP (contra Kornfilt 1995). The structures are given below:

(67) a. referential nominal   b. non-referential nominal

```
            DP                                        NP
           /  \                                       |
        /  \                                          N°
   NumP/ClP    D°
             [referentiality]
       /  \
     NP    Num°/Cl°
     |
     N°
```
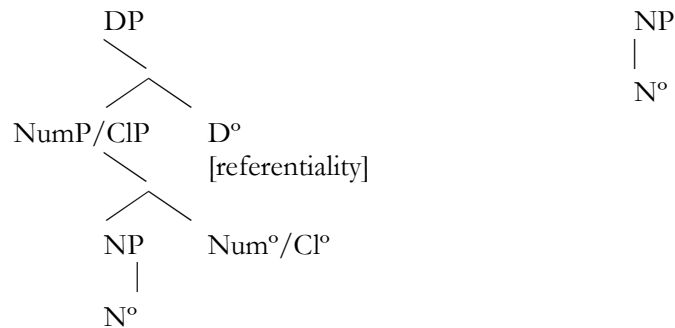
As seen above, the referential nominal in (a) has a NumP/ClP and DP layer from which it gets (either grammatical or semantic) number interpretation together with referentiality. The non-referential nominal in (b), on the other hand, is an NP and not a DP. It does not possess a DP layer, whose head, D°, assigns referentiality. It does not possess a NumP/ClP as well, hence it is interpreted as transnumeral (cf. Schroeder 1999, Göksel and Kerslake 2005).

There are three main groups of data where non-referential nominals occur:

(68) a. as objects of transitive verbs,

     b. as surface subjects of Unaccusative verbs (including unaccusatives, existentials and passives),

     c. as subjects of transitive verbs, and unergative verbs, i.e. the so-called 'subject incorporation' cases.[45]

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[45] Öztürk (2005) groups these as theme-incorporation (a&b) vs. agent-incorporation (c). Grouping (a) and (b) under the same category does not predict their different behavior as exemplified below:
     (i)   kitap oku-mak

The examples for each category are given below:

(69) Ayla-ø *kitap* oku-du-ø.   *object of transitive verb*

Ayla-nom book read-past-3sg

'Ayla read a book/books.'

(70) a. Ev-e *hırsız* gir-di-ø.   *unaccusative*

house-dat thief enter-past-3sg

'The house got burgled.' (lit. A thief/Thieves entered the house.)

b. Dolap-ta *su* var.   *existential*

fridge-loc water exis

'There is water in the fridge.'

c. Kütüphane-de *kitap* oku-n-du-ø.   *passive*

library-loc book read-pass-past-3sg

'A book/Books was/were read in the library/ Book-reading took place in the

library.'

---

	book read-inf
	'to read (a) book(s)' (to book-read)/'book-reading'
(ii)	a. ev-e hırsız *gir-mek/gir-me-si
	home-dat thief enter-inf/enter-vn-poss.3sg
	'thief-entering-to-the-house'
	b. dolap-ta su *ol-mak/ol-ma-sı
	fridge-loc water be-inf/be-vn-poss.3sg
	'the fact that there is water in the fridge'
	c. kitap *oku-n-mak/oku-n-ma-sı
	book read-pass-inf/read-pass-vn-poss.3sg
	'the fact that book(s) is/are being read'

(71) a. Ev-i *su* bas-tı-ø.[46]   *subject of transitive verb*

house-acc water flood-past-3sg

'The house was flooded (with water).'

b. Tayfa-yı *deniz* tut-tu-ø.   *subject of transitive verb*

sailor-acc sea hold-past-3sg

'The sailor got seasick.'   [Sezer 1972, ex. 17b] (idiomatic expression)

c. Sokak-ta *kedi* miyavlı-yor-ø.   *subject of unergative*

street-loc cat meow-impf-3sg

'There is cat meowing in the street'/ 'A cat/cats is/are meowing in the street.'

The syntactic evidence that non-referential nominals are not head categories of the type

N° comes from the modification test proposed by Mohanan (1995) for Hindi noun

incorporation constructions. In Arslan (2000) and Öztürk (2005), it is shown that non-

referential nominals can be modified indicating that they are phrasal categories.[47] (72)

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[46] A. Göksel (p.c.) points out that this sentence can also be expressed with the dative marked phrase *eve* 'home-dat':
(i)   Ev-e su bas-tı-ø.
          home-dat water step-past-3sg
          'The house was flooded.'
I argue that the verb *bas-* in this example is different from the one in (71a) above even though the interpretation of these two sentences seems to be the same. The verb in (i) can occur in structures like the following:
(ii)   Ankara-ya hiç ayak bas-ma-dı-m.
          Ankara-dat at.all foot step-neg-past-1sg
          'I haven't set foot on Ankara at all.'
Further support for the claim that the verb *bas-* in (i) is different from the one in (71a)comes from the contrast in the following:
(iii)   Ev-i pire bas-tı-ø.
          home-acc flee step-past-3sg
          'The house is filled/raided with flees.'
(iv)   *Ev-e pire bas-tı-ø.
          home-dat flee step-past-3sg
[47] Recall that in section 2.1.2 in Chapter 2 it has been pointed out that the occurrence of an adjunct in a structure with a bare nominal differs from the one with a *bir NP* nominal. I repeat the examples below for convenience:
     (i)   Mehmet-ø kötü *araba* kullan-ıyor-ø.

gives the examples of a non-referential object; (73) non-referential nominals in the

unaccusative class and (74) non-referential subject:

(72) a. O-ø sahaf. *Eski kitap* sat-ıyor-ø.

He-nom book-seller. old book sell-impf-3sg

'He is a book-seller. He sells old books.'   [Arslan 2000:12, ex. 45]

b. Ali-ø *konuş-acak insan* ara-dı-ø.

Ali-nom talk-OP person search-past-3sg

'Ali looked for someone to talk to.'   [Öztürk 2005:40, ex. 56b]

(73) a. Ağaç-ta *yeşil elma* yetiş-iyor-ø.   unaccusative

tree-loc green apple grow-impf-3sg

'There is green apple growing in the tree/Green apples grow in the tree.'

b. Hastane-de *iki ünite kan* ver-il-di-ø.   passive

hospital-loc two unit blood give-pass-past-3sg

'There were two units of blood given at the hospital.'

Mehmet-nom bad car use-impf-3sg
'Mehmet drives badly.'
(ii)   Mehmet-ø kötü *bir araba* kullan-ıyor-ø.
Mehmet-nom bad one car use-impf-3sg
'Mehmet is driving a bad car.'   (Aydemir 2004:467, ex. 5)
It has been pointed out that the immediately available reading of (i) is that the adjunct is interpreted as modifying the whole predicate 'drive' whereas in (ii) it modifies the nominal 'a car'. The fact that this cannot be observed in (72) can be accounted for by the semantic compatibility of the adjunct and the verb. Even though it is possible to "use something in a bad manner" (*kötü kullan-*), it is impossible to "sell something in an old manner" (*eski sat-*). In other words, I argue that the examples in (i&ii) do not constitute counterexamples to the claim that bare nominals can be modified.

c. Yemek-te *kızarmış patates* var.   existential

meal-loc fried potatoes exis

'There are French fries at dinner.'

(74) Küçük çocuğ-u *kuduz köpek* ısır-mış-ø.

little child-acc rabies dog bite-evid-3sg

'The little child apparently got bitten by a mad dog.'

The examples (72-74) display the possibility of modification of the non-referential nominals supporting the claim that they are not head categories but phrasal categories (NP) modified by a left adjoining adjectival phrase. (Chapter 4 will provide a further test regarding coordination of bare nominals to the same effect).

Semantically, the bare nominals are all interpreted as non-specific (Enç 1991) and non-presuppositional (Diesing 1992, Kelepir 2001) bound by the existential closure (∃). The bare object in (65d), for example, does not to refer to any entity the speaker or the hearer has in mind. It describes only the class membership, the notion or concept of the entity. It does not have any number reference (Nilsson 1985, Schroeder 1999, Dayal 2003, among others). The structures below are idiomatic expressions taken from Erguvanlı (1984), which further exemplify that the [bare object + verb] describes one single activity whereby the bare object seems to modify the action only: [48]

(75) a. günah çıkar-mak   b. göz kırp-mak   c. avuç aç-mak

     sin take.out-inf   eye clip-inf   palm open-inf

     'to confess'   'to wink'   'to beg'   [from Erguvanlı 1984:24]

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[48] The same point is made by Dayal (2003) for Hindi bare objects. She notes that the object does not correspond to a theme but is instead interpreted as a modification of the verb: "…the relation between *read* and *book-read* is akin to the difference between *cook* and *boil* (or any manner-of-cooking verb)" (Dayal 2003:17).

The bare nominals in the Unaccusative class are also interpreted non-presuppositionally, bound by the ∃-closure. Consider the unaccusative structure in (70a) above. The interpretation of this sentence is not directly that a thief/thieves entered the house but that the house was burgled. What is conveyed by this structure is not the event of a thief entering a place, but burglary (note the English translation). That is to say, the semantic interpretation of these bare nominals is non-specific, hence non-presuppositional. The same observation holds for the bare nominals acting as subjects[49] of transitive and unergative verbs. They are also non-specific, non-presuppositional. Recall the example in (71a). It is not possible to talk about a certain amount of water which flooded the house. The cause of the flood is an(y) amount of water, hence the non-specific *su*.

As a second property, let us consider the phonological properties of the bare nominals, starting with the bare object+verb sequences. As Knecht (1986) points out these structures have the same stress pattern with the noun compounds, an example of which is given in (76): [50]

(76) [[FOC portaKAL] reçel-i]

orange jam-poss.3sg

'orange jam'

(77) Ayla-ø [[FOC kiTAP] oku-yor-ø].

Ayla-nom book read-impf-3sg

'Ayla is book-reading.'

---

[49] See Kennelly (1997) where she argues that nonspecific arguments cannot function as syntactic subjects.
[50] I will show the focused phrase as [FOC x] and the stressed syllable using small capitals.

The same holds for the Unaccusative class and the so-called "subject-incorporation" cases as well:

(78) Ev-e [[FOC hırSIZ] gir-di-ø].   Unaccusative

home-dat their enter-past-3sg

'The house was burgled.'

(79) Mutfak-ta [[FOC biRİ] var].   existential

kitchen-loc someone exis

'There is someone in the kitchen.'

(80) Kütüphane-de [[FOC kiTAP] oku-n-du-ø].   passive

library-loc book read-pass-past-3sg

'Book-reading took place in the library.'

(81) Ayla-yı [[FOC köPEK] ısır-mış-ø].   subject of a transitive

Ayla-acc dog bite-evid-3sg

'Ayla got bitten by a dog/dogs apparently.'

As seen in the stress patterns above, Knecht's (1986) observation that bare object+verb sequences show the same stress pattern as the compounds applies to the other instances of bare nominals, as well. Let us see the stress pattern of a presuppositional object in a transitive structure and a presuppositional subject in unergatives to show the difference from bare nominals:

(82) Tolga-ø araba-yı [_FOC_ al-DI-ø].　　　　　　[from Nakipoğlu-Demiralp, to appear]

　　　Tolga-nom car-acc buy-past-3sg

　　　'Tolga bought the car.'

(83) Kedi-ø [_FOC_ miyavLI-yor-ø].

　　　cat-nom meow-impf-3sg

　　　'The cat is meowing.'

The accusative marked object *arabayı* 'the car-acc' and the subject *kedi* are interpreted presuppositionally, outside the existential closure, in the restrictive clause in Diesing's (1992) terms. Focus on the accusative object in (82) and the nominative subject in (83) induces a contrastive reading, i.e. the sentence would not have the presentational focus reading (cf. Nakipoğlu-Demiralp, to appear) [51]. The immediately preverbal position or stress in this position is associated with neutral/presentational focus position in Turkish (see Erguvanlı 1984, Kural 1992, Kornfilt 1997, İşsever 2003, Nakipoğlu-Demiralp (to appear), among others; contra Göksel and Özsoy 2000, 2003). However, a neutral focus interpretation for these nominals is not possible due to the accusative suffix on the object and the nominative on the subject, which render them presuppositional. Diesing's (1992) Mapping Hypothesis predicts the presuppositional nominals to be outside the existential closure, i.e. outside the verb phrase. This is also predicted by Cinque's (1993) Nuclear Stress Rule, which claims that the most embedded element gets

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[51] Nakipoğlu-Demiralp (to appear) notes that accusative marked objects in the immediately preverbal position cannot carry neutral focus due to the accusative suffix which renders the object presuppositional. A presuppositional reading, however, is incompatible with neutral focus intonation, and gives rise to contrastive focus. See Göksel and Özsoy (2000, 2003) for a different view of contrastive and neutral focus (identificational and informational focus). They claim that the difference between contrastive and presentational focus is a difference in the scope of application of a property, and not a difference in kind. In other words, they argue that when a single constituent is targeted for focusing the result is contrastive focus, when all the constituents in a sentence are targeted (and the sentence is SOV) the result is presentational focus in Turkish.

the neutral focus. The nominals *arabayı* 'car-acc' and *kedi* 'cat' in (82&83) above, are not

inside the verb phrase, and thus cannot bear focus.

To sum up this section, we have seen that bare nouns in all three contexts, i.e.

internal arguments of transitive verbs, arguments of Unaccusatives, and external

arguments of unergatives and transitive verbs, share certain features: semantically they

have a non-presuppositional interpretation; and phonologically they have a stress

pattern in line with compound stress[52]. In the next chapter we will see that syntactically

these non-specific nominals are restricted in word order due to their syntactic status as

NPs and not DPs.

3.3 Summary

In this chapter, we have seen that referential nominals in Turkish are structurally DPs

where D^o bears the referentiality features, [±definite] and [±specific] necessary to make

a predicate an argument. When a PossP occurs in the numeration, it selects a DP as an

argument.[53] DP, in turn, selects a NumP or ClP. Since both NumP and ClP

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[52] Ketrez (2005) criticizes Knecht's (1986) argument that the stress always fall on the bare noun and argues that since the immediately preverbal position is the neutral focus position in Turkish, the placement of the stress is due to the focus and can be shifted to other constituents in the presence of the question particle, a wh-word and negation:
(i)   Ayşe kitap oku-MUŞ mu?
        Ayşe book read-evid Q
        'Did Ayşe read (a) book/do book-reading?'
(ii)   KİM kitap oku-muş?
        who book read-evid
        'Who read a book/books?'
(iii)   Ayşe kitap oKU-ma-mış.
        Ayşe book read-neg-evid
        'Ayşe did not do book-reading.'   [Ketrez 2005:38-39, ex.66, 68, 69]
[53] Some studies also assume a KP above the DP. Coene and D'hulst (2003) point out that it was Guisti (1993) who proposed that the DP has an extended functional projection labeled KP and thus is headed by K(ase). To my knowledge, it is Kornfilt (1991) who first mentions in a footnote that Modern Turkish has a functional projection for Case (i.e., KP), as opposed to Old Turkish. Kornfilt (1995, 2003) and Yükseker (2003) assume that referential nominals in Turkish are headed by KP, which immediately dominates a DP. There is no independent syntactic evidence for the occurrence of K as a syntactic head in Turkish other than projecting morphology to syntax according to the mirror principle. In this study, the distinction is

subcategorize for an NP, they are mutually exclusive. I have argued that Numº either

hosts the phonologically null singularity marker or the plural suffix –*lAr*. The Spec

position of NumP can be lexically empty when the Numº bears either ø or –*lAr*. In

cases where Numº hosts –*lAr*, the Spec NumP may also be filled with the quantifiers

bazı and *bütün* which mean 'some' and 'all' when they are merged at this position. As for

the ClP, I have argued that Clº either hosts a null classifier or an overt one. Overt

classifiers like *tane* 'unit', *adet* 'unit' are bound/defective roots in Turkish and attach to

the numerals which occur in Spec ClP. The Spec ClP can also host the quantifiers *çok*

'many', *birçok* 'a lot of', *birkaç* 'several', *bazı* 'a type of' and *bütün* 'whole'. Note that the

quantifiers *bazı* and *bütün* have the possibility to be merged either at Spec NumP where

the interpretation induced is 'some' and 'all', or at Spec ClP with the interpretation 'a

type of' and 'whole' respectively. See below the tree structure:

(84)

```
                    PossP
                   ╱    ╲
                  ╱      ╲
                 ╱    ╲
               DP      Poss°
              ╱  ╲
             ╱    ╲
          NumP/ClP    D°
          ╱    ╲
         ╱      ╲
       NP      Num°/Cl°
       △
```
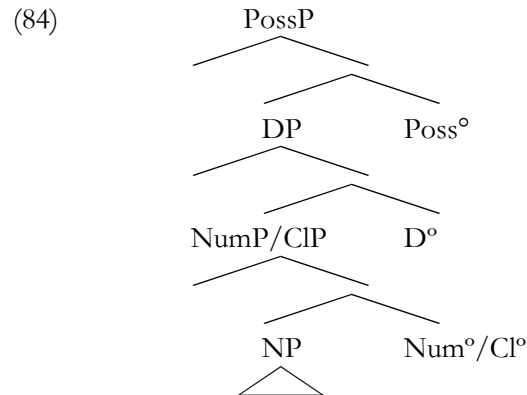
Bare nouns, on the other –hand, are non-referential, and lack a DP and a NumP/ClP

layer. The three main groups of data that allow non-referential nominals are:

(85) a. non-referential objects of transitive verbs,

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made between DP and NP, where the former reflects the structure of referential nominals and the latter
that of non-referential undergoing adhesion to the verb (see the next chapter for details.)

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b. non-referential subjects of Unaccusative verbs (including unaccusatives, existentials and passives),

c. non-referential subjects of transitive verbs, and unergative verbs, i.e. the so-called 'subject incorporation' cases.

In the next chapter, we will discuss the syntactic properties of non-referential nominals in detail. Having argued that they are not head categories of the kind N°, but phrasal categories of NP but not DP, their licensing mechanism will be discussed.

CHAPTER 4

SYNTACTIC DIFFERENCES OF NP/DP

and NP-LICENSING

4.0 Preliminaries

This chapter discusses the structural properties of DPs and NPs in Turkish with respect to the differences in their case licensing conditions. In line with the previous studies of Öztürk (2005), Ketrez (2005), I argue that non-referential nominals (bare nominals[1]) are NPs (not Ns, nor DPs); and that they fail to be marked for (strong) Case. In the first and second sections (§4.1, §4.2), I will discuss the structural differences displayed by DPs and NPs. I will show that referential arguments, DPs, move to a position outside the scope of the existential closure (Diesing 1992), whereas non-referential arguments, NPs, remain in their base-generated position under the scope of the existential closure. The claim that all DPs including non-specific indefinites, escape the existential closure is at odds with previous studies such as Enç (1991), Diesing (1992), Kennelly (1993, 1994, 1997b) and Kelepir

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[1] Recall from the previous chapters that I use the term *bare* to refer only to NPs and not [bir N] structures like Öztürk (2005) does. I argue that [bir N] constructions are in fact DPs.

(2001), who argue that specific nominals escape the existential closure whereas non-specifics remain in the nuclear scope, as has been pointed out earlier. I have, however, shown that the argument that non-specific indefinites, which I claim to be DPs, remain in situ like the non-referential nominals (NP) is problematic in accounting for the differences displayed between these DPs and NPs with respect to number and referential interpretation, scope, modification by adverbs, ellipsis, pronominalization, relative clause formation and aspectual properties (see Chapter 2).[2] Section 4.3 deals with the structural accounts put forth for the licensing of NPs in syntax. After showing the problems of the head-incorporation account, I discuss the complex predicate formation account of Turkish NPs in the sense of Massam (2001) presented in Öztürk (2005) and Ketrez (2005). I, however, argue that their arguments face certain problems regarding Turkish. I show that Öztürk (2005) assumes a pre-syntactic operation where a non-referential NP forms a complex predicate with the verb before the verb enters syntax. Moreover, I will point out the inadequacies of Öztürk's (2005) analysis of [bir N] constructions to undergo the same kind of complex predicate formation. Ketrez's (2005) account, on the other hand, is insufficient to explain the Turkish facts since she focuses only on non-referential objects. It is not clear how her definition of complex predicate formation can account for non-referential subjects in Turkish. I present a new account of NPs in Turkish that predicts the difference in the syntactic behavior of DPs and NPs, which I will label *adhesion*. Lastly, in §4.4, I discuss the case properties of non-referential arguments, NPs. I adopt de Hoop's (1996) distinction between strong vs. weak Case and I argue that NPs check weak Case via φ-feature Agree relation formed between them and the relevant probe ($v°$ for object, T° for subject) (cf. Chomsky 2000, 2001, 2004). (In the next chapter, however, I will show that

---

[2] As for the mobility restriction displayed by [DP bir NP] constructions, I will argue that it can be accounted for by the Case features they bear. See the next chapter.

long distance *Agree* cannot account for strong structural Case in Turkish). The last section

summarizes the arguments of the chapter.

4.1 The structural properties of DPs and NPs

The preceding chapter has shown that referential nominals in Turkish are dominated either

by a NumP layer whose head is specified for the [±plural] feature or a ClP whose head

hosts a null or overt classifier, which is a bound root attaching to the numerals in Spec ClP.

NumP/ClP is in turn selected by a DP whose head assigns referentiality to the nominal

making it an argument of type <e>. The non-referential nominals, on the other hand, lack

NumP/ClP and DP layers. They are phrasal categories of the kind NP and are not head

categories (cf. Öztürk 2005). After having discussed the internal structural differences

between DP and NP, this chapter will show that:

(i)   DPs but not NPs are (overtly) case-marked.

(ii)   There is a difference in the surface structural position of referential and non-

referential arguments (cf. Diesing 1992, Kennelly 1994, Aygen-Tosun 1999,

Kelepir 2001, Çağrı 2005, Ketrez 2005, among others). I will argue that NPs do

not leave their merge position; whereas DPs undergo movement to the Spec

position of a functional category.[3] The syntactic difference between NP and DP

is also reflected in the case marking of referential and non-referential subjects of

embedded clauses. When a sentence with a referential subject is embedded, that

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[3] The position to which they move to and the motivation for that movement will be discussed in the next chapter.

subject of the embedded clause is marked with the genitive case. When a

sentence with a non-referential argument is embedded, however, it does not

receive overt case (cf. Lewis 1967; Underhill 1976; Kennelly 1993, 1994, 1997b;

Kornfilt 1997; Göksel and Kerslake 2005, among others).

I assume that the following is the clause structure of Turkish (following Chomsky 2000,

2001, 2004, cf. Kelepir 2001):

(1)

```
                        CP
                   ┌─────┴─────┐
                 Spec          C'
                          ┌─────┴─────┐
                         TP           C°
                    ┌─────┴─────┐
                               T'
                          ┌─────┴─────┐
                         vP           T°
                    ┌─────┴─────┐    [uφ]
                  ∃                v'
                      ┌──────────┴──────┐
                   DP_subj              v'
                    [φ]           ┌──────┴──────┐
                   [uCase]       VP            v°
                            ┌─────┴─────┐     [uφ]
                                       V'
                                  ┌─────┴─────┐
                               DP_obj        V°
                                [φ]
                               [uCase]
```
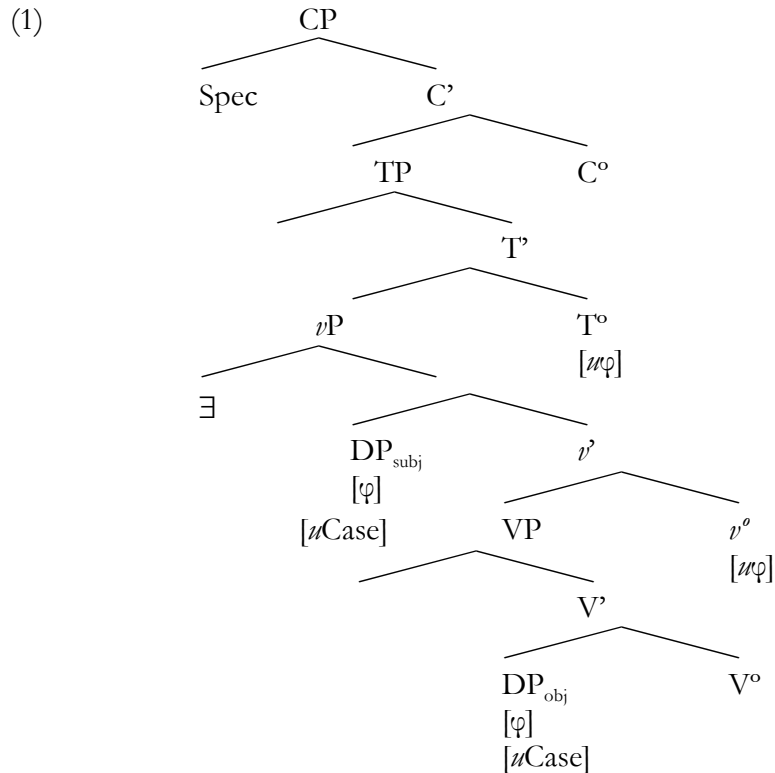
I argue that Turkish clause structure possesses the functional category vP (contra Öztürk

2005) (see the following chapter for arguments). Following Diesing (1992) and Kelepir

(2001), I argue that the arguments in their merge positions, i.e. base-generated positions, are

bound by the Existential Closure (represented as ∃ in the above configuration). Following

Chomsky (1995), I assume that the structural case features of nominals and φ-features of T and *v* are uninterpretable. In accordance with the assumptions of the theory, the uninterpretable features need to be matched and deleted via the operation *Agree*, which establishes an agreement relation between the uninterpretable feature [*u*F] of the functional head (Probe) and the matching interpretable feature of the lexical item (Goal). Chomsky (2000, 2001, 2004) claims that it is via this operation *Agree* between the probe and the goal that the uninterpretable Case feature of nominals get deleted as well. I will argue, however, that long distance *Agree* can check the weak Case feature of the non-referential NPs which stay in their base-generated position, but the next chapter will show that *Agree* does not suffice to check the strong case feature of DPs in Turkish. Moreover, Chomsky (2000, 2001, 2004) assumes that the EPP (OCC) feature of the phase heads C and *v*, together with that of T is uninterpretable as well. I will argue in the next chapter, however, that EPP can be eliminable and the facts can be explained in a theory which does not posit EPP (cf. Martin 1999; Castillo et al 1999; Grohmann et al 2000; Boeckx 2000, 2005; Bošković 2002, to appear, among others). Consider the following example:

(2)   a. Ali-ø *kitab-ı* oku-du-ø.

Ali-nom book-acc read-past-3sg

'Ali read the book.'

b.

TP
        *v*P   Tº
                [*u*φ]
Ali$_{subj}$
[*i*φ] VP   *v*º
            [*u*φ]
kitabı$_{obj}$ oku$_V$
[*i*φ]
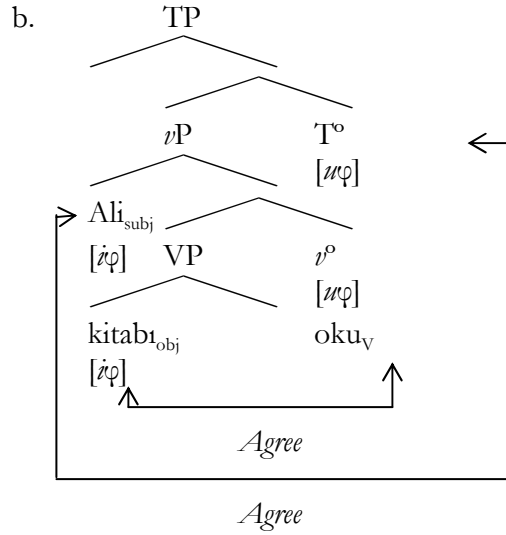
Agree

Agree

In those cases in which the uninterpretable φ-features of the probe *v* matches the interpretable φ-features of the goal, object DP; and those of the probe T matches the interpretable φ-features of the goal, subject DP via long distance *Agree*, the uninterpretable Case features of the DP$_{object}$ and DP$_{subject}$ are licensed as accusative and nominative respectively due to the inherent features of *v* and T according to Chomsky (2000, 2001, 2004). In other words, Chomsky (2004) argues that φ-feature checking and case licensing occur at the merge positions of the arguments and there is no displacement for case reasons. It is, however, noted in the literature that referential arguments, DPs in our terms, do not surface in their merge positions in Turkish, that is, there is a difference in the structural position of referential and non-referential arguments (DPs vs. NPs) (Diesing 1992, Kennelly 1994, Aygen-Tosun 1999, Kelepir 2001, Çağrı 2005, Ketrez 2005, among others). I argue, following Diesing (1992), that NPs are interpreted existentially remaining in their merge positions, whereas DPs undergo movement to the Spec positions of *v*P and TP for case reasons, which will be discussed in the next chapter (cf. Bošković 2005, contra Chomsky 2000, 2001, 2004). This movement is in line with Diesing's (1992) Mapping Hypothesis in that it will lead the DP to be interpreted outside the existential closure (∃).

In the following sections, I show the different structural properties of Turkish NP and DP.

4.2 NP/DP differences and the Mapping Hypothesis

We have seen in the previous chapter that non-referential nominals (i.e. NPs) occur in three different environments: (i) as objects of transitive verbs, (ii) as subjects of Unaccusative verbs (including unaccusatives, existentials and passives), (iii) as subjects of transitive verbs, and unergative verbs, i.e. the so-called 'subject incorporation' cases.

In this section, I argue that Turkish abides by the Mapping Hypothesis (Diesing 1992) in the sense that non-referential nominals (NPs) remain in their base-generated position bound by the existential closure, whereas referential nominals (DPs) move out of the nuclear scope to Spec positions of higher functional categories. I, however, depart from Kennelly (1994), Zidani-Eroğlu (1997), Kelepir (2001) in arguing that non-specific indefinites are referential and they also move outside the existential closure (see chapter 2). I will present evidence for the different behavior of NPs and DPs from (i) the interpretation of the nominals, (ii) position of the referential nominals with respect to manner adverbs, and (iii) specifically for subject NPs, the case-marking in embedded clauses.

4.2.1 Interpretation

As has been discussed in the previous chapter, NPs are interpreted non-referentially (Enç 1991, Diesing 1992, Kelepir 2001). They do not refer to a specific entity or item the hearer

or the speaker has in mind. They describe the class membership, the notion or concept of the entity and they lack any number interpretation (Nilsson 1985, Schroeder 1999, Dayal 2003, among others). Consider the referential and non-referential objects below:

(3) Ali-ø [DP (o) [NP şarkı]]-yı söyle-di-ø.

Ali-nom (that) song-acc say-past-3sg

'Ali sang the/that song.'

(4) Ali-ø [DP bir [NP şarkı]]-yı söyle-di-ø.

Ali-nom one song-acc say-past-3sg

'Ali sang a specific song.'

(5) Ali-ø [DP bir [NP şarkı]] söyle-di-ø.

Ali-nom one song say-past-3sg

'Ali sang a(ny) song.'

(6) Ali-ø [NP şarkı] söyle-di-ø.

Ali-nom song say-past-3sg

'Ali sang.'

In (3-5), DP objects are exemplified, whereas in (6) we observe an NP object. DP objects are interpreted referentially. It is important to note that previous analyses such as Enç (1991), Diesing (1992), Kennelly (1993, 1994, 1997b) and Kelepir (2001) have argued that non-specific indefinites of the kind shown in (5) above are not referential. The claim I make

here is that they are referential in the sense that the identity of the referent of the nominal is known to the speaker or the subject in the real or an imaginary world, though not to the listener (see Chapter 2).

As opposed to the DP, the NP object, on the other hand, does not have any reference on its own but it restricts the meaning of the verb.[4] The same kind of interpretation is also observed in the case of subjects of unaccusatives and transitives:[5]

(7) a. Ev-e [NP hırsız] gir-di-ø.   *subject of unaccusative*

    home-dat thief enter-past-3sg

    'The house was burgled.' (lit. Thief-entering happened to the house.)

    b. Ev-e [DP bir [NP hırsız-ø]] gir-di-ø.

    home-dat one thief-nom enter-past-3sg

    'A thief entered the house.'

(8) a. Ayla-yı [NP arı] sok-muş-ø.   *subject of transitive*

    Ayla-acc bee sting-evid-3sg

    'Ayla apparently got bee-stung.'

---

[4] Recall the examples in (75) in Chapter 3 from Erguvanlı (1984) where the [bare object+verb] sequence is an idiomatic expression describing one single activity:

a. günah çıkar-mak	b. göz kırp-mak	c. avuç aç-mak
sin take.out-inf	eye clip-inf	palm open-inf
'to confess'	'to wink'	'to beg'	[from Erguvanlı 1984:24]

[5] For space considerations, I do not exemplify the case of subjects of unergatives, which also behave in the same manner. The reason I give examples of unaccusatives and transitives is that the surface subject of the former is a theme, whereas that of the latter is an agent, as in the case of unergatives.

b. Ayla-yı [_{DP} bir [_{NP} arı]] sok-muş-ø.

Ayla-acc one bee sting-evid-3sg

'Apparently a bee stung Ayla.'

Subjects of an unaccusative verb and of a transitive verb have been exemplified above in (7-8) respectively. The sentences in (b) exemplify the DP subjects where there is a referential but indefinite *thief* and *bee* respectively. In the sentences in (a), on the other hand, NP subjects are exemplified which are interpreted existentially and non-referentially bound by the existential closure. Note that the definite referential *hırsız* 'thief' and *arı* 'bee' occur in sentence initial position, which I will show to be in Spec TP, under the *presentational focus interpretation*:

(9) [_{DP} Hırsız-ø] ev-e gir-di-ø.

thief-nom home-dat enter-past-3sg

'The thief entered the house (for burgling).'

(10) [_{DP} Arı-ø] kız-ı sok-tu-ø.

bee-nom girl-acc sting-past-3sg

'The bee stung the girl.'

The subjects in (9) and (10) are interpreted as definite referential under the presentational focus reading. The syntactic evidence for this will come in the following sections. Definite

referential subject DPs may also occur in the immediately preverbal position only under the contrastive focus reading:[6]

(11) Ev-e [DP hırsız-ø] gir-di-ø, (komşu değil).

home-dat thief-nom enter-past-3sg (neighbor not)

The thief entered the house, (not the neighbor).'

(12) Kız-ı [DP arı-ø] sok-tu-ø, (sivrisinek değil).

girl-acc bee-nom sting-past-3sg (mosquito not)

'The bee stung the girl, (not the mosquito).'

The DP subjects in the immediately preverbal position are interpreted as definite referential only under the contrastive focus reading in (11-12). The difference in interpretation of NPs vs. DPs (under the presentational focus reading) gives support to Diesing's (1992) Mapping Hypothesis. Thus, this can be explained if we assume that NPs remain in their base-generated positions (NP objects as sisters of V; and NP subjects in Spec vP) where they are bound by the existential closure and are interpreted existentially. DPs, on the other hand, are interpreted presuppositionally, i.e. above the existential closure. This has also been argued for in Kennelly (1994), Zidani-Eroğlu (1997), Kelepir (2001) except for non-specific indefinites. The next subsection provides syntactic evidence to the effect that this is indeed the case.

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[6] I will argue in the next chapter that the subject DP moves to Spec TP for case reasons. The scrambled structure is then achieved via the movement of *eve* 'to home' and *kızı* 'girl-acc' to an A'-position above the subject in (11-12).

4.2.2 Position of NPs/DPs with respect to adverbials

The evidence for the claim that NPs remain in their base-generated position, while DPs move to a higher positon comes from the ordering of objects with respect to adverbials. Consider the structures below:

(13) a. *Ali-ø güzel şarkı-yı söyle-di-ø.[7]

    Ali-nom beautiful song-acc say-past-3sg

    intended: 'Ali sang the song beautifully.'

    b. Ali-ø şarkı-yı güzel söyle-di-ø.

    Ali-nom song-acc beautiful say-past-3sg

    'Ali sang the song beautifully.'

The example in (13b) above shows that the referential object *şarkı* 'song' occurs to the left of the manner adverbial *güzel* 'beautifully'. Those cases where it occurs to the right of the adjunct, on the other hand, are ungrammatical. This test is based on the argument that manner adverbs mark the left edge of the VP domain (Pollock 1989). Aygen (2002), however, has argued that examples like this pair do not constitute valid tests to argue for object shift in Turkish and that the ungrammaticality is due to the ambiguity of the lexical item *güzel*, which can be interpreted as an adjective meaning 'beautiful' or as an adverb meaning 'beautifully'. Following Kelepir (2001) and Üntak-Tarhan (2006), I argue, on the

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[7] Note that this sentence is grammatical in the reading where *güzel* is interpreted as 'beautiful', i.e. 'Ali sang the beautiful song.'

other hand, that the data shows that the object moves out of its base-generated position. As Üntak-Tarhan (2006) convincingly shows, there are two different positions that different kinds of adverbials can occur. The above sentences contain a manner adverbial which is simplex in morphology. Üntak-Tarhan (2006) points out that manner adverbs are of two kinds: morphologically simplex and morphologically complex manner adverbs.[8] She further argues that temporal and locative adverbs, together with the complex manner adverbs occur in a position higher than the surface position of the referential object. Her examples are below:

(14) a. Ali-ø dün *kitab-ı* oku-du-ø.

Ali-nom yesterday *book-acc* read-past-3sg

'Ali read the book yesterday.'

b. Ali-ø *kitab-ı* dün oku-du-ø.

Ali-nom *book-acc* yesterday read-past-3sg

'Ali read the book yesterday.'   [from Üntak-Tarhan 2006:39, ex.21]

---

[8] Apart from their morphology, Üntak-Tarhan (2006) shows that simplex manner adverbs differ from complex manner adverbs not only in terms of their adjunction position (see the examples and discussion in the text above) but also in allowing VP-fronting or not. As can be predicted, VP-fronting is available in cases where complex manner adverbs are used (ii), but results in ungrammaticality in cases where the structure contains simplex manner adverbs (i):

(i)   *[Elbise dik-er-ø]$_i$ Ayşe-ø güzel t$_i$.
            dress sew-aor-3sg Ayşe well
            'Ayşe sews dresses well.'

(ii)   ✓[Elbise dik-ti-ø]$_i$ Ayşe-ø güzelce t$_i$.
            dress sew-past-3sg Ayşe nicely
            'Ayşe sew dresses well/nicely.'   [from Üntak-Tarhan 2006:63, ex. 45a-b]

Note that the analysis of these data as VP fronting is challenged by the following sentence:

(iii)   Birin-i gör-dü-ø herkes-ø.   ∀>∃; ∃>∀
            someone-acc see-past-3sg everyone-nom
            'Everyone saw someone.'

The ambiguity of this sentence indicates that the subject *herkes* 'everyone' is in a higher position, which indicates that it has undergone rightward movement.

(15) a. Ayşe-ø okul-da *yemeğ-i* ye-di-ø.

   Ayşe-nom school-loc *food-acc* eat-past-3sg

   'Ayşe ate the food at school.'

   b. Ayşe-ø *yemeğ-i* okul-da ye-di-ø.

   Ayşe-nom *food-acc* school-loc eat-past-3sg

   'Ayşe ate the food at school.'   [from Üntak-Tarhan 2006:39, ex.22]

In (14) and (15), it is observed that the referential object (italicized in the examples) can

occur both to the right and to the left of the temporal and locative adverbs. The same can

be observed in the following where a morphologically complex manner adverb is used:[9]

(16) a. Ali-ø yavaşça *kitab-ı* oku-du-ø.

   Ali-nom slowly *book-acc* read-past-3sg

   'Ali read the book slowly.'

   b. Ali-ø *kitab-ı* yavaşça oku-du-ø.

   Ali-nom *book-acc* slowly read-past-3sg

   'Ali read the book slowly.'   [from Üntak-Tarhan 2006:41, ex.25]

Note that the referential object in (16) also can occur either to the right or to the left of the

adverb leading to fully grammatical sentences. The fact that the ordering of the DP with

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[9] See Üntak-Tarhan (2006:61-62) for a list of complex manner adverbs.

respect to the temporal, locative and complex manner adverbs seems free, however, does not present any evidence as to the claim that the referential object can remain in situ, i.e. sister to V°. As Üntak-Tarhan (2006) points out, this indicates that there is a syntactic difference between simplex manner adverbs on the one hand, and complex manner adverbs, temporal and locative adverbs on the other. The fact that the referential object cannot occur to the right of the simplex manner adverb as in (13a) above, indicates that the referential object needs to move out of its base-generated position to a position below the merge position of locative, temporal and complex manner adverbials:

(17)

locative/temporal/
complex manner adv   DP$_{obj}$

                   simplex manner adv

                                  ~~DP$_{obj}$~~   V°
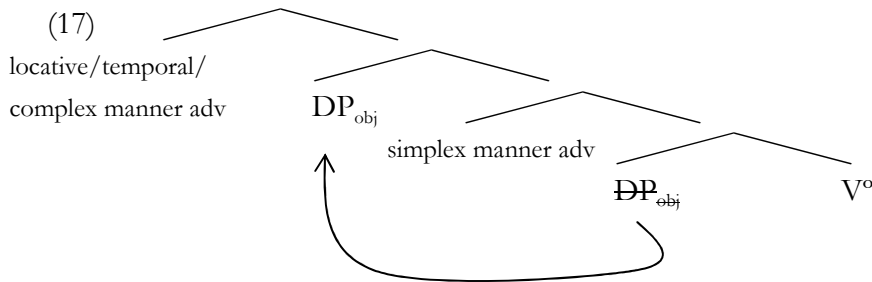
The examples above have shown that the referential object moves out of its base-generated position as a sister of V° to a position higher than the merge position of simplex manner adverbs but lower than that of locative, temporal or complex manner adverbs.[10] The non-referential object, on the other hand, displays a different behavior. Compare the following examples to (13) above:

(18) a. Ali-ø güzel şarkı söyle-di-ø.

     Ali-nom beautiful song say-past-3sg

     'Ali sang beautifully.'

---

[10] Üntak-Tarhan (2006) calls these adverbs *circumstantial adverbs* (p. 46).

b. *Ali-ø şarkı güzel söyle-di-ø.

Ali-nom song beautiful say-past-3sg

intended: 'Ali sang beautifully.'

As seen above, the occurrence of the non-referential object NP to the left of the adverb results in ungrammaticality[11] indicating that NP does not (or rather cannot), in this case, leave its base-generated position, and thus is bound by the existential closure.

I take the contrast between (13) and (18) to indicate that non-referential arguments stay in their merge positions as sisters to V° and are bound by the existential closure which, following Kelepir (2001), I assume to occur just above the base-generated position of the subject. We have seen that the evidence to this claim comes from (i) the non-referential interpretation of NPs, and (ii) surface syntactic position of object NP with respect to simplex manner adverbs. Let us now consider how subject NPs behave with respect to adverbs. Note that the co-occurrence of simplex manner adverbs with non-referential subjects results in infelicitous structures:

(19) *Kız-ı kötü arı sok-tu-ø.

girl-acc bad bee sting-past-3sg

intended: 'The girl got bee-stung badly.'

OK in the reading: 'The girl got stung by a bad bee.'

---

[11] Note that the sentence is ungrammatical in the presentational focus reading. There are speakers who do accept this kind of sentences when the focus of the sentence is altered. See Uygun (2006) and Sezer (2006) for a discourse-based analysis of "scrambling" of bare singular nominals.

(20) *Kütüphane-de sessiz kitap oku-n-du-ø.

library-loc silent book read-pass-past-3sg

intended: 'Book-reading took place in the library silently.'

OK in the reading: 'A silent book has been read in the library.'

The sentences in (19) and (20) exemplify a transitive structure with a non-referential subject NP (agent), and a passive structure with a non-referential subject NP (theme) respectively. The occurrence of simplex manner adverbs results in infelicitous structures due to the ambiguity of these lexical items between an adjectival and an adverbial reading.[12] Let us see how these NPs behave with respect to complex manner adverbs:

(21) a. Kız-ı birdenbire arı sok-muş-ø.

girl-acc suddenly bee sting-evid-3sg

'The girl got bee-stung suddenly.'

b. Kız-ı arı birdenbire sok-muş-ø

girl-acc bee suddenly sting-evid-3sg

*'The girl got bee-stung suddenly.'

'The bee stung the girl suddenly.'

---

[12] The following example shows that the adjective *fena* 'bad' behaves differently from *kötü* 'bad':
   (i)   (?) Kız-ı fena arı sok-muş-ø.
           girl-acc bad bee sting-evid-3sg
           'The girl got bee-stung badly.'
Fena 'bad' seems to behave more like an adverb than its synonym *kötü* 'bad'. Note that there are some speakers who accept the following sentence as grammatical with the non-referential reading of the subject:
   (ii)   %Kız-ı arı kötü sok-muş-ø.
           girl-acc bee bad sting-evid-3sg
           'The girl got bee-stung badly.'
The reason, I guess, for the lack of total grammaticality of this sentence results from the occurrence of a lexical item in between the non-referential subject and the verb preventing them to undergo *adhesion* as will be discussed in the following sections.

(22) a. Kütüphane-de sessizce kitap oku-n-du-ø.

library-loc quietly book read-pass-past-3sg

'Book-reading took place quietly in the library.'

b. Kütüphane-de kitap sessizce oku-n-du-ø.

library-loc book quietly read-pass-past-3sg

*'Book-reading took place quietly in the library.'

'The book was read in the library quietly.'

As seen in the sentences above, the non-referential subject occurs lower than the complex

manner adverb, *birdenbire* 'suddenly' and *sessizce* 'quietly' respectively. The occurrence of the

subject to the left of the adverbial yields a referential reading of the subject. This gives

further support for the claim that the non-referential subject (NP) remains in situ, whereas

the referential subject (DP) is higher in the structure.

(23)
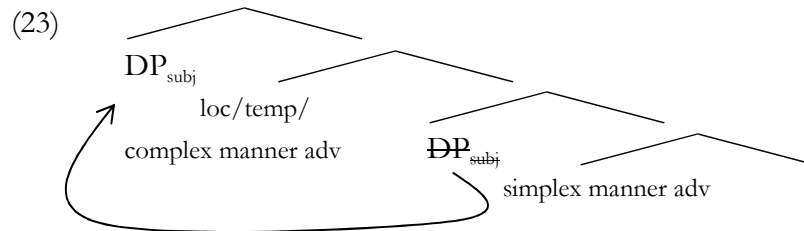
The structure above indicates that the subject is base-generated higher than the simplex manner adverbs given that they modify the VP.[13] The referential subject DP, however, is dislocated to a higher position than the complex manner adverbials.

4.2.3 Subject case marking in embedded clauses

Additional evidence for the claim that non-referential subjects remain in situ while referential subjects move to a higher position escaping the ∃-closure is provided by subject case marking in embedded clauses. Referential subjects (DPs) bear genitive case under subordination, whereas non-referential subjects (NPs) remain bare (Lewis 1967; Underhill 1976; Kennelly 1993, 1994, 1997b; Kornfilt 1997; Özsoy 1999; Göksel and Kerslake 2005, among others). Consider the examples below:

(24) Ali-ø [ev-e *hırsız* gir-diğ-in]-i söyle-di-ø.

Ali-nom house-dat thief enter-nomin-poss.3sg-acc say-past-3sg

'Ali said the house was burgled/there was a thief entering the house.'

(25) Ali-ø [hırsız-ın ev-e gir-diğ-in]-i söyle-di-ø.

Ali-nom thief-gen house-dat enter-nomin-poss.3sg-acc say-past-3sg

'Ali said the thief broke into the house.'

---

[13] As pointed out by M. Kelepir (p.c.), the structure in (23) above seems to indicate that if a non-referential subject undergoes *adhesion* to the verb (as will be discussed in the following sections), then a simplex manner adverb can also be contained. However, the lack of total grammaticality of (ii) in footnote 12 is evidence that *adhesion* occurs when there is no adverbial in between the NP and the verb. See, however, section 4.3.2 for question and focus particles occurring in between these elements.

(26) [Ayla-yı *arı* sok-tuğ-un]-u duydum.

      Ayla-acc bee sting-nomin-poss.3sg-acc hear-past-1sg

      'I heard that Ayla got bee-stung.'

(27) [Arı-nın Ayla-yı sok-tuğ-un]-u duydum.

      bee-gen Ayla-acc sting-nomin-poss.3sg-acc hear-past-1sg

      'I heard that the bee stung Ayla.'

In (24-25), unaccusative verbs are embedded as a result of which the referential subject bears genitive suffix and the non-referential one remains bare. The same is observed in the embedded subject of a transitive verb in (26-27). This difference, I claim, is due to the difference in the syntactic position of the referential and non-referential subjects, i.e. the non-referential subject remains in its merge position bound by the existential closure, whereas the referential subject moves out of the nuclear scope and as a result bears genitive marking. It is also possible to have the referential embedded subject, but not the non-referential, scrambled:

(28) Ali-ø [ev-e hırsız-ın gir-diğ-in]-i söyle-di-ø.

      Ali-nom house-dat thief-gen enter-nomin-poss.3sg-acc say-past-3sg

      'Ali said the thief broke into the house.'

Note that the difference between (28) and (25) is that the embedded subject is focused in (28). We can argue that the subject being a referential DP is moved out of its base-generated position and then the dative phrase is scrambled to the left of it. The exact

derivation of this sentence is not of importance at this stage. The important fact is that the embedded subject is referential and bears the genitive suffix, whereas the non-referential one remains in its base-generated position and is not overtly marked (see 24 and 26).

In unergative structures, apart from the differences in interpretation, position with respect to adverbials and case-marking of subjects in embedded sentences, there is a further phonological difference noted by Dede (1986):

(29) BeBEK ağlı-yor-ø.[14]

baby cry-impf-3sg

'There is baby-crying.'

(30) Bebek ağLI-yor-ø.

baby cry-impf-3sg

'The baby is crying.'

When the stress (marked with small caps) is on the subject noun as in (29), the interpretation of the subject is non-referential (under the presentational focus reading); when, however, the stress is on the predicate (30), the subject is interpreted referentially. Being non-referential, the subject in (29) is structurally NP (lacking a DP projection), whereas the one in (30) is referential and thus DP.[15]

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[14] Note that this sentence is ambiguous between a contrastive and a presentational focus reading.

[15] The difference in stress patterns can be accounted for by Cinque's (1993) Nuclear Stress Rule assuming that the NP subject remains in situ under the scope of the existential closure. After verb raising the NP is the most embedded element in the structure receiving stress. Whereas the DP subject leaves its base-generated position and it is not the deepest embedded constituent.

To sum up, three pieces of evidence have been given to distinguish between the surface positions of NPs and DPs: (i) interpretation, (ii) position with respect to adverbials, and (iii) subject case marking in embedded clauses. These support the claim that while non-referential nominals (i.e. NPs) remain in their base-generated position, thus are bound by the existential closure in the sense of Diesing (1992), the referential nominals (i.e. DPs) are dislocated to a higher position escaping the nuclear scope. Under the theoretical requirement that nominals need both case and referentiality in order to be licensed, the DPs are licensed in the structure since they are assigned referentiality by D° and can check their case features via movement to higher Spec positions (as will be discussed in the next chapter). The question arises as to how NPs are licensed in syntax since they lack a functional projection assigning them referentiality, which is the subject of the next section.

4.3 Structural accounts for the licensing of NPs

We have seen in the previous section that NPs behave syntactically different than DPs in the sense that they remain in their base-generated position. The evidence comes mainly from (i) the interpretation of NPs, (ii) the position of NPs with respect to simplex manner adverbs, and (iii) for subject NPs, the case-marking in embedded clauses. It is these properties that led certain linguists to argue for a head-incorporation account of non-referential arguments in Turkish (Nilsson 1984, 1985; Knecht 1986; Kornfilt 1984, 1995, among others). Following studies such as Erguvanlı (1984), Kural (1992), Kennelly (1994), Arslan (2000), Öztürk (2005), Ketrez (2005), among others, I will argue that the head-incorporation analysis cannot account for the facts. Let me first summarize the head-

incorporation account in the following subsection and then present the analysis assumed in this work.

4.3.1 Head incorporation account of non-referential nominals

A number of arguments have been presented in the literature in favor of the head incorporation account of non-referential nominals in Turkish in the sense of Baker (1988) (see Nilsson 1984, 1985; Knecht 1986; Kornfilt 1984, 1995, among others).

Baker (1988) argues for a theory of incorporation where the movement of an X° from an independent base structure position to combine with another X° accounts for the grammatical function changing processes such as applicative, causative, passive, antipassive and possessor raising (Baker 1988:22). He argues that incorporation is a subcase of the generalized transformation *Move Alpha* (Chomsky 1981, 1986) and hence the Head Movement Constraint (Travis 1984) follows entirely from the Empty Category Principle:

(31) Head Movement Constraint (Travis 1984)

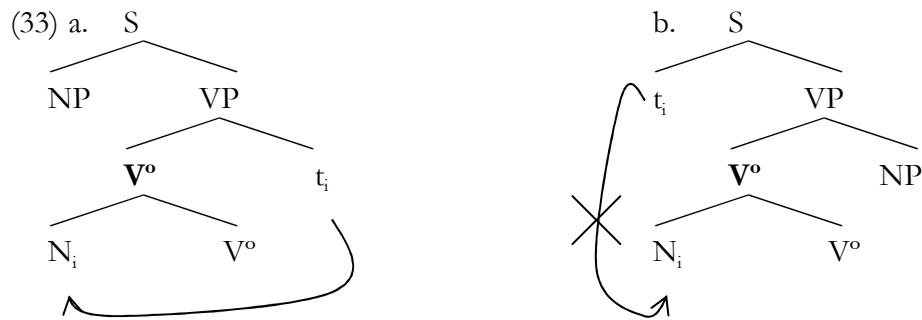An X° may only move into the Y° which properly governs it.

(adapted from Baker 1988:53)

(32) Empty Category Principle (ECP)

Every trace must be properly governed. (α properly governs β iff α theta-governs or antecedent-governs β.) (Chomsky 1986:17)

In descriptive terms, incorporation involves movement of a head category to a higher head position, which has two types of consequence, one morphological and the other syntactic: (i) it creates a complex category of the X^o level (complex predicate), and (ii) it creates a syntactic link between two positions in the phrase marker. The ECP implies that the trace of an object can be properly governed by its head via theta-government, whereas the trace of a subject can only be governed in a chain by antecedent government. This in turn argues that incorporation is allowed for the head of an NP which can be base-generated only in the complement position:

(33) a.

```
           S
         /   \
       NP      VP
             /    \
           V°       t_i
          /  \
        N_i    V°
```

b.

```
           S
         /   \
      t_i      VP
             /    \
           V°       NP
          /  \
        N_i    V°
```

Since the trace of the complement is properly governed, incorporation of objects is allowed (33a). However, the trace of the subject cannot be properly governed, violating the ECP. Hence, Baker (1988) argues that subject incorporation is not possible cross-linguistically. Let us now consider the case in Turkish.

The non-referential nominals in Turkish have been analyzed as instances of head incorporation whereby the noun becomes part of the predicate, thus it does not have any argument status in syntax. Nilsson (1985) claims that the bare noun is combined with a verb into a compound, where it functions as a semantic extension to the verb. Nilsson (1984) argues for a lexical analysis of incorporation in Turkish. Knecht (1986), on the other hand,

claims that the non-referential noun incorporates into the verb syntactically. Kornfilt (1984) argues that a non-referential noun unmarked for overt morphological case carries abstract syntactic Case, which is assigned by the Case assigner under government. When a referential nominal (NP in her terminology, DP in ours), however, is morphologically marked for case, she assumes that it also carries syntactic Case possibly assigned by the case morpheme itself, and therefore does not have to occur adjacent to the verb (Kornfilt 1984:210). Kornfilt (1995), however, argues for syntactic incorporation in the sense of Baker (1988). She claims that non-referential nouns are assigned structural Case but do not carry overt case morphology. Following Baker (1988), she assumes that incorporation is head movement. The moved N forms a complex word with the verb. Since Turkish is a head-final language, the verb properly governs the trace of the moved N head. She assumes that NPs in Turkish are actually embedded within Case Phrases (KPs). Consider below the structure she is positing:

(34) Before incorporation   After incorporation
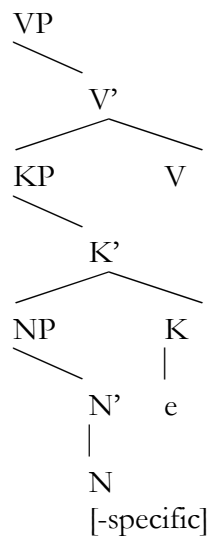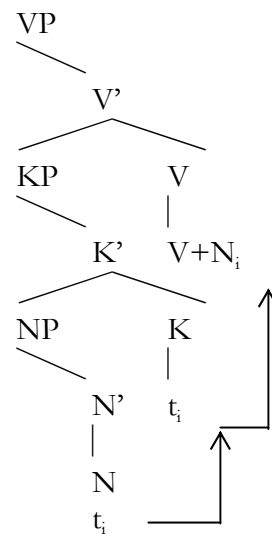
[from Kornfilt 1995]

Kornfilt argues that incorporation is possible only when the K° head is empty. In cases where the K head is filled with an overt Case marker, the N head of the NP cannot move to V. Even if it moved, the verb would not govern its trace due to the barrier status of the KP. In cases where the K head is empty, the N could move into that empty position and further into the V. The traces left behind would be governed by the verb.

Having reviewed briefly the head-incorporation account of NPs in Turkish, the next section will discuss the problems that head-incorporation faces.

4.3.2 Problems for the head-incorporation account

The head-incorporation account briefly discussed in the subsection above faces serious problems in accounting for the facts about non-referential nominals.

First of all, note that Turkish poses a serious problem for head-incorporation since we have seen that non-referential subjects of unergatives and transitives behave in a similar manner to non-referential objects. Consider the examples below:

(35) Ayla-yı arı sok-tu-ø.   *transitive*

Ayla-acc bee sting-past-3sg

'Ayla got bee-stung.'

(36) Bahçe-de kedi miyavlı-yor-ø.   *unergative*

garden-loc cat meow-impf-3sg

'There is cat-meowing in the garden.'

As discussed in the previous section, the non-referential subjects in (35&36) display similar behavior to non-referential objects (i.e. interpretation, position with respect to adverbials and case-marking in embedded clauses) and pose a challenge to the cross-linguistic claim that subjects cannot be incorporated since their traces fail to be properly governed, violating the ECP. The fact that they exhibit the same behavior with non-referential objects casts doubt on the head-incorporation analysis of Turkish non-referential nominals.

The second problem for the head incorporation analysis of NPs in the sense of Baker (1988) concerns the syntactic status of these non-referential nominals. Recall that in the previous chapter, these non-referential nominals have been shown to constitute phrasal categories of the kind NP due to the possibility of adjectival modification, a test adapted from Mohanan (1995). Consider the following sentences from the previous chapter:

(37) a. O-ø sahaf. *Eski kitap* sat-ıyor-ø.

He-nom book-seller. old book sell-impf-3sg

'He is a book-seller. He sells old books.'   [Arslan 2000:12, ex. 45]

b. Ali-ø *konuş-acak insan* ara-dı-ø.

Ali-nom talk-OP person search-past-3sg

'Ali looked for someone to talk to.'   [Öztürk 2005:40, ex. 56b]

As seen in these examples, the non-referential objects can be modified by adjectives indicating that they are not head categories of the kind N°, but are phrasal categories, i.e.

NP. The same can be observed for non-referential subjects. Below are given examples of an unaccusative and a transitive verb:

(38) Bu ağaç-ta *yeşil elma* yetiş-iyor-ø.

this tree-loc green apple grow-impf-3sg

'There is green apple growing in this tree/Green apples grow in this tree.'

(39) Küçük çocuğ-u *kuduz köpek* ısır-mış-ø.

little child-acc rabies dog bite-evid-3sg

'The little child apparently got bitten by a mad dog.'

The above examples show that the non-referential subjects can also be modified by adjectivals indicating that they are not head categories but phrases.

Further support for the phrasal status of the non-referential arguments and thus additional counter-argument to the head-incorporation account come from another test proposed by Mohanan (1995) for Hindi noun incorporation constructions, namely the possibility of coordination. Consider the examples below:

(40) a. Ayla-ø (eski) kitap al-ır-ø ve sat-ar-ø.

Ayla-nom (old) book buy-aor-3sg and sell-aor-3sg

'Ayla buys and sells old books.'

b. Ayla-ø dergi ve kitap sat-ar-ø.

Ayla-nom magazine and book sell-aor-3sg

'Ayla sells books and magazines.'

Coordination is not expected to occur in noun incorporation cases since the noun is argued to form a single syntactic unit with the verb. Turkish facts exemplified above show that the non-referential object cannot be analyzed as being incorporated since coordination of different verbs (40a), or non-referential nouns (40b) is possible. [16] Needless to say, coordination of different non-referential nouns can be observed in the case of subjects as well. Consider the subjects of an unaccusative and a transitive verb below:

(41) Tarla-da [domates ve biber] yetiş-iyor-ø.

field-loc tomato and pepper grow-impf-3sg

'Tomatoes and peppers are growing in the field.'

(42) Şanssız adam-ı aynı gün [arı ve yılan] sok-tu-ø.

unlucky man-acc same day bee and snake sting-past-3sg

'The unlucky man got bee-stung and snake-bitten the same day.'

These data indicate that (i) the non-referential nominal is not a head category but a phrasal category, and that (ii) they cannot be analyzed as being head-incorporated into the verb since it is obvious that the nominal and the verb do not form a single unit.

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[16] The example in (40b) can also be analyzed as verb ellipsis again indicating the impossibility of the head incorporation account of the noun and the verb.

Apart from the phrasal status of the non-referential objects, a third problem for the head incorporation analysis concerns the possibility of the occurrence of focus particles like *dA* 'too/also', *bile* 'even' and *mI* 'yes/no question marker' in between the non-referential nominal and the verb (Erguvanlı 1984).

(43) a. Murat-ø kitap da oku-r-ø.

Murat-nom book too read-aor-3sg

'Murat reads books too.'

b. Murat-ø kitap bile oku-r-ø.

Murat-nom book even read-aor-3sg

'Murat even reads books.'   [Erguvanlı 1984:26, ex. 71&72]

c. Murat-ø kitap mı oku-yor-ø?

Murat-nom book Q read-impf-3sg

'Is Murat doing book-reading?'

The occurrence of the focus particles and the question particle in between the non-referential object and the verb argues against the head incorporation analysis since it is predicted that no element could intervene in between.[17] In the examples below, it is seen

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[17] Note that it is not only the focus particles and the question particle that can occur between the bare object and the verb. As seen in (i), the occurrence of *falan* 'and such' is perfectly fine. Moreover, the bare object can occur postverbally as seen in (ii) (cf. Göksel 1998, İşsever 2003, Uygun 2006, Sezer 2006, among others):
(i)   *Kitap* falan oku-ya-ma-m şimdi.
           book and.such read-abil-neg-1sg now
            'I cannot read books and such right now.'
(ii)   -Yemeğini yesene oğlum.
            'Eat your meal, son.'

that these particles can also occur in between the verb and the non-referential nominal arguing against the head-incorporation account:

(44) Sizin ev-e hırsız mı gir-di-ø?

your house-dat thief Q enter-past-3sg

'Did your house get burgled?'

(45) O şanssız adam-ı akrep bile sok-muş-ø.

that unlucky man-acc scorpion even sting-evid-3sg

'That poor guy has been stung even by a scorpion.'

A further argument against the head incorporation analysis of non-referential NPs, concerning only objects in this case, comes from the causative structures. As pointed out by Erguvanlı (1984), object incorporation is predicted to detransitivize the verb. This, however, is not the case in Turkish (cf. Öztürk 2005). The causative construction in Turkish illustrates the point. Note that when an intransitive verb is causativized in Turkish, the causee receives accusative case (see 46). When, however, a transitive verb is causativized, the causee receives dative case since accusative is already assigned to the object (see 47). Consider the examples below:

- Ye-me-yeceğ-im *yemek*.
eat-neg-fut-1sg food
'I will not eat it.'   [İşsever 2003:1049, ex. 58]
These examples also argue against the head incorporation analysis of the non-referential object.

(46) a. Ali-ø koş-tu-ø.

Ali-nom run-past-3sg

'Ali ran.'

b. Ayşe-ø Ali-yi koş-tur-du-ø.

Ayşe-nom Ali-acc run-caus-past-3sg

'Ayşe made Ali run.'

(47) a. Ali-ø balığ-ı tut-tu-ø.

Ali-nom fish-acc catch-past-3sg

'Ali caught the fish.'

b. Ayşe-ø Ali-ye balığ-ı tut-tur-du-ø.

Ayşe-nom Ali-dat fish-acc catch-caus-past-3sg

'Ayşe made Ali catch the fish.'   [Öztürk 2004:63, ex.25-26]

Arguing that the non-referential object has been incorporated into the verb would lead to the expectation that the causee would receive accusative case when the structure is causativized just like in the intransitive constructions. This, however, is not the case in Turkish:

(48) a. Ali-ø balık tut-tu-ø.

Ali-nom fish catch-past-3sg

'Ali caught fish/went fishing.'

b. Ayşe-ø Ali-ye balık tut-tur-du-ø.

Ayşe-nom Ali-dat fish catch-caus-past-3sg

'Ayşe made Ali catch fish/go fishing.'

c. *Ayşe-ø Ali-yi balık tut-tur-du-ø.

Ayşe-nom Ali-acc fish catch-caus-past-3sg   [Öztürk 2004:64, ex. 27]

As seen above, the causee can only be assigned dative case, which indicates that the verb behaves as a transitive verb. In other words, even though the object is not overtly marked for accusative, it behaves as if it is associated with the accusative, which then forces the causee to be assigned dative in the causative construction. The ungrammaticality of (c) implies that the bare object has not incorporated into the verb.

We have seen that the fact that the NP is interpreted non-referentially (bound by the existential closure) and that it occurs to the right of manner adverbs support the claim that the non-referential object (NP) remains in its base-generated position. The fact that the NP remains in situ, however, cannot be analyzed as a case of head incorporation in the sense of Baker (1988) since this analysis faces serious problems as discussed in this section.

4.3.3 Pseudo-incorporation account of NPs

Another approach to NPs in the literature is the pseudo-incorporation analysis initially proposed by Massam (2001) and Dayal (2003) where non-referential nominals are pseudo-

incorporated into the verb forming a complex predicate. In the following I will first briefly review the arguments for pseudo-incorporation as put forth by Massam (2001) for Nieuan (Oceanic). I will then focus on Öztürk (2005) and Ketrez (2005) who both analyze non-referential NPs in Turkish in terms of pseudo-incorporation, forming a complex predicate with V°. It will be shown that their accounts have some problems for the assumptions about the clause structure proposed for Turkish. Öztürk (2005), for example, assumes a pre-syntactic operation where a non-referential NP forms a complex predicate with V° before V° enters syntax. Ketrez (2005), on the other hand, focuses only on non-referential object NPs, thus her definition of complex predicate cannot account for cases of agent "pseudo-incorporation".

Massam (2001) argues that Niuean (Oceanic) exhibits pseudo-noun-incorporation (PNI).[18] Focusing on objects, she argues that the normal order in Niuean is Verb-Particles-S-O-X and the PNI construction result in the V-O-Particles-S-X ordering. Her argument against noun incorporation is based on her evidence that shows the phrasal status (NP) of the object nominals in question. She proposes an analysis in which an object NP (rather than DP) is generated adjacent to a verb. As NP cannot check absolutive case in Niuean, it fails to move out of VP, hence, she argues, it undergoes predicate fronting along with the verb to derive the 'incorporated' order. The examples of a non-incorporated and a pseudo-incorporated structure are given below:

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[18] Miner (1983) has also suggested that Zuni possesses a process different from noun incorporation. He has argued that Zuni possessed both noun incorporation and noun stripping. Noun stripping, a term proposed by Miner, refers to the process whereby "nominals are rendered indefinite (modifiers, determiners, number affixes, etc. are "stripped away") and enter into closely-knit units with their verbs, but stop short of actually being incorporated" (Miner 1983:83-84).

(49) a. Takafaga tūmau nī e ia e tau *ika*.　　　verb-particles-subject-object

　　　hunt always emph erg he abs pl fish

　　　'He is always fishing.'

　　　b. Takafaga *ika* tūmau nī a ia.　　　verb-object-particles-subject

　　　hunt fish always emph abs he

　　　'He is always fishing.'　　[adapted from Massam 2001: 157, ex.5a-b, italicization mine]

Massam (2001) points out that besides the difference in constituent order, the pseudo-incorporated object in (b) appears without the functional elements, such as case (*e* 'abs', *e* 'erg') and number articles (*tau* 'pl') as in (a), indicating that it is not a DP, but an NP. Moreover, the PNI in Niuean detransitivizes the structure, which is seen by the case marking on the agent. It is marked ergative in (a), but bears absolutive marking in the PNI construction in (b). Massam (2001) also claims that the PNI nominal is not a head category, N°, by showing evidence from the modification facts:

(50) Ne inu *kofe kono* a Mele.

　　　past drink coffee bitter abs Mele

　　　'Mary drank bitter coffee.'　　　　　[Massam 2001:158, ex. 6a]

The fact that the incorporated nominal can be modified shows that it does not have a head status.[19] Massam (2001) further argues that Niuean PNI is not the result of lexical or

---

[19] Massam (2001) argues against a possible analysis of incorporation of a compound lexical N (e.g. *bitter coffee*) with V (e.g. *drink*) by exemplifying structures displaying complex nominals which include comitative and absolutive markers:

syntactic incorporation of an N into a V, but is a result of the base generation of an NP without functional extended projections, followed by predicate fronting, i.e., movement of [V NP] to IP-initial position. As for the pseudo-incorporated nominal, she points out that it is non-referential, hence non-specific and indefinite (Massam 2001:173), where a referential nominal is one which has non-empty reference, which exists in a particular universe of discourse, and a non-referential nominal fails to introduce a potential discourse referent, and refers to type, not token (p.169). Massam (2001:171) points out that the lack of referentiality of the nominal "ensures an unbounded or non-delimited reading of the event … providing the habitual or frequentative interpretation for PNI constructions".

Focusing mainly on the semantics of incorporation, Dayal (2003) argues that languages like Hindi display some kind of an incorporation which does not require the incorporated nominal to form a syntactic or morphological unit with the verb. She argues that Hindi provides evidence for semantic incorporation but not for syntactic incorporation: (i) there is no shift in valency in Hindi (i.e. the verb remains transitive) unlike Niuean; (ii) the "incorporated" nominal is not an N°, but NP (it can be modified and conjoined); and (iii) the nominal does not have to occur strictly adjacent to the verb, unlike Niuean, when certain discourse requirements are fulfilled (see the original study for further details). Dayal's examples of modified and conjoined bare nominals are reproduced below:

(51) Anu sirf *puraanii kitaab* becegii.

Anu only old book will-sell

'Anu will sell only old books.'   [Dayal 2003:11, ex. 24a]

(i)   Ne kai *sipi   mo   e   ika   mitaki* a Sione.
       past eat chip com abs fish good   abs Sione
       'Sione ate good fish and chips.'   [Massam 2001:160, ex.7b]

(52) Anu apne beTe ke-liye *sundar aur paRhii-likhii laRkii* DhuunDh rahii hai.

Anu self's son for beautiful and educated girl is-searching

'Anu is looking for a beautiful and educated girl for her son.' [ibid, p.11, ex. 25a]

Dayal (2003) criticizes previous analyses of the semantics of incorporation, in that they posit an existential associated with the (pseudo-)incorporating argument. This, she points out, fails to get the number neutral interpretation the (pseudo-)incorporated nominal conveys. Her proposal is that the regular transitive verb expresses a relation between individuals, whereas a pseudo-incorporating transitive verb expresses a relation between individuals and properties. The property argument does not correspond to a theme but is interpreted as a modification of the verb. Hence, Dayal (2003) argues that the relation of a non-incorporation structure and a pseudo-incorporated one (eg. *read* and *book-read*) is similar to the difference between *cook* and *boil* (p.17).

A pseudo-noun incorporation analysis has been proposed for Turkish bare nominals by Öztürk (2005), who adopts a Neo-Davidsonian phrase structure where both Case and referentiality are assigned within the domain of a single functional projection. She assumes that the arguments of a verb are merged into the Spec position of relevant light verb projections introducing different theta-roles. Following the pseudo-incorporation analysis of Massam (2001), Öztürk (2005) argues that the bare nominals, which are neither head categories, nor DPs, but NPs, are base generated as the complement of the verbal head where they form a complex predicate. The structure she proposes for the immediately preverbal bare nouns is as follows:

(53)

```
        V'              ← complex predicate
       / \
     NP    V
```
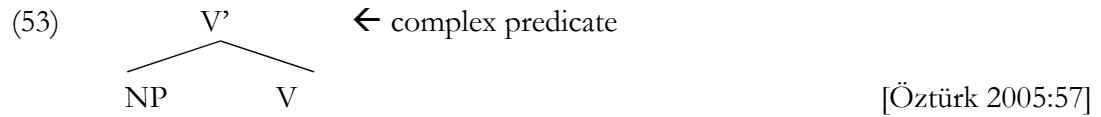
[Öztürk 2005:57]

It is important to mention that Öztürk (2005) also takes [bir N] constructions to be *bare* and argues that they also undergo the same kind of complex predicate formation shown in (53). The problem for this claim that [bir N] constructions are also non-referential has been discussed in the previous chapters.

Ketrez (2005) proposes an analysis of bare nominals along the same lines. She adopts a canonical phrase structure and argues for a complex verb formation for bare nominals (not [bir N] constructions). However, her analysis focuses only on the bare nominals in the object position. She proposes the following definition of complex predicate:

(54) Complex predicate

A verb x and a nominal y form a complex predicate if (i) y is not a DP, (ii) every maximal projection z that dominates x dominates y, (iii) x locally c-commands y.

[Ketrez 2004, Ketrez 2005:48]

(55)

```
            VP
          /    \
        DP       V'
              /     \
            NP        V
           kitap     oku
```

[Ketrez 2005:48, ex. 87]

Ketrez (2005) argues that bare objects in Turkish behave like independent constituents (not head categories but phrases), but they display mobility restrictions due to the absence of DP and NumP layer.

These two accounts of complex predicate formation in Turkish face certain problems. First of all, note that Öztürk (2005) assumes a pre-syntactic operation where the NP and the V° form a complex predicate before the V° enters syntax. Arguing that in Turkish both case and referentiality are assigned within the domain of a single projection (specifically, a theta-role introducing head[20]), she posits that Turkish does not have a DP projection, i.e. there is only NP. The structure she is positing is too strong in that NP can enter syntax without having formed a complex predicate with the V°, or it can enter as part of a complex predicate. That it will be an NP merged in the Spec of a theta-role introducing head or as part of a complex predicate is decided *pre-syntax* in her account.[21]

Ketrez (2005) argues that non-referential NPs lack DP and NumP projections. Lacking a functional category assigning them referentiality (i.e. D°), they cannot be licensed unless they undergo complex predicate formation. However, her definition of complex predicate given in (54) above does not account for cases of non-referential subjects. In the next section, I will present a new account of NPs in Turkish that will predict the difference in the syntactic behavior of DPs and NPs.

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[20] Furman (2005) criticizes Öztürk's (2005) claim that arguments are introduced in theta-role introducing heads by using the following pair of examples:

    (i)   Elif-ø piyano-yu Burak-a 10000 YTL-ye sat-tı-ø.
               Elif-nom piano-acc Burak-dat 10000 YTL-dat sell-past-3sg
               'Elif sold the piano to Burak for 10000 YTL.'
    (ii)   Burak-ø piyano-yu Elif-ten 10000 YTL-ye al-dı-ø.
               Burak-nom piano-acc Elif-abl 10000 YTL-dat buy-past-3sg
               Burak bought the piano from Elif for 10000 YTL.   (from Furman 2005, ex. 11a-b)

Furman states that the source and the recipient are the same in both structures, *Elif* and *Burak* respectively. Assuming that theta-roles encode the structural positions of arguments poses a serious problem since the position of the recipient and the source differs as seen in (i) and (ii) above. One may argue that *Elif* in (i) and *Burak* in (ii) are in fact agents, and not source and recipient respectively. This indicates another difficulty posed by Öztürk's claim, that is, the identification of theta-roles has proved to be very challenging.

[21] Another problem raised for Öztürk's (2005) account of pseudo-incorporation is the following: Massam (2001) shows that pseudo-incorporation detransitivizes the verb in Nieuan and adopting the same process for Turkish predicts detransitivization in this language as well, contrary to fact. See the discussion on causatives in (48) above. I thank M. Kelepir for pointing this out.

4.3.4 Adhesion

Having discussed the problems of both head-incorporation and complex predicate formation analyses put forth to account for Turkish, I propose that the behavior of non-referential NPs can be accounted for by a process which I label *adhesion*. Consider the following definition:

(56) Adhesion

An argument NP adheres to V° as Last Resort.

My proposal rests upon the distinction between DPs and NPs in Turkish. DPs are assigned referentiality by the functional head D° and as we will see in the following chapter they check strong Case along the lines described in de Hoop (1996). Having both referentiality and case, they satisfy the licensing conditions in syntax. As for the question of how non-referential nominals, which I have shown to be representationally NPs, are licensed, we have seen that neither the head-incorporation account nor the complex predicate formation via pseudo-incorporation can account for the structural properties of non-referential nominals. Within the assumptions of the minimalist framework (Chomsky 2000, 2001, 2004), when the lexical array containing an NP is selected, it merges with the V° if it is an object, or it merges as Spec of *v*P if it is a subject. However, not having a functional projection that would assign referentiality to it, the NP needs to adhere to the V° in order to be licensed. In other words, according to the definition above, a non-referential argument nominal, be it an object or a subject, adheres to the verb from its base-generated position. We have seen in section 4.2 evidence for the claim that non-referential nominals remain in

their base-generated position where they are bound by the existential closure. The referential nominals, DPs, however, are assigned referentiality via D°, and undergo dislocation out of their base-generated positions. The trigger for the dislocation of DPs will be discussed in detail in the following chapter. À la Alexiadou and Anagnostopoulou (2001) who propose a cross-linguistic claim stating that by spell-out VP can contain no more than one argument with an unchecked Case feature, I claim that only one argument NP can remain in its base-generated position, i.e. adhesion can only take place with one NP. The ungrammaticality of the following sentence attests this claim:

(57) *∃ [$_{\nu P}$ [$_{NPsubj}$ Arı] [[$_{NPobj}$ çocuk] sok-tu-ø]]

bee child sting-past-3sg

intended: 'bee-stinging happened to-child.'

In (57) above, the intended structure has two NPs remaining in their base-generated positions under the scope of the existential closure in the sense of Diesing (1992). The ungrammaticality indicates that only one argument can be interpreted non-referentially, i.e. there can only be one NP adhering to the verb. The restriction I propose seems also to apply to constructions where there is a generic operator, if we adopt Diesing (1992):

(58) Kanguru et ye-me-z-ø.

kangaroo meat eat-neg-aor-3sg

'Kangaroos don't eat meat.'   generic

In the sentence above, even though neither the subject *kanguru* 'kangaroo' nor the object *et* 'meat' are interpreted referentially, the occurrence of two non-referential nominals seems possible in the presence of the generic operator, which is signaled by the aorist marker on the verb. Diesing (1992) argues that in this kind of structures there is an abstract generic operator *Gen* that binds variables to produce a generic reading. She further argues that generic subjects are introduced in the structure in the restrictive clause, not bound by the existential closure. Hence, the subject *kanguru* 'kangaroo' would not be in its base-generated position in (58) above. [22]

We can thus reinterpret Alexiadou and Anagnostopoulou's (2001) restriction as follows:

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[22] I will not go into detail about how generic operator works in Turkish. Suffice it to say for the discussion that the examples of genericity in Turkish bear the aorist marker on the verbal predicate (cf. Göksel and Kerslake 2005). The following structure in fact indicates that it is the aorist marker which makes a difference in interpretation:

(i)   [DP Kanguru-ø] [NP et] ye-me-di-ø.
        kangaroo-nom meat eat-neg-past-3sg
        'The kangaroo didn't eat meat.'

The interpretation indicates that the subject in (i) is interpreted referentially as opposed to the subject in (58) above. Consider the adverb placement test we applied:

(ii)   *Hızlıca kanguru et ye-me-z-ø.
        quickly kangaroo meat eat-neg-aor-3sg
   intended: 'Kangaroos don't eat meat quickly.'

The ungrammaticality of (ii) indicates that the non-referential subject cannot occur within *v*P to which the manner adverb *hızlıca* 'quickly' adjoins. Consider now the subject case-marking in the embedded clause below:

(iii)   *[Kanguru et ye-me-diğ-in]-i bil-iyor mu-sun?
        kangaroo meat eat-neg-nomin-poss.3sg-acc know-impf Q-2sg
        intended: 'Do you know that kangaroos don't eat meat?'

(iv)   [Kanguru-nun et ye-me-diğ-in]-i bil-iyor mu-sun?
        Kangaroo-gen meat eat-neg-nomin-poss.3sg-acc know-impf Q-2sg
        'Do you know that kangaroos don't eat meat?'
        'Do you know that the kangaroo didn't/doesn't eat meat?'

First, note that the sentence in (iv) is ambiguous between a generic reading of the subject and a definite reading. The fact that the subject *kanguru* 'kangaroo' cannot occur without the genitive marker in the non-referential (generic) interpretation as seen in (iii) may indicate that it is in fact not in *v*P. In other words, the two tests we applied in the text to distinguish DPs from NPs (i.e. adverb placement, and subject case-marking in embedded clauses) indicate that the subject *kanguru* 'kangaroo' may in fact not be in Spec *v*P which is in line with Diesing (1992) and the restriction I propose above following Alexiadou and Anagnostopoulou (2001). However, since a thorough analysis of structures like (58) necessitates an in-depth discussion of generics, I leave the point for further research for the time being.

(59) By Spell-Out, only one argument can remain in its base-generated position adhering to the verb as a Last Resort.

In view of the definition given in (56), adhesion occurs as follows for objects and subjects:
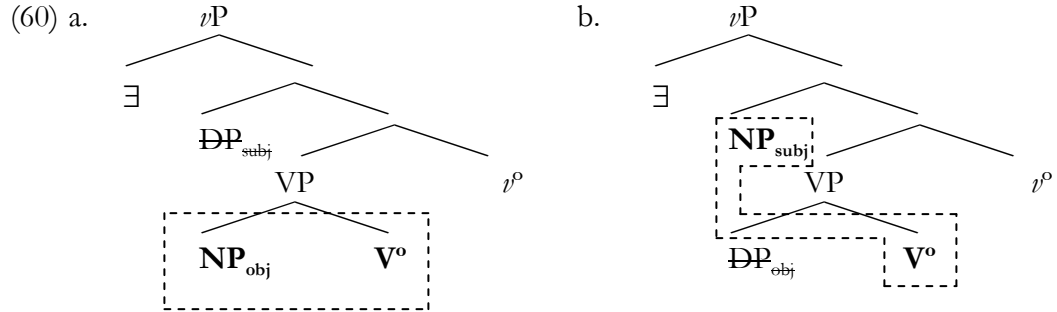
As illustrated in the tree structures above, there can only be one non-referential nominal within the *v*P, i.e. there can only be one NP which adheres to the verb. This also implies that only one argument can remain in its base-generated position (see 59). In (60a) above, the NP$_{object}$ adheres to the verb which occurs as a sister node, whereas the subject moves outside the scope of the existential closure. In (60b), on the other hand, the object DP moves out of its merge position, whereby the non-referential NP$_{subject}$ undergoes adhesion to the verb.

The analysis I am proposing differs from the previous analyses specifically in its application to NPs and not to [*bir* N] nominals, which I claim to be DPs. The previous analyses have made a distinction between an overtly case-marked nominal such as *bir kitab-ı* 'a book-acc' vs. a non-case marked one like *kitap* 'book' or *bir kitap* 'a book', arguing that overtly case-marked ones are above the existential closure, whereas the latter pattern similarly in terms of their scope with respect to an operator or a quantifier in the structure

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and their mobility restrictions; and stay under the scope of the existential closure (see, for example, Enç 1991; Diesing 1992, Kennelly 1993, 1994, 1997b; Kelepir 2001; Öztürk 2005[23] among others).

The analyses put forth in the literature for non-referential nominals and [bir N] constructions can be summarized as follows:

Previous analyses	bare nouns	*bir N-ø*
Knecht 1986	incorporated	not incorporated
Kornfilt 1995	incorporated	incorporated
Aydemir 2004	incorporated	not incorporated
Öztürk 2005	pseudo-incorporated	pseudo-incorporated
Ketrez 2005	complex predicate	no complex predicate
this study	adhesion	no adhesion

Table 1: Analyses put forth for bare nominals and *bir N* constructions

I claim, contra Kornfilt (1995) and Öztürk (2005), that *bir N* constructions cannot be analyzed on a par with non-referential nominals since they differ in various respects, namely number and referential interpretation, scope, modification by adverbs, ellipsis, pronominalization, relative clause formation, and aspectual properties as discussed in detail in chapter 2 (cf. Erguvanlı 1984, Knecht 1986, Aydemir 2004, Ketrez 2005). I argue that *bir*

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[23] Recall that Öztürk (2005) proposes that there are two *bir*'s in Turkish, one stressed, BİR, and the other unstressed. She proposes that the unstressed *bir* in the [*bir* N] construction is a predicate modifier, which modifies the NP just like any adjective. The stressed *BİR*, on the other hand, is an adverbial modifying the event formed by pseudo-incorporation. Thus, according to Öztürk (2005), both *bare* nominals of the kind *kitap* 'book' and [bir N] constructions undergo the same kind of complex predicate formation via pseudo-incorporation into the verb. Likewise, Kornfilt (1995) has treated bare nouns and [bir N] constructions alike arguing that they undergo Baker (1988) style incorporation to the verb. I have however shown in Chapter 2 that analyzing these constructions alike is problematic in the sense that there are syntactic differences between *kitap* and *bir kitap*.

N constructions are syntactically DPs where *bir* can be merged in the Spec ClP position

yielding the numeral meaning (*BİR*); or in Spec DP where the nominal is interpreted as

indefinite (see the previous chapter for details). Note that all of these differences are

expected given the DP status of the *bir N* nominals and the NP status of non-referentials.

Possessing a DP and NumP/ClP layer, *bir N* nominals do not get merged with the verb via

adhesion and thus can be elided, can head relative clauses, be pronominalized, etc. Non-

referential nominals, however, being NPs, do not have a syntactic status on their own which

would allow them to be elided, pronominalized or modified by adjectives.

To recapitulate, I have shown the inadequacies of both the head-incorporation

account and the complex predicate formation account of non-referential nominals in

Turkish and proposed another analysis where the non-referential nominal, NP, undergoes

adhesion to the verb in *syntax*. I have also shown that the arguments regarding the similar

behavior of *bare* nominals (non-referential nominals) and [bir N] constructions with respect

to scope and mobility restrictions cannot account for the differences they exhibit in terms

of adverbial modification, behaving as an antecedent to an overt/covert pronominal,

relative clause formation, ellipsis and aspectual properties. I claimed that these differences

can be easily accounted for by the present study which has shown in Chapters 2 and 3 that

non-referential nominals are NPs, whereas [bir N] constructions are dominated by DP

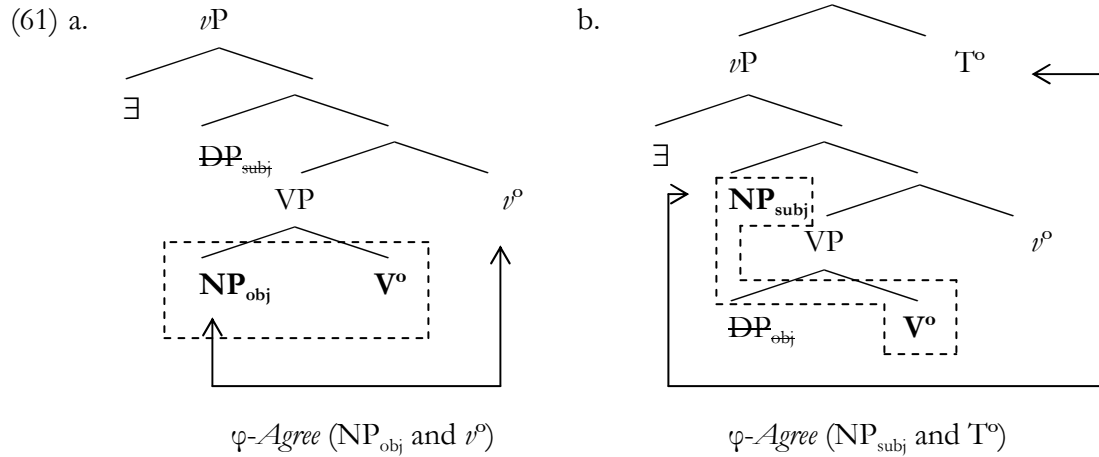projection. The next section discusses the case properties of NPs.

4.4 Case properties of NP

We have discussed in the previous section that non-referential nominals, i.e. NPs, are licensed via adhesion along the lines proposed in (56) above. However, recall that nominals need both referentiality and Case in order to be licensed in syntax. In this section, we turn to the case features of non-referential arguments, i.e. NPs.

I argue that the non-referential nominal, i.e. NP, checks weak Case along the lines discussed in de Hoop (1996).[24] de Hoop (1996) distinguishes between two kinds of structural cases: weak vs. strong; and argues that weak Case is the default structural Case licensed at D-structure, whereas strong Case is licensed at S-structure. She proposes that objects that remain VP-internally are interpreted existentially and bear weak Case. I argue that NPs, which remain in their merge positions under the scope of the existential closure, check their case features with the relevant functional head via φ-feature *Agree* (Chomsky 2001, 2004). Not having NumP/ClP and DP layer which encode the number interpretation and referentiality, they check weak Case as opposed to DPs which check strong Case features in the sense of de Hoop (1996).

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[24] Kennelly (1994) argues that non-referential objects, non-case-marked object DPs in her terminology, remain VP-internally and are licensed by the verb under government via strict sisterhood. Kelepir (2001), in discussing how zero-marked objects receive their case, does not make a choice among the different approaches such as de Hoop (1996) and van Geenhoven (1998). Öztürk (2005) argues that bare nominals introduced as the sister of the V check the weak Case feature of the relevant thematic head via verb movement. She proposes that de Hoop's (1996) strong Case feature corresponds to [Case+Referentiality] feature, whereas weak Case feature corresponds to Case feature without the referentiality within her framework.

(61) a.   b.

               vP vP   T°

∃   ∃

~~DP~~$_{subj}$ **NP**$_{subj}$

    VP v°   VP v°

NP$_{obj}$ **V**°   ~~DP~~$_{obj}$ **V**°

    φ-*Agree* (NP$_{obj}$ and v°)   φ-*Agree* (NP$_{subj}$ and T°)

The NP$_{obj}$ forms an *Agree* relation with v° to match its interpretable φ-features with the uninterpretable φ-features of the probe (i.e. v). The NP$_{subj}$, however, forms an *Agree* relation with T°. It is via this φ-feature *Agree* relation that the non-referential nominals can check their (weak) Case features.[25] However, since they lack any DP layer, they can only check weak Case à la de Hoop (1996). Note that this has implications for the cross-linguistic claim made above à la Alexiadou and Anagnostopoulou (2001). We could now reinterpret the claim I put forth in (59) as follows:

(62) By spell-out, only one argument can remain in its base-generated position checking weak Case (à la de Hoop 1996) via φ-feature *Agree* with the relevant functional head.

Before closing the chapter, let us reconsider the claim that *bir* N constructions cannot be treated on a par with NPs (contra Kornfilt 1995 and Öztürk 2005). Apart from the syntactic differences discussed in Chapter 2, I argue that NPs check weak Case along the lines

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[25] Note that in the following chapter, I will argue that DPs undergo movement since φ-feature *Agree* does not suffice to check their strong Case (cf. Bošković 2005, contra Chomsky 2000, 2001, 2004).

described in de Hoop (1996), whereas [$_{DP}$ bir N] nominals check strong Case. The case-checking properties of DPs will be discussed in detail in the following chapter.

4.5 Summary

In this chapter, I have shown the syntactic properties displayed by NPs vs. DPs. In particular, I have argued that non-referential arguments, NPs, have to remain in their base-generated position where they get interpreted under the scope of the existential closure (Diesing 1992), which I claim, following Kelepir (2001) to be just above the base-generated positions of the subject and the object. Referential arguments, DPs, on the other hand, are shown to undergo movement out of their merge positions, thereby escaping the nuclear scope and getting interpreted referentially.

As for the licensing of NPs in syntax, I have argued against the head-incorporation analysis proposed by Nilsson (1984, 1985), Knecht (1986), Kornfilt (1984, 1995), among others. I have also indicated some of the shortcomings of the complex predicate formation analysis of non-referential nominals as proposed in Öztürk (2005) and Ketrez (2005). I have proposed that non-referential nominals which cannot be assigned referentiality due to the lack of a DP projection undergo adhesion to the verb in syntax. This, I have discussed, lends support to the cross-linguistic claim made in Alexiadou and Anagnostopoulou (2001) that by spell-out only one argument can remain within vP. In our terminology, this is interpreted as the restriction that in a sentence there can only be one NP argument, i.e. only one non-referential argument undergoing adhesion. I have also shown the inadequacies of the analyses which treat *bir N* structures similar to non-referential nominals. I have argued

that *bir N* constructions are DPs, whereas non-referential nominals are NPs. Finally, I

discussed the case properties of NPs and argued that they check weak Case via φ-feature

Agree with the relevant functional head. The next chapter will discuss the behavior of DPs

and their case licensing mechanism. I will discuss the dislocation of DPs in the two

respects: (i) the position they move to, and (ii) the trigger of this dislocation.

CHAPTER 5

DISLOCATION: CASE OR EPP?

5.0 Preliminaries

In the previous chapter, I have discussed the structural differences displayed by the

categories of NP and DP in Turkish. I have shown that NPs are licensed in the structure

through adhesion. As for DPs, their syntactic properties have argued for their dislocation

from the base-generated position where they are escape the domain of the existential

closure, which is also predicted by the Mapping Hypothesis of Diesing (1992). This chapter

discusses in detail the dislocation phenomenon observed with DPs. I discuss the interaction

of the Extended Projection Principle (EPP) and Case in the derivation of surface

configurations of constructions in Turkish. Following work by Castillo et al (1999), Martin

(1999), Grohmann et al (2000), Bošković (2002, 2002b), Boeckx (2000) among others, I

argue for the elimination of EPP as a principle of the Universal Grammar (UG) since the

constructions in Turkish relevant to the EPP can in fact be accounted for without any

appeal to the EPP. Adopting Bošković's (2005) approach, I argue that the movement of

DPs is in fact motivated by the strong Case feature of the nominal itself which forces it to

move to the Spec position of the functional category with which it forms an *Agree* relation.

In other words, I claim that it is the strong Case feature of the DP which triggers dislocation and forces it to behave like a probe in Turkish (contra Chomsky 2000, 2001, 2004).

5.1 EPP effects of *v*

This section deals with the EPP effects of *v*. I will argue that Turkish clause architecture possesses *v*P as a projection at whose Spec position the subject is base-generated and to whose second Spec the DP object moves (cf. Furman 2005, Üntak-Tarhan 2006; contra Öztürk 2005). I show that the different properties displayed by DP objects and NP objects are accounted for by the dislocation of the DP objects to the second Spec *v*P position, while NP subjects remain in their base-generated position undergoing adhesion to the verb as discussed in the previous chapter.

5.1.1 DP vs. NP objects: object shift

The previous chapter has laid down the syntactic differences displayed by NP objects and DP objects regarding (i) interpretation and (ii) position with respect to simplex manner adverbials. Recall first the difference in interpretation:

(1) Ali-ø [$_{\textbf{DP}}$ (o) [$_{NP}$ şarkı]]-yı söyle-di-ø.

Ali-nom (that) song-acc say-past-3sg

'Ali sang the/that song.'

(2) Ali-ø [_{DP} bir [_{NP} şarkı]]-yı söyle-di-ø.

Ali-nom one song-acc say-past-3sg

'Ali sang a specific song.'

(3) Ali-ø [_{DP} bir [_{NP} şarkı]] söyle-di-ø.

Ali-nom one song say-past-3sg

'Ali sang a(ny) song.'

(4) Ali-ø [_{NP} şarkı] söyle-di-ø.

Ali-nom song say-past-3sg

'Ali sang.'

As has been discussed in the previous chapter, the DP objects exemplified in (1-3) are

interpreted referentially whereas the NP object in (4) does not have any reference on its

own (as also observed in the translation). This has been accounted for by the adhesion

analysis of the non-referential object, NP$_{obj}$, whereby the NP adheres to the verb in syntax.

The referential objects, DP$_{obj}$, however, escape the domain of the existential closure by

being dislocated from their base-generated positions.

As for the second piece of evidence for the different behavior of DP vs. NP objects,

we have discussed the position of the objects with respect to simplex manner adverbials. As

opposed to non-referential objects, the DP objects occur higher in the structure with

respect to the adjunction position of simplex manner adverbials. I repeat the examples

below for convenience:

(5) a. Ali-ø güzel [$_{NP}$ şarkı] söyle-di-ø.

Ali-nom beautiful song say-past-3sg

'Ali sang beautifully.'

b. *Ali-ø [$_{NP}$ şarkı] güzel söyle-di-ø.

Ali-nom song beautiful say-past-3sg

intended: 'Ali sang beautifully.'

(6) a. *Ali-ø güzel [$_{DP}$ [$_{NP}$ şarkı-yı]] söyle-di-ø.

Ali-nom beautiful song-acc say-past-3sg

intended: 'Ali sang the song beautifully.'

b. Ali-ø [$_{DP}$ [$_{NP}$ şarkı-yı]] güzel söyle-di-ø.

Ali-nom song-acc beautiful say-past-3sg

'Ali sang the song beautifully.'

The examples above indicate that the referential objects occur higher in the structure than the adjunction position of simplex manner adverb *güzel* 'beautifully' (cf. Kelepir 2001, Üntak-Tarhan 2006), whereas the non-referential object which has undergone adhesion to the verb occurs lower at surface structure.

I argue that the position the DP object moves to is the phase edge, i.e. Spec *v*P. The existence of *v*P as part of the syntactic structure of Turkish has been challenged recently.

The following section summarizes arguments against *v*P followed by arguments for a *v*P layer in Turkish.

5.1.1.1 Arguments against *v*P in Turkish

The occurrence of a *v*P layer in Turkish has been recently challenged by Öztürk (2005). Öztürk (2005) gives four arguments against the presence of *v*P as a case checking projection in Turkish clausal structure:

(i)   violation of Burzio's Generalization (1986)

(ii)   inapplicability of the cross-linguistic claim by Alexiadou and Anagnostopoulou (2001) regarding number of arguments with an unchecked Case feature

(iii)   lack of *v*P fronting in Turkish

(iv)   inapplicability of Legate's (2003) tests for the phasehood of *v*P (Antecedent Contained Deletion (ACD), reconstruction of wh-phrases to the *v*P edge and parasitic gaps).

First, she holds that pseudo-incorporation of agents, the so-called subject incorporation cases, poses a challenge to Burzio's Generalization since they do not allow control or agent oriented adverbials showing that they do not behave as external arguments.[1]

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[1] Öztürk's (2005) examples to this effect are:
    (i)   *Ali-yi [PRO_i sorgula-mak için] polis_i tutukla-dı-ø.   [Öztürk 2005:49, ex. 79b]
            Ali-acc interrogate-inf for police arrest-past-3sg
            intended: 'Police arresting happened to Ali to interrogate him.'
    (ii)   *Ali-yi kasıtlı olarak polis_i tutukla-dı-ø.   [Öztürk 2005:50, ex. 80b]
            Ali-acc intentionally police arrest-past-3sg
            intended: 'Police arresting happened to Ali intentionally.'
Note that in the above structures the non-referential NP *polis* 'police' cannot control into the purpose clause in (i), and cannot take an agent oriented adverbial *kasıtlı olarak* 'intentionally' in (ii), leading to the argument that it does not behave as an external argument. According to Burzio's Generalization, the prediction is that there

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As for the cross-linguistic claim made by Alexiadou and Anagnostopoulou (2001) stating that by spell-out VP can contain no more than one argument with an unchecked Case feature, Öztürk (2005) claims that Turkish challenges this principle in that both subjects and objects check their case and theta-role features in their base-generated positions.[2] Thus, she argues that if *v*P is eliminated from the phrase structure of Turkish, the principle stated by Alexiadou and Anagnostopoulou (2001) would cease to apply to Turkish.

As for the lack of *v*P fronting[3], Öztürk (2005) gives the following structure:

(7) Oda-sın-a git-me-di her çocuk.   [Öztürk 2005:133, ex. 58b]

room-poss.3sg-dat go-neg-past every child

i. *It is not the case that every child went to his room.   (*not>every)

ii. Every child is such that the didn't go to his room.   (every>not)

Öztürk (2005) states that the structure above seems to be very similar to *v*P fronting but argues that data from embedded clauses indicates that it is right adjunction:

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will be no accusative in the structure, contrary to fact. Based on this, Öztürk (2005) argues that there is no motivation for the existence of *v*P in Turkish.

[2] Her example is below:
    (i) [CP [TP [NegP [AgentP bütün çocuk-lar [ThemeP o test-e [VP gir-me-di]]]]]]
         all child-plu that test-dat take-neg-past
         'All children did not take that test.' (*all>not, not>all)   [Öztürk 2005:131, ex. 54]
Based on the scope relation of the subject and negation, Öztürk (2005) claims that the subject and the object remain in situ challenging Alexiadou and Anagnostopoulou's (2001) claim.

[3] As for the lack of *v*P fronting in Turkish, Öztürk (2005) bases her argumentation on Abel's (2003) analysis of Huang's (1993) data:
(i) John said that [[*v*P t_Bill *v* [VP wash himself_Bill/*John]] Bill certainly would t_*v*P
                                                                [from Öztürk 2005:132, ex. 57]
She argues that the unavailability of coindexation of *John* and the reflexive indicates that the reflexive is still c-commanded by *Bill*. Assuming that subjects are base-generated within *v*P, rather than VP, this, in turn, indicates that the data is an example of *v*P fronting, identifying *v*P as a syntactic constituent.

(8)   * Ali oda-sın-a git-me-diğ-in-i her çocuğ-un söyle-di.

Ali room-poss.3sg-dat go-neg-nomin-poss.3sg-acc every child-gen say-past

'Ali said that every child didn't go to his room.'

Based on the ungrammaticality of (8), Öztürk (2005) argues that the structure in (7) can only be analyzed as right adjunction and not *v*P fronting.[4]

As a last piece of argument against *v*P, Öztürk (2005) uses Legate's (2003) tests for the phasehood of *v*P, which involve ACD (antecedent contained deletion), reconstruction of wh-phrases to the *v*P edge and parasitic gaps. Based on previous work such as Özsoy (1996) and İnce (2004), Öztürk (2005) claims that Turkish does not have ACD constructions of the type observed in English and no parasitic gaps. As for the wh-reconstruction data, Öztürk (2005) shows that Turkish does not provide data to test it. Thus the fact that Legate's tests are all inapplicable in Turkish leads Öztürk (2005) to argue against the presence of *v*P in Turkish.

The next section shows the inadequacies of Öztürk's (2005) claims against the existence of *v*P in Turkish.

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[4] As for the lack of *v*P, Öztürk (2005) criticizes Kornfilt (1990)'s following data:

(i)   Ben kitab-ı Ahmet-e ver-eceğ-im, Mehmet de öyle.
       I book-acc Ahmet-dat give-fut-1sg Mehmet and so
       'I will give the book to Ahmet, and so will Mehmet.'
(ii)   *Ben kitab-ı Ahmet-e ver-eceğ-im, Mehmet de gazete-yi öyle.
       I book-acc Ahmet-dat give-fut-1sg Mehmet and paper-acc so
       *'I will give the book to Ahmet, and so will Mehmet the newspaper.'

Kornfilt (1990) argues that the ungrammaticality of (ii) indicates that the verb and the object forms a constituent leaving the subject out, hence stranding the object results in ungrammaticality. Öztürk (2005), however, argues that the ungrammaticality results only because of the use of the adverb *öyle* 'so' without the verb *yap-* 'do', and furthermore claims that both (i) and (ii) are equally bad.

5.1.1.2 Arguments for *v*P in Turkish

Öztürk's (2005) argument against the presence of *v*P as a Case checking projection in Turkish clausal architecture is based on her claim that nominal phrases are assigned case and referentiality in the same syntactic position. In other words, she claims that case and referentiality are codependent features and as such they are assigned by θ-role introducing functional heads, such as Agent Phrase and Theme Phrase. One of the problems with this argument is that the claim that referentiality is dependent on case is based on her argument that Turkish does not possess DP, and thus there is no projection assigning referentiality to the noun phrase. However, in the previous chapters, I have provided syntactic arguments to show that Turkish possesses a DP projection whose phonologically null head assigns referentiality to the nominal. Another problem in her claim that Case and referentiality are codependent features comes from the pseudo-incorporation analysis she proposes, where she argues that the pseudo-incorporated nominal does not have any referentiality assigned to it but is able to check weak Case in the sense of de Hoop (1996). This indicates that, in fact, Case *can* exist without the referentiality feature, providing support to the claim made in this study that Case is separate from referentiality, which is assigned by the phonologically null Dº in Turkish. Moreover, Öztürk (2005) questions the existence of *v*P in terms of object case checking only. She assumes that the subject is introduced in the structure in the theta-role introducing functional category. Note, however, that *v*P is not only operative in terms of indirectly checking the object case in Minimalist terms but also offers the merge position of the subject, i.e. Spec *v*P. Arguing that there is a distinction between NP and DP (see chapters 2 and 3) and that there is no *v*P is highly problematic in accounting for the

facts of the language.[5] In this section, I will discuss the inadequacies of the specific arguments Öztürk (2005) puts forth for the non-existence of the *v*P category in Turkish and argue on the contrary that Turkish clause architecture possesses a *v*P at whose Spec the subject is base-generated and to whose second Spec the referential object moves (cf. Furman 2005, Üntak-Tarhan 2006).

Recall that Öztürk's (2005) first argument against the presence of *v*P in Turkish concerns the fact that Turkish violates Burzio's Generalization in the sense that sentences with non-referential agents do not allow control or agent oriented adverbials but they have an accusative marked noun phrase. This indicates, according to Öztürk (2005), that bare nominals are not the external arguments of the predicate. Thus she argues that Turkish clause architecture does not possess a *v*P layer. This is problematic in the sense that her analysis of the pseudo-incorporation of agents later in her work challenges her own discussion of the violation of Burzio's Generalization. In accounting for the pseudo-

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[5] Öztürk (2005) assumes that the semantic difference in terms of referentiality of nominals is achieved via the position the NP occurs in the structure. In other words, she proposes that if the NP is merged in the Spec position of a functional head (be it AgentP or ThemeP), it is interpreted as a full argument; whereas in cases where it is introduced in the structure as the sister of V°, it is non-referential and is a predicative nominal. In addition to the problem of theta-role bearing functional categories pointed out by Furman (2005) (see fn. 19 in Chapter 4), an additional problem for this approach is that the referential and non-referential nominals are argued to bear the same syntactic structure, i.e. they are both NPs, and the numeration is predicted to apply some sort of a look-ahead mechanism in deciding to merge which NP in the Spec of a functional category and which one as the sister of V°. Thus, it fails to capture the minimal design specifications the Minimalist Program is aiming to achieve. Moreover, the data below is left unaccounted for if no distinction is made between non-referential objects and subjects as claimed by Öztürk (2005) (see Chapter 3, fn. 44):

    (i)   arı sok-ma-sı
            bee sting-vn-poss.3sg
            'bee-stinging'
    (ii)   *arı sok-mak
            bee sting-inf
            intended: 'bee-stinging' (OK in the reading: 'stinging a bee')
    (iii)   kitap oku-mak
            book read-inf
            'book-reading'
    (iv)   *kitap oku-ma- sı
            book read-vn-poss.3sg
            intended: 'book-reading'

As seen above, the infinitive marker –*mAk* results in an ungrammatical structure with the non-referential subject, whereas we observe the reverse with the non-referential object. The argument that they are base-generated in the same position, i.e. as sister to V°, cannot account for the difference in this data.

incorporation of agents, she argues that the non-referential NP checks the weak case feature of the relevant functional head, here AgentP, whereby it gets associated with the relevant theta-role, here Agent (Öztürk 2005:121). This implies that the violation of Burzio's Generalization in Turkish pseudo-incorporation of agents is only apparent.

As for Öztürk's (2005) claim that Turkish challenges the cross-linguistic claim made in Alexiadou and Anagnostopoulou (2001) stating that VP can contain no more than one argument with an unchecked Case feature, she bases her argument on the assumption that arguments in Turkish are base-generated in theta-introducing heads where they are also assigned referentiality, which in turn is based on the assumption that Turkish does not have a DP projection. As the discussion in Chapters 2 and 3 has shown, Turkish possesses a difference between NPs and DPs. In her example repeated below, both the subject and the object are referential, i.e. they are structurally DPs; and under our account they are dislocated from their base-generated position above the scope of the existential closure.

(9) Bütün çocuk-lar o test-e gir-me-di.   *all>not, not>all
     all child-pl that test-dat enter-neg-past
     'All children did not take that test.' (adapted from Öztürk 2005:131, ex. 54)

Öztürk (2005) further argues that movement out of theta-positions reverses the scope relations:

(10) Bütün çocuk-lar allahtan o test-e gir-me-di-ler.   [Öztürk 2005:131, ex. 55b]
     all child-plu luckily that test-dat take-neg-past-3pl
     'Luckily, all the children did not take that test.' (all>not, *not>all)

She claims that the occurrence of the third person plural agreement marking on the predicate signals that the subject has moved to Spec TP and that the sentence can only be interpreted as the universal quantifier taking scope over negation. The first problem for this data is that there are native speakers who judge that there is no semantic difference between (9) and (10) in terms of the scope relations of *bütün* 'all' and negation. The interpretation for those speakers is not>all (cf. Furman 2005)[6]. Secondly, I claim that the occurrence of third person plural agreement on the predicate does not signal the movement of the subject to Spec TP. Since the subject is referential, and hence a DP, it is already at Spec TP outside the nuclear scope under our account (which will be discussed further in the following sections). The function of the occurrence of overt third person plural agreement has been discussed by many linguists such as Sezer (1978), Kornfilt (1984), Göksel (1987), Schroeder (1999), and Kirchner (2001), among others. The common idea behind all these studies is that the occurrence of the 3rd person plural agreement depends not only on syntactic features such as the structural make-up of the subject noun phrase (i.e., whether it is a noun modified by numerals or quantifiers (*iki adam* 'two men'), or whether it is a plural marked noun (*adamlar* 'men')), but also on semantic features such as the animacy feature (or rather [+human] feature) of the subject noun, and also on syntactic distance (length/vicinity) between the subject and the predicate. I claim that the interpretation of the sentences in (9) and (10) does not display a difference and hence there is no motivation to assume different structural positions for the subjects.[7]

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[6] See Furman (2005) for a small-scale research showing that the absence or presence of third person plural marking on the verb does not lead to changes in scopal relations (contra Öztürk 2005).

[7] Turkish seems to allow optionality with respect to the plural agreement between the subject and the predicate for 3rd person. With respect to the plurality of the subject noun and agreement on the verb, one has to take into account factors such as animacy (or rather humanness) and the internal structure of the subject

noun, i.e. the fact that the plural subject noun is a combination of noun+plural or is modified by number denoting quantifiers:

(i)   Çocuk-lar-ø gel-di-(ler).
        child-plu-nom come-past-(3pl)
        'The children came.'
(ii)   (Ismarladığınız) kitap-lar-ø gel-di-(*ler).
        that.you.ordered book-plu-nom come-past-(*3pl)
        'The books (that you ordered) arrived.'
(iii)   İki/Çok çocuk-(*lar)-ø gel-di-(*ler).
        Two/many child-(*plu)-nom come-past-(*3pl)
        'Two/many children came.'

The contrast between (i) and (ii) indicates that the humanness of the plural subject plays an important role in the "optionality" of the 3rd person plural agreement on the predicate. The contrast between (i) and (iii), however, indicates that the syntactic structure of the plural subject noun is also another factor. That is, the fact that the animate plural subject is morphologically a noun+pl or is a numeral/quantifier+noun affects the "optionality" of the –lAr on the predicate even if the subject is animate. Note also that the following is acceptable only if the bracketed phrase is understood as an adjunct:

(iii') [İki arkadaş] gel-di-ler.
        two friend come-past-pl
        'They came [as two friends].'

Some linguists have argued that there is a difference in the interpretation of the sentences with and without the plural agreement as in the case of (i) above (see Sezer 1978, Schroeder 1999, Kirchner 2001, among others). Sezer (1978), for example, argues that it is not animacy or the [±human] distinction that plays a role in number agreement, but agency.

(iv)   *Anahtar-lar-ø kapı-lar-ı aç-tı-lar/✓aç-tı.
        key-plu-nom door-plu-acc open-past-3pl
        intended: 'The keys opened the doors.'   [Sezer 1978:28, ex. 8a]
(v)   Uçak-lar-ø kent-i bombala-dı-lar.
        airplane-plu-nom city-acc bomb-past-3pl
        'Airplanes bombed the city.'   [ibid., p. 29, ex. 11a]

Sezer (1978) argues that even though the subjects in (iv) and (v) are both inanimate physically, the subject *uçaklar* 'airplanes' is animate grammatically using syntactic evidence from causative structures, where Turkish does not allow causativization of transitive structures whose subjects are inanimate:

(vi)   *Ben-ø anahtar-a kapı-yı aç-tır-dı-m.
        I-nom key-dat door-acc open-caus-past-1sg
        Intended: 'I made the key open the door.'   [ibid., p. 29, ex. 10d]
(vii)   General-ø uçak-lar-a kent-i bombala-t-tı-ø.
        general-nom airplane-plu-dat city-acc bomb-caus-past-3sg
        'The general ordered the airplanes to bomb the city.'   [ibid., p. 29, ex. 11b]

Based on this contrast, Sezer argues that the subject *uçaklar* 'airplanes' is grammatically animate. He thus proposes that the plural agreement is available on the predicate if the plural subject is grammatically animate, that is, if it is agentive or totally [+human]. Moreover, Sezer (1978) argues that the plural agreement is obligatory in certain structures:

(viii) *Çocuk-lar-ø baba-ları-nın el-lerin-i bir bir öp-tü-**ler**/ *öp-tü.
        child-plu-nom father-poss.3pl-gen hand-poss.3pl-acc one one kiss-past-**3pl**/kiss-past
        'The children one by one kissed their father's hands.'   [Sezer 1978:30, ex. 14a-b]
(ix)   Ali ile Hasan birbir-lerin-i sev-me-z-**ler**/*sev-me-z.
        Ali and Hasan each.other-poss.3pl-acc like-neg-aor-3pl/like-neg-aor
        'Ali and Hasan do not like each other.' [ibid., p. 31, ex. 15a-b]

The sentences in (viii and ix) show that the plural agreement on the predicate is obligatory when the agents are doing the action one by one. This leads Sezer to conclude that even when the plural agreement seems optional, there is a slight difference in meaning (i). When the predicate shows plural agreement, the action is considered to be carried out by each member of the subject noun phrase separately, i.e. one by one; whereas when there is no agreement, the action is taken to be carried out by the members of the subject as a group, collectively.

Moreover, as discussed in chapter 4, Turkish does abide by the restriction proposed by Alexiadou and Anagnostopoulou (2001) in that two non-referential NPs cannot occur within VP. I repeat example (57) in chapter 4 below:

(11) *∃ [$_{vP}$ [$_{NPsubj}$ Arı] [[$_{NPobj}$ çocuk] sok-tu-ø]]]

bee child sting-past-3sg

intended: 'A child got bee-bitten.'

Kornfilt (1984) and Göksel (1987) base their accounts of plural agreement on the notion of syntactic distance. Göksel argues that syntactic distance plays an important role in establishing grammaticality of the plural agreement between the subject and the predicate which is otherwise not possible. Compare the following:

(x)   *Kitap-lar-ø yer-e düş-müş-ler.
       book-plu-nom floor fall-rep-3pl
       'The books have fallen to the floor.'

(xi)   *Kitap-**lar** ya dün akşamki deprem-in şiddet-in-den ya da o eski kütüphane zaten
       çürük ol-duğ-u için yer-e düş-müş-**ler**.   [from Göksel 1987:71, ex 4b]
       book-plu either last night's earthquake-gen force-poss.3sg -abl or that old bookshelf anyway
       rickety be-nom-poss.3sg because floor-dat fall-rep-3pl
       'The books fell on the floor either owing to the force of the last night's earthquake, or because that old bookshelf was rickety anyway.'

Göksel further points out that even when the subject is human, the speakers are reluctant to omit the third person plural agreement marker in sentences where the subject is separated from the verb by embedded clauses or phrases:

(xii) **?** Yolcu-lar hem tren-in hangi istasyon-a kadar gid-eceğ-in-i öğren-me-mek hem de yol için yetecek yiyecek ve içecek getir-
       me-mek-le hata et-ti-ø.
       passenger-plu both train-gen which station-dat as.far.as go-nomin-poss.3sg-acc learn-neg-inf both also road for sufficient food and drink bring-neg-inf-com mistake make-past-ø
       'The passengers made a mistake both by not finding out how far the train was supposed to go and by not bringing with them sufficient amount of food and refreshments.' [Göksel 1987:72, ex 6]

Kirchner (2001) proposes a simplified approach for the understanding of the 3rd person plural agreement in Turkish. He mainly argues that "agentivity is more suitable for explaining plural agreement on the predicate rather than humanness or animateness feature" (p. 219). However, in order for the agentivity rule to apply, it is required that the plural marked subject be able to be interpreted to consist of distinct referents. Moreover, Kirchner points out that length factors do play a role. He however points out that length and vicinity factors are related to the limitation of human memory and is motivated by the tendency in the communication system to avoid two plural markers too closely leading to redundancy, and thus the length/vicinity factors should be dealt on a level distinct from the level where distinctness and agentivity factors play a role. He summarizes his view as follows: "… agreement of the predicate is generally triggered if the referent of the subject is interpreted as consisting of distinct entities and has the role of an agent. However, agreement can be suppressed in the case of direct vicinity of the plural marked predicate and subject or it can be triggered in cases where the subject is separated from the verb by embedded clauses" (Kirchner 2001:223).
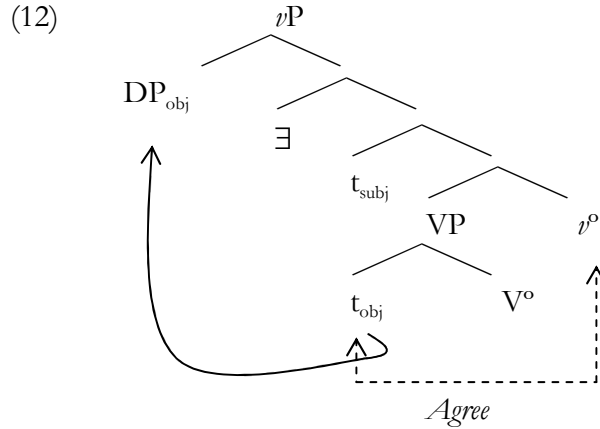
In the example above, we see that the co-occurrence of two non-referential nominals, i.e. two NPs, results in an ungrammatical structure. In order to get the intended reading, one of the nominals has to move outside the scope of the existential closure, which is only possible if that nominal is a DP, an indefinite DP in this case. This is evidence that Alexiadou and Anagnostopoulou's (2001) restriction can also be observed in Turkish, contra Öztürk (2005).

As for the lack of vP fronting in Turkish, Öztürk (2005) has criticized Kornfilt's (1990) analysis of data with the adverb *öyle* 'so', who has argued that the verb and the object form a constituent leaving the subject out. Öztürk (2005), however, claims that the ungrammaticality results only because of the use of the adverb *öyle* 'so' without the verb *yap-* 'do'. However, it is important to note that the native speakers I have consulted with agree with Kornfilt's (1990) original judgments indicating that Öztürk's (2005) claim/criticism is unattested (see footnote 4 above).

Finally, recall that Öztürk (2005) uses the inapplicability of Legate's (2003) tests in Turkish to argue against the presence of a vP layer. Note, however, that Legate (2003) uses these tests not to argue for the presence of vP in clause architecture but for the phasehood of vP in the sense of Chomsky (2000, 2001). Hence, inapplicability of phasehood of vP tests to Turkish cannot be taken as an argument to show that there is no vP layer in Turkish clause architecture. To sum up, the discussion Öztürk (2005) brings up for the absence of vP in Turkish is not conclusive in the sense that it points out the absence of evidence for vP layer rather than presenting evidence *against* its presence, as has been independently observed in Üntak-Tarhan (2006).

Having provided counter-arguments to the claim made in Öztürk (2005), I now turn to arguments which give evidence to the fact that Turkish possesses a vP layer at whose

Spec the subject is base-generated and to whose second Spec position the referential object, i.e. DP$_{object}$ moves. Consider the tree structure below:

(12)

```
                    vP
        ┌───────────┴───────────┐
      DP_obj                     
                        ┌────────┴────────┐
                        ∃                 
                              ┌───────────┴───────────┐
                            t_subj                     
                                    ┌──────┴──────┐
                                   VP            v°
                              ┌─────┴─────┐      
                            t_obj        V°
                                
                                    Agree
```

I argue that the operation *Agree* takes place between the probe *v*° and the DP object in situ, i.e. when the object is merged as sister of V°. The motivation for *Agree* to take place is that the probe *v*°, having uninterpretable φ-features, needs to delete those features via agreeing with a matching set of interpretable φ-features which it finds on the object noun phrase. However, the syntactic evidence provided in Chapter 4 has shown that the referential object moves out of its base-generated position to a higher position which I claim to be Spec of *v*P, thus escaping the domain of the existential closure, whereby it is interpreted referentially. As for the trigger of this movement, there have been two different veins of argument in the literature. Chomsky (2000, 2001, 2004) has argued that this dislocation is triggered not by the uninterpretable Case feature, but by the EPP feature (or OCC in Chomsky 2004) which the phase head *v*° bears. The Case feature is checked and deleted through the operation of φ-feature *Agree* taking place before the object moves to Spec *v*P under this account. However, Castillo et al. (1999), Martin (1999), Grohmann et al. (2000), Boeckx (2000), Bošković (2002, 2005); and Kelepir (2001), Ketrez (2005) for Turkish, have

argued that the dislocation of the referential object out of its base-generated position is triggered by Case features of either the probe v^o or the goal DP. The discussion of the ECM constructions in Turkish in the next section will show that it is in fact the latter analysis that holds for Turkish.

5.1.2 ECM constructions in Turkish-revisited

In Chapter 2, it was shown that ECM constructions in Turkish involve the raising of the ECM subject to the matrix clause level. This section will argue that the ECM nominal which is base-generated as the subject of the ECM predicate from which it takes its theta-role undergoes movement to the matrix Spec vP position. The comparison of ECM clauses with fully finite complement clauses will indicate that assuming an EPP feature for the matrix v^o is problematic in that it does not abide by the economy principles of the minimalist theory.

Chapter 2 had presented a number of arguments that indicate that the ECM subject in fact undergoes movement to the matrix clause; namely, adverb scope facts, existential sentences, scopal properties of negation and a quantifier phrase were given as evidence to this. I have also shown that the ECM clauses in Turkish do not constitute phases, i.e. they are not CPs (contra Öztürk 2005, Meral 2005, Oded 2006). The evidence put forth for this was pronominal binding facts and the difference in behavior of topicalized subjects of a fully finite complement clause and an ECM subject. Possessing no CP layer implies that the ECM clause is a deficient TP, where deficiency is defined in the theory as not being selected

by a phase head (Chomsky 2000, 2001, 2004).[8] Having provided arguments that the ECM

clause is not a CP, but a defective TP, and that the ECM nominal undergoes dislocation to

the matrix clause, I argue that the ECM nominal moves to the Spec position of the matrix

*v*P. Consider the derivation of the ECM clause[9] below:

(13) [Ben-ø [sen-i$_i$ [t$_i$ git-ti] san-dı-m]]].

I-nom you-acc go-past think-past-1sg

'I considered you to have gone.'

---

[8] Recall that both Özsoy (2001) and Aygen (2003) independently argue that the ECM clause is a deficient TP. However, while Özsoy (2001) argues that the ECM subject undergoes movement to the matrix level in ECM clauses where the predicate is a DP or a PP; Aygen (2003) argues that the ECM subject remains in its own clause forming an *Agree* relation with the matrix *v*.

[9] For ECM clauses in Turkish see Pullum (1975), Kornfilt (1977, 1984), Kural (1993), Zidani-Eroğlu (1997), Moore (1998), Özsoy (2001), Aygen (2002, 2003), Öztürk (2005b), İnce (2005, 2006), Meral (2005), Oded (2006), Haig (2006), Arslan-Kechriotis (2006) among others. There are two "dialects" of ECM clauses in Turkish: one where there is no agreement on the ECM predicate and the other where there is overt agreement, as exemplified below:

(i)   Ben-ø sen-i git-ti san-dı-m.
            I-nom you-acc go-past think-past-1sg
            'I considered you to have gone.'

(ii)   Ben-ø sen-i git-ti-**n** san-dı-m.
            I-nom you-acc go-past-**2sg** think-past-1sg
            'I considered you to have gone.'

See Aygen (2006) both for the summary of the previous analyses with respect to the (non-)obligatoriness of the agreement marker on the ECM predicate, and also for a criticism of calling these two versions different dialects. No semantic difference has been reported to occur between the two versions given above. Previous studies have only focused on the overt occurrence of the agreement marker as a structural difference. In this study, I aim to discuss only the version without the agreement marker, i.e. (i). Note that the two versions differ structurally not only with respect to the (non-)occurrence of the agreement marker but also with respect to coordination, which, to my knowledge, has not been discussed previously. Consider below the coordinated structures within a fully finite complement clause (iii) and ECM clauses with and without overt agreement (iv-v):

(iii)   Ben-ø [sen-ø avukat-sın ve o şirket-te çalış-ıyor-sun] san-ıyor-du-m.
            I-nom you-nom lawyer-2sg and that firm-loc work-impf-2sg think-impf-past-1sg
            'I thought (that) you were a lawyer and worked in that firm.'

(iv)   Ben-ø sen-i [avukat-sın ve o şirket-te çalış-ıyor-sun] san-ıyor-du-m.
            I-nom you-acc lawyer-2sg and that firm-loc work-impf-2sg think-impf-past-1sg
            'I considered you to be a lawyer and to work in that firm.'

(v)   *?Ben-ø sen-i [avukat ve o şirket-te çalış-ıyor] san-ıyor-du-m.
            I-nom you-acc lawyer and that firm-loc work-impf think-impf-past-1sg
            intended: same as (iv)

As seen in (iv) and (v), even though coordination is possible in ECM clauses whose predicates bear overt agreement, it is not fully grammatical in ECM clauses without agreement. The explanation of this difference in grammaticality depends on further analysis of ECM clauses with overt agreement which I leave for future research.

The ECM clause, not being a CP, contains only one phase, i.e. the (embedded) vP.

Assuming that the derivation proceeds phase by phase (Chomsky 2000, 2001, 2004), the

lexical arrays for each phase are given below:

(14) Phase 1: {v, gitti}

Phase 2: {v, T$_{emb}$, ben, seni, sandım}

Phase 3: {C, T$_{matrix}$}

The syntactic derivation of the ECM clause is given below:

(15) Phase 3→
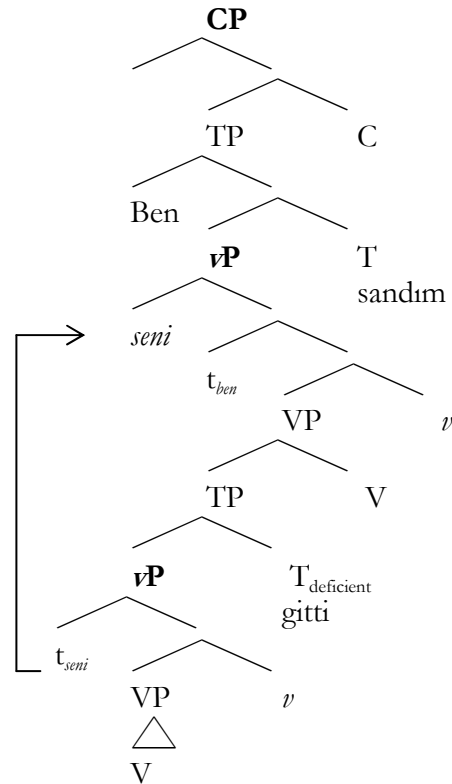
The ECM clause having a deficient T (in minimalist terms), does not project a Spec TP.

Since the ECM DP *seni* 'you-acc' is thematically related to the ECM predicate *git-* 'go' and

not the matrix one *san-* 'think', I follow Zidani-Eroğlu (1997) and Özsoy (2001) and argue

that it is merged as the subject of the ECM clause. Zidani-Eroğlu (1997) and Özsoy (2001)

independently argue that the ECM DP undergoes movement to the matrix clause for Case

reasons, since it cannot check its Case features in the ECM TP which is deficient

theoretically, i.e. it is a TP not selected by a CP failing to match the φ-features of the ECM

subject. Note, however, that the position the ECM DP moves into cannot be the matrix

object position since object position is thematic and movement to thematic positions is

outlawed (Chomsky 1981). I argue that the position the ECM subject moves to is Spec *v*P.[10]

It is important to note that Chomsky (2000, 2001, 2004) assumes that phase heads, *v* and C,

can optionally bear an EPP feature which necessitates the projection of an (extra) Spec

position. Arguing that the movement of the ECM subject to the matrix Spec *v*P is because

of the EPP feature of the matrix *v* would account for the ungrammaticality of ECM clauses

which contain non-referential NPs. Recall from Chapter 2 that non-referential subjects,

NP_{subj}, result in ungrammaticality when they occur in ECM clauses. I repeat one example

below for convenience:

(16) *Biz-ø Ayla-yı arı-yı sok-tu san-dı-k.[11]

　　　we-nom Ayla-acc bee-acc sting-past think-past-1pl

　　　intended: 'We thought Ayla to be bee-stung.'

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[10] Lasnik (2004) argues that the accusative marked phrase in English ECM constructions moves to Spec Agr_oP adopting Koizumi's (1995) Split-VP analysis.
[11] Note that this sentence is ungrammatical in the intended reading. It is grammatical but infelicitous in the reading where Ayla stings a bee.

The occurrence of the non-referential subject *arı* 'bee' is ungrammatical in the above sentence.[12] The analysis which assumes the EPP would account for this ungrammaticality in terms of the EPP feature of the matrix v^o. In other words, the analysis assuming that EPP is part of the universal grammar would argue that the ungrammaticality is due to the fact that the EPP feature of *v* is not satisfied, i.e. the non-referential subject (NP_{subj}) undergoes adhesion to the verb and cannot move to the higher clause. The main problem for the analysis assuming that *v* (and C) can bear EPP features is that it is totally optional (Chomsky 2000, 2001, 2004). The verb *san-* 'consider, believe, think' can also take other types of complement clauses as exemplified below:

(17) [Sadece sen-ø her şey-i iyi yap-abil-ir-sin] san-ıyor-sun.

   only you-nom every thing-acc good do-abil-aor-2sg think-impf-2sg

   'You think (that) only you can do everything well.'

(18) [Sadece sen-in her şey-i iyi yap-abil-diğ-in]-i san-ıyor-sun.

   only you-gen every thing-acc good do-abil-nomin-poss.2sg-acc think-impf-2sg

   'You think that only you can do everything well.'

---

[12] In an earlier manuscript, I have proposed that the dislocation of the ECM subject to the matrix *v*P position is triggered by the interpretational requirements. In other words, I have argued that the ECM DP moves to the matrix Spec *v*P to escape the scopal domain of the existential closure, whereas the NP cannot undergo dislocation and thus results in ungrammaticality in ECM constructions. Note that this proposal is problematic in two respects. First of all, arguing that the ECM DP undergoes movement to the matrix clause level to be interpreted referentially, i.e. outside the scope of ∃, is problematic since it would first need to escape the ∃ of its own clause. Recall that I assume following Kelepir (2001) that the existential closure occurs outside the base-generated positions of both the subject and the object. The referential ECM subject needs to first move outside its own ∃ and be interpreted referentially. The evidence I have given in chapter 2 however argued for an overt raising of the ECM subject to the matrix clause. The trigger for this movement cannot be the need to escape ∃ since it would move outside the scope of its own ∃ and would be interpreted referentially leaving no motivation for further movement for interpretation. (One cannot argue that the existential closure does not occur in ECM clauses without any syntactic and/or semantic evidence). Secondly, there is a conceptual problem in the argument that movement is triggered for interpretational requirements. Arguing that a syntactic movement takes place purely for something (∃) that is at the logical form is problematic.

In (17), we observe that the verb *san-* takes a fully finite complement clause, whereas in (18) it subcategorizes for a nominalized complement. The grammaticality of co-referentiality of the second person pronoun in both complement types indicates that the complement is a CP.[13] The analysis assuming the EPP would argue that the matrix *v* in these constructions does not bear the optional EPP feature since no DP moves to Spec *v*P to check it and the structures are grammatical. As for the nominalized complement clause, one can assume (following among others, Kennelly 1993, 1994, 1994b, 2004), that the CP is headed by a DP projection. Assuming that the matrix *v* bears the EPP feature, it would then be checked by the dislocation of this complex DP to Spec *v*P position. In other words, in constructions where the matrix verb is *san-*, the theory assuming the EPP would argue that *v* in some cases bears the EPP feature and in others does not. Apart from the optionality problem, a look-ahead problem would raise in accounting for the passive versions of these sentences as will be discussed in section 5.2.2.

This and the preceding subsection have discussed the dislocation of object DPs. Having provided evidence against the argument that Turkish clause structure lacks a *v*P projection, I have argued that the referential objects, either matrix objects or ECM subjects, move to Spec *v*P. As for the trigger of this dislocation, it has been pointed out that assuming that the phase head *v* bears an EPP feature forcing the DP to move to its Spec position is problematic since the assignment of that feature is optional (Chomsky 2000, 2001, 2004). After discussing the dislocation of DP subjects in the following section, I will

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[13] Compare the grammaticality of the coreferentiality of the pronoun in (17-18) to the ECM version given in Chapter 2 which I repeat below for convenience:
(i)   *Sadece sen-i bun-u yap-abil-ir-sin san-ıyor-sun.   (Chapter 2, ex. 30)
        only you-acc this-acc do-abil-aor-2sg think-impf-2sg
        *'You consider only you to be able to do this.'

propose an analysis of the facts without any need to assume an optional EPP feature for the phase heads.

5.2 EPP effects of T

This section deals with the constructions which are argued to constitute evidence for the occurrence and universality of the EPP feature on T. I first discuss the different behavior of NP_{subj}/DP_{subj} and then passives, subject-to-subject raising constructions and locative inversion constructions in Turkish and show that even though Turkish does not provide concrete arguments against the EPP feature of T, the assumption that EPP is a universal principle faces certain economy problems which do not hold for an analysis which does away with the EPP. Thus, the implication is that dislocation phenomena may in fact be accounted for without appeal to the EPP feature on T.

Within the minimalist framework (Chomsky 2000, 2001, 2004), T^{o} has two sets of uninterpretable features: (i) φ-features, which are argued to be checked by (long distance) *Agree*, and (ii) EPP-features, which is checked by either the move or the merge of a DP in Spec TP position. Consider the following transitive sentence in Turkish:

  (19) Adam kadın-ı ara-dı-ø.

      man woman-acc call-past-3sg

      'The man called the woman.'

How can one argue that the subject *adam* occupies the Spec TP position in the structure? Given the fact that long distance *Agree* checks φ-features of T° and that the language has an expletive *pro*, i.e. *pro_expl*, the question arises whether the following is a possible derivation:

(20) [_TP *pro_expl* [_*v*P adam kadın-ı ara-dı-ø]

man woman-acc call-past-3sg

'The man called the woman.'

The above derivation where the EPP feature of T° is checked by an expletive *pro*, and φ-features of T° are checked by the subject in its base-generated position, i.e. Spec *v*P, should potentially be possible. However, this is not possible due to the Effect on Output Condition introduced in Chomsky (1995):

(21) α enters the numeration only if it has an effect on output.[14]

(Chomsky 1995:294)

According to the universal economy principle stated above, insertion of a covert expletive pronominal in Spec TP position to check the EPP feature of T° is excluded since it does not have any effect on PF, i.e. the two outputs, one with *pro_expl*, the other without, are identical in phonetic form and thus the derivation in (20) is outlawed. This indicates the ranking of rules and principles in that universal principles are less costly than language specific rules that are contingent on parameter choices. Note that the condition on output effect shows that there cannot be a *pro_expl* in Spec TP while the subject remains in its merge

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[14] See also the footnote (121) in Chomsky (1995: 392) where he states that null expletives are allowed in the numeration only if they have an indirect effect at PF or LF.

position. The next question arises as to the syntactic position of the non-referential subject to which I return now.

5.2.1 DP vs. NP subject

The previous chapter, as in the case of objects, has laid down the syntactic differences displayed by referential and non-referential subjects, DP_{subj} and NP_{subj} respectively: (i) difference in interpretation regarding referentiality, (ii) position with respect to adverbials, and (iii) case-marking in embedded clauses. Consider the examples below:

    (22) Ev-e hırsız gir-di-ø.

        home-dat thief enter-past-3sg

        'The house was burgled.'

    (23) Hırsız ev-e gir-di-ø.

        thief home-dat enter-past-3sg

        'The thief broke into the house.'

Regarding the interpretation of subjects, the nominal hırsız 'thief' is interpreted non-referentially in (22), whereas it is a referential thief in (23).[15] As for the ordering with respect to adverbials, we have seen in the previous chapter that the co-occurrence of simplex

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[15] Note however that the noun *hırsız* 'thief' can be interpreted to be referential in (22) only under the contrastive focus reading, i.e. The thief entered the house, not someone else. As for the subject in (23), I will argue that it bears the nominative suffix, whereas the one in (22) is licensed via adhesion to the verb whereby it is only marked for weak case in the sense of de Hoop (1996).

manner adverbs with non-referential subjects results in infelicitous structures due to the ambiguity of the adjuncts between an adjectival and an adverbial reading. The ordering of referential and non-referential subjects with respect to complex manner adverbs, however, is different. I repeat one example below:

(24) a. Kız-ı birdenbire arı sok-muş-ø.

girl-acc suddenly bee sting-evid-3sg

'The girl got bee-stung suddenly.'

b. Kız-ı arı birdenbire sok-muş-ø.

girl-acc bee suddenly sting-evid-3sg

'The bee stung the girl suddenly.'

The non-referential subject occurs lower than the complex manner adverb as seen in (a) above (under the presentational focus reading), whereas the referential object occurs higher. As for the third difference, we have discussed the case-marking in embedded clauses:

(25) a. Ali-ø [ev-e hırsız gir-diğ-in]-i söyle-di-ø.

Ali-nom home-dat thief enter-nomin-poss.3sg-acc say-past-3sg

'Ali said that the house was burgled.'

b. Ali-ø [hırsız-ın ev-e gir-diğ-in]-i söyle-di-ø.

Ali-ø thief-gen home-dat enter-nomin-poss.3sg-acc say-past-3sg

'Ali said that the thief broke into the house.'

The difference between (25a) and (25b) (under the presentational focus reading) indicates that the non-referential subject in (25a) remains in situ undergoing adhesion to the verb and does not bear overt case, whereas the referential subject in (25b) undergoes dislocation out of its base-generated position and is marked genitive in embedded clauses.

Given that the referential subject is dislocated from its base position in the course of the derivation, I argue that the position the referential subject moves to is Spec TP. Given that T° bears both φ-features and an EPP feature, both of which are uninterpretable, and thus need to be checked and deleted before the derivation reaches Spell-Out, the evidence that the referential subject moves out of its merge position as opposed to the non-referential subject can be interpreted to be triggered by the EPP feature of T°. The subject being at the edge of the phase vP can move to Spec TP without violating the Phase Impenetrability Condition (PIC).

However, this analysis assuming that dislocation is motivated by the EPP feature of T° faces some economy problems with respect to non-referential subjects. Recall that non-referential subjects do not leave their base-generated positions and they undergo adhesion to the verb (see chapter 4). The EPP analysis has to either argue that there is a covert pronominal, *pro*_{expl}, in Spec TP position (Rizzi 1982) or that another lexical item moves to Spec TP to check the EPP feature of T (Miyagawa 2003). Consider the sentence with a non-referential subject below with these two options the EPP analysis would have to assume:

(26) [TP *pro*expl [*n*P Ayla-yı arı sok-tu-ø]].

pro Ayla-acc bee sting-past-3sg

'Ayla got bee-stung.'

(27) [TP Ayla-yıᵢ [*n*P arı [VP tᵢ sok-tu-ø]]].

Ayla-acc bee sting-past-3sg

'Ayla got bee-stung.'

The problem for the option that the EPP feature of T can be checked by a covert expletive pronominal in cases where the subject is non-referential is conceptual in the sense that the numeration should only contain material that has an effect on either of the interfaces, PF or LF (cf. the condition on output effect given in (21) above (Chomsky 1995)). An expletive *pro* cannot have an effect on the PF interface since it lacks phonetic content. Moreover, its function as a "filler" of Spec TP prevents it from having an effect on LF. Therefore, positing an expletive *pro* in a language which lacks expletives raises questions. The second (potential) problem for assuming a *pro*expl would be the case requirements. Assuming that a *pro*expl occurs in Spec TP position is problematic in the sense that *pro* needs to be Case assigned (Rizzi 1982). The non-referential nominal needs to have Case as well in order to be licensed in the structure. Since evidence against incorporation has been given, I have proposed in the previous chapter that non-referential nominals can check only weak Case in the sense of de Hoop (1996) via long distance *Agree* with the relevant functional head. In

the case of the NP$_{subj}$, positing a *pro*$_{expl}$ in Spec TP raises the question as to how the NP and

pro check their case features.[16]

The alternate analysis of similar facts is proposed by Miyagawa (2003) who assumes

that in Japanese the EPP-feature of T attracts the accusative nominal to Spec TP, giving rise

to scrambling effects. Thus, accordingly, the Miyagawa style analysis would assume that the

object *Ayla-yı* 'Ayla-acc' would move to the Spec TP position to check the EPP feature of

T° (see 27). This analysis has to assume that verb-raising takes place which would then

render both the subject and the object equidistant to the T head. Being equidistant, T° can

attract either the subject or the object to its Spec position in order to check its

uninterpretable EPP feature. The problem for this analysis arises in structures in which

both the subject and the object are referential, i.e. DPs. Note that in the structure above,

the reason that the DP object moves to Spec TP and not the subject is because the subject

is a non-referential nominal undergoing adhesion to the verb. In cases where the object is

non-referential, NP$_{obj}$, the subject is predicted to move to Spec TP for EPP reasons. This

analysis creates an optionality in cases where both the subject and the object are referential,

thus violating economy. In other words, in cases where both the subject and the object are

DPs and assuming that verb raising takes place, at the point in the derivation when *v*P is

introduced, we cannot know which DP will raise to Spec TP in order to check the

uninterpretable EPP feature of T. A further problem in that case is raised in the sense that

within the theory a nominal which has checked its Case feature is "frozen" in its place and

is predicted not to undergo any further movement (cf. Chomsky 1995:280, Chomsky

2001:6). In that case, even though both the subject and the object are seen to be the

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[16] Manzini and Roussou (2000) state that some literature has argued in favor of the elimination of not only *pro*$_{expl}$ but also *pro* even for the null subject configurations. See, for example, Platzack (1995), Pollock (1996), Manzini and Roussou (2000) and Manzini and Savoia (2002).

potential checkers of EPP via movement to Spec TP, only the subject can move because

the object would have its Case checked in Spec vP where it moves (see the arguments in

Chapter 4 and above) yielding it inactive for further dislocation.

　　To sum up, this section has analyzed the behavior of DP subjects which are argued to

undergo dislocation to the Spec position of T° with which they form an *Agree* relation to

check the uninterpretable φ-features of that functional category. Even though the structures

do not present a concrete argument against EPP, the argument that the trigger of

dislocation of DP subjects to Spec TP position is the EPP feature of T° faces certain

economy problems that are left unaccounted for. The discussion on passives, locative

inversion and subject-to-subject raising will indicate similar economy problems for the

analysis which assume that the dislocation of referential subjects is triggered by the EPP.

5.2.2 Passive

The following sentence exemplifies a passive structure in Turkish:[17]

(28) Ben-ø (polis tarafından) sorgula-n-dı-m.

I-nom police by interrogate-pass-past-1sg

'I was interrogated (by the police).'

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[17] Transitive verbs as well as intransitive verbs can be passivized in Turkish as exemplified below:
(i)　　Bu dükkan-da kitap sat-ıl-ma-z.
　　　　this shop-loc book sell-pass-neg-aor
　　　　'Books are not sold in this shop.'
(ii)　　Ankara-ya bu yol-dan gid-il-ir.
　　　　Ankara-dat this road-abl go-pass-aor
　　　　'(One) can go to Ankara by this road.'　　　　(Göksel 1993:109, ex. 41a&42b)
When the passive is formed from an intransitive verb (as in (ii)), it is not possible to express the agent (cf. Göksel 1993).

According to the Minimalist Program and its predecessor Government and Binding Theory, the external argument is suppressed in a passive construction and can only surface in an oblique phrase, i.e. *polis tarafından* 'by the police' in the example above. The passive verb bears overt passive morphology and lacks object case assignment abilities. Within the later work in minimalism, passive structures, together with unaccusatives, are argued to be deficient in that they do not constituent phases, i.e. they are φ-deficient and thus they do not project a Spec position as opposed to the transitive *v* (Chomsky 2000, 2001, 2004).[18] Within the assumption that the nominative DP, the theme, is base-generated/merged in VP internal position, the question for the present analysis is where it is in (28). I provide two syntactic tests to argue that it is not in the VP like a regular object of a transitive verb but in fact in Spec TP.

The syntactic test I provide to show that the nominative DP in (28) above behaves differently than a regular object comes from extraction facts. Consider the following examples:

(29) Bir adam gör-dü-m çok yaşlı.

one man see-past-1sg very old

'I saw an old man.'   (adapted from Kornfilt 2003)[19]

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[18] See, however, Legate (2003) who argues that passive and unaccusative structures also constitute phases just like a transitive *v*P.

[19] Kornfilt (2003) argues that the adjectival phrase *çok yaşlı* 'very old' scrambles to the postverbal position in the example (29) above. İnce (2005b), on the other hand, accounts for the data by QR. He argues that the indefinite non-specific *bir adam* 'a man' undergoes QR and right-adjoins to TP. The adjectival phrase, then, late-adjoins to the copy of *bir adam* which is then erased. I leave the exact analysis of such constructions aside and use the data to show the distinction between an (indefinite) object and a subject.

(30) *Bir adam sen-i sor-du-ø çok yaşlı.

one man you-acc ask-past-3sg very old

intended: 'An old man asked for you.'

As seen above, extraction out of an object is possible, whereas it results in ungrammaticality in the case of the subject of a transitive verb. This indicates that the object *bir adam* 'a man' in (29) and the subject *bir adam* 'a man' in (30) are not in the same domain (i.e. *v*P). Note that this difference in grammaticality is also observed with the nominative DPs in passives, i.e. grammatical subjects of passives:

(31) ?*Bir adam ez-il-di-ø çok yaşlı.

one man run.over-pass-past-3sg very old

intended: 'An old man has been run over.'

The fact that the sentence is degraded in grammaticality unlike the example in (29) indicates that the theme of the verb *ez-* 'run over' is not in its base-generated position in VP.

A further argument that indicates that the nominative DP in passives is not VP-internal but in fact is in Spec TP comes from control structures. Consider the following:

(32) Ben-ø [PRO yanlış anlaş-ıl-mak] iste-m-iyor-um.

I-nom wrong understand-pass-inf want-neg-impf-1sg

'I don't want to be misunderstood.'

The infinitival clause in the above example has a passive verb and PRO is controlled by the matrix subject *ben* 'I'.[20] I take the grammaticality of this sentence to indicate that the nominative DP in passive structures has not remained in its VP-internal position but has moved to a higher position which I take to be Spec TP.

Going back to the original example in (28), which I repeat below for convenience, the nominative DP *ben* 'I' agrees with the matrix verb in φ-features as shown with person agreement on the predicate.

(28) Ben-ø (polis tarafından) sorgula-n-dı-m.

I-nom police by interrogate-pass-past-1sg

'I was interrogated (by the police).'

The two tests applied above have indicated that the theme has moved from its base-generated position to Spec TP. The minimalist framework of Chomsky (2000, 2001, 2004) assuming that EPP is a principle of UG, argues that this movement is triggered via the EPP feature of the functional category T°, which forces it to project a Spec position into which the DP moves. In order for the theme to be able to move, it has to abide by the Phase Impenetrability Condition (PIC) which informally states that only the head of a phase and its Spec are accessible to operations (cf. Chomsky 2000:108; Chomsky 2001:13; Chomsky 2004:108). A further assumption in Chomsky (2000, 2001, 2004) is that a passive *v* does not constitute a phase, i.e. it is not a φ-complete probe. However, Legate (2003) has argued that passive *v* is in fact a phase head like a transitive *v*. Assuming Legate (2003), at the point in the derivation where the phase *v*P is formed in the example (28) above, the theme DP *ben* 'I'

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[20] See Oded (2006) and Meral (2006) for a discussion on control in Turkish within the minimalist framework.

needs to move to the phase edge, i.e. Spec vP position so that the EPP feature of T° can

attract it without any violation of the PIC. The first problem that arises in this account is

the look-ahead problem. In other words, at the point where the phase vP is formed, there

needs to be some sort of look-ahead, i.e. we need to know that a (φ-complement) T will be

introduced in the next phase level which will force the DP to move to its Spec. According

to the PIC, the DP must first land in Spec vP in order to continue its way to Spec TP. This

implies that the phase head v must also have an optional EPP feature which would trigger

the movement of the DP to its Spec so that it can move to Spec TP in the next phase level.

That is, the assignment of the EPP feature of v and the movement of the DP to Spec vP

depend on the look-ahead mechanism which constitutes an inherent problem for

Chomsky's (2000, 2001, 2004) account.

Another problem posed for this account concerns the DP/NP distinction in Turkish.

Consider the sentences below:

(33) a. [$_{DP}$ Şarkı-ø] hep beraber söyle-n-di-ø.

song-nom all together say-pass-past-3sg

'The song was sang all together.'

b. Hep beraber [$_{NP}$ şarkı] söyle-n-di-ø.

all together song say-pass-past-3sg

'There was singing (going on) all together.'

Both of the examples above are passive structures in Turkish but their subjects are

representationally different. Following the argumentation in this study, I argue that the

nominative DP in (a) occurs in Spec TP, whereas the NP in (b) remains in situ. The evidence for their representational difference comes from the three considerations we discussed in the previous chapter, namely (i) interpretational difference, (ii) position with respect to (manner) adverbials, and (iii) case marking in embedded clauses.

As for their interpretation, the theme subject *şarkı* 'song' in (a) refers to a referential song, here it is a specific and definite one, i.e. DP. The subject of (b), on the other hand, does not refer to a specific song the speaker (or the hearer for that matter) has in mind. It restricts the lexical meaning of the verb *söyle-* 'say', and hence is non-referential. According to Diesing's (1992) Mapping Hypothesis, the DP in (a) needs to move out of its base-generated position in order to avoid being interpreted existentially. The NP in (b), on the other hand, can only be interpreted within the scope of the existential closure.

The second piece of evidence for the structural difference between the two "subjects" in (a&b) above concerns their surface positions with respect to manner adverbials. The fact that simplex manner adverbs sound odd with such examples has been discussed earlier (see section 4.2.2 in Chapter 4). Consider below the use of a complex manner adverb where the nominal *şarkı* 'song' is changed to *marş* 'march/marching song' to obtain a more suitable sentence.

(34) a. [$_{DP}$ Marş-ø] gurur-la söyle-n-di-ø.

march-nom pride-with say-pass-past-3sg

'The march was sung with pride.'

b. Gururla [NP marş] söylendi-ø.

pride-with march say-pass-past-3sg

'There was march singing (going on) proudly.'

* 'The march was sung with pride.'

In the sentence in (a), the DP subject occurs higher in the structure than the complex

manner adverbial *gururla* 'proudly', whereas in (b) we observe that the NP subject occurs in

a position lower than the adverb.[21]

As for the difference in embedded clauses, consider the sentences below:

(35) a. Haber-ler-de [marş-ın gururla söyle-n-diğ-i] kayded-il-di-ø.

news-pl-loc march-gen proudly say-pass-nomin-poss.3sg state-pass-past-3sg

'It was stated in the news that the march was sung with pride.'

b. Haber-ler-de [gururla marş söyle-n-diğ-i] kayded-il-di-ø.

news-pl-loc proudly march say-pass-nomin-poss.3sg state-pass-past-3sg

'It was stated in the news that there was march singing/marches were sung with

pride.'

Recall from the previous chapter that referential subjects, i.e. DP$_{subj}$, bear genitive case

under subordination, whereas non-referential subjects, i.e. NP$_{subj}$ remain bare (Lewis 1967,

Underhill 1976, Kornfilt 1997, Göksel and Kerslake 2005, among others). The difference, I

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[21] One should keep in mind that the judgments are made under the presentational focus reading. The sentence in (b) can be argued to have a scrambled DP subject carrying contrastive focus. I.e., The march is sung proudly, not another song.

have claimed, is due to the difference in the syntactic position of the DP_{subj} and NP_{subj}, the former having been dislocated, whereas the latter remaining in its base-generated position having undergone adhesion to the verb.

Having provided syntactic evidence as to the difference between the subjects in (34), consider the problem that is raised under Chomsky's (2000, 2001, 2004) account. The derivation for the DP subject in a passive structure would bear the same look-ahead problem that I discussed for (28). An additional problem for the theory is the NP_{subj} in the passive structure. As I have argued above and in more detail in Chapter 4, the NP remains in its base-generated position posing a problem for the EPP feature of T. Assuming that T carries the EPP feature, the theory is forced to argue for an empty pronominal in the Spec TP position to check its EPP feature. This would in turn suggest that there is a nominal in Spec vP, the base-generated position of the subject, and also another empty element in Spec TP yielding an uneconomical structure and violating the condition on output effect (Chomsky 1995) (see also the discussion in the previous subsection 5.2.1).

To recapitulate, the canonical analysis of the passive sentence in (28) along the lines of Chomsky (2000, 2001 and 2004) faces two problems: First, it needs to involve a look-ahead mechanism in order to avoid a PIC violation; and second, it needs to posit a phonologically null element in Spec TP of sentences where the grammatical "subject" is an NP and not a DP. Thus, I argue that assuming that T has an EPP feature complicates the derivation and produces an uneconomical account of structures.

5.2.3 Subject to subject raising constructions in Turkish

This section discusses subject-to-subject raising constructions in Turkish and shows that the canonical analysis along the lines presented in Chomsky (2000, 2001, 2004) faces problems. Consider the structures below:

(36) a. Sen-ø ben-i hiç anla-ma-mış gibi görün-üyor-sun.

you-nom I-acc at.all understand-neg-evid like appear-impf-2sg

'You seem not to have understood me at all.'

b. Sen-ø ben-i hiç anla-ma-mış-sın gibi görün-üyor-ø.

you-nom I-acc at.all understand-neg-evid-2sg like appear-impf-3sg
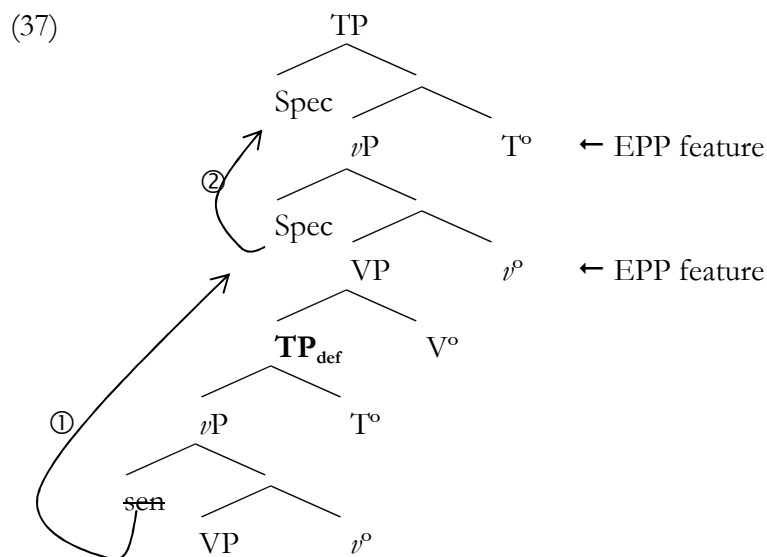
'It seems that you haven't understood me at all.'

In (36a) above, the thematic subject of the verb *anla-* 'understand' shows overt agreement with the raising verb *gibi görün-* 'appear, seem'. In (36b), on the other hand, the agreement is with the embedded predicate. Under the analysis that agreement is checked via Spec-head relation, these facts indicate that the DP *sen* 'you' is in Spec TP in (a) and is in the embedded clause in (b). Let us consider how an analysis along the lines of Chomsky (2000, 2001, 2004) can account for subject to subject raising structures in Turkish.[22] Consider first

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[22] Moore (1998) claims that there are two dialects of Turkish regarding raising. According to one dialect, raising only out of non-agreeing direct complements is possible. According to the other dialect raising both out of agreeing and non-agreeing direct complements is acceptable:

(i)   %Biz-ø sana süt iç-ti-k gibi görün-dü-k.
         we-nom you-dat milk drink-past-1pl like appear-past-1pl
         'We appeared to you to have drunk milk.' (Moore 1998, ex. 1; Mulder 1976, ex. 26b)

the derivation of (36a) where the subject of the embedded predicate has raised to the matrix

clause. Chomsky (2000, 2001, 2004) assumes that raising T, as well as passive and

unaccusative v do not constitute phases, and are φ-deficient in nature. Being defective, they

do not project a Spec position.[23] Consider the tree structure of (36a) below:

(37)

TP
   Spec
      vP   T° ← EPP feature
    ②
      Spec
         VP v° ← EPP feature
         TP$_{def}$ V°
    ①
         vP   T°
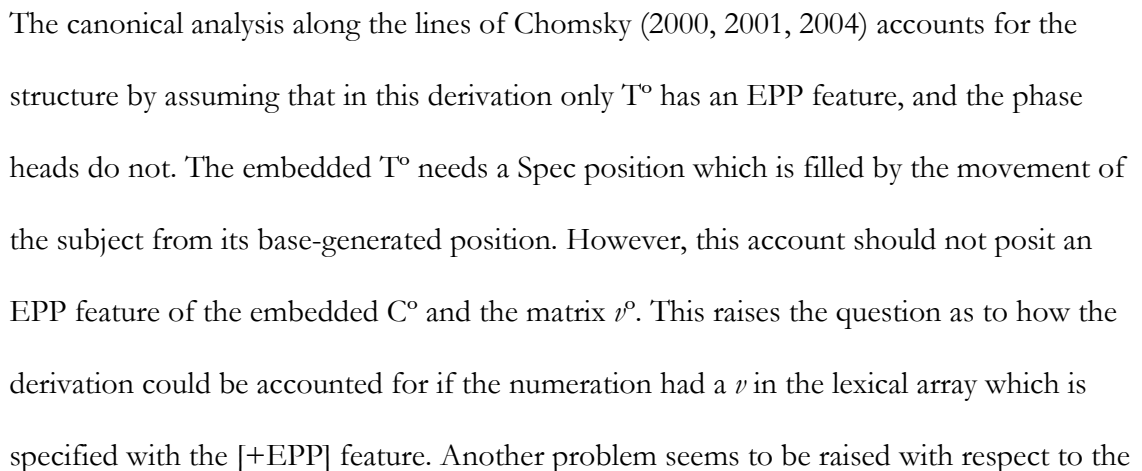   ~~sen~~
         VP v°

As shown in the tree diagram, the raising T is deficient in nature, and does not project a

Spec position. The subject of the embedded predicate is already base-generated at the edge

of the embedded vP phase and thus can move to matrix Spec vP only if matrix v is given the

option of bearing an EPP feature (see movement ① above). Then, T bearing the EPP

feature attracts the DP to its Spec position (movement ②). Note that the optionality of the

EPP of the phase heads, v and C, is a conceptual problem for Chomsky's analysis. The

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According to Moore, this sentence is accepted by one group of speakers, but not for the other group
(including George and Kornfilt (1981), and myself). I suggest that the use of an imperfective verb instead of
the past one in the above sentence would make it more unacceptable at least for some of the speakers of the
dialect who accept (i):

(ii)   *Siz-ø bana süt iç-iyor-sunuz gibi görün-üyor-sunuz.
            you-nom I-dat milk drink-impf-2pl like appear-impf-2pl
            'You appear to me to drink (be drinking) milk.'

[23] This is contrary to Legate (2003) who argues against the claim that passive, unaccusative v and raising T are
defective. She claims that these elements also constitute phases.

question remains as to how the structure could be accounted for if the lexical array did not

have a *v* with the EPP feature. I will argue below that this movement to matrix Spec *v*P can

be accounted for without assigning an EPP feature to *v*.

Let us consider now the derivation of (36b). As has been noted, the DP subject *sen*

'you' agrees with the embedded predicate. The embedded clause is a fully finite clause, i.e.

CP. Consider the tree diagram of the structure below:

(38)

The canonical analysis along the lines of Chomsky (2000, 2001, 2004) accounts for the

structure by assuming that in this derivation only T° has an EPP feature, and the phase

heads do not. The embedded T° needs a Spec position which is filled by the movement of

the subject from its base-generated position. However, this account should not posit an

EPP feature of the embedded C° and the matrix *v*°. This raises the question as to how the

derivation could be accounted for if the numeration had a *v* in the lexical array which is

specified with the [+EPP] feature. Another problem seems to be raised with respect to the

EPP feature of the matrix T°. Since this approach takes the EPP feature of T not to be

optional, it is forced to assume that there is an empty pronominal in matrix Spec TP and

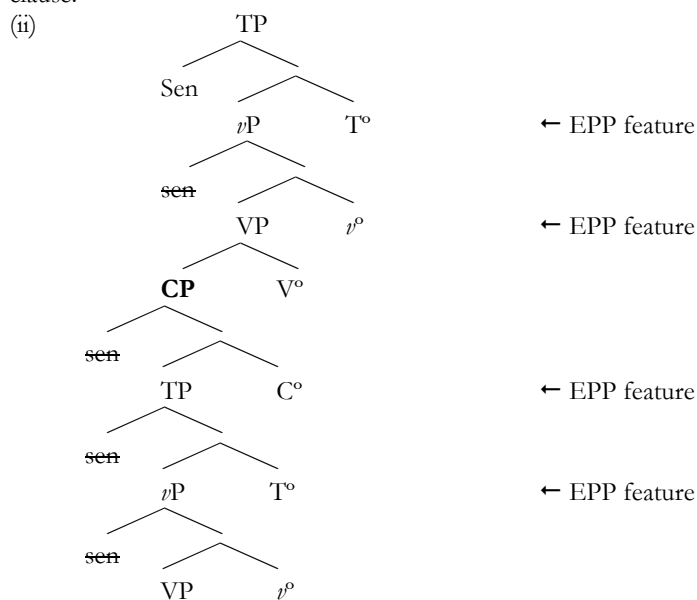that this pronominal cannot be overt at all.[24, 25]

In this section, we have seen that the canonical analysis along the lines of Chomsky

(2000, 2001, 2004) faces certain problems in accounting for subject-to-subject raising

constructions in Turkish.

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[24] The claim that this empty pronominal cannot be overt is true at least in the dialect where speakers do not accept raising out of finite complement clauses (see Moore 1998 and footnote 22 above.)

[25] The Chomskyan analysis runs into problems in accounting for the structure that Moore (1998) argues is grammatical for speakers of dialect B. Consider the structure below:

(i)   (*) Sen ben-i hiç anla-ma-mış-sın gibi görün-üyor-sun.
        you-nom I-acc at.all understand-neg-evid-2sg like appear-impf-2sg
        literally: 'You seem that you did not understand me at all.'

The asterisk in paranthesis indicates Moore's claim that this structure is grammatical only for speakers of a certain dialect. The difference between (i) and the structure in (36b) above is that there is overt agreement on the matrix predicate indicating that the subject *sen* 'you' has moved from the embedded clause to matrix clause:

(ii)
```
                TP
           Sen      
                vP       T°          ← EPP feature
            sen
                    VP      v°       ← EPP feature
               CP      V°
            sen
                    TP       C°      ← EPP feature
            sen
                    vP       T°      ← EPP feature
            sen
                    VP      v°
```

The analysis along the lines of Chomsky (2000, 2001, 2004) has to assume that the embedded T°, and C°, together with the matrix v° and T° have an EPP feature forcing the DP *sen* 'you' to move through their Spec positions until the final target of movement, i.e. matrix Spec TP. However, according to Chomsky (2001) the goal has to be active in order to be able to undergo an *Agree* relation with the probe. A noun is active only when it has (uninterpretable) structural Case feature. Once its Case feature is valued, it is "frozen in place" and can no longer enter into any relation (Chomsky 2001:6). Therefore, assuming the derivation above is problematic since the DP *sen* 'you' values its Case feature when it moves to the embedded Spec TP via φ-feature *agree* with embedded T.

Moore (1998) proposes a Copy-raising analysis for this kind of raising constructions, i.e. where both the embedded predicate and the raising predicate show overt agreement. In other words, he argues that there is a coindexed *pro* in the base-generated position of the DP in this dialect.

5.2.4 Locative Inversion in Turkish

This section discusses locative inversion constructions in Turkish and discusses the problems of the canonical EPP analysis along the lines presented in Chomsky (2000, 2001, 2004). Consider the structures below:

(39) Kafes-in iç-in-de bir aslan uyu-yor-ø.

cage-gen inside-poss.3sg-loc one lion sleep-impf-3sg

'A lion is sleeping inside the cage.'   (Özsoy 1998:359, ex.1a)

The structure above exemplifies what has been called locative inversion in Turkish. The relativization of a constituent of the locative phrase employs the strategy used for subjects.[26] The relativization strategy of the locative phrase has been accounted for by the argument

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[26] To put a very rough summary of the relativization strategies in Turkish, there are two kinds which are traditionally called the subject participle (SP) and the object participle (OP). The subject participle *-(y)An* is used for relativizing a subject or part of the subject (ii), whereas the object participle *-DIK* is used for relativizing a non-subject (iii):

    (i)   Adam-ø kitab-ı oku-yor-ø.
                man-nom book-acc read-impf-3sg
                'The man is reading the book.'
    (ii)   kitab-ı oku-**yan** adam
                book-acc read-SP man
                'the man who is reading the book'
    (iii)   adam-ın oku-**duğ**-u kitap
                man-gen read-OP-poss.3sg book
                'the book that the man is reading'

The verb in both types of the relative clause is 'non-finite', i.e. in participial form. The main difference between the OP and SP strategies is that in the object participle clause the subject is marked with the genitive case and there is a possessive suffix on the verb agreeing with the subject in person and number. In the subject participle case, on the other hand, there is no overt agreement (see Underhill 1972, Hankamer and Knecht 1976, Kornfilt 1984, Özsoy 1994, Çağrı 2005, Göksel and Kerslake 2005, among others, for the discussion of relative clauses in Turkish).

that the locative phrase occupies the base-generated position of the subject, Spec vP, and the indefinite subject is argued to remain VP internally (Poole 1993, Kennelly 1994)[27]:

(40) [Operator$_i$ [e$_i$ iç-in-de] bir aslan uyu-yan] kafes$_i$

inside-poss.3sg-loc one lion sleep-SP cage

'the cage in which a lion is sleeping' (Özsoy 1998:359, ex.1b)

As opposed to the analyses which assume that the locative phrase occupies the Spec vP position, Özsoy (1998) argues that the indefinite subject of the unergative verb in (39) carries all the subject properties displayed by indefinite DPs in Turkish, and that the locative phrase is *adjoined* to VP allowing the indefinite subject to remain in its base-generated position licensed by the zero case marker assigned by default to DPs in Spec vP which do not possess φ-features, hence do not move to Spec AgrsP at LF (Özsoy 1998:362).[28]

Let us consider how Chomsky's (2000, 2001, 2004) analysis can account for the structure in (39). Putting aside for the moment the account proposed by Özsoy (1998), the canonical analysis has to posit that in sentence (39) the locative phrase moves from Spec vP position to Spec TP position in order to check the uninterpretable EPP feature of T°. Under Özsoy's (1998) analysis, the only difference is that the locative phrase is adjoined to VP and it does not replace the subject. Özsoy (1998) also argues that the locative phrase moves at LF to Spec TP to check for the features of T°.[29]

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[27] The original claim is that the locative phrase is in Spec VP (the VP-internal subject hypothesis). Kennelly (1994) assumes that the indefinite subject remains inside V'.

[28] Note that Özsoy (1998) uses a different definition of specificity than the one offered in this study. She argues that specificity is encoded by φ-features, and a non-specific nominal lacks φ-features.

[29] Her original claim is that the locative phrase moves to Spec Agr$_s$P where it checks the feature of Agr$_s$.

The problem for the analysis along these lines concerns first of all that unlike English locative inversion is not possible with definite DPs in Turkish:

(41) Kedi-ø divan-ın üst-ün-de uyu-yor-ø.

cat-nom sofa-gen top-poss.3sg-loc sleep-impf-3sg

'The cat is sleeping on the sofa.'

Note that the subject of the same unergative verb, i.e. *uyu-* 'sleep', is interpreted as definite and the constituent of the locative phrase cannot be relativized with the subject participle strategy:

(42) *Kedi-ø üst-ün-de uyu-yan divan

cat-nom top-poss.3sg-loc sleep-SP sofa

intended: 'the sofa on which the cat is sleeping'

The canonical analysis of locative inversion assuming that T° bears an EPP feature has to assume that either a DP as in (41) or a locative phrase as in (39) can check that feature in Turkish. Moreover, the language is marked in a way that it is argued to allow only indefinite DPs in locative inversion structures. Note that the same set of data can be accounted for without assuming that a DP or a locative phrase satisfies the EPP of T. As I will argue below, it is the feature specification of the nominal that creates the distinction between (39) and (41) above.

A further problem is raised for the canonical analysis that assumes EPP with the occurrence of non-referential nominals in locative inversion structures. Consider below the sentences where we have NPs as subjects:

(43) Ağac-ın dal-ın-da kuş öt-üyor-ø.   unergative

tree-gen branch-poss.3sg-loc bird chirp-impf-3sg

'There is bird-chirping on the branch of the tree.'

(44) Masa-nın üst-ün-de kitap var.   unaccusative (existential)

table-gen top-poss.3sg-loc book exis

'There is a book on (top of) the table.'

(45) Oda-da mülakat yap-ıl-ıyor-ø.   unaccusative (passive)

room-loc interview do-pass-impf-3sg

lit. 'There is interview-making in the room.' (There is/are interview/s going on ...)

(46) Kavanoz-un iç-in-e karınca gir-miş-ø.   Unaccusative

jar-gen inside-poss.3sg-dat ant enter-evid-3sg

lit. 'There has been ant-entering into the jar.' (There are ants in the jar.)

Recall from Chapter 3 that I have given syntactic evidence as to the claim that the subjects of these sentences are NPs and not DPs. In Chapter 4, I have argued that they are licensed via adhesion defined in (56) section (4.3.4). Moreover, evidence has been given in favor of the claim that NPs remain in their base-generated positions unlike DPs. Chomskyan

analysis of locative inversion would argue that these structures can be accounted for by the same line of analysis given for (39). In other words, this account would overlook the representational distinction between DP and NP in Turkish contrary to the claims made in this study.

Moreover, this account of locative inversion cannot account for the ambiguity of the following sentence. I repeat Özsoy's (1998) example:

(47) Kafes-in iç-in-de bir aslan uyu-yor-ø.

cage-gen inside-poss.3sg-loc one lion sleep-impf-3sg

'A lion is sleeping inside the cage.' (Özsoy 1998:359, ex.1a)

I claim that this sentence is ambiguous with respect to the referential properties of the subject DP *bir aslan* 'a lion' in that it can be interpreted as an indefinite, nonspecific lion or an indefinite specific one. The difference in the relativization strategies used constitutes evidence for my claim:

(48) İç-in-de bir aslan uyu-yan kafes

inside-poss.3sg-loc one lion sleep-SP cage

'the cage in which a lion is sleeping' (Özsoy 1998:359, ex.1b)

(49) İç-in-de bir aslan-ın uyu-duğ-u kafes

inside-poss.3sg-loc one lion-gen sleep-OP-poss.3sg cage

'the cage in which a lion is sleeping'

As seen above, the constituent of the locative phrase is relativized with the subject participle in (48), whereas it is relativized with the object participle in (49). The canonical analysis along the lines of Chomsky (2000, 2001, 2004) does not predict any difference between these two readings of *bir aslan*, hence cannot account for (48) and (49). The analysis I will propose, however, not only predicts the interpretational difference but also accounts for the different relativization strategy used, since I will argue that it is the feature specification of the DP that determines its syntactic position and its Case features and that therefore there is no need to assign an EPP feature to T.[30]

A further problem for the canonical account of locative inversion concerns the grammaticality of certain transitive verbs. The extraction of a constituent of a locative phrase using the subject participle strategy is not allowed in transitive structures:

(50) Koltuğ-un arka-sın-da çocuk-ø kitap oku-yor-ø.

armchair-gen behind-poss.3sg-loc child-nom book read-impf-3sg

'The child is book-reading behind the armchair.'

(51) *Arka-sın-da çocuk-ø kitap oku-yan koltuk

behind-poss.3sg-loc child-ø book read-SP armchair

intended: 'The armchair behind which the child is book-reading'

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[30] An additional issue regarding locative inversion and the EPP analysis is that the EPP checks φ-features whereas locative inversion involves movement of PP to Spec TP. An analysis assuming EPP-based argumentation would have to hold that the φ-features of the complement DP of PP percolate to the head, whereby the φ-features of T are checked.

As seen above, the transitive verb *oku-* 'read' does not allow locative inversion. However, the following exemplifies grammatical structures where "locative inversion" occurs with transitives:

(52) Kulübe-nin iç-in-de çocuğ-u akrep sok-tu-ø.

   hut-gen inside-poss.3sg-loc child-acc scorpion sting-past-3sg

   'The child got stung by a scorpion inside the hut.'

(53) İçinde çocuğu akrep sokan kulübe

   inside-poss.3sg-loc child-acc scorpion sting-SP hut

   'the hut in which the child got stung by a scorpion'

As opposed to the structure in (51), the one in (53) is totally grammatical and this poses a challenge to the canonical analysis. In order to account for (53), one has to argue that the subject *akrep* 'scorpion' is in its base-generated position and the locative phrase occupies Spec TP. Then the question arises as to why the same account cannot explain the ungrammaticality of (51).

As another point, consider that there is a problem with this kind of analysis for locative inversion in Turkish in that it is based on the relativization strategy used. The syntactic evidence used to argue that the locative phrase checks the EPP feature of T° is to check if the constituent of the locative phrase is relativized using the so-called subject participle strategy. This is very problematic in the sense that in impersonal passive structures in Turkish, i.e. structures where an intransitive verb is passivized, the only way to extract any nominal in the structure is via using the subject participle:

(54) Bu yol-dan araba-yla plaj-a gid-il-ir-ø.

    this road-abl car-inst beach-dat go-pass-aor-3sg

    '(One) goes to the beach by car from this road.'

(55) Bu yol-dan araba-yla gid-il-en plaj

    this road-abl car-inst go-pass-SP beach

    'the beach (x) such that one goes to (x) by car from this road'

(56) Bu yol-dan plaj-a gid-il-en araba

    this road-abl beach-dat go-pass-SP car

    'the car (x) such that one goes to the beach by (x) from this road'

(57) Araba-yla plaj-a gid-il-en bu yol

    car-inst beach-dat go-pass-SP this road

    'this road (x) such that one goes to the beach by car from (x)'

The sentences above indicate that relativizing any of the nominals in the structure where there is no subject is achieved via the use of the subject participle. This implies that using the subject participle formation as syntactic evidence for the claim that the locative phrase moves to Spec TP to check the EPP feature of T is very problematic.

    To summarize, this section (5.2) has discussed that the DP subjects undergo movement to Spec TP position as opposed to NP subjects which remain in their base-generated positions undergoing adhesion to the verb as discussed in the previous chapter. I

have shown that the analysis assuming that the dislocation of DP$_{subj}$ to Spec TP is triggered by the EPP feature of T° needs to account for certain economy problems that do not raise in an analysis which eliminates the EPP. Thus, the implication of the discussion is that dislocation phenomena may in fact be accounted for without appeal to the EPP feature on T° (cf. Castillo et al 1999; Martin 1999; Grohmann et al 2000; Boeckx 2000, 2005; Bošković 2002, 2002b, 2005, among others). The next section gives the proposal for an analysis of these constructions without any need for the EPP.

5.3 An EPP-free solution to Turkish data

This section will present a new perspective to explain the Turkish data which pose some economy problems for the theory assuming that the Extended Projection Principle (EPP) dictates a universal requirement that certain functional projections need to have an extra Spec position in order to account for dislocation phenomena.

An inherent redundancy regarding the trigger of dislocation of arguments to Spec positions of functional heads has been formed in the early stages of Minimalism (Chomsky 1995). There have been two major sources of the same kind of dislocation phenomenon, namely EPP and Case, forcing the other to become a "free rider" in Chomsky's (1995) terms.

The EPP has been introduced in the theory as a principle stating a universal requirement that all sentences have a (possibly null) subject (Chomsky 1981:26; 1982:10).[31]

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[31] Chomsky (1981) discusses the behavior of pleonastic elements *it* and *there* in English, and states that the principle that every sentence must have a (possibly null) subject does not derive from theta-theory since these elements do not bear theta-roles; nor does it derive from considerations of subcategorization. He suggests that it may be derived from the theory of predication in the sense of Williams (1981), along lines suggested in

With the move from the Government and Binding Theory to Minimalism, EPP has turned from a requirement on sentence structure into a feature whose presence required a Spec position to be filled. In Chomsky (1993), EPP was taken to be a morphological property of Tense in terms of strong vs. weak NP-features. Chomsky (1995), however, states EPP as the strong D-feature of T. This view is expanded by Alexiadou and Anagnostopoulou (1998) by allowing EPP checking via verb movement to T. After the removal of functional heads that bear only uninterpretable features, such as Agr° and null D°, EPP is stated as a strong N-feature of T (Chomsky 2000). The effect of the EPP, however, still remained constant. It requires the Spec position of the head it occurs in to be filled by an NP. However, an important change is introduced in Chomsky (2000) which has broadened the effect of EPP. Chomsky (2000) proposes that apart from the EPP-feature of T, the phase heads, i.e. C and *v*, also bear an EPP-feature, which may vary parametrically among languages and if available, is optional. This has been labeled as *generalized EPP* (cf. Chomsky 2000, Bošković 2005, among others). As noted by Boeckx (2000:6), the fact that the EPP feature of the phase heads is optional and that checking can in fact be done by the operation *Agree* (Chomsky 2000, 2001) has deconstructed the EPP in rejecting its necessarily overt character.

Apart from the EPP, Case was also considered to be the trigger of dislocation of arguments to Spec positions of functional categories. Being uninterpretable both for the nominal and the functional head, Case has been considered to be the formal feature par excellence (Chomsky 1995:278). Attempts to reduce the inherent redundancy in the theory concerning the trigger of dislocation of nominals have concentrated either on eliminating

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Rothstein (1983). However, Boeckx (2000:2) notes that Rothstein's (1983) account of EPP as a concept of saturation to motivate the need of predicates to have a subject suffers from the fact that it makes EPP follow from semantic principles. The sentences where EPP is satisfied by semantically null expletives, however, challenge this semantic understanding of the EPP.

the role of Case in syntax (Marantz 1991; Chomsky 2000, 2001, 2004; McFadden 2004; Gohil 2005) or on the elimination of the EPP as a universal principle (Martin 1999; Castillo et al 1999; Grohmann et al 2000; Boeckx 2000; Bošković 2002, 2005; Epstein et al 2005, among others).

The previous sections in this chapter have shown that the referential arguments in Turkish undergo dislocation from their base-generated position and the analysis that this dislocation is triggered by the EPP feature of the functional heads faces some economy problems in trying to account for the data. I propose that the data can be accounted for without any need to posit an (optional) EPP feature in line with studies such as Martin 1999; Castillo et al 1999; Grohmann et al 2000; Boeckx 2000; Bošković 2002, 2005; Epstein et al 2005, among others. Note, however, that these studies differ in their proposals to account for the data in the sense that Martin (1999), Boeckx (2000), Grohmann et al (2000), Bošković (2002b), for example, account for the facts by appealing to the Inverse Case Filter, i.e. the requirement that traditional Case assigners have to check/assign their Cases. I, however, follow Bošković (2005) and argue that it is in fact the uninterpretable Case features of the nominals, not the features of the functional heads that force them to undergo movement. The next section discusses the Case features of nominals in this respect.

5.3.1 Proposal: Case feature of the nominals

Recall that two conditions have been proposed in the theory for argumenthood, namely referentiality assignment and Case. Having argued that Turkish in fact possesses two

different projections of nominals, i.e. DP and NP, the question arises as to how we can account for their behavior in syntactic terms. In the previous chapter, I have proposed that non-referential nominals are licensed in syntax via the *adhesion* operation whereby the NP adheres to the verbal head in syntax, and I have also argued that NPs check weak Case (in the sense of de Hoop 1996) via φ-feature *Agree* relation formed with the relevant functional head, $v°$ for object NPs and T° for subject NPs. As for referential arguments, I argue that they bear strong Case features (de Hoop 1996). My proposal elaborates on de Hoop's (1996) distinction of weak vs. strong Case features. De Hoop (1996) distinguishes between two kinds of structural Case: weak vs. strong, depending on the level of structure they are licensed. She argues that weak Case is licensed at D-structure, and objects that bear weak Case are interpreted as part of the predicate, whereas strong Case is licensed at S-structure. I adapt her distinction within the minimalist framework. I have argued that NPs bear weak Case which they check via φ-feature *Agree* with the relevant probe ($v°$ for object, T° for subject) in their base-generated position. This is in line with Chomsky's (2000, 2001, 2004) proposal that states that Case does not induce any operations, i.e. there is no dislocation triggered by the Case feature. Chomsky (2000, 2001, 2004) explicitly proposes that Case is a φ-set which deletes under the φ-feature *Agree* relation formed between the nominal and the relevant probe ($v°$ or T°). My proposal argues that only weak Case can be checked and licensed via φ-feature Agree, i.e. only non-referential arguments can check their case features in situ. We have seen that referential nominals, i.e. DPs, undergo dislocation from their base-generated positions to Spec positions of vP or TP, whereby they are also interpreted outside the scope of the existential closure. The previous sections in this chapter have indicated that the analysis assuming that this movement is triggered by the EPP is problematic. I thus argue that a DP bears strong Case feature which is responsible for

triggering the dislocation of that DP to the Spec of functional categories (contra Chomsky 2000, 2001, 2004). Before moving on to the details of how this proposal can account for the data, let me discuss the Case properties of DPs in more detail.

As opposed to NPs which bear weak Case features, I propose that DPs bear strong Case features. My proposal is different from the ones in Kennelly (1994), Kelepir (2001) and Öztürk (2005). Kennelly (1994) argues that non-referential objects, non-case-marked object "DP"'s in her terminology, remain VP-internally and are licensed by the verb under government via strict sisterhood. She focuses only on objects. Kelepir (2001), in her discussion about how zero-marked objects receive Case, does not make a choice among the different approaches in the literature such as de Hoop (1996) and van Geenhoven (1998). Moreover, her discussion concerns only the object nominals as is the case with Kennelly's (1994). Öztürk (2005), on the other hand, argues that bare nominals introduced in the structure as the sister of the V° check the weak Case feature of the relevant thematic head via verb movement. Arguing that Turkish does not have a DP layer assigning referentiality to the nominal, she proposes that de Hoop's (1996) strong Case feature corresponds to [Case+Referentiality] feature, whereas weak Case feature corresponds to Case feature without referentiality within her framework. Note that this analysis is problematic in two respects. First of all, semantic and syntactic evidence has been given in Chapter 2 that Turkish possesses a DP layer assigning referentiality to the nominal (cf. Ketrez 2005), and secondly, based on her argument that Turkish lacks DP, Öztürk (2005) initially claims that referentiality is dependent on case in a language like Turkish. However, in her discussion on weak Case of the pseudo-incorporated nominals, she claims that case, in fact, can exist without the referentiality feature, thus denying her initial claim.

My proposal does not only apply to objects but also subjects in the sense that I argue that the representational distinction between referential and non-referential nominals also reflects their properties in Case licensing. NP subjects and objects bear weak Case, whereas DP subjects and objects bear strong Case features. I, however, would like to elaborate more on the strong Case feature. Recall from the discussion in Chapter 2 that I have argued against the previous analyses which treated *bir NP* structures on a par with bare NPs. The syntactic evidence I have given has indicated that they are referential as opposed to the bare NPs which are non-referential. The previous analyses have focused only on the overtness of case-marking on the nominals (see for example, Dede 1986; Enç 1991; Diesing 1992; Kennelly 1993, 1994, 1997b; Kelepir 2001, among others). Since nominative is already a phonologically null marker in Turkish, the discussion in these studies focused only on object nominals. I claim that the phonologically overt/covert nature of the Case marker in fact corresponds to a distinction in the strong Case feature itself. Let me illustrate my proposal on object DPs first:

(58) Ali-ø [DP (bu) kitab]-ı oku-du-ø.

Ali-nom (this) book-acc read-past-3sg

'Ali read this/the book.'

(59) Ali-ø [DP bir kitab]-ı oku-du-ø.

Ali-nom one book-acc read-past-3sg

'Ali read a specific book/one of the books.'

(60) Ali-ø [_DP bir kitap] oku-du-ø.

     Ali-nom one book read-past-3sg

     'Ali read a(ny) book.'

As seen above, there is a distinction between the DP objects in terms of interpretation

which is reflected in their Case marking. The DP in (58) is interpreted to be definite (and

thus specific), whereas the one in (59) is indefinite but specific. Note that both DPs are

marked with overt accusative Case as opposed to the indefinite non-specific DP

exemplified in (60). I propose that all DPs bear strong Case features, but the difference

observed among them needs an explanation. I claim that the features of the head D° play a

role in what kind of strong Case feature the DP bears. As seen in (58-59), when D° bears

the feature [+specific] the accusative marking is overt, whereas when it bears the feature

[-specific] it is not. Based on the case of object nominals, I claim that strong Case feature

can be overt or covert depending on the [±specific] feature of D°.[32] I argue that this extends

to the DP subjects as well. In other words, when the DP_{subj} is marked with the feature

[+specific] it bears overt nominative, whereas when it is marked with the feature [-specific]

it bears covert nominative. As mentioned earlier, since nominative is already a

phonologically null marker in the language, the distinction cannot be observed

morphologically.[33]

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[32] The claim that the features of the head of the DP projection is active in what kind of a strong Case feature (i.e., overt or covert) the nominal will bear is not too far-fetched since it is the occurrence of a DP layer itself which allows the nominal to bear strong Case. Note also that I avoid using the term *null case* since it has been proposed in the literature for the Case features of PRO (see Chomsky and Lasnik 1993, Martin 2001).

[33] A syntactic difference between specific and nonspecific subjects is observed in the relativization strategy used:

(i)   bir kitap oku-n-an oda

        a book read-pass-SR room

        'the room where a (non-specific) book is/was read.'

(ii)   bir kitab-ın oku-n-duğ-u oda

Note that the covert structural Case I am proposing is also different from default Case. I argue that referential arguments, i.e. DPs, bear covert structural Case when D° bears the feature [-specific]. Default Case, on the other hand, has been introduced to account for adverbial structures like the following where there is no probe (T° in this case) with which the subject can form a φ-feature Agree relation to check its case feature as well (cf. Kornfilt 1999):

(61) [**Ben** Skopelos-a gid-ince], sen-ø de gel-ir-sin.

   I Skopelos-dat go-adv you-nom too come-aor-2sg

   'When I go to Skopelos, you'll come, too.'

The bold-face subject *ben* 'I' cannot bear nominative like the subject of the main clause *sen* 'you', since there is no temporal element in the adverbial clause with which it can form an *Agree* relation. Thus, it has been argued to bear default Case (Kornfilt 1999). Note that assignment of default Case is totally different from the structural covert Case I am proposing in that covert Case depends on the features of the D head, whereas default Case occurs in the absence of a suitable probe.

   To sum up, I propose a distinction in the nature of the strong Case DP checks. I have claimed that the head properties of the DP projection are operative in the case-checking mechanism in that the [±specific] feature of D° correlates with the covert or overt strong Case the DP checks. In other words, when the D head bears the feature [+specific], the DP checks strong overt Case, whereas when it bears the feature [-specific], the DP is able to

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   a book-gen read-pass-NSR-poss.3sg room
   'the room where a specific book is/was read.'
 This supports the distinction of subject DPs based on the [±specific] feature of D°.

check only covert strong Case. I also claim that the covert structural Case is the reason for the relevant restriction in mobility of non-specific [bir NP] constructions as opposed to specific DPs which are marked with overt structural Case:

(62)

	Structural Case	
↓		↓
Weak		*Strong*
NP	↓	↓
	Overt	*Covert*
	DP	DP
	[+specific] D°	[-specific] D°
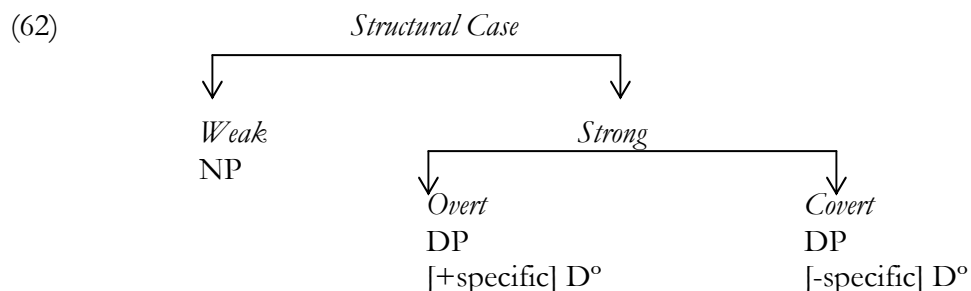
As seen in the chart above, I distinguish between weak and strong Case following de Hoop (1996). I, however, elaborate on de Hoop's (1996) account and claim that the [±specific] feature of D° determines the properties of strong Case with respect to overt vs. covert Case. Moreover, I depart from de Hoop in the sense that I claim that the difference between strong and weak Case does not correspond to the level of structure they are assigned/checked as is originally proposed by de Hoop (1996). They are both checked in syntax but their licensing mechanism is different: weak Case can be checked via φ-feature Agree formed between the NP and the relevant probe as proposed by Chomsky (2000, 2001, 2004) (see the previous chapter). I, however, propose an explanation of dislocation of DPs in Turkish along the lines of Bošković (2005) in the sense that I argue that it is the strong Case feature the DP bears which triggers its dislocation out of its merge position (contra Chomsky 2000, 2001, 2004).

Bošković (2005) argues for a new account of successive cyclic movement that reconciles Takahashi's (1994) Minimal Chain Links Principle approach and Chomsky's

(1995, 2000, 2001, 2004) feature-based successive cyclicity account. In Takahashi's system, successive cyclic movement is driven by the requirement that chain links must be as short as possible. Furthermore, movement is assumed to start only after the final target of movement enters the structure. In other words, the movement has to wait until the target is introduced in the structure. This analysis is based on the operation Form Chain. Consider the following example:

   (63) What$_i$ do you think [$_{CP}$ t$_i$ [$_{C'}$ that Mary bought t$_i$]]?   (Bošković 2005:4, ex.1)

The MCLP, the requirement that all chain links be as short as possible, forces *what* to stop at the embedded Spec CP on its way to matrix Spec CP. Note however that in this approach the movement of *what* has to wait until the matrix interrogative C is introduced in the structure.

Chomsky's analysis of successive cyclicity, however, dispenses with the operation Form Chain. Based on the notion of phase, this analysis treats every step of successive cyclic movement as a separate operation with its own feature checking motivation. Movement in this approach starts before the final target enters the structure. Chomsky achieves this by giving an EPP feature to the phase heads which requires the movement of an element to the Spec position of that phase head. According to the PIC, only the head and the Spec of a phase are accessible for movement to a position outside of the phase. Thus, adding an EPP feature to the phase head and thus motivating the movement of the element to Spec position allows it to undergo further movement. This, however, leads to a look-ahead problem since when movement occurs in phase A, we need to know what will happen in a higher phase B.

Bošković argues for a reconciliation of these two accounts. He argues based on

Bošković (2002) and Boeckx (2003) that successive cyclic movement does not involve

feature checking with intermediate heads and argues against the feature-checking approach

to movement. Unlike Takahashi's (1994) approach, his analysis does not require the Form

Chain operation, as a result of which there is no need to wait until the final target of

movement enters the structure for the movement to start. Under this analysis, the look-

ahead problem raised by the feature-checking analysis does not raise. He specifically argues

that the intermediate EPP effects (i.e. movement to embedded Spec positions in successive

cyclic movement) can be deduced from the independently required uninterpretable feature

on the moving element (contra Boeckx 2000). He gives the following scenario where XP is

a phase and Y needs to undergo movement to W via Spec XP:

(64)　　W $[_{XP}$ … X …　　Y]
　　　　uF　　　　　　iF
　　　　K　　　　　　　uK

(65)　　$[_{XP}$ … X … Y]
　　　　　　　　iF
　　　　　　　　uK　　　　　(Bošković 2005, ex. 30-31)

Within Chomsky's system, an element has to have an uninterpretable feature in order to be

visible/active for movement (Activation Condition). Y is active since it has uK and

according to the PIC, it has to move to the Spec XP, i.e. edge of a phase, in order to be able

to undergo further dislocation. Chomsky achieves this by assigning an EPP feature to the

phase head X. However, as Bošković points out, at the derivation where the phase XP is

merged, i.e. (65), we need to know that W will enter the structure, resulting in the look-

ahead problem. Bošković's proposal is that at the point in the derivation where the phase XP is merged, we in fact know that Y will eventually move outside of XP without any look-ahead involved, since Y bears the uninterpretable feature K which can never be checked if it remains within the XP. Following Chomsky (2001), Bošković assumes that when a phase is reached, the complement of the phase is sent to Spell-Out, at which point word order in that unit is established (cf. Fox and Pesetsky 2005). In other words, Bošković argues that because of the presence of *u*K, Y needs to move to Spec XP in order to avoid being sent to Spell-Out. He further argues that Agree is not sufficient, and the uninterpretable feature on Y requires Y to function as a probe, i.e. it should c-command the checker in the Spec WP position. Under this approach, the phase head X has nothing to do with the movement of Y to Spec XP position, i.e. it is not a property of X itself (e.g. EPP feature) as is the case with Chomsky's analysis. He also deduces the PIC effects: Y has to move to Spec XP, XP being a phase, in order not to get caught in a spell-out unit which would freeze it for pronunciation purposes.[34]

I assume following Bošković (2005) that it is the strong Case feature of the nominals which trigger their dislocation to Spec positions of functional categories with which they form a φ-feature *Agree* relation. As pointed out in the discussion above, this approach does not raise a look-ahead problem which the EPP analysis faces and the PIC effects are also explained. The next sections will discuss the application of this approach to the data we have discussed at the beginning of the chapter, i.e. "EPP effects of *v*" (object shift and

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[34] Bošković (2005) also discusses the derivation of cases where a lower copy is pronounced. He argues that pronunciation is fixed only for heads of trivial chains (i.e. full chains). In other words, PF will not freeze Y for pronunciation if at the point when Y is first sent to Spell-Out, Y is not the head of a trivial chain, i.e. it is not a full chain. Under the copy theory of movement, if Y moves to Spec XP, the phonology will "know" that Y in the complement of the phase X, i.e. the spell-out domain, is a lower copy (i.e. it is not a complete chain) since it sees another copy of Y. If Y does not move to Spec XP, the phonology will see only one copy of Y which indicates that Y is the complete chain for phonology, thus it will freeze the pronunciation of Y in its place in the complement of X.

ECM) on the one hand, and "EPP effects of T" (DP vs. NP subjects, passive, subject-to-subject raising, and locative inversion) on the other.

5.3.2 Account of "EPP-effects of *v*"

In this and the coming section, the aim is to account for the data introduced at the beginning of the chapter without any appeal to the EPP. Arguing that EPP is eliminable, I propose an account of the dislocation of arguments which depends on the Case properties of DPs. Following Bošković (2005), I argue that it is the Case properties of the DP which force it to undergo dislocation, (whereby they also abide by Diesing's (1992) Mapping Hypothesis). Note that this is contra Chomsky (2000, 2001, 2004) in that he assumes that Case is an uninterpretable φ-set which deletes as a result of the φ-feature checking formed via the operation *Agree* between the probe and the goal. This analysis also argues against the claims made in Martin (1999), Boeckx (2000), Bošković (2002b) that movement is due to the Inverse Case Filter, which states the requirement that traditional Case assigners must check/assign their Case in a Spec head configuration. Under this analysis, there is no need to enforce the case checking of the traditional case assigners, which accounts for the existence of verbs that appear to assign Case only optionally (Bošković 2005:36). I will show that the strong Case feature of the nominal and Chomsky's (1995) Minimal Link Condition can account for the data in Turkish:

(66) *Minimal Link Condition*

K attracts α only if there is no β, β closer to K than α, such that K attracts β.

(Chomsky 1995:311)

Focusing on simplex clauses, let us first consider the so-called object shift:

(67) a. Ayla-ø [$_{DP}$ şarkı-yı]$_i$ güzel t$_i$ söyle-di-ø.

Ayla-nom song-acc beautiful say-past-3sg

'Ayla sang the song beautifully.'

b. Ayla-ø güzel [$_{NP}$ şarkı] söyle-di-ø.

Ayla-nom beautiful song say-past-3sg

'Ayla sang beautifully.'

We have seen evidence that DP objects undergo movement from their merge position to Spec vP, whereas NP objects remain in situ. We have also seen that assuming an EPP feature of the phase head v is problematic in the sense that it would have to be assigned in the case of DP objects, but not when the object is an NP. Thus, I argue that the dislocation of the DP object is triggered by the strong Case feature it bears. The reason that it moves to Spec vP is first of all that vP is the functional category with which it forms an *Agree* relation in its base-generated position to check and delete the uninterpretable features of v°, and that it is the closest landing site according to the Minimal Link Condition (MLC). Consider the structure below:

(68)

vP

DP_{obj}

∃

t_{subj}

VP $v°$

t_{obj} $V°$
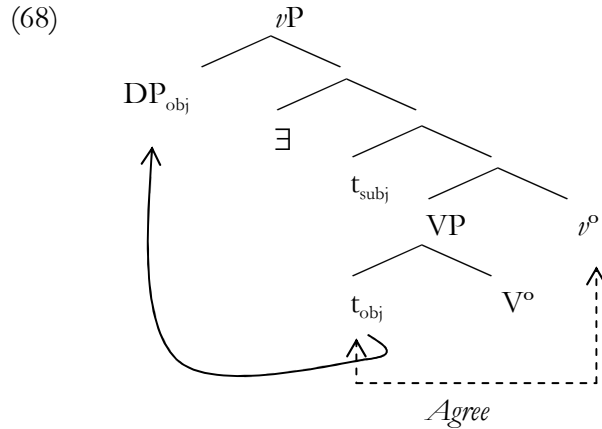
Agree

The φ-feature *Agree* relation occurs when the object is merged as a sister to V° along the lines described in Chomsky (2000, 2001, 2004). It is the strong Case feature the DP bears which triggers its dislocation to Spec vP whereby it also is interpreted outside the scope of the existential closure which is above the base-generated positions of the subject and the object (cf. Kelepir 2001).

The question arises as to how this analysis can account for ECM clauses in Turkish. Recall that evidence has been given to show that the ECM subject undergoes movement to the matrix Spec vP position. According to the analysis I propose, the ECM subject, being a DP, bears an uninterpretable strong Case feature which it cannot check within the ECM clause since the ECM clause is a deficient TP lacking a φ-complete T° and thus failing to project a Spec position in minimalist terms. The DP has to undergo movement to the matrix Spec vP position abiding by the MLC in order to check its strong Case feature with the matrix v and in order to avoid being sent to Spell-Out within the ECM clause (see the tree structure in (15) above). Note that this account also explains the ungrammaticality of NPs as ECM subjects. Recall from Chapter 2 that the occurrence NPs in ECM clauses results in ungrammatical structures. I repeat the examples below:

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(69) *Biz-ø ev-e [NP hırsız-ı] gir-di san-dı-k.

we-nom home-dat thief-acc enter-past think-past-1pl

intended: 'We thought thief-entering took place to the house.'

(70) *Biz-ø bodrum-da [NP fare-yi] var san-dı-k

we-nom basement-loc mouse-acc exis think-past-1pl

intended: 'We thought there to be mice in the basement.'

(71) *Biz-ø kütüphane-de [NP kitab-ı] oku-n-du san-dı-k.

we-nom library-loc book-acc read-pass-past think-past-1pl

intended: 'We thought book-reading to have taken place in the library.'

(72) *Biz-ø Ayla-yı [NP arı-yı] sok-tu san-dı-k.

we-nom Ayla-acc bee-acc sting-past think-past-1pl

intended: 'We thought Ayla to be bee-stung.'

(73) *Biz-ø sokak-ta [NP kedi-yi] miyavlı-yor san-dı-k.

we-nom street-loc cat-acc meow-impf think-past-1pl

intended: 'We thought cat-meowing to take place in the street.'

The claim I have made in the previous chapter that non-referential nominals bear only weak Case predicts the ungrammaticality of these ECM clauses whose intended subjects are NPs. Bearing only weak Case, there is no motivation for the NP to undergo movement to the matrix clause and the attempt to dislocate them results in ungrammaticality. This highlights

the difference between strong vs. weak structural Case I propose in this study in that even though weak Case can be checked in situ via φ-feature *Agree* formed between the NP and the relevant probe, pure *Agree* relation does not suffice to check the strong Case feature of DPs, which need to undergo movement to delete their uninterpretable features.

To sum up, the "EPP-effects of *v*" can be accounted for in this analysis without any appeal to the EPP feature of *v* which itself yields an economy problem because of its optional character. The proposal that the strong Case feature on the DP forces it to undergo movement to the Spec position of the phase along the lines of Bošković (2005) gives an EPP-free solution that accounts for the Turkish data.

5.3.3 Account of "EPP-effects of T"

This section deals with the dislocation of DP subjects to Spec TP. The claim is that the DP subject bears an uninterpretable strong Case feature forcing it to move to the Spec TP position. Before discussing passive, subject-to-subject raising and locative inversion structures, let us focus on DP$_{subj}$ in a simplex clause:

(74) a. Ev-e hırsız gir-di-ø.

home-dat thief enter-past-3sg

'The house was burgled.'

b. Hırsız-ø ev-e gir-di-ø.

thief-nom home-dat enter-past-3sg

'The thief broke into the house.'

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Evidence has been given to the effect that DP$_{subj}$ in (74b) moves to Spec TP whereas NP$_{subj}$ in (74a) remains in situ undergoing adhesion to the verb. Under the analysis proposed here the DP subject undergoes movement to Spec TP position because of its strong Case feature abiding by the MLC, whereas the NP subject bearing only weak Case remains in situ. Since there is nothing to force the occurrence of possibly a null lexical item in Spec TP, the derivation of the sentence in (74a) under this account does not face the problems the EPP-based argument does.

As for the passive constructions repeated below, one can argue under this analysis that the DP in (75a) bearing strong Case features undergoes dislocation to Spec TP abiding by the MLC, whereas the NP in (75b) remains in situ since it bears only weak Case:

(75) a. Şarkı-ø hep beraber söyle-n-di-ø.

song-nom all together say-pass-past-3sg

'The song was sang all together.'

b. Hep beraber şarkı söyle-n-di-ø.

all together song say-pass-past-3sg

'There was singing (going on) all together.'

Note once again that the problems of the EPP-based argument do not arise under this analysis. In other words, assuming with Legate (2003) that passive *v* also constitutes a phase head, the EPP-based argument faces a look-ahead problem in the sense that before the TP is merged the referential theme *şarkı* 'song' needs to be dislocated to the edge of the phase

in order to undergo further movement to Spec TP not violating the PIC, which is only possible if *v* is assigned an EPP feature (see 75a). Note however that if the theme is non-referential (75b), the phase *v* would be argued not to bear that optional EPP feature. Under the approach proposed here, the optionality problem of the EPP feature does not hold since it is only the strong Case properties of the DP which triggers its dislocation. There is no look-ahead mechanism involved in the derivation of both of the structures in (75). Moreover, this analysis also does away with the economy problem of the EPP-based argument which needs to posit a null expletive in the case of a non-referential theme (75b).

Let us now consider the subject-to-subject raising constructions repeated below:

(76) a. Sen-ø$_i$ [$_{TPdef}$ t$_i$ ben-i hiç anla-ma-mış] gibi görün-üyor-sun.

you-nom I-acc at.all understand-neg-evid like appear-impf-2sg

'You seem not to have understood me at all.'

b. [$_{CP}$ Sen-ø ben-i hiç anla-ma-mış-sın] gibi görün-üyor-ø.

you-nom I-acc at.all understand-neg-evid-2sg like appear-impf-3sg

'It seems that you haven't understood me at all.'

Under the analysis where the dislocation of arguments are triggered by their strong Case features, the structures above receive an account without any appeal to the EPP of either the phase heads, or T. In the raising structure in (a) the DP undergoes movement to the matrix Spec TP position in order to check and delete its strong Case feature which would be left unchecked if it remained in situ since the raising T is deficient in nature, i.e. it does not possess complete φ-features and thus cannot project a Spec position. Not having an

intermediate landing site (i.e. no intermediate Spec TP), the movement of the DP to matrix Spec TP abides by the MLC. The optionality of assigning an EPP feature to the phase head *v* does not become a problem for this analysis since movement is solely triggered by the features of the nominal and not the functional head. As for the second structure (76b), the EPP-based argument needs to posit a null expletive at matrix Spec TP, violating the effect on output condition. The Case-based analysis I propose, however, does not face such a problem.

Lastly, let us consider the locative inversion structures and how they would receive an account under the analysis proposed here. Consider the structures below with a non-referential subject in (77) and a referential one in (78):

(77) Divan-ın üst-ün-de kedi uyu-yor-ø.

sofa-gen top-poss.3sg-loc one cat sleep-impf-3sg

'A cat is sleeping on the sofa.'

(78) Kedi-ø divan-ın üst-ün-de uyuyor-ø.

cat-nom sofa-gen top-poss.3sg-loc sleep-impf-3sg

'The cat is sleeping on the sofa.'

The first sentence exemplifies a non-referential subject, NP, which I have argued to have weak nominative Case feature. The definite referential subject, DP, (78), on the other hand, I argue, has the strong nominative Case feature. Since nominative is phonologically null, the difference is not seen morphologically. The classical analysis of EPP would argue, based on the relativization strategy used to extract the complement of the PP, that only the first

structure exemplifies "locative inversion" in the sense that the PP would be argued to move

to Spec TP position to satisfy the EPP feature of T. The latter structure however would be

in that account not an example of locative inversion.[35] Under the analysis proposed here,

both of the structures in (77) and (78) do not constitute examples of locative inversion in

the sense that the locative phrase is not argued to occupy the Spec TP position. In (78), the

DP moves to Spec TP in order to check and delete its strong Case feature. In (77), on the

other hand, since the subject is non-referential (NP) it remains in situ adhering to the verb

checking its weak Case feature via φ-feature *Agree* it forms with T°. The problems

concerning the EPP-based account of locative inversion (see 5.2.4 above) cease to be

problems under the analysis proposed here since the trigger of dislocation is argued to be

the strong Case feature of the nominal and not the feature specifications of the functional

head.

5.4 Conclusion

The aim of this chapter has been to discuss the motivation of the dislocation of DPs in

Turkish from their base-generated position to the Spec positions of the relevant probe (*v*°

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[35] See below the relativization of the complement of the PP in (77) and (78) respectively:
(i)   Üst-ün-de kedi uyu-yan divan
        top-poss.3sg-loc cat sleep-SP sofa
        'the sofa on which a cat is sleeping'
(ii)   a. *Kedi-ø üst-ün-de uyu-yan divan
        cat-nom top-poss.3sg-loc sleep-SP sofa
        b. Kedi-nin üst-ün-de uyu-duğ-u divan
        cat-gen top-poss.3sg-loc sleep-OP-poss.3sg sofa
        'the sofa on which a (specific) cat is sleeping'
As seen above, in the case of the non-referential subject the subject participle strategy is used, whereas in the
case of the referential subject we observe that the object participle strategy is used. Therefore, the EPP-based
analysis would argue that the locative phrase is in Spec TP in (77) to check the EPP feature of T. See section
5.2.4 above for problems of this analysis.

for objects and Tº for subjects). I have first discussed the "EPP effects of *v*", i.e. object shift and ECM in Turkish. Having provided arguments against Öztürk (2005), I have argued that Turkish possesses a *v*P projection (cf. Üntak-Tarhan 2006) at whose Spec position the subject is base-generated and to whose second Spec position the referential object (DP$_{obj}$) moves. The second section has dealt with the "EPP effects of T", i.e. DP vs NP subjects, passive, subject-to-subject raising and locative inversion structures. I have argued that DP$_{subj}$ moves to Spec TP position. The discussion in the first and the second sections (5.1 and 5.2) has also pointed out the problems which the EPP-based canonical analysis faces (Chomsky 2000, 2001, 2004). In the third section (5.3), I have proposed an account of the facts without any appeal to the EPP feature. Following Bošković (2005), I have argued that the dislocation of arguments is triggered not because of the feature specifications of functional heads, but because of the Case properties of the nominals. I have proposed a Case-based account of the data, where I have claimed that DPs check strong structural Case as opposed to NPs which were shown to check weak structural Case along the lines described in de Hoop (1996) in the previous chapter. My analysis of structural Case differs from de Hoop's (1996) original claim in that I argue that the difference between strong vs. weak Case is not a matter of the level in which checking occurs (S-structure vs. D-structure), but rather that weak Case can be checked in situ via the φ-feature *Agree* relation formed between the NP and the relevant probe, whereas strong Case forces the DP to undergo dislocation since pure *Agree* does not suffice. I have also proposed a distinction in the strong structural Case feature depending on the [±specific] feature of Dº. DPs headed by a [+specific] Dº are argued to bear overt structural Case, whereas those headed by a [-specific] Dº bear covert structural Case. Since nominative is already a null morpheme in the language, the difference is observed only in the case of the objects. The data has been discussed under the

assumptions of the analysis proposed and it has been observed that the problems faced by

the EPP-based account do not rise in the Case-based account.

CHAPTER 6

CONCLUDING REMARKS AND FURTHER ISSUES

6.1 Summary of the claims

The aim of this dissertation was to discuss the syntactic properties of nominals in Turkish,

their Case properties, and the implications of a theory of grammar in which the dislocation

of arguments is not motivated by the Extended Projection Principle (EPP), but by Case

checking in structural terms. The initial point of research has been the hybrid behavior that

Turkish exhibited regarding noun phrases, in particular referential and non-referential noun

phrases. The DP projection in Turkish has either been assumed without any motivation

given (e.g. Kennelly 1993, 1994, 1996; Kornfilt 1999, among others), or has been challenged

(Öztürk 2005). The first and the main problem for assuming a DP in Turkish concerns the

lack of an overt determiner/article system in the language. The claim that *bir* 'one/a' or the

demonstratives *bu* 'this', *şu* 'that', *o* 'that over there' constitute the determiner class in the

language have faced two problems: First of all, arguing that these lexical items instantiate

the D° category in Turkish fails to account for the head-directionality problem in the sense that Turkish, being a head final language, is expected to have D° in phrase final position, contrary to fact. The second problem for the claim that *bir* 'one/a' is an indefinite article in Turkish implies that Turkish behaves highly exceptionally with respect to the cross-linguistic claim made independently by Crisma (1997) and Longobardi (2001) that languages that do not have a definite article do not have an indefinite article as well, while the opposite is well attested, i.e. there are languages which have a definite article but which lack an indefinite one. In this study, I have proposed an analysis of Turkish nominals motivating the projection of a DP layer with a phonologically null head carrying the features of definiteness and specificity. In particular, I have argued that referential nominals are DPs, whereas non-referentials constitute NPs.

The motivation for assuming that Turkish possesses a DP projection in addition to NP has been the hybrid behavior Turkish exhibits with respect to the syntactic properties of nominal phrases. Turkish has been shown to posit problems for the account which assumes that it is among the languages that do not have a DP projection. Chapter 2 has shown, first of all, that semantically there needs to be a DP in addition to NP to account for the referentiality of the nominal phrases. It has been argued, contrary to the previous analyses in the literature (see among others, Dede 1986, Enç 1991, Kennelly 1993, 1994, 1997b), that it is not possible to argue for a distinction to hold between Case-marked nominals and non-Case marked ones. Scope properties, adjectival modification, ellipsis, pronominal antecedence, relativization, aspectual properties and passivization facts have argued in favor of a distinction between the nominals not based on overt Case-marking but on the syntactic properties of nominals. In particular, it has been argued that bare nominals are non-referential whereas others are referential along the lines described in Fodor and Sag

(1982) and Massam (2001). Two syntactic arguments supporting this claim have been given concerning first island effects in scrambling and second ECM constructions in Turkish. In the discussion about the island effects, it has been shown that Turkish poses a counterexample to the generalization which states that languages that do not have a DP projection do not display island effects in scrambling (Boeckx 2003). Taking *wh*-scrambling as a testing ground, I have shown that Turkish in fact exhibits island effects in the following contexts: (i) complex NPs, (ii) *wh*-islands, and (iii) sentential subjects. I have taken this as evidence for the claim that Turkish in fact does not belong to the class of languages with no DP. The second syntactic evidence as to the occurrence of DP apart from NP comes from the ECM constructions in Turkish. It has been shown that the ECM subject in fact undergoes raising from its base-generated position in the ECM clause from the predicate of which it takes its theta-role to the matrix clause level. The behavior of bare nominals and [bir NP] constructions in ECM clauses has given another argument as to the claim that they cannot be treated on a par syntactically. In other words, it has been shown that even though [bir NP] constructions are allowed as ECM subjects, bare nominals fail to do so. This has been taken as argument that they need to have different structures.

Having provided semantic and syntactic evidence for the claim that Turkish nominal constructions do have a layer above the NP, Chapter 3 has discussed the internal structure of nominals claiming that referential nominals are DPs whereas non-referential ones are NPs. I have argued that NPs can be selected either by a Number Phrase or a Classifier Phrase. The fact that both NumP and ClP subcategorize for an NP accounts for their mutual exclusivity. It has been argued that the Numº bears the feature [+plural] which is instantiated by the occurrence of the plural marker –*lAr*, or the feature [-plural] in which case the position is occupied by the zero marker ø. It has also been shown that the Spec

NumP can be either lexically empty or filled with the quantifiers *bütün* 'all' and *bazı* 'some' in which case the plural marker occurs on the head noun. The head of the ClP has been argued to host either a null classifier or a lexical one such as *tane, adet* 'unit', which are bound/defective roots attaching to the numerals that occur in Spec ClP. Spec ClP can also host number denoting quantifiers which, however, do not co-occur with overt classifiers except *birkaç* 'several'. This chapter has also argued that NumP/ClP is merged as the complement of a DP projection whose head is a phonologically null element in Turkish marking the nominal referential with the features [±specific] and [±definite]. In other words, it has been argued that referentiality assignment is achieved via the projection of a null D° in Turkish, hence arguing for an analysis of Turkish where Case and referentiality assignment are achieved within the domain of different functional heads. It has been argued that the demonstratives and (the unstressed version of) *bir* 'one/a' occurs in Spec DP position when D° bears the features [+definite] and [-definite] respectively. That is, *bir* and the demonstratives do not constitute the D° class, but they occur in the Spec position of the D° which is phonologically null in Turkish.

The second part of Chapter 3 has argued that non-referential nominals are not headed by a DP layer but are phrasal categories of the kind NP. NPs can occur in Turkish (i) as objects of transitive verbs, (ii) as (surface) subjects of Unaccusatives, and (iii) as subjects of transitive verbs. It has been shown that they differ from the referential nominals, i.e. DPs, in one or more of the following properties: (i) semantic properties, (ii) stress pattern, and (iii) word order restrictions.

Having established a representational distinction between referential nominals (DP) and non-referential ones (NP), Chapter 4 has focused on the syntactic differences DPs and NPs displayed and has proposed a licensing mechanism for NPs. It has been shown that

DPs move from their base-generated positions to a position outside the scope of the existential closure (Diesing 1992), whereas NPs remain in their merge positions within the nuclear scope. The evidence for the different behavior of DPs and NPs has come from their interpretational properties, their position with respect to (simplex) manner adverbs, and subject case marking in embedded clauses. The rest of the chapter has dealt with the question which has arisen regarding the licensing of NPs in syntax since they have been shown to lack a DP layer assigning them referentiality. I have argued against the head-incorporation account of non-referential nominals showing that they are not head categories. I have also argued against the complex predicate formation analysis proposed by Öztürk (2005) and Ketrez (2005) in that the former assumes a pre-syntactic operation, whereas the latter captures only the object nominals, leaving aside the subjects. It has been proposed that NPs undergo *adhesion* to the verbal head in syntax, as opposed to DPs which undergo dislocation from their merge positions. At the end of the chapter, it has been claimed that NPs undergoing adhesion bear weak Case features in the sense of de Hoop (1996), which they can check via long distance φ-feature *Agree* relation they form with the relevant probe (v^o or T^o).

Chapter 5 has dealt with the dislocation of DPs from their merge positions. The position to which the DP moves and the trigger for this movement have been the subjects of argumentation. Focusing first on objects, I have argued that DP objects move to the (second) Spec vP. It has been shown that Öztürk's (2005) claim against the projection of vP in Turkish in fact does not present arguments *against* the presence of that functional category, but for the lack of evidence for its presence. The ECM subjects have also been considered in this section since I have argued that they move to the Spec vP position of the matrix clause. The argumentation has shown that the claim that this dislocation is triggered

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by the (optional) EPP feature of the phase head v faces certain economy problems which in turn constitute problems for the minimal design specifications of the theory. Focusing next on DP subjects, I have argued that they undergo dislocation from their base-generated positions to Spec TP. The discussion of passive, subject-to-subject raising and locative inversion constructions in Turkish has revealed that the claim that the dislocation of DP subjects is motivated by the EPP feature of T^o faces economy problems similar to the analysis assuming EPP of v^o. The chapter has laid down an EPP-free solution to the data. Following Bošković (2005), I have proposed an analysis where the Case features of the arguments force them to move from their base-generated positions outside the nuclear scope, i.e. vP. Specifically, I have argued that DPs bear strong Case feature as opposed to NPs which bear weak Case feature along the lines described in de Hoop (1996). I have departed from de Hoop's original proposal in the sense that I have claimed that the difference between strong and weak Case does not concern the level of Case-checking (i.e. D-structure vs. S-structure), but their licensing mechanisms. I have proposed that weak Case features can be checked via φ-feature *Agree* relation formed between the goal NP and the relevant probe in line with the claim of Chomsky (2000, 2001, 2004). However, contra Chomsky (2000, 2001, 2004) I have argued that pure *Agree* does not suffice to check the strong Case feature of nominals. Adapting Bošković (2005), I have proposed that the strong Case feature forces the DP to undergo dislocation from its base generated position.[1] I have also proposed that strong Case feature is of two types, overt vs. covert, which is dependent on the [±specific] feature of D^o.

   The argumentation in this chapter has contributed to the literature discussing the uneconomical nature of a theory of grammar where both Case and the EPP have been

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[1] Bošković (2005) does not distinguish between weak vs. strong Case feature. His claim is that it is the uninterpretable Case feature that the nominal bears which forces it to undergo movement.

argued to trigger the dislocation of DPs to Spec positions of functional categories. The claims made in this study have given support for the studies which have argued to eliminate the role of EPP as a universal principle of grammar focusing on the problems it fails to account for (see, among others, Martin 1999; Castillo et al 1999; Grohmann et al 2000; Boeckx 2000; Bošković 2002, 2005).

6.2. Remaining issues for further research

In this dissertation, by motivating a DP projection in Turkish apart from the NP, I have discussed a theory of grammar in which Case and referentiality assignment is mediated via different functional heads. I have claimed that Case plays an important syntactic role in the grammar in the sense that the uninterpretable Case features of DPs act as triggers for their dislocation, eliminating the need for the assignment of an (optional) EPP feature for the core functional categories, i.e. v^o, T^o and C^o.[2]

In Turkish, complements of verbs can be marked by case markers other than the accusative and that these case markers also interact with grammatical function changing operations in ways different than the accusative. This study has confined its limits to the discussion of nominative and accusative, and the behavior of nominals in the preverbal area. Hence, a fuller picture might emerge if the other cases and the analysis of the postverbal area for dislocation are taken into consideration.

The first and the main question that is raised by this study concern the presence of a head, which is phonologically empty. By proposing that Turkish possesses a DP projection

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[2] Recall that Chomsky (2000, 2001, 2004) argues that the EPP feature of the phase heads, v^o and C^o, are optional. As for the original EPP, i.e. the EPP feature of T^o, he has stated that it is "perhaps universal perhaps not; the jury is still out on that" (Chomsky 2004: 116).

whose head is phonologically null, the question arises as to the implications of this null head

for the minimalist theory. Note that null determiners have been argued for in the literature

(see, for example, Sloat 1969,[3] Carlson 2000, Radford 2004 and Dayal 2004 for English;

Longobardi 1994 for Italian; Deprez 2002 for Haitian; Paul 2005 for Malagasy and Suh

2005 for Korean, Watanabe 2006 for Japanese, among others). The role of the determiner

in the semantics of noun phrases is as follows. Assuming that NPs are predicative (i.e.

semantically of type $<e, t>$), they need to be type-shifted in order to become arguments (i.e.

semantically of type $<e>$ or $<<e, t>, t>$. In languages which have a fully developed article

system, noun phrases without overt determiners also occur in argument positions.

Longobardi (1994) has claimed that these argument phrases contain a null $D°$ whose

function is to type shift predicates into arguments.[4]

In this study, I am proposing a null $D°$ in a language without an overt determiner

class (see also Suh (2005) and Watanabe (2006) for null $D°$ in Korean and Japanese

respectively, other "determiner-less" languages). The motivation for positing a DP

projection is that Turkish exhibits a hybrid behavior with respect to interpretation and

syntactic properties of the referential and non-referential nominal phrases. Arguing that

Turkish does not have a DP projection fails to distinguish between the behavior of bare

nominals, which I have shown to be NPs, and *bir NP* constructions, which I have argued to

constitute DPs. This study has pointed out that bare nominals and *bir NP* constructions

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[3] Sloat (1969), in her study about proper nouns in English, does not use the term "null determiner". She argues that English proper nouns have the zero allomorph of unstressed *the*.

[4] Dayal (2004) summarizes the type-shifting possibilities as follows:

(i)　　DP　　　　　　　(ii)　　NP　　　　　　　(iii)　　　　DP

Det　　　NP　　　　　　　　│　　　　　　　　　　Det　　　　NP
ð　　　　dogs　　　　　　dogs　　　　　　　　　dogs$_i$　　　t$_i$
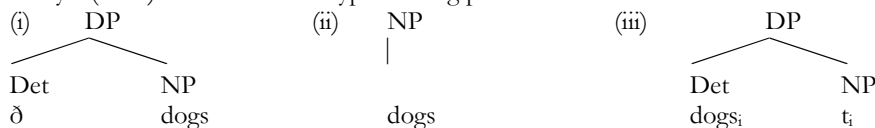
The first option (i) is the null determiner hypothesis proposed in Longobardi (1994). The second option instantiates the covert type-shifting discussed in Carlson (1977), and the last one is N➝D raising. I refer the reader to the original works for details.

differ not only in terms of their semantic interpretation, i.e. referentiality, but also in terms of their syntactic properties, i.e. bare nominals (NPs) remain in their base-generated position bound by the existential closure and they check weak Case via φ-feature *Agree*; whereas DPs undergo dislocation from their merge positions to Spec positions of the relevant probe because of the uninterpretable strong Case feature they bear. Therefore, assuming that Turkish possesses a DP projection (in addition to NP) accounts for the behavior displayed by different kinds of nominal phrases in the language.

A point which is left open for future research in this study is the in-depth analysis of the existential constructions involving particles *var* 'there is/are' and *yok* 'there is/are not' in Turkish. Recall that in Chapter 2, the discussion of ECM clauses in Turkish has shown that existential clauses cannot occur in ECM constructions unless they encode possession in the sense of Sezer (2001). I have pointed out that the ungrammaticality of the existentials in ECM clauses may be seen as an oddity of the particles *var* and *yok* but the exact analysis of this needs further research (see footnote 33 in Chapter 2).

The behavior of the quantifier *birkaç* 'several' has also shown differences from the other number denoting quantifiers in that the co-occurrence of *birkaç* with demonstratives and classifiers results in grammatical structures as opposed to the other quantifiers. The proposal made in this thesis that the reason for the different behavior of *birkaç* can be seen to lie behind its morphological make up also needs further support (see example (58c) and the following discussion in Chapter 3).

A point which has been left open for further typological research concerns the co-occurrence restrictions displayed between the definite article and demonstratives. In footnote 34 in Chapter 3, it was shown that English, German and French do not allow the co-occurrence of the demonstrative with the definite article, whereas Greek, Hungarian and

Javanese do. The different behavior of demonstratives and articles in various languages may be interpreted to argue against a cross-linguistic unified analysis of these categories within the nominal projection. This is also apparent in the case of Turkish as well. Note that the demonstratives and the articles are argued to occupy the Dº position in English-type languages, whereas I have argued that demonstratives and *bir* 'one/a' occupy the Spec DP position. This has also been observed in Korean by Suh (2005). In other words, the implication of this discussion is that the claim that demonstratives and articles occupy the same position within the nominal phrase cross-linguistically is too strong.

Having argued that Turkish distinguishes between NPs and DPs, I have left open the discussion of generic noun phrases in Turkish which require an in-depth discussion of genericity and the generic operator in the language. As pointed out in footnote 22 in Chapter 4, the syntactic tests applied to generic statements in Turkish comply with the claim that Turkish sentences cannot contain more than one non-referential nominal (i.e. NP). However, an exact analysis of generics in Turkish awaits further research.

Further implications of this study concern the structure of Turkish. By motivating a DP projection in Turkish, I have proposed a representational distinction between referential and non-referential arguments. I have claimed that the dislocation of referential arguments from their base-generated positions is not triggered by the feature specifications of the functional heads (i.e. EPP feature), but by the strong Case feature the nominals bear. This analysis has the advantage of eliminating the involvement of a look-ahead mechanism or an optional assignment of the EPP feature to the probes at hand. By proposing a Case-based account of facts, rather than the EPP-based one, there remains no need to posit an (expletive) *pro* in structures where the surface subject is an NP (a non-referential nominal). Thus, one can argue that under this account one can do away with the assumption of

positing an expletive *pro* in a language without overt expletives at the expense of positing a null D in a language without overt determiners.

The claims made in this study that (i) Turkish possesses a DP projection other than the NP, and (ii) the dislocation of DPs is triggered by their Case-checking requirements also have implications for the double object constructions and scrambling in the language. The discussion of double object constructions and scrambling requires an in-depth analysis which has been left out in this study. However, some implications are as follows. Assuming that Turkish has double object constructions, the question arises as to the status of dative case. Consider the following:

(1) a. Çocuğ-a bir çikolata ver-di-m.

     child-dat one chocolate give-past-1sg

     'I gave the child a (bar of) chocolate.'

     b. Bir çikolata-yı çocuğ-a ver-di-m.

     one chocolate-acc child-dat give-past-1sg

     'I gave a (bar of) chocolate to the child.'

Note, first of all, the difference in word order. As seen in (a), the non-specific indefinite object *bir çikolata* follows the dative marked phrase. It is also possible in the order where it precedes the dative phrase but only under the pair-list reading (i.e. 'I gave a bar of chocolate to the child, one candy to the girl', etc. or 'I gave one bar of chocolate to the child, and two bars to his mother', etc.). The questions that the proposed analysis raises are as follows: Given that *bir NP* constructions are DPs as argued in this study, the non-specific indefinite

object bears covert structural Case which triggers its dislocation to Spec *v*P. What is the implication of this account for the dative phrase? One may argue that it is also referential in the sense that it is interpreted as definite. This would imply that it should also undergo dislocation from its base-generated position. One can argue that since the dative marked phrase bears the feature [+definite] and is thus [+specific] it undergoes movement first, followed by the movement of the [-definite], [-specific] object. The question then arises as to the derivation of (1b) where we have an indefinite specific object which occurs before the dative marked phrase under the presentational focus reading. In (1b), the accusative marked object bearing strong overt Case would undergo movement before the dative marked phrase. The problem for this kind of analysis, however, would be that dislocation has been argued to be triggered by the structural Case feature of DPs. Dative, being an inherent case, is expected not to trigger any movement. However, assuming that dative can be checked in situ raises another problem with respect to the ordering observed in (1a).[5] Since the discussion of double object constructions requires an in-depth research, I leave this issue open in this study.[6]

As a last point, I would like to point out that the implications of the claims made in this study need to be investigated for the scrambling of constituents in Turkish, as well. Since NPs undergo adhesion to the verbal head, they are expected not to undergo any scrambling process. However, recent research has revealed that NPs (bare nominals) can also undergo scrambling although in a much more restricted manner than DPs (Uygun

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[5] One can argue that in structures like (1a), the movement of the dative marked phrase can be argued to be motivated by VP-internal topicalization. In other words, one can argue that the phase head can bear an optional [+topic] feature. In cases like (1a) one may argue that the dative phrase moves to Spec *v*P to check the optional [+topic] feature of *v*. This would imply that long distance Agree fails to check the discourse feature. The implication and the problem of this analysis is that whenever the theme is [-specific], one has to argue that *v* needs to have a [+topic] feature in order to account for word order facts.

[6] The fact that the dative phrase in this kind of sentences does not get affected by the grammatical function changing processes may be taken to imply that Turkish does not have *real* double object constructions (cf. A. Göksel, p.c).

2006, Sezer 2006). The source of this distinction is most likely to present further insight into the nature of nominal phrases in Turkish as well as cross-linguistically.

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