# THE TURKISH PARTITIVE AS SIMPLE NOMINAL PHRASES: EVIDENCE FROM INCORPORATION AND SPECIFICITY

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#### **ABSTRACT**

EDUARDO HUGO GIL – The Turkish partitive as simple nominal phrases: evidence from incorporation and specificity

(Under the direction of Professor Randall Hendrick)

Partitive constructions express part-whole relations as in the English phrase *two slices of cake*. There has been continuing debate about how to treat such phrases syntactically and semantically. That is, which of the partitive construction's constituents is dominant: the 'part' expression *two slices* or the 'whole' expression *cake*?

We propose that the syntactic structures of partitive and non-partitive noun phrases in Turkish are identical, and that consequently, the dominant constituent for both is the head of the structurally higher NP. For partitives, this higher head of NP corresponds to the 'part' expression.

In Turkish, the NP of both partitives and simple, nonpartitive clauses is the complement of a functional Case head: K. For all partitives, the part expression serves as the head of this complement NP. Internal to this NP, an NP corresponding to the 'whole' expression is generated and moved to the specifier position of the Case Phrase, or KP, for case licensing.

Evidence is drawn from our fieldwork on specificity, word order, and the distribution of case in Turkish. Alternative semantic and morphosyntactic theories of incorporation and partitivity are considered but found inconsistent with our data.

**KEY WORDS:** partitivity, Case, incorporation, specificity, scrambling, Turkish

For my mother Teresa and my sister Nadia

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## **NOTES ON TRANSCRIPTIONS**

## **AND GLOSSES**

Throughout this work, data will be transcribed using the standard orthography of Modern Standard Turkish. Phonemically, this system corresponds very closely, but not fully, to the International Phonetic Alphabet (IPA).

Exceptions to IPA conventions are as follows.

Turkish orthography	IPA
	[y]
<ö>	[œ]
<1>	[w]
< <u>c</u> >	[අ]
<ç>	[ʧ]
<j></j>	[3]
<ş>	
<y></y>	[j]
<ğ>	In the standard dialect, realized as a long vowel, occasionally followed by [j]

Turkish famously has two- and four-way vowel harmony. Following Öztopçu (2006), underspecified vowels that harmonize by backness – that is, to either [e] or [a] –

will be notated with a majuscule [A]. Vowels that harmonize by both height and backness – that is, to either [1], [u], [i], or [ü] – will be notated with a majuscule [I].

Also per Öztopçu (2006), consonant harmony with be transcribed with capital [B], [D], and [C], representing the voicing alternations of [b]  $\sim$  [p], [d]  $\sim$  [t], and [c]  $\sim$  [ç], respectively.

Glosses of transcriptions contain the following abbreviations for functional morphemes.

Abbreviation	Meaning
1 <sup>st</sup> ; 2 <sup>nd</sup> ; 3 <sup>rd</sup>	Person
ABIL	Abilitative
ABL	Ablative
AGR	Agreement <sup>1</sup>
AOR	Aorist
CAU	Causative
DAT	Dative
EVT	Eventuality
FUT	Future
GEN	Genitive
LINKER	Linker <sup>1</sup>
LOC	Locative
NEG	Negation
NOM	Nominative

<sup>&</sup>lt;sup>1</sup> These abbreviations are used in Chung and Ladusaw (2003). Their usages are discussed in the Chapter 3.

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PAS	Passive	
PLU	Plural	
POS	Possessive	
PROG	Progressive	
PRT	Partitive	
PST	Past tense	
Q	Question	
SING	Singular	
SUF	Nominal inflection <sup>1</sup>	
UNM	Unmarked particle <sup>1</sup>	

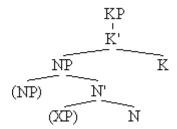
## **CHAPTER 1**

## INTRODUCTION

The contrasts and similarities between the linguistic properties of simple, nonpartitive nominal phrases like English *slices*, in which a noun is not interpreted as a subset of a particular group, and those of partitive phrases like *slices of the cake*, in which a noun is interpreted as a subset of a particular, syntactically overt group, form the core of the present investigation. From Selkirk (1976) to E. Ojeda (2004), the field has long struggled to straighten the syntactic asymmetries and distributional differences between partitives and nonpartitives.

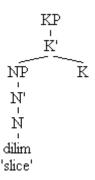
Using Turkish fieldwork data on the syntactic, morphological, and semantic phenomena of the direct object of the sentential predicate, we propose a syntactic analysis of the Turkish partitive that unifies it with a standard composition of nonpartitive phrases. This analysis has its theoretical provenance in Baker (1988) on the incorporation of nominal material into the verbal head, but is very much an expansion of the work in Kornfilt (1996, 2003) and Heusinger & Kornfilt (2005) on case marking, word order, and specificity in Turkish.

Briefly sketched, we argue that partitive nominal phrases are identical to the structure of nonpartitive nominal phrases in Turkish. Abstractly, the structure is as follows.

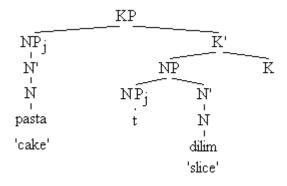


The contrast in the nonpartitive constituent *dilim* ('a slice/slices') and the partitive *pastadan dilim* ('a slice/slices of the cake') is the presence of a Noun Phrases (NP) within the maximal projection of the matrix NP. Per Kornfilt (1996), this NP-internal NP moves to the specifier position of the Case Phrase (KP) to receive structural case. The structures are otherwise identical.

To illustrate these claims, consider the nonpartitive example in the structure below, where the head of the KP may house case morphology.



The partitive example, *pastadan dilim*, has the same structure, but the constitution of the NP is more complex. The head of the partitive NP is again occupied by *dilim*, while within its specifier position is another NP, *pasta*, that is raised to the KP-spec position, where it receives the structural ablative case *-dan*.



We argue, following Kornfilt (1996), that the moved phrase is indeed an NP, not a KP. If this is so, this phrase cannot bear inherent case, and thus cannot bypass the Case Filter without movement to a position within the KP that assigns structural case.

Our analysis contrasts with Belletti (1988) which posits Partitive Case as a unique morphosyntactic primitive. We conclude that this approach to partitivity is not straightforwardly supported by the Turkish data.

Because our analysis of partitives attributes its properties to primitives such as the KP and movement, we also consider the feasibility of the semantic approach to incorporation in Chung and Ladusaw (2004) as an explanation of Turkish partitives. Our fieldwork into Turkish structures suggests strongly that this approach is not optimal.

This work is organized as follows. Chapter 2 provides an overview of the basic properties of Turkish clausal organization and their semantic interpretation. Chapter 3 examines some of the literature, both about our object language and others, that attempts to account for these phenomena. In particular, theories of specificity and of incorporation are reviewed.

In Chapter 4, we present novel data on partitive structures in Turkish, and we compare the theoretical frameworks in Chapter 3 in order to motivate our formal analysis. Finally, Chapter 5 sums up our findings and suggests avenues for future research.

## **CHAPTER 2**

## **BACKGROUND**

This chapter provides an overview of the some word order properties of the Turkish clause. In section 2.1, the function and distribution of case are discussed. Section 2.2 covers some of the literature on Turkish word order, with special emphasis on the direct object and its location relative to the predicate. Section 2.3 discusses word-order variability within the direct object itself. Section 2.4 presents the structure of Turkish partitive structures. Lastly, Section 2.5 addresses semantic scope in the Turkish sentence.

## 2.1 Case marking in Turkish

Turkish has a relatively rich and extremely regular case system.<sup>2</sup> Six forms of case are found in Turkish: the genitive, the nominative, the locative, the ablative, the dative, and the accusative.<sup>3</sup> Each will be discussed in turn, but of greatest importance to this work will be the distribution of the accusative.

## 2.1.1 Genitive case and the possessive marker

<sup>2</sup> Turkish case morphology is especially prone to the effects of vowel and consonant harmony. Please refer to the previous section on the IPA for a brief clarification of harmonic phenomena denoted by uppercase letters in the transcriptions.

 $<sup>^{3}</sup>$  A seventh, the comitative/instrumental marker [+(y)lA], is occasionally considered a case, but following Göksel and Kerslake (2005), we will not treat it as such.

The genitive case is used to mark possession. Its regular form is [+(n)In].<sup>4</sup> When another noun that follows the genitive-marked noun is itself marked with the possessive marker, a possessor-possessed relation is established.

The possessive marker marks a noun as possessed. It is irregular. The chart below shows its distribution by person and by number.

	singular	plural
1 <sup>st</sup> person	[+(I)m]	+[I]mIz
2 <sup>nd</sup> person	[+(I) n]	[+(I)nIz]
3 <sup>rd</sup> person	[+(s)I]	[+lErI]

Consider the examples below, which form a dialogue. When context allows, the genitive-marked noun may be elided. The material in parentheses may be dropped.

## 2.1.2 Nominative case

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<sup>&</sup>lt;sup>4</sup> Only genitive pronouns in the first person are irregular:  $ben ('I') \sim benim ('mine')$  and  $biz ('we') \sim bizim ('ours')$ 

Nominative case marks the subject of a sentence. (Kornfilt 1997) In finite clauses, the nominative case is null. <sup>5</sup>

## 2.1.3 Locative case

Locative case in Turkish is marked with [+DA]. It is used to mark the location of an object, or the place at which an action happens.

#### 2.1.4 Ablative case

The ablative case in Turkish is marked with [+DAn]. It may be used to mark a noun as a thematic Source, as in (4a) below. It may also be used to mark the object of a number of verbs, as in (4b-c). Importantly, the ablative marker on the object is obligatory for these verbs, as we see in (4d-e).

(4) a. öğretmen gaziantep+ten

<sup>&</sup>lt;sup>5</sup> Turkish also allows for the elision of pronouns marked with nominative case, but whether Turkish is a true *pro*-drop language is debatable. This issue is discussed at length in Öztürk (2002).

teacher G+ABL

"The teacher is from Gaziantep"

b. emre ayı+dan kork+tu

E bear+ABL fear+PST

"Emre feared the bear"

c. özge bir yalancı+dan nefret.ed+er

Ö a liar+ABL hate+AOR

"Özge hates a liar"

d. \* emre ayı+Ø kork+tu

E bear fear+PST

e. \* özge bir yalancı+Ø nefret ed+er

Ö a liar hate+AOR

## 2.1.5 Dative case

Dative case in Turkish is marked with [+(y)A]. For dative verbs and motion verbs, this case marks the thematic Goal of the action.

(5) a. anne+m biz+e para al+d1

mother+1<sup>st</sup>.POS us+DAT money give+PST

"My mother gave us money"

b başkan Kaliforniya+ya git+ti

president K+DAT go+PST

"The president went to California"

Like the ablative case, there are many verbs, such as those in (5c-d), that require their objects to be marked with the dative case. For these verbs, absence of the dative is strongly ungrammatical, as we see in (5e-f).

- (5) c. herkes şarkı+ya bayıl+dı
  everyone song+DAT adore+PST
  "Everyone adored the song"
  - d. Sen onlar+a inan+dı+n mı
    you them+DAT believe+PST+2<sup>nd</sup> Q
    "Did you believe them?"
  - e. \* herkes şarkı+Ø bayıl+dı
    everyone song adore+PST
  - f. \* Sen onlar+Ø inan+dı+n mı
    you them believe+PST+2<sup>nd</sup> Q

#### 2.1.6 Accusative case

Accusative case marks the direct object of most transitive verbs. Its form is [+(y)I], and unlike the ablative and dative cases, lack of the ablative case on the direct object does not in itself cause ungrammaticality; rather, its absence draws out a change in the semantics. Consider the set below.

- (6) a. ben dün kitap oku+du+m

  I yesterday book read+PST+1<sup>st</sup>

  'I read books yesterday'
  - b. ben dün kitab+1 okudum

book+ACC

'I read the book yesterday'

c. ben dün bir kitab okudum

a book

'I read a book yesterday'

d. ben dün bir kitab+1 okudum

'I read a certain book yesterday'

book+ACC

The contrast in between (6a) and (6b) is one of definiteness. That is, the object *kitap* in (6a) is indefinite and, per Erguvanlı (1984), is non-referential. The morphologically complex direct object in (1b), *kitab+i*, is definite and referentially salient.

The contrast between (6c) and (6d) is one of specificity (Aygen-Tosun, 1999). For both examples, the direct objects are indefinite. In (6c), however, the direct object *bir kitap* is not specific, whereas the direct object in (6d), *bir kitabi*, is specific. That is, the book here is indefinite but within a known set of books.

The exact nature of contrasts in specificity is discussed in greater depth in section 2.5 below and in section 3.2. In fact, the relationship between specificity and the accusative forms a cornerstone for our proposal about partitives' syntactic structure.

## 2.1.7 A summary of Turkish case morphology

The table below summarizes the case forms discussed in Section 2.1.

underspecified form | following vowels | following consonants

genitive	+(n)In	-nin, -nün, -nun, -nın	-in, -ün, -un, -ın
nominative	+Ø	-Ø	-Ø
locative	+DE	-de ~ -te, -da ~ -ta	-de ~ -te, -da ~ -ta
ablative	+DEn	-den ∼ -ten, -dan ∼ -tan	-den ~ -ten, -dan ~ -tan
dative	+(y)E	-ye, -ya	-e, -y
accusative	+(y)I	-yi, -yü, -yu, -yı	-i, -ü, -u, -1

## 2.2 Sentential word order

With its rich case system, it is unsurprising that Turkish allows for very free word order, but there are crucial restrictions on the order of constituents. (Sapir, 1921; Blake, 2001)

It is generally agreed that the canonical order of constituents within a sentence is Subject-Object-Verb (SOV). Kornfilt (1997) amends this, and proposes that the class of "Verb" be taken to more broadly mean "Predicate," and that "Object" include adjuncts as well as any other type of object. Her formulation, to which we herein will adhere for glosses of data, is below in (7).

(7) Subject – Adjuncts / Objects – Predicate + Copula + Inflection Marker

Although the examples in this section involve nonpartitive NPs, these sentencelevel facts are tested with partitive counterparts in our findings in Chapter 4.

## 2.2.1 Permutations of canonical word order

Variation in word order in Turkish is driven by the language's pragmatics and semantics (Erguvanlı 1984). Consider the set below in (8).

- (8) a. ben buzdolabın+a pasta+yı koy+du+m

  I refrigerator+DAT cake+ACC put+PST+1<sup>st</sup>
  - b. ben koy+du+mbuzdolabın+apasta+yıI put+PST+1<sup>st</sup> refrigerator+DAT cake+ACC
  - c. buzdolabın+a pasta+yı ben koy+du+m refrigerator+DAT cake+ACC I put+PST+1<sup>st</sup>
  - d. buzdolabın+a pasta+yı koy+du+m ben refrigerator+DAT cake+ACC put+PST+1st I
  - e. koy+du+m ben buzdolabın+a pasta+yı put+PST+1<sup>st</sup> I refrigerator+DAT cake+ACC
  - f. koy+du+m buzdolabın+a pasta+yı ben put+PST+1<sup>st</sup> refrigerator+DAT cake+ACC I

(for all) "I put the cake in the refrigerator"

The forms in (8) represent all possible permutations of the ordering of major constituents, or scrambling, in a sentence (Temürcü, 2001). The canonical order of SOV is shown in (8a), with less frequent but grammatical orders also given: SVO in (8b), OSV in (8c), OVS in (8d), and VSO in (8e), and VOS in (8f).

## 2.2.2 Direct object and the verb

In set (8), the accusative case-marked direct object, *pastayı*, may occur after the verb (8b, 8e-f), directly before, or left-adjacent to, the verb (8a), or to the left of but adjacent to the verb (8c-d).

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<sup>&</sup>lt;sup>6</sup> Slobin (1978) reports that SOV word order is employed in 48% of Turkish adult speech, followed by SVO at 25%.

This fact also holds for direct objects marked with ablative and dative case.

Consider the forms in sets (9-10), where the object, *dilbilim*, appears licitly after the verb (the a examples), left-adjacent to to it, (the b examples), and left of but not adjacent to the verb (the c examples). For the examples in set (9), the direct object is marked with ablative case, and with dative case in set (10).

- (9) dilbilim+den a. ahmet iğren+er Α loathe+AOR linguistics+ABL b. ahmet dilbilim+den iğren+er Α linguistics+ABL loathe+AOR c. dilbilim+den ahmet iğren+er linguistics+ABL A loathe+AOR (for all) "Ahmet loathes linguistics"
- (10)a. müge bayıl+ır dilbilim+e adore+AOR linguistics+DAT M b. müge dilbilim+e bayıl+ır M linguistics+DAT adore+AOR dilbilim+e c. müge bayıl+ır linguistics+DAT M adore+AOR (for all) "Müge adores linguistics"

## 2.2.2.1 Scrambling and accusative case marking

The presence of case marking on the direct object crucially determines the grammaticality of scrambling of direct objects in sentences whose predicates assign

accusative case. Consider sets (11-12) below, which incorporate and modify the data in set (6).

(11)a. ben kitab+1 dün oku+du+m book+ACC vesterday read+PST+1st I 'Yesterday, I read the book' b. ben bir kitab+ı dün oku+du+m book+ACC yesterday read+PST+1st I 'Yesterday, I read a certain book' c. \* ben kitap oku+du+m dün book yesterday read+PST+1st I (intended) 'Yesterday, I book-read' d. \* ben bir kitap dün oku+du+m book vesterday read+PST+1st Ī (intended) 'Yesterday, I read some book'

The inability of material like *dün* to intervene between a sentential predicate and a direct object that is not marked with accusative case has fueled much work on the semantics and syntax of Turkish in the last 30 years, e.g. very recently Aydemir (2004). Again, these facts will be near the core of our analysis in Chapter 4 of the partitive's phrasal organization.

## 2.3 Word order within the direct object

Like the variability of word order on the level of the sentence, the linearity of material within the sentence's constituents is neither fully fixed nor fully free. Following

Kornfilt (2003), we will use the term "subscrambling" to describe the occurrence of DP-or PP-internal material outside syntactically canonical positions.<sup>7</sup> As was the case with section 2.2, these facts will be extended to nonpartitive structures in our proposal.

## 2.3.1 Subscrambling

Below in set (12) are examples of Turkish sentences whose direct objects are modified by adjectival (12a) or prepositional (12b) material. These examples represent the canonical syntactic position for both prepositional and adjectival phrases that modify nouns: directly before the indefinite 'determiner' *bir*.

(12) a. ben dün sokak+ta çok yaşlı bir adam gör+dü+m

I yesterday street+LOC very old a man see+PST+1st

'I saw a very old man on the street yesterday'

b. ben bir.daha sen+in gibi bir terzi bul+a+ma+m
 I once.more you+GEN like a tailor find+ABIL+NEG+1<sup>st</sup>
 'I won't ever again be able to find a tailor like you'

The subscrambled forms of these sentences are given below in set (13). Neither of the truth values is changed.

(13) a. ben dün sokak+ta bir adam gör+dü+m çok yaşlı

I yesterday street+LOC a man see+PST+1<sup>st</sup> very old
b. ben bir.daha bir terzi bul+a+ma+m sen+in gibi

I once.more a tailor find+ABIL+NEG+1<sup>st</sup> you+GEN like

<sup>&</sup>lt;sup>7</sup> We give an account for the process by which subscrambling occurs in Chapter 4. For now, the symmetry in its distribution is important.

In (13a), the modifying adjectival material *çok yaşlı* is subscrambled to the right of the verb. Likewise, the modifying prepositional phrases *senin gibi* is subscrambled. In both cases, this contrasts with the canonical positions in set (12): before *bir adam* and *bir terzi*.

## 2.3.2 Impossible subscrambling

Consider the examples in set (14), which parallel the unscrambled examples in set (12). For the objects, note that in the absence of the indefinite determiner, modifying material appears directly before the noun.

- (14) a. dün sokak+ta çok yaşlı adam+ı gör+dü+m yesterday street+LOC very old man+ACC see+PST+1st 'I saw yesterday the very old man on the street'
  - b. dün sokak+ta çok yaşlı adam+a rasla+dı+m yesterday street+LOC very old man+DAT meet+PST+1<sup>st</sup>
    - 'I yesterday met the very old man on the street'
  - c. dün sokak+ta çok yaşlı bir adam+a rasla+dı+m yesterday street+LOC very old a man+DAT meet+PST+1<sup>st</sup>
  - 'I yesterday met a very old man on the street'
  - d. dün sokak+ta çok yaşlı adam+dan şüphelen+dı+m
     yesterday street+LOC very old man+ABL suspect+PST+1<sup>st</sup>
     'I yesterday suspected the very old man on the street'
  - e. dün sokak+ta çok yaşlı bir adam+dan şüphelen+dı+m yesterday street+LOC very old a man+DAT suspect+PST+1st

'I yesterday suspected a very old man on the street'

As we see in set (15), case marking on the direct object renders subscrambling strongly ungrammatical, no matter whether such case marking is dative, accusative, or ablative.

- (15) a. \* dün sokak+ta adam+ı gör+dü+m çok yaşlı
  yesterday street+LOC man+ACC see+PST+1<sup>st</sup> very old
  'I yesterday saw the very old man on the street'
  - b. \* dün sokak+ta adam+a rasla+dı+m çok yaşlı
    yesterday street+LOC man+DAT meet+PST+1<sup>st</sup> very old
    'I yesterday met the very old man on the street'
  - c. \* dün sokak+ta bir adam+a rasla+dı+m çok yaşlı yesterday street+LOC a man+DAT meet+PST+1<sup>st</sup> very old 'I yesterday met a very old man on the street'
  - d. \* dün sokak+ta adam+dan şüphelen+dı+m çok yaşlı yesterday treet+LOC man+ABL suspect+PST+1<sup>st</sup> very old 'I yesterday suspected the very old man on the street'
  - e. \* dün sokak+ta bir adam+dan şüphelen +dı+m çok yaşlı yesterday street+LOC a man+DAT suspect +PST+1<sup>st</sup> very old 'I yesterday suspected a very old man on the street'

## 2.3.3 Subscrambling restricted

The two sections above lead to this important observation about scrambling: that direct object-internal constituents may only occur outside of their syntactically canonical positions when the noun in the direct object is not marked for accusative case.

From section (2.2.2.1), we may additionally draw another conclusion about the distribution of subscrambling: that subscrambling may only occur when the direct object is left-adjacent to the verb.

Lastly and very importantly, subscrambling provides the evidence in Kornfilt (2003) for noun incorporation in Turkish, which we assume in our proposal for partitive syntactic structure. An overview of this proposal is given in below in 3.2.1.4.

## 2.4 The partitive

Partitive structures in Turkish correspond to the English forms *half of the onions* and *two of the boys*. Four syntactic mechanisms for creating partitive forms exist in Turkish. As the partitive is the object of our investigation, all four are described here, but it is the last two, the lexically headed partitive and the naked partitive, that we analyze in Chapter 4.

#### 2.4.1 Genitive-marked structures

The first mechanism for creating partitives in Turkish involves marking the superset of the partitive with genitive case, while the head receives the suffix -(s)I, which von Heusinger and Kornfilt  $(2005)^8$  glosses as an agreement marker. That is, in the Turkish equivalent of *half of the onions*, it is *the onions* that would be marked with

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<sup>&</sup>lt;sup>8</sup> Hereafter 'H&K (2005).'

<sup>&</sup>lt;sup>9</sup> We, per Göksel and Kerslake (2004), analyze this morpheme as possessive.

genitive case, while *half* would receive the agreement marker. Like nonpartitives, adjectival material can modify the head of the NP, but note that in (16a), such modifiers intervene between the partitive's two nominal constituents.

## 2.4.2 Ablative-marked structures

A second mechanism for expressing partitive relationships in Turkish is very similar to the first. The major morphological difference is that instead of marking the superset with genitive case, the ablative is instead used. Again, adjectival material may intervene between the two constituents when that material will modify the second noun in the partitive.

computer+PLU+GEN

'which (ones) of the computers'

whick+PLU+POS

## 2.4.2.1 Ablative structures without agreement

Ablative case may also be used in partitive structures whose heads are not marked the possessive -(s)I. Unlike the two previous constructions, the partitive head is filled not with a quantifier but with a lexical noun, but like the others, modifying material may occur within the partitive. Consider the examples below.

- (17) c. ben pasta+dan iki dilim+i ye+di+m

  I cake+ABL two slice+ACC eat+PST+1<sup>st</sup>.SING

  'I ate two slices of the cake'
- (17) d. ben pasta+dan fazla dilim ye+di+m

  I cake+ABL leftover slice eat+PST+1<sup>st</sup>.SING

  'I ate leftover slices of the cake'

# 2.4.3 'Naked' partitives

Another partitive construction in Turkish also involves ablative case, but is distinguished from the structures above in that it has no overt head. That is, the superset within the partitive is marked with ablative case but is not followed by a lexical noun.

Kornfilt (1996) convincingly argues that these forms are structurally true partitives, and that the head of the partitive is present in the form of a phonologically unexpressed pro. This head is nonspecific, and carries the meaning of, in her words, 'some amount of X,' where X is the ablative-marked noun.

## 2.4.4 Restriction on formation of ablative partitives

As we see in examples (16b) and (17b), there is overlap in the distribution of the genitive- and ablative-marked partitive forms. These two examples are functionally synonymous in their truth values, and differ only in that one (16b) exhibits genitive case, while another (17b), exhibits ablative case.

Per Göksel and Kerslake (2005)<sup>10</sup>, the ablative construction can be replaced with the genitive construction but not vice versa. That is, although all ablative-marked partitive structures have grammatical genitive counterparts, not all genitive-marked partitive forms have grammatical ablative forms.

There is a set of nominal heads, which G&K (2005) describes as forming partitives of proportion or totality, that are only grammatical when the partitive's superset noun is marked with genitive case. Example (16a) contains one of these, *yarı+sı*, which is not licit in an ablative-marked partitive.

Below an example in (19a) of *yart+st*'s ungrammaticality with the ablative, we give in (19b) a list, taken from G&K, of other nouns which may not grammatically appear as the heads of ablative-marked partitive structures.

<sup>10</sup> Hereafter 'G&K'

## 'half of the onions'

b. büyük kısmı ('most of'), büyük bölümü ('most of'), çoğu ('most of'),

hepsi ('all of'), tümü ('all of'), bütünü ('the whole of'), her biri

('every one of'), and her plus any other numeral plus an agreement

marker

## 2.5 An exception to head-final organization?

We have so far been agnostic to the structure of nominal phrases, but in this section, we provide arguments against the DP as a functional projection above the Turkish NP. We adopt this controversial position in our proposal in Chapter 4.

We have assumed throughout that Turkish is, within X' theory, a head-final language. In the following examples, the head of the phrase appears after its complement. In sets (20-21) respectively, the VP- and PP-heads take nominal complements, while in (22), the head, a noun, takes a prepositional complement.

- (20) pasta+yı yemek
  cake+ACC to.eat
  - VP: 'to eat cake'
- (21) ali+ye göre

  A+DAT according.to

PP: 'according to Ali'

(22) b. beşiktaş+a karşı maç
B+DAT against game

NP: 'the game against Besiktas'

As we have seen from the behavior of the indefinite Turkish marker *bir*, nominal phrases appear to be preceded by 'determiners.' This is also true of all quantifiers in Turkish, only a sampling of which is given below.

In these examples, the 'determiner'/quantifier must precede the noun. If the DP Hypothesis were to hold for Turkish and if we assume that a Headedness Parameter exists in language to account for the difference between SOV and SVO languages, we would expect the opposite to be true, e.g. the grammaticality of the (b) examples in sets (23-26) in which the head of the putative DP would appear to the right of its NP complement.<sup>11</sup>

```
(23) a. bir
              şişe
     a/one bottle
       'a/one bottle'
   b. * sise
               bir
       bottle one
   c. dolu bir sise
       full a bottle
       'a full bottle'
   d. bir dolu sise
     one full bottle
       'one full bottle'
(24) a. her şişe
      all bottle
       'all bottles'
```

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<sup>&</sup>lt;sup>11</sup> It is worth noting that an anti ymmetric account of Turkish a la Kayne (1994) would obviate this problem by making the Headedness Parameter irrelevant. We cannot here address the feasibility of antisymmetry for Turkish, but a strong argument against this tack can be found in Kural (1997).

- b. \* şişe her
  - bottle all
- c. \* dolu her şişe
  - full all bottle
- d. her dolu şişe
  - all full bottle
  - 'all full bottles'
- (25) a. sekiz şişe
  - eight bottle
  - 'eight bottles'
  - b. \* şişe sekiz
    - bottle eight
  - c. dolu sekiz şişe
    - full eight bottles
  - d. sekiz dolu şişe
    - eight full bottle
    - 'eight full bottles' (both c-d)
- (26) a. biraz şişe
  - many bottle
  - 'many bottles'
  - b. \* şişe biraz
    - bottle many
  - c. \* dolu biraz şişe

full many bottle
d. biraz dolu şişe
many full bottle

'many full bottles'

Moreover, there is a sharp difference in the distribution of the quantifiers *her* and *biraz* in sets (24) and (26) and the numerals *bir* and *sekiz* in sets (23) and (25). In the (c) and (d) examples, we see that the numerals may appear before or after the noun's adjectival material whereas the quantifiers must precede the adjective.

This asymmetry is thought to reveal a functional distinction in Turkish numerals: as adjectivally denoting atomicity (*dolu bir şişe*) from within the NP; or, in the case of *bir dolu şişe*, as truly quantificational like *her* and *biraz* but outside the NP. (Öztürk 2005)<sup>12,</sup>

In addition to the evidential and theoretical arguments for dispensing with the DP as a functional projection in Turkish, Öztürk (2005) points out the typological improbability of holding to the traditional view of *bir* as an indefinite article (Lewis 1967). Turkish lacks a definite article, but it is not this fact by itself that is crosslinguistically suspect.

...There are no languages which lack a definite article but have an indefinite one. Yet it is very common for languages to lack the indefinite article but to have the definite, such as the case of Irish, Hebrew, and Arabic....Assuming

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<sup>&</sup>lt;sup>12</sup> The exact structure of the nominal phrase above the level of NP and KP is beyond the scope of this work, but we assume, per Öztürk (2005), that the referential heavy lifting of the absent DP is passed on to other functional heads in Turkish.

<sup>&</sup>lt;sup>13</sup> Following Öztürk (2005), we take bir, as in example (4c), to be an adjunct to the NP at the N' level denoting atomicity.

that Turkish has an indefinite article would make Turkish highly exceptional in terms of language typology. (Öztürk 2005:15)

## 2.6 Scope in Turkish

Because the sometimes hazy concept of specificity is so central to the broader themes of this work, we address here some facts about scopal specificity in the broader context of the Turkish sentence. Focus is given to the interaction between universally quantified subjects and direct objects (from Aygen-Tosun, 1999).

## 2.6.1 Direct objects without case

When universally quantified subjects are paired with direct objects that lack case marking, scopal relations limit the possible interpretations of the sentence. That is to say, there cannot be just one entity but must be multiple entities. As such, universally quantified subjects have wide scope over bare direct objects.

If the morphologically bare direct object is preceded by the indefinite *bir*, the same scopal truth conditions hold. Again, the universally quantified subject has wide scope over the direct object.

∀>kitap (every girl, many books)

For both examples, it is not the case that there is one sole book that every girl read; rather, the girls read different books.

### 2.6.2 Direct objects with case

In contrast to the scopal effects with unmarked direct objects, direct objects with accusative case but without the indefinite bir necessarily take scope over universally quantified subjects. Under this narrow-scope reading, there is one specific book for the operator  $\forall (x) \ (x : kiz)$ .

Direct objects that are introduced by the indefinite *bir* and that carry accusative case are more complex. These direct objects are ambiguous between wide-scope and narrow-scope interpretations, and as such, have two possible logical representations.

(28) b. her kız dün bir kitab+ı oku+du+
$$\emptyset$$
every girl yesterday a book+ACC read+PST+3<sup>rd</sup>
'Every girl read a certain book yesterday'
kitab > $\forall$  (every girl, one book)
 $\forall$  > kitab (every girl, many books)

The wide-scope interpretation is represented by the formalization in which the NP *kitap* has scope over the universally quantified subject *her kiz*. The next formalization

captures the distributive reading of (28b) in which there is no one specific book that is read by every girl.<sup>14</sup>

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(28) c. onun.için kütüphane+de hiç kitap kal+ma+dı thus library+LOC no book remain+NEG+PST 'Thus there were no books left in the library'

d. baba.ve.piç kitab+ın ism+i+ymiş B book+GEN title+POS+EVT

'Baba ve Piç was supposedly the book's title'

<sup>&</sup>lt;sup>14</sup> In isolation, the sentence in (28b) is ambiguous, but continuations of the discourse clarify which scopal ranking is present. This is illustrated by the examples in (28c-d), where the wide interpretation is forced by the sentence in (28c), while the narrow reading is required for (28b) when it is followed by (28d).

#### **CHAPTER 3**

#### THEORETICAL BACKGROUND

In this chapter, we introduce the theories that are assumed in our proposal for the structure of the Turkish partitive. In section 3.1, we review formalizations of the often ambiguous, even 'squishy' concept of specificity. Special attention is given to specificity in relation to partitivity, and it is in this section that we adopt a theory of specificity based on referential anchoring.

In section 3.2, we look at syntactic theories of incorporation of nominal material into the predicate. We look particularly at proposals for the incorporation of nonpartitive Turkish nouns into the verb.

# 3.1 What is 'specificity,' specifically?

In section 2.5, we looked at the effects that multiple quantified nominal phrases within a sentence have on the scopal interpretation of that sentence's arguments. This interplay, especially in the last example (28b) in which the indefinite noun allowed for wide-scope interpretation, has been argued to be an origin of specificity. (Kratzner 1998).

In this section, we look at attempts to formalize intuitions about specificity that do not reduce it to scopal relations between two quantifiers.

# 3.1.1 Definiteness and specificity

Heim (1982) proposes a Familiarity Condition to explain the interpretation of NPs containing definite and indefinite determiners. She posits that every NP carries with it an index representing its discourse reference.<sup>15</sup> As NPs are introduced into discourse, these reference indices enter the file of all established references in the discourse, or Dom(R).

Definiteness, then, is the presence of an NP's file card in Dom(R). Indefinite NPs, in contrast, carry file cards that are not in Dom(R). Consider the following examples in the pairs in (1-2), where subscript numbers represent Heim's file cards.

In (1a), two file cards, *1* and *2*, are introduced to Dom(R) by the indefinite NPs (a) mouse and (some) cheese. Because these members are present in Dom(R) for (1b), the definite NPs, (the) mouse and it, associated with file cards 1 and 2 are licit.

Dom(R) for the sentences in (2) also has two members, 1 and 2, both of which are introduced to the set by the same sentence as that for set (1). The indefiniteness of the two NPs in (2b), however, is the result of absence of their file cards, 3 and 4, from Dom(R).

Enç (1991) expands Heim's Familiarity Condition to formalize intuitions about specificity. This account retains the reference indices and the domain of established NPs'

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<sup>&</sup>lt;sup>15</sup> Following Heim, we refer to these indices as "file cards."

file cards found in Heim's proposal, but introduces a separate index that represents groups of previously established entities.

On Enç's view, specificity depends on whether the file card of newly introduced NP is within the file card of a group of established entities in Dom(R). This if formalized below in (3), which is the rewording of Enç's proposal found in Heusinger (2007).

(3) Where the index j denotes a group of entities already established in the discourse, NP<sub>i</sub> is specific if there exists a j such that  $i \subseteq j \& j \in Dom(R)$ 

In (4a) below, the file cards of two NPs, the singular (a) snake and the plural (some) kids, are entered into Dom(R) as 1 and 2. In (4b), the novel nominal phrase two boys enters the discourse carrying the file card 3, which is a subset of the entities in file card 2. <sup>16</sup>

(4) a. [A snake]<sub>1</sub> scared [some kids]<sub>2</sub> 
$$Dom(R) = \{1, 2\}$$
b. [Two boys]<sub>3</sub> ran from [it]<sub>1</sub> 
$$3 \subseteq 2 \& 2 \in Dom(R)$$

Because of this, the entities of the nominal phrase *two boys* are understood as a part of the entities in the NP *some kids*, which is already in Dom(R). Thus, to paraphrase Enç, an NP is only specific if and only if its second index is already definite.

Importantly, this model accounts for specific interpretations of NPs in sentences without any other quantified NPs. This is important because it offers a framework under which specificity is more than indefinites that allow for wide-scope relations with other NPs.

#### 3.1.1.1 Specificity and partitivity

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<sup>&</sup>lt;sup>16</sup> Note also that, per Heim, the NP carrying file card l in (4a), the indefinite (a) snake, has licitly become the definite pronoun it (4b) after entering Dom(R).

In a crucial manner, specificity in Enç (1991) is a relationship between the members of a set and that superset's status in the discourse. That is, the specificity of an NP is determined by whether it is an element or member of a set that is already established in the discourse. Specificity is the partitivity relationship as formalized above in example (3).

From the formalization in (3), Enç goes further and claims that all partitives are specific. Indefinite partitives like *some of the candy* refer to subsets of the partitive's referent, requiring matching second file cards for the indefinite member of the partitive (e.g. the subset *some*) and the definite member (the superset (*the*) *candy*), not only to reinforce the referential status of the partitive subset to its definite superset, but, more importantly for Enç, as proof that 'partitives are necessarily specific.' (Enç 1991: 10)

Enç assumes that accusative case carries the feature [+specific], where that feature is interpreted as in (3). This feature is only available to nouns that would otherwise receive only accusative case; as we saw in Section 2.1.5 and 2.1.6, all other case markers selected by the verb are obligatory. In the pair in (5), the ungrammatically of the second example is due to the lack of accusative case on a necessarily specific direct object: the partitive \*kadınlardan ikisi.

(5) a. ali kadın+lar+dan iki+si+ni tanı+yor+du

A woman+PLU+ABL two+AGR+ACC know+PROG+PST

b. \* ali kadın+lar+dan iki+si+Ø tanı+yor+du

A woman+PLU+ABL two+AGR+Ø know+PROG+PST

"Ali knew two of the girls"

To test Enç's proposal, we can compare the results in set (5) with the parallel judgments in (6) and (7) for definite, solidly referential expressions in the direct object position. These definite direct objects are pronouns and names, and by the formalism in (3), are inherently specific.

We see that the lack of accusative case here leads to ungrammaticality. Thus, the symmetry in the grammaticality judgments for sets (5-7) is taken as morphological support for Enç's theory of specificity as partitivity.

### 3.1.1.2 Overt and covert partitivity

Enç pursues the analysis of specificity as entailing partitivity and posits that, no matter whether they bear the full, overt partitive structure as described in Section 2.4 and exemplified in (5a-b), forms like those in the direct object position in (8b) below are, by (3), semantically partitive.

(8) a. 
$$[oda+m]_1+a$$
  $[birkaç çocuk]_2$   $gir+di$   $Dom(R) = \{1, 2\}$   $room+1^{st}+DAT$  several child enter+PST "Several children entered my room"

(for examples b-d) "I knew two girls"

(examples from Enç 1991)

The first example in (8) introduces two file cards to the domain of referents: that of *odam* and, importantly, that of a set *birkaç çocuk*. The following three examples each introduce a new file card, 3, to Dom(R): that of *iki kız*. Where this NP is marked with accusative case in (8b), the interpretation of 3 is as a subset of the larger, already referentially established entity with the file card 2.

Examples (8c-d) are very different. (8c) is grammatical because the novel NP *iki kız* is semantically unrelated to the superset *birkaç çocuk* introduced in (8a). Rather, this new NP introduces its file card 3 to Dom(R) as a separate entity, not as a subset of the larger file card 2.

Example (8d) is ungrammatical because the semantics indicates that the file card of the novel NP is a subset of another, already established file card in Dom(R). Following Enc's assumption about the role of accusative case in assigning specificity,

this example, like (5b), (6b), and (7b), is ungrammatical because the formal semantics of the partitive *iki kız*, as satisfied by the formalism in (3), necessitates a specific interpretation that is not morpho-syntactically realized with accusative case, whose presence carries specificity and whose absence carries nonspecificity.<sup>17</sup>

The crucial comparison here is between the examples in (5a-b) and those in (8a,b,d). Enç argues that the semantic overlap in the distribution of specificity, as tested by the absence or presence of accusative case, motivates treating the direct object in (8b) as a syntactically covert partitive.<sup>18</sup>

# 3.1.2 Specificity without partitivity

# 3.1.2.1 Epistemic specificity

There are instances of indefinite NPs that behave as specific in the absence of a possible semantically partitive interpretation. Consider the sentences below, where (9b) or (9c) can be licit but alternative continuations of the discourse that is initiated in (9a).

- (9) a.  $[A boy]_{\alpha}$  left the party
  - b. [His] $_{\alpha}$  name was [Marcus] $_{\alpha}$
  - c. No-one is sure who  $[he]_{\alpha}$  was

For the discourse initiated by (9a) and resolved in (9b), the interpretation of the identity of the bracketed material is definite and consequentially specific. In contrast, that same NP in the discourse started by (9a) but resolved in (9c) is nonspecific.

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<sup>&</sup>lt;sup>17</sup> An important distinction should be made here. Specificity is necessarily realized with accusative case on nouns only when that noun is in a position to receive accusative case. Pronouns and names may be specific, but they may occur as arguments to predicates that assign case other than the accusative without ceasing to be specific. Indeed, when in positions, the lack of accusative case is strongly ungrammatical, as in sets (6-7) above.

<sup>&</sup>lt;sup>18</sup> This is illustrated by a more precise translation of the covert partitive in (8b): 'I knew two of the girls'

Fodor and Sag (1982) provides a lexical analysis for data set (9). The argument is that the indefinite determiner a in (9a) is semantically ambiguous between two logical forms: one in which the indefinite is not referential but quantificational, and introduces a new entity to the semantics; and another in which the determiner is referential and specifically cataphoric. The poverty of the semantics in (9a) allows for this ambiguity to arise in isolation, and is settled by continuations that either introduce a postcedent (9b) or do not (9c).

## 3.1.2.2 Specificity as referent anchoring

The notion of direct reference is key to the previous formal treatments of specificity. Scope, partitivity, and ambiguous discourse all go some way to account for what makes a given NP 'specific,' but consider the role of the boldfaced NP in the excerpt below from Higginbotham (1987: 64).

(10) In typical cases, specific uses are said to involve a referent that the speaker 'has in mind.' (cf. Section 3.1.2.1 – EHG) But this condition seems much too strong. Suppose my friend George says to me, 'I met a certain student of mine today.' Then I can report the encounter to a third party by saying, 'George ...met a certain student of his today,' and the specificity effect is felt although I am in no position to say which student George met with.

As Higginbotham points out, the specificity of the indefinite NP *a certain student* of his cannot be traced backwards to or forward to an endophoric entity.

Von Heusinger (2002) posits the notion of specificity as referential anchoring, that is, the notion that specific NPs are anchored to other entities in the discourse. The formalization of referential anchoring, which von Heusinger admits owes much to

Heim's Familiarity Condition, is given below in (11), and is taken from von Heusinger (2007).

#### (11) Relative Specificity Condition

An NP<sub>i</sub> in a sentence  $\psi$  with respect to a file F and the Domain of filenames DOM( $\psi$ ) is [+specific] if there is a contextually salient function f such that i = f(j) and j  $\in$  DOM( $\psi$ )

Under this model, the sentences in Higginbotham's scenario above both introduce file cards for their NPs to the DOM( $\psi$ ). In George's first sentence, separate file cards represent the speaker's NP *I* and the indefinite *a certain student of mine*. Higginbotham's sentence introduces three separate file cards to his sentence's DOM( $\psi$ ): one for *a certain student of his*, one for *George*, and one for the speaker. The examples below apply the formalization in (11) to the critical examples from (10).

(12) a. George<sub>1</sub>: 'I<sub>1</sub> met [a certain student of mine]<sub>2</sub> today'

$$2 = f(1)$$
 &  $1 \in DOM(\psi)$ 

b. Higginbotham<sub>1</sub>: 'George<sub>2</sub> met [a certain student of his]<sub>3</sub> today'

$$3 = f(1)$$
 &  $1 \in DOM(\psi)$ 

$$3 = f(2)$$
 &  $2 \in DOM(\psi)$ 

In (12a), the indefinite NP introduces a file card 2 that is interpreted as the product of some contextually salient function on the file card 1, which acts as file card 2's anchor. As such, the indefinite NP associated with file card 2 is interpreted as specific.

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<sup>&</sup>lt;sup>19</sup> Von Heusinger (2007) gives one entity's temporal and physical proximity to another entity or one entity's identifiability of another entity as examples of such contextually salient functions.

That same indefinite NP carries the file card 3 in (12b). It can be interpreted in two ways. First, it can be taken as the product of function on I, the file card associated with the speaker. In this case, the specificity is understood to reside in some contextually salient manner within the speaker, e.g. Higginbotham may felicitously continue the discourse in (12b) with the below, which betrays the nature of the contextually salient link between the speaker and *a certain student of his*.

### (12) c. And the student's name was Bilgen

The second interpretation of (12b) involves using file card 2 for the NP George as the anchor on which some function f produces the file card for the NP a certain student of his. This analysis anchors referentiality not on the speaker, but on the NP George. As such, (12c) would very likely be nonsensical under this second analysis, as there is no known function saliently relating the file card for the speaker to the file card for the indefinite specific. Rather, as the anchor is the file card for George, the following judgments are correctly predicted as Higginbotham's continuation of (12b).

- (12) d. I don't know who the student is
  - e. No-one but George knows who the student is
  - f. # No-one knows who the student is

(12d-e) are licit because they make no claims about the speaker's relation to the specificity of the entity *the student of his*. The problem with (12f) is that it flouts a very common contextually salient link between *a student*, the indefinite specific, and that student's teacher, the anchor *George*, i.e. identifiably. With other functions to link the anchor to the specific indefinite, (12f) becomes licit as a continuation of (12b).

(12) g. No-one knows who the student is, but George swears that s/he sits in on his calculus lectures.

We adopt specificity as defined by the Relative Specificity Condition in example (11) only after the proposal in Enc (1991) is shown to be lacking.

### 3.2 Syntactic incorporation

As it is crucially assumed in our treatment of the Turkish partitive as a syntactically identical to nonpartitives, this section gives an overview of previous attempts in the literature to account for incorporation, which we here define per Baker (1988) as the processes by which by which a semantically independent word comes to appear within or affix to another word.

Mohawk grammar exemplifies this process. Consider the examples in set (13), taken from Postal (1979), in which the noun *nuhs* ('house') is an independent word in (13a) but becomes an infix of the verb *yenuhwe?s* in the second example.

3FS/3N+baby+like+ASP

'The baby house-likes'

PRE+baby+SUF

Although Baker (1988) proposes a unified syntactic account for a variety of incorporation phenomena including causative and antipassive constructions, most relevant to us is his treatment of noun incorporation into the verb. The four subsections

that follow provide an overview of Baker's analysis of noun incorporation, and will then proceed to its application in Kornfilt (1993) to Turkish direct objects.

#### 3.2.1 Disruption of maximal projections

Baker (1988) marshals data from a great variety of less commonly investigated languages, but his account of incorporation draws on these languages' common phenomena. One such phenomenon is incorporation's 'stranding' of NP-internal material. That is to say, noun incorporation targets the head N of the NP for movement into the VP, but leaves other modifying constituents of the NP in situ. Consider the Southern Tiwa (Kiowa-Tanoan) pair below, which are taken from Allen, Gardiner, and Frantz (1984) and cited in Baker (1988).

In the unincorporated example (14a), the direct object *wisi seuanin* is a semantically independent NP, and comprises two words: the quantifier *wisi* and the nominal *seuanin*.

The incorporated counterpart to (14a) is (14b), for the noun *seuan* now appears within the VP *bimuban* as *biseuanmuban*. It is striking that this noun's sometime modifier, the quantifier *wisi*, has not been incorporated, but has been licitly stranded in its

original site of base generation. Although we here are only looking at noun incorporation, set (14) suggests that incorporation allows for the disruption of the incorporated item's original maximal projection by targeting only the direct object's terminal node.

#### 3.2.2 Head-to-head movement

Beyond this empirical observation about noun incorporation, there are, of course, a few theoretical assumptions central to all of Baker's analyses of incorporation.

Although only alluded to in the previous section, the first of these is exemplified in another Southern Tiwa pair, taken again from Allen, Gardiner, and Frantz (1984) and cited in Baker (1988).

Example (15a) represents the order of a Tiwa sentence in which two semantically separate nominal phrases are present: the syntactically independent *suean* (with the nominal inflection suffix *-ide*) for 'man' and the bound *ti-* translated as 'I'. In (15b), the formally independent direct object appears inside the verb phrase between the person marker *ti-* and the head of the verb phrase *mu*.

Incorporation is licit only between the heads of XPs that are in a close structural relationship. This Head Movement Constraint (HMC) is formalized below.

(16) A head X may only move the head Y which properly governs it.<sup>20</sup>

This formalization in will allow for incorporation of the head of the XP sister complement into the verb but will exclude incorporation from XPs in other positions from incorporating.

### 3.2.3 Case and incorporation

The HMC is central to Baker (1988), but for our purposes, local head movement between the heads of direct object NPs and their selecting VP-heads is most relevant.

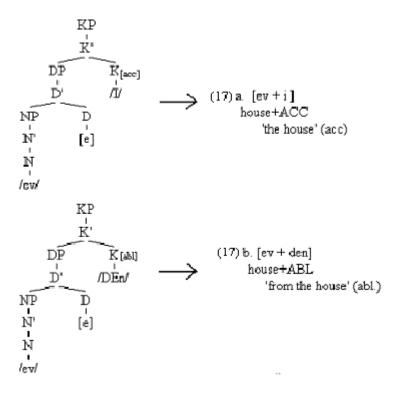
While retaining Baker's locality restraint on incorporation, we here provisionally adopt the proposal from Kornfilt (2003) for the structure of nominal phrases whereby the NP is, following Abney (1987), the complement of a determiner whose maximal projection, the DP, is a complement of a functional head that assigns case: the head of a Case Phrase, or KP.<sup>21, 22</sup>

Below, we give two examples of the internal structure of the KP.

<sup>21</sup> The notion of a KP with this internal structure is first proposed in Lamontagne & Travis (1987). Although we argue against the DP in Turkish, we here present the analysis in Kornfilt (2003), which does assume the DP.

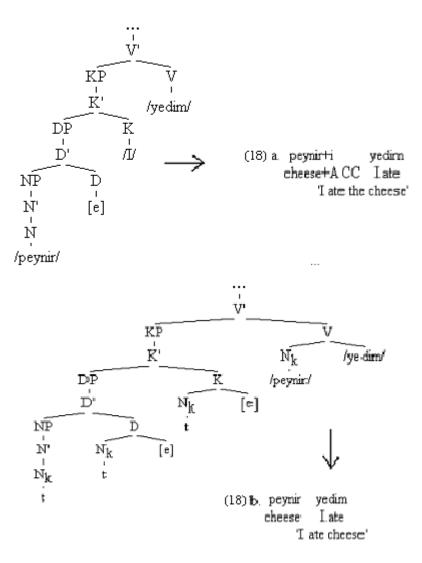
<sup>&</sup>lt;sup>20</sup> We assume the definition of government – and barriers – from Chomsky (1986).

<sup>&</sup>lt;sup>22</sup> Turkish case morphology is so rich that we do not distinguish between 'Case,' the theoretical designator of an NP's argument status, and 'case,' the morpho-syntactic realization of those assignations.



For both examples in set (17), purely nominal material, *ev*, is base-generated as the head of an NP. For reasons of economy, there is no head-to-head movement from the NP to the head of the KP; instead, the NP- and KP-head remain in situ to provide overt case marking: accusative case for *evi* in (17a) and ablative case for *evden* in (17b).

Kornfilt (1993) extends this analysis of Turkish nominals to account for the incorporation facts in Turkish. The argument is as follows: direct objects are incorporated into the head of the VP when its complement KP's head is 'occupied' by an empty category. That is, the movement originating from within the NP continues up to the VP-head and incorporates when an intervening KP-head is not available to saturate the NP-head with its case features.

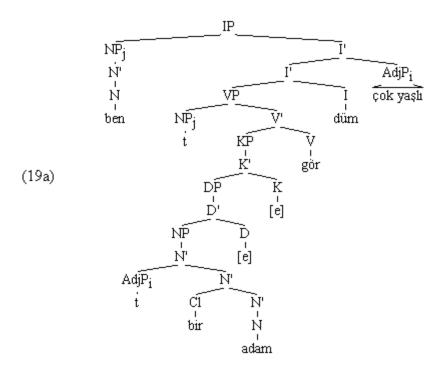


Example (18a) illustrates case-marked structures like those in set (17) wherein the NP-head receives case by dint of the KP-head.

Example (18b) provides our first structural analysis, following Kornfilt (2003), of noun incorporation in Turkish. Unlike (18a), the NP-head moves through the DP's empty category and continues on through the empty category in the head position of the KP. From there, local movement of the NP-head continues up to the head of the VP, into which the noun, *peynir*, is incorporated.

# 3.2.4 Subscrambling as evidence for incorporation

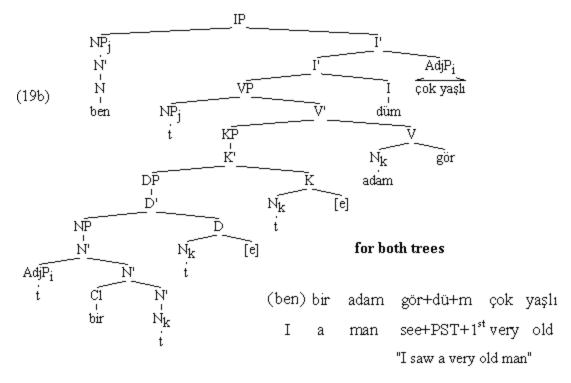
Subscrambling provides for Kornfilt (2003) crucial empirical evidence for incorporation into the verb of the caseless NP-head. Consider for a moment the alternative to incorporation for a grammatical subscrambled sentence in (19a) where the caseless NP-head remains in situ. <sup>23</sup> This alternative is followed in (19b) by an account from incorporation. <sup>24</sup>



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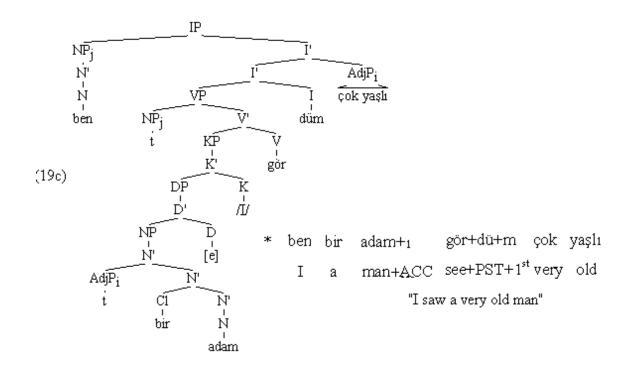
<sup>&</sup>lt;sup>23</sup> The examples in set (19) are modified versions of (13a) from Chapter 2.

 $<sup>^{24}</sup>$  We follow Kornfilt (2003) and claim that subscrambling right-dislocated NP-internal material and adjoins in above the level of the VP-head.



Kornfilt argues that the tree in (19a) is illicit because the AdjP trace within the NP for the rightward-moved AdjP *çok yaşlı* is not properly governed by the head of the NP. In contrast, Kornfilt's noun incorporation structure in (19b) allows for the N+V complex to properly govern the AdjP Trace. As such, proper government is obtained only when the head N is incorporated into the head V because it effectively alters the c-command relationship with the trace of the AdjP.

For this same reason, subscrambling is predictably illicit for case marked direct objects, as movement of the N-head to a governing position is blocked by an intervening overt KP-head. We illustrate this below.



#### **CHAPTER 4**

#### AN ANALYSIS OF TURKISH CASE

#### MARKING IN PARTITIVE CONSTRUCTIONS

### 4.1 Proposal

This section contains the novel data that motivate our proposal.<sup>25</sup> Section 4.1.1 sketches our argument for the structure of partitive phrases in Turkish. Starting first with our argument for adopting notion of specificity from Heusinger and Kornfilt (2005), we propose and model the semantics of nonspecific partitives in Turkish. This will lead in Section 4.1.2 to a discussion of specificity's role in assigning structural case and the syntactic processes that drive such case marking, marshaling evidence from word order at the level of the direct object and of the sentence.

# 4.1.1 Specificity as discourse-bound

Recall the argument from Enç (1991) as summarized in Section 3.1 above: specificity is a partitivity relationship, and is parametrically realized in Turkish direct objects with the accusative case marker -(y)I. One expects, then, that if partitives are

<sup>&</sup>lt;sup>25</sup> Except where noted, all the Turkish examples in this section were elicited from the author's email exchanges with three native speakers. These consultants either hold terminal academic degrees, or are at present pursuing one. They are male, in their early 30s, and fluent in the language's standard sociolect, which is based on the Istanbul dialect. All at present live in the United States, but use Turkish as an ecolect and travel often to Turkey.

<sup>&</sup>lt;sup>26</sup> Note that it is only for direct objects that may be structurally assigned accusative case that specificity may be grammaticalized. This is assumed in Enç (1991) and made explicit in Kornfilt (1997: 276).

inherently specific, partitives in the direct object position must be obligatorily marked with accusative case.

This is not sustained by the data. Consider the grammatical examples below, which are taken from von Heusinger and Kornfilt (2005).

(1) a. ali büro+ya çocuk+lar+dan iki kız+ı al+acak

A office+DAT kid+PLU+ABL two girl+ACC hire+FUT

'Ali will hire two (specific) girls of the children for the office'

b. ali büro+ya çocuk+lar+dan iki kız+Ø al+acak

A office+DAT kid+PLU+ABL two girl hire+FUT

'Ali will hire two (nonspecific) girls of the children for the office'

The grammaticality of (1b) is critical. The direct object is the syntactically and semantically partitive *çocuklardan iki kız*, but it is not interpreted as specific. That is, in simple epistemic terms, Ali does not have any particular two girls in mind. This contrasts with the specificity of the accusative case-marked direct object in (1a).

Consider also the 'naked partitives' discussed in Kornfilt (1996), as summarized in Section 2.4.3 above.

(1) c. ali [ NP balık+tan ] dün ye+di

A fish+ABL yesterday eat+PST

'Ali ate (an unspecified amount) of fish yesterday.

If we assume Kornfilt (1996) is correct that these naked partitives are indeed structurally identical to other partitives, then these nonspecific objects like (1c) would, following Enç (1991), necessarily be specific and carry accusative case. Neither, of

course, is true; the material in the direct object position *balıktan* is marked with ablative case and is nonspecific.<sup>27</sup>

As the syntactic partitives in examples (1b-c) are perfectly grammatical and nonspecific, partitivity cannot be intrinsically specific. For this reason, we adopt the account of specificity in Heusinger and Kornfilt (2005). That is, specificity in Turkish is treated as a discourse-introduced primitive that marks entities as referentially anchored to previous entities.

For instance, consider the dialogue below in example (a) where Erol speaks to Havva, who then in (b) relays their conversation to Fatih.

Another dialogue is possible in which the specificity of the patient is not known.

Note the absence of accusative case marking in both examples.

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<sup>&</sup>lt;sup>27</sup> To be clear, Enç (1991) explicitly says that 'the lack of accusative case on the partitive, whether it is a genitive or an ablative partitive, leads to ungrammaticality.' (cf. pg. 10).

E students+3<sup>rd</sup>.POSS+ABL a girl flunk+FUT+EVT

'Erol's supposedly going to flunk one (nonspecific) girl of his students'

Von Heusinger and Kornfilt predict that these dialogues are grammatical, for the specificity (or lack thereof) of the partitive, as marked by the accusative, is anchored in the first utterance and transmitted in the second.

Also predicted is that dialogues with mismatches in specificity between the first speech act's patient and that of the second would be ungrammatical or at least extremely awkward.

Both predictions are borne out. These dialogues are grammatical, and are represented by the formalizations, following Heusinger (2007), below.

- (2) a'.  $E_1$ : ben<sub>1</sub> [öğrenci+ler+im+den bir kız+ı]<sub>2</sub> bırak+acağ+ım  $I \quad student+PLU+1^{st}.POS+ABL \quad one \quad girl+ACC \quad flunk+FUT+1^{st}$   $2=f(1) \quad \& \quad 1 \in DOM(\psi)$ 
  - b'.  $H_1$ :  $erol_2$  [öğrenci+ler+i+nden bir kız+1] $_3$  bırak+acak+mış  $E \quad student+PLU+3^{rd}.POS+ABL \ one girl+ACC \ flunk+FUT+EVT$   $3=f(1) \quad \& \quad 1 \in DOM(\psi)$
  - (3) a'.  $E_1$ : ben $_1$  [öğrenci+ler+im+den bir kız+Ø] $_2$  bırak+acağ+ım  $I \quad student+PLU+1^{st}.POS+ABL \quad one \quad girl \quad flunk+FUT+1^{st}$   $2 \neq f(1) \quad \& \quad 1 \in DOM(\psi)$ 
    - b'.  $H_1$ : erol $_2$  [öğrenci+ler+i+nden bir  $k_1z+\emptyset]_3$  bırak+acak+mış E student+PLU+3<sup>rd</sup>.POS+ABL one girl flunk+FUT+EVT  $3 \neq f(1)$  &  $2 \in DOM(\psi)$

For (2a) the specific indefinite partitive  $\ddot{o}grencilerimden\ bir\ kizi$  introduces the file card 2 that is interpreted as the product of some contextually salient function on the file card I, which is introduced by the first speaker: Erol.

For (2b), the same indefinite NP carries the file card 3. Because of it is case marked, it can only be interpreted as the product of function on I, the file card associated with the speaker Havva. In this case, the specificity is understood to reside in some contextually salient manner within the speaker. That is, Havva knows who Erol's underachieving student is.

For the nonspecific indefinite in (3a'), no such function can be carried out to anchor the partitive *öğrencilerimden bir kız* to the speaker. More plainly, Erol doesn't know much about this student of his. As such, the nonspecific in the continuation in (3b') can anchor its referentiality on the card for neither Erol nor Havva.

So what of mismatches in case/specificity from one speaker to the next? That is, can the speech act in (2a) be followed by (3b), and can (3a) be followed by (2b)? The answer is yes, but the crucial mismatches are not in the utterances themselves, but in the relationships between the file cards and functions introduced in the reply's domain of speakers.

That is, if (2a) were to be grammatically followed by (3b), or vice versa, only a few licit truth conditions for the second utterance could be available. Paraphrases are also given.

(4) a. where (2b) follows (3a) 
$$3 \neq f(1) \quad \& \quad 1 \in DOM(\psi).$$

Supposedly, Erol will flunk one of his female students; there is no contextually salient relationship between student and teacher; Havva does have such a relationship with the student.

(4) b. where (3b) follows (2a)

$$3 \neq f(1)$$
 &  $3 = f(2)$  &  $2 \in DOM(\psi)$ 

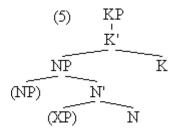
Supposedly, Erol will flunk one of his female students; there is no contextually salient relationship between this student and Havva; it is also unknown whether Erol shares such a relationship with his student.

The commonality in these scenarios is that the specificity of the direct object, as reflected in the marking of accusative case, is present within the linking of new referents' file cards with the speaker. Although it appears to be available only to arguments in positions whose theta roles are syntactically determined, we take specificity to be a marked primitive on nominal phrases, one which may be toggled by the anchoring of referents in the discourse to other established entities, speaker and hearer included.

### 4.1.2 The syntactic structure of partitives

Movement and specificity phenomena motivate a unified account of partitive and nonpartitives nominal structures in Turkish. We expand the structural account in Kornfilt (1996) to include fully fleshed out partitives, nonpartitives, and the 'naked' partitives that Kornfilt originally addressed.

The internal structure of the Turkish nominal phrase is as follows.



For simple nonpartitives, the specifier position within the NP is empty such that the only material with the maximal projection of the sister to the KP is the NP-head and whatever complement it may select.

For partitives, the material that corresponds to the partitive's superset is generated within the NP-spec position. For bare partitives, we follow Kornfilt (1996) and posit that these NP structures have an NP in specifier position and a *pro* as the NP-head.

We also, as argued in section 2.5, reject a DP projection directly above the Turkish NP. In its place, we adopt the KP, whose head carries inherent or structural case. For the former, the head may hold an empty category either when the syntax recognizes the KP to be in a position that receives nominative case, or when the KP could receive accusative case but does not due to lack of discourse established specificity.

Lastly, the head-final nature of the KP does not motivate head-to-head movement between the KP-head and the head of the NP when the KP-head is overt. This conclusion is as much as it is an appeal to economy as it is driven by subscrambling facts below.

#### 4.1.2.1 Evidence from word order

This section looks at word order phenomena with respect to partitive noun phrases. Two questions need to be addressed: will the facts about the incorporation of

heads of nonspecific nonpartitive direct objects hold for nonspecific partitives?<sup>28</sup> and does the asymmetry in grammaticality between specific and nonspecific subscrambling also hold for partitive structures?<sup>29</sup>

Interestingly, (1b), which has a morphologically bare, nonspecific direct object, impressionistically manifests a key characteristic of incorporation: the caseless direct object is directly left-adjacent to the verb. This suggests that like their nonpartitives counterpart, partitives do not allow the disruption of the juncture of the head-to-head incorporation into the VP-head. The examples below illustrate this point plainly.

(6) a. özge parti+de erkek+ler+den iki kişi+yi dün öp+tü
 Ö party+LOC man+PLU+ABL two person+ACC yesterday kiss+PST
 'Yesterday, Özge kissed two (specific) individuals of the men at the party'

b. \* özge parti+de erkek+ler+den iki kişi+Ø dün öp+tü
 Ö party+LOC man+PLU+ABL two person yesterday kiss+PST
 'Yesterday, Özge kissed two (nonspecific) individuals of the men at the party'

The subscrambling facts surveyed in Section 2.3 above also hold for Turkish partitive structures. Consider the pair below in which example (b) exhibits subscrambling out of the partitive direct object with the incorporated head.

(7) a. ali büro+ya çocuklar+dan [[çok güzel]i iki kız] al+acak

A office+DAT children+ABL very pretty two girl+Ø hire+FUT

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<sup>&</sup>lt;sup>28</sup> Recall from section 2.2.2.1 that the incorporation of the direct object into the verb is grammatical only with nonspecific nouns.

<sup>&</sup>lt;sup>29</sup> Recall from section 2.3 that subscrambling of adjectival material from with the direct object to a post verb position is grammatical only with nonspecific nouns.

b. ali büro+ya çocuklar+dan [ ti iki kız ] al+acak [çok güzel]i

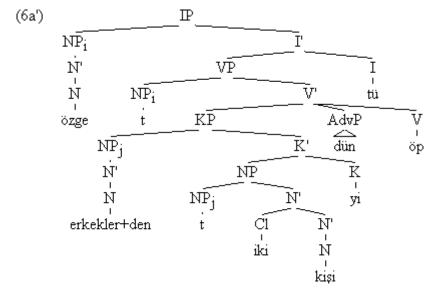
A office+DAT children+ABL two girl hire+FUT very pretty

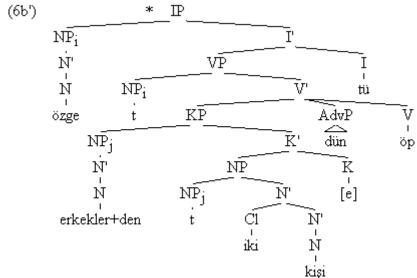
'For the office, Ali will hire two (nonspecific) very pretty girls of the children' (for both)

Furthermore, partitive structures whose heads are marked with accusative case behave very much like nonpartitives, case-marked structures. The case-marked direct objects in set (8) cannot be licitly subscrambled to post-verbal positions, as is attempted in the pair below.

(8) a. ali büro+ya çocuklar+dan [ [çok güzel] i iki  $k_{1}z+1$ al+acak A office+DAT children+ABL very pretty girl+ACC hire+FUT two b.\* ali büro+ya çocuklar+dan  $[t_i \text{ iki kız+1}]$  al+acak [çok güzel]i A office+DAT children+ABL two girl hire+FUT very pretty 'For the office, Ali will hire two (specific) very pretty girls of the children' (for both)

Thus, incorporation appears to occur from the head of the complex partitive direct object to the head of the verb phrase. Consider the trees below, which are simplified versions of the data from set (6) above.

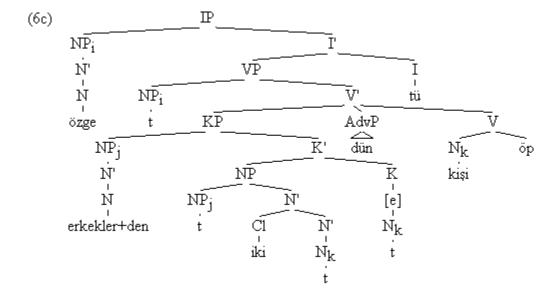




Example (6a') illustrates a nearly full projection within the Turkish partitive: the NP is overtly headed, and the specifier position generates another NP. The KP above this NP also demonstrates the partitive at work. Here, the specifier position is the final stop for the partitive's superset *erkeklerden*, and the head is filled by the verb's selection of structural case: *-yi*.

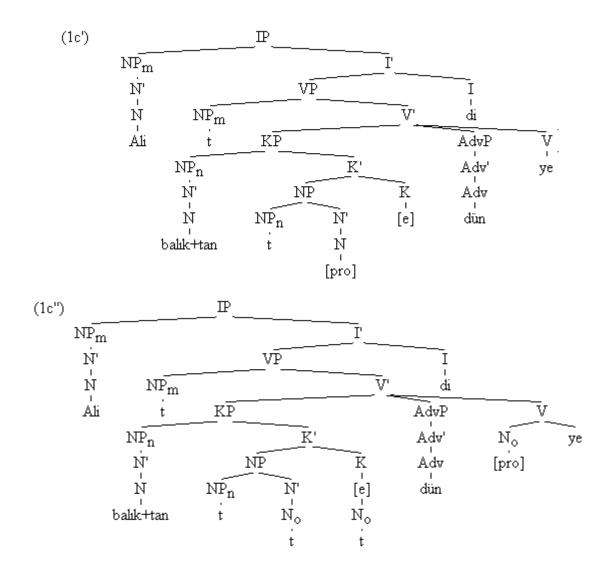
The tree in example (6b') represents the ungrammatical example is (6b). The adverbial *dün* intervenes between the caseless direct object and the verb, thus providing very good evidence of the incorporation of the noun into the verb.

Below is a structure in which the NP-head of the partitive has moved through the empty category in the head of KP and through to the head of the VP.



In the tree above, we have an example of full incorporation of the head of a partitive direct object

This analysis also extends to naked partitives. Consider the examples below whose only difference is whether the partitive's head, which per Kornfilt (1996) is realized as a pro meaning 'an unspecified amount of' (cf. pg. 131), incorporates itself into the VP-head. These trees propose structures for example (1c) above.



# 4.1.2.2 Further evidence from subscrambling

Our evidence from subscrambling in partitives also gives evidence that partitives and nonpartitives have identical syntactic structures. These data at their core manifest the incorporation of nonspecific NP-heads into the VP-head, and together with the data in the previous section, subscrambling provides further syntactic evidence of the parallel structures of partitive and nonpartitive structure in Turkish.

Consider the formalisms below, which analyze the VPs from subscrambled data from in examples (7b) and (8b) above. The examples below assume a rightward

dislocation of adjectival material from within the NP to a VP-external position.

Importantly, Kornfilt (2003) notices a specificity constraint on the applicability of this process whereby it may only apply on structurally cased-marked nonspecific direct objects.

- (7) b'. [[[[çocuklar]<sub>i</sub>+dan [  $t_j$  iki  $t_k$   $t_i$  NP] e KP] [k12]<sub>i</sub> al VP] ... [çok güzel]<sub>k</sub> children+ABL two girl buy very pretty
- (8) b'. \* [[[çocuklar]<sub>k</sub>+dan [  $t_l$  iki  $t_k$  kız NP] +1 KP] al VP] ...[çok güzel]<sub>l</sub> children+ABL two girl ACC buy very pretty
- (8) c.' \* [[[[çocuklar]\_k+dan [  $t_1$  iki  $t_k$   $t_j$  NP]  $t_i$  KP] [[kız+1]\_i+j] al VP] ...[çok güzel]\_1 children+ABL two girl+ACC buy very pretty

Example (7b') illustrates three processes: movement of the NP *çocuklar* from NP-spec to KP-spec; incorporation of the partitive NP-head *kız* into the verb *al*; and the dislocation of *çok güzel*.

Examples (8b'-c') are paradoxical for a few reasons. First, the case marking on the *kız+ı* in (8b') is only possible if the argument to the KP-head is specific. In this case, the structure's insensitivity to the specificity constraints on the right dislocation of the adjectival *çok güzel* causes ungrammaticality.

Example (8c') is even more insensitive to our assumptions about Turkish partitive phrases. It too flouts the assumption that accusative case bears specificity by dislocating adjectival material, but (8c') also uneconomically moves the NP-head to incorporate with the governing KP-head, which itself is then incorporated into the VP-head.

Neither option is particularly palatable. The latter is uneconomic, as we have not found evidence, beyond that in the analysis of nonspecific direct objects, of other

examples of head-to-head movement in Turkish. But importantly, both flout the evidence for the accusative marker acting to denote specificity.

# 4.2 Arguments against alternative theories

### 4.2.1 Semantic incorporation

The proposal for incorporation in Chung and Ladusaw (2004)<sup>30</sup> introduces two separate methods of semantic composition, Restriction and Saturation, to account for, among other phenomena, noun incorporation in Chamorro (Austronesian). This section gives an outline of these two concepts and discusses the motivating Chamorro data.

This semantic treatment of incorporation for Chamorro runs counter to some tenets of syntactic incorporation, e.g. the Head Movement Constraint and a prohibition on the incorporation of material more complex than a head. Because much of our proposal for Turkish partitive structure rests on syntactic incorporation, this semantic account would, if applicable to Turkish, force a reanalysis of our proposal. We show in 4.2.4, however, that the structures necessary for the C&L proposal do not exist in Turkish.

#### 4.2.1.1 Saturation and Restriction

The concept of saturation – that is, the process by which incomplete grammatical units complete each other – is neither novel nor unfamiliar to linguistics.<sup>31</sup> In C&L, the incomplete predicate is saturated by semantically complete entities. The example in

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<sup>30</sup> Hereafter 'C&L'

<sup>&</sup>lt;sup>31</sup> Cf. C&L for a discussion of Strawson (1959).

(19a) gives the logical form of the simple sentence *Jillian married Ayşe* before semantic composition via saturation.

(19) a. 
$$\lambda y \lambda x \left[ \text{marry'}(y)(x) \right] (J, A)$$

C&L here introduces the function application Saturate to in a sense round out the function marry' with the available entities J and A as its arguments.

'Jillian married Ayşe' (it is the case that *Jillian* (did) *marry Ayşe*)

In addition to Saturation, C&L introduce a second mode of semantic composition. Restriction differs crucially from Saturation in that the latter does not allow for 'saturated argument positions (to be) available to semantic composition.' (C&L: 3) Restriction differs from this mode of composition in that argument positions can be filled by a property argument that introduces to the predicate some restrictive modifier that does not completely Saturate, thus providing the predicate cum function with an argument.

English arguably lacks noun-to-verb incorporation, but we may attempt an ersatz English example to illustrate Restriction. As such, consider the following formalisms whose 'translations' are admittedly awkward. The arrow → represents the application of Restriction and, in the case of (20b), Saturation, too.

(20) a. 
$$\exists e \lambda y \lambda x \lambda e [[marry'(y)(x)(e)], lady'] (J) \rightarrow \exists e [marry'(y)(J)(e) \& lady'(y)]$$

# 'Jillian lady-married' (there is an event such that *Jillian*

(did) *marry* some *lady*-ish thing'

b.  $\exists e\lambda y\lambda x\lambda e$  [[marry'(y)(x)(e)], lady'] (J, A)  $\Rightarrow \exists e$  [marry'(A)(J)(e) & lady'(A)] # 'Jillian lady-married Ayşe'' (there is an event such that *Jillian* (did) *marry* some *lady*-ish thing, which is *Ayşe*)

Example (20a) illustrates Restriction of the predicate without complete Saturation. The function lady' here, as well as in (20b), restricts the properties of the variable y without saturating it with any particular semantic entity.

There are however, multiple specific entities in the set for (20b), A and J, and both Saturate the predicate marry'. The function lady', which again only delimits a domain of 'ladylike' properties and not the entities themselves, also acts on A, and adds background information on gender on nature of the sentence's truth conditions.

It is important to bear in mind that Saturation and Restriction are not syntactic operations, but rather semantic modes of composition: one, Saturation, that fully fills some position in a predicate's argument structure; and another, Restriction, that denotes but does not fulfill the properties of an unsaturated position in the argument structure.

# 4.2.1.2 Chamorro incorporation <sup>32</sup>

Chamorro incorporation allows for the so-called 'extra object' that lends to the awkwardness of the English translation *Jillian lady-married Ayşe* in (20b).

This incorporation is only found in two verbs: gäi 'have' and täi 'not have.'

C&L argue that these verbs select two arguments: an external possessor and an internal possessed argument. It is this internal argument that demonstrates many of the phenomena commonly attributed to incorporation.

The incorporated structure behaves morpho-syntactically like a verb. It inflects for tense, agrees with the external subject, and its distribution of pronouns patterns with intransitive verbs and not with transitive verbs with true, unincorporated direct objects.

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 $<sup>^{\</sup>rm 32}$  All the Chamorro data and glosses are from C&L.

Consider the following, but note that only the first two and the very last examples exhibit the incorporation of nouns, which are bracketed.

AGR+not.have+problem you

'You would have no problems'

b. man+gäi+[kareta] häm

AGR+have+car we

'We own (have) a car'

c. man+mamokkat häm tatti

AGR+walk we back

'We walked back'

d. in+silélebra (\*häm) i giput

AGR+celebrate.PROG we the party

'We were celebrating the party'

e. \* Si juan gäi+[todu i lapis]

UNM J have+all the pencil

To mean 'Juan has all the pencils'

The examples in set (21) point to the core of the proposal in C&L. Whatever the nature of the incorporated material in (21a-b), it cannot be a truly syntactic direct object of the verbs *gäi* or *täi*.

We see that the agreement marker *-man* on both the incorporated verb in (21b) and the intransitive verb in (21c) concord differently with subjects of different person and number. In examples (21b,c), we see that verbal agreement inflection is identical in

incorporated verb forms and in intransitive verbs, but is dissimilar to inflection for the transitive verb in (21d). Examples (21a-c) show us that the presence of an overt pronoun is grammatical for incorporated and intransitive verbs, but is ungrammatical for transitive verbs, as in (21d). In all, we see that incorporated forms behave morphologically like intransitive verbs, not transitive verbs.

## 4.2.1.3 The Head Movement Constraint, flouted

Another complication is the so-called 'extra' direct object in Chamorro.

b. man+gäi+[ga'] häm *nuskuantus ga'lagu* yan in+pépeksai siha

AGR+have+pet we several dog and AGR+raise.PROG them

'We have several pet dogs and (we) are raising them'

Here, nominal material has incorporated into the verbs, but the verbs themselves are followed by 'extra direct objects' akin to *Ayşe* in the awkward English example (20b). These forms demonstrate that verb-incorporated nominal material, ga', can occur with a full DP, ga'lagu, that is outside the verb and seemingly the post-incorporation verb's 'extra' direct object.

But the extra 'direct' object *un ga'lagu* to the incorporated verb *mangäiga'* occurs with the verbal agreement marker appearing with *man*—, the marker for intransitive verbs. This with the marker *in*— that occurs with truly transitive VP like *pépeksai siha*,

the VP after the conjunction in example (23b). We here have more morphological evidence that the incorporated verb in Chamorro is not transitive.

This fact has as its corollary that neither the incorporated material nor the extra object in Chamorro can be the syntactic sister to the verb. If this fact held for Turkish, we would face problems with our proposal for the structure of the Turkish partitive, as it is couched upon syntactic incorporation that allows only for head-to-head movement under the Head Movement Constraint.

That is, if the incorporated material is not a complement to the verb but instead an adjunct, then the Head Movement Constraint appears to be violable under the C&L treatment, as proper government as understood in Baker (1988) as a relationship between heads, is flouted by the Chamorro examples.

## 4.2.1.4 C&L not wholly applicable to Turkish

At the core of Chung and Ladusaw (2004) and its semantic approach to incorporation is the function Restrict, which allows for incorporated, property-denoting material to co-occur with another, fully syntactically fleshed out constituent. This extra, would-be object is central to their account of Chamorro object incorporation.

No Chamorro-like extra object is available in Turkish. Consider the examples below.

Ö yesterday book read+PST

'Özge {read books / book-read} yesterday'

- (10) a.\* mehmet aile+si+ne hamsi+yi balık pişir+di

  M family+3<sup>rd</sup>.POSS+DAT anchovy+ACC fish cook+PST

  'Mehmet {cooked anchovy/fish-cooked anchovy} for his family'
  - b. \* özge dün baba ve piç+i kitap oku+du
     Ö yesterday B&P+ACC book read+PST
     'Özge {read Baba ve Piç / book-read Baba ve Piç} yesterday'

The examples in set (9) are boilerplate examples of noun incorporation in Turkish. These contrast with the attempts in set (10) to incorporate, via Restriction, property-denoting nominal material while, on the model of Chamorro, simultaneously Saturating the predicate with an extra object.<sup>33</sup>

All speakers who commented on structures like the examples in set (10) found them extremely ungrammatical. This points to the inability of Saturation and Restriction to co-occur in Turkish, but does not in itself obviate the semantic model of composition in C&L, as the examples in set (9) may be thought to exhibit restriction of the verb, whereas a grammatical example like *Özge dün* Baba ve Piç'i *okudu* can manifest Saturation of the predicate.

But the lack of simultaneous Restriction and Saturation is troublesome for the C&L model. For Turkish, it is logically impossible to both Saturate and Restrict. This much is conceded in C&L itself.

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<sup>&</sup>lt;sup>33</sup> The semantics of the incorporated verbs in set (10) is not inconceivable. For (10a), the restricted properties of the verb *balık pişirdi* may relate to a low temperature or delicate method of preparation that is better suited for fish than for a heartier meat like ground beef. For (10b), *kitap okudu* may contrast with *şiir* ('poetry') *okudu*, where the reader pays more attention to rhythm and concision than she would to prose.

It should be evident that Restrict, with its ability to compose without saturation, is key to our account of incorporation in Chamorro....What would prevent an incorporated object from being doubled even in languages, such as Greenlandic or Maori, that simply do not permit this?...In such a language, the Chamorro route to extra objects would be closed off. (cf., pg. 113)

## 4.2.2 Inherent partitive case?

Our treatment of Turkish partitives is syntactic. In this section, we look at arguments for partitivity as a more morphological phenomenon. If partitivity could be reduced solely to the verb's theta-role assignment, our strict syntactic approach would be unnecessary.

## 4.2.2.1 Evidence from Finnish

Belletti (1988) follows the distinction in Chomsky (1968a) between inherent case and structural case. Crudely put, inherent case is semantically assigned via theta roles, but structural case is assigned in the syntax by dint of structural relations with other constituents.

Finnish famously contrasts partitive and accusative case on direct objects. The pair below is from Belletti (1988).

(25) a. hän pani kiriat pöydälle

he put book(PLU, ACC) on.the.table

'He put the books on the table'

b. hän pani kirjoja pöydälle

he put book(PLU, PRT) on.the.table 'He put some books on the table'

Belletti argues that partitive case is inherent, that partitive case may be selected for the direct object by the verb. Because it is so rare morphologically, she turns to phenomena in other languages in order to provide evidence of a phonologically unrealized but inherent partitive case.

#### 4.2.2.2 Unaccusatives and definiteness: evidence from Italian

The evidence for verbs' selecting partitive case is limited, but Belletti investigates other syntactic positions to justify partitivity as, an inherent case. Consider the passive and unaccusative Italian examples below, also from Belletti, in which the bracketed subjects in set (26) are indefinite and those in set (27) are definite.

- (26) a. era.finalmente.arrivato [qualche studente] a lezione arrived.finally some student to lecture 'Some student finally arrived to the lecture'
  - b. é stato messo [un libro] sul tavolo has been put a book on table

'A book has been placed on the table'

- (27) a. \* era.finalmente.arrivato [ogni studente] a lezione arrived.finally every student to lecture 'Every student finally arrived to the lecture'
  - b. \* é stato messo [il libro] sul tavolo has been put the book on table

'The book has been placed on the table'

Definiteness effects on unaccusatives are key to the distribution of Belletti's partitive case. In set (26), the internal arguments of the unaccusative and passive verbs are indefinite. Importantly, the definite internal arguments in set (27) lead to ungrammaticality.<sup>34</sup>

Belletti (1989) argues that the asymmetry between sets (26-27) is due to the effect of an unaccusative or passive VP-head on the definiteness on its direct object. That is, just as transitive verbs may mark their complements with accusative or, like Finnish, overt partitive case, unaccusative verbs may mark their complements with partitive case. Unlike accusative case, however, partitive case is not structurally determined but is inherent to the semantics of the verb.

For Italian, as would be necessary for many languages, partitive case is phonologically null, but it is certainly compatible with the indefinite determiners in the bracketed DPs in set (26), and is incompatible with the definite determiners in set (27).

#### 4.2.2.3 More evidence from Finnish

If partitive case is not structurally determined, as seems to be the case for complements of unaccusative and passive verbs in Italian, we expect partitive case to behave is manners opposite how structural cases do. For instance, in the functionally identical English pair *I hit her*  $\sim$  *She was hit by me*, whether a pronoun receives either nominative and accusative case is determined by its syntactic position independently of the theta role it carries.

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<sup>&</sup>lt;sup>34</sup> The examples in set (3) are grammatical only when the internal argument is raised from within the VP to IP-spec in order to receive (structural) nominative case: [ogni studente] era finalmente arrivato t a lezione; [il libro] é stato messo t sul tavolo

Partitive case in Finnish does not exhibit this complementary distribution with structural cases. Consider the pair of sets below. (All data from Manninen & Nelson 2004)

'Pekka murdered Jussi'

'Jussi was murdered'

'Diane killed some slugs'

'Some slugs were killed'

Although nominative case in Finnish is, like in Turkish, phonologically null, we see in set (28) a very English-like, structurally determined, position-sensitive switch in the distribution of accusative and nominative case in passive constructions: the subject gets nominative case, and the direct object get accusative case.

Like (28a), example (a) in set (29) is transitive, but the verb, per Belletti (1988), has selected a partitive complement as a direct object, but it is (29b) that supports the case for partitive case as inherent. The subject of this example retains partitive case. If

partitive case were structurally determined, we would not expect the partitive marker -ta on the constituent in the position licensing nominative case.

### 4.2.2.4 Summing up Belletti (1988)

Belletti (1988) suggest that the internal argument of unaccusatives is the complement to the VP-head. This is strengthened, in part, by parallel grammaticality judgments for Italian unaccusatives and passives, whose arguments are assumed to be the sister to the VP-head.

This assumption about unaccusatives vis-à-vis passives bolsters inherent partitive case's viability when more data from Finnish are analyzed. There we see that passivization does not suppress the partitive, as one would expect to occur were the partitive were a structural case, but that it remains, in contrast to the accusative, which predictably appears on the sister to the VP. Having made our proposal, we now consider the two rival theories summarized in Chapter 3. We start in section 4.2.1 with Turkish in light of the arguments in C&L for the semantic composition of incorporated material. We then turn in section 4.2.2 to the possibility of inherent partitive case, per Belletti (1988), in Turkish.

## 4.2.2.5 No inherent partitive case in Turkish

Unlike Finnish, Turkish does not grammaticalize partitivity with a contrastive case marker. As we have seen, partitivity on direct objects is instead indicated in two ways: syntactic partitive structures of the types discussed in Section 2.4; and lack of

accusative case marking on nonsyntactic partitives of the types discussed in Section 3.1.1.2.

How then to proceed to determine whether partitive case is inherent in Turkish? We follow the model in Belletti (1988) to tease out whether a definiteness effect on Turkish unaccusatives and passives would require an appeal to phonologically covert case in order to explain word order phenomena.

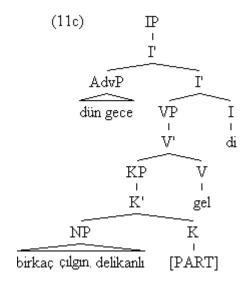
- (11) a. bu çılgın delikanlı dün.gece Franklin Caddesi+ne gel+di
  this wild dude last.night F.S+DAT come+PST

  'This wild dude came to Franklin Street last night'
  - b. birkaç çılgın delikanlı dün.gece franklin caddesi+ne gel+di
     some wild dude last.night F.S+DAT come+PST
     'Some wild dudes came to Franklin Street last night'
  - c. dün.gece Franklin Caddesi+ne birkaç çılgın delikanlı gel+di last.night F.S+DAT some wild dude come+PST 'Last night, some wild dudes came to Franklin Street'
  - d. dün.gece franklin caddesi+ne bu çılgın delikanlı gel+di
     last.night F.S+DAT this wild dude come+PST
     'Last night, this wild dude came to Franklin Street'

Following the unaccusative hypothesis in Belletti (1988), the subjects in these examples, the NPs headed by *delikanli*, are complements of the unaccusative verb *gel*. For (11a-b), the subjects differ in that the definite subject in (11a) has been raised to the specifier position of the IP to receive inherent nominative case, while, per Belletti (1988), the indefinite subject in (11b) receive inherent case from the verb *gel*.

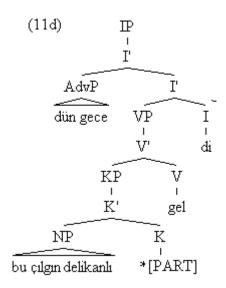
Examples (11c-d) are more problematic for Belletti. In both cases, the subjects have remained in situ, and following her hypothesis, should be marked with partitive case. From the Italian examples, we expect a definiteness effect to preclude an unmoved definite subject as the complement the VP-head. While this is the case in example (11d), the grammaticality of (11c) flouts the definiteness effects that Belletti explores.<sup>35</sup>

Consider the parsing trees for these last two examples, where the role of the temporal adjunct *dün gece* is crucial in determining whether the unaccusatives' complement remains in situ or moves to the specifier position of IP.



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<sup>&</sup>lt;sup>35</sup> Unlike English *this*, which arguably has both definite/demonstrative and indefinite uses (e.g. *This man's bald* versus *There's this bald man*) Turkish *bu* is only demonstrative and thus definite. (Kornfilt 1997; Göksel & Kerslake 2005).



In the tree for example (11c), we find validation for Belletti's prediction that indefinite arguments to an unaccusative may receive partitive case from the VP-head and remain in situ.

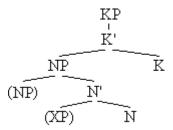
Example (11d) is more problematic. The argument to the unaccusative is a definite, demonstrative NP, and should, per the definiteness effects for partitive case assignment, be unable to receive partitive case on the terms of the account in Belletti (1988). Under this account, the NP in (11d) must necessarily move to IP-spec to receive nominative case.

The grammaticality of (11d) disproves this prediction. The unaccusative in Turkish does not license partitive case to its sole argument, and points to the improbability of such a distinct, inherent partitive case in Turkish.

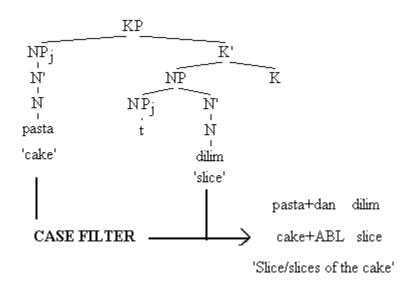
## **CHAPTER 5**

## **SUMMARY**

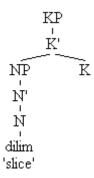
This thesis has argued that the structures of Turkish partitive and nonpartitive phrases are identical syntactically. My claim is that partitive constructions are generated initially with the same organization syntactically.



For partitives, the NP in parentheses contains the superset of the partitive and is generated in the specifier position of the matrix NP: e.g. *slices of the cake*. This NP lacks inherent case and moves to the specifier position of the KP to receive structural ablative case.



Although nonpartitives lack this constituent, they otherwise share the overall syntax.



We have brought in data from word order, specificity, and case marking to flesh out this hypothesis, and in so doing have made a few points about the semantics of partitives. We have shown that partitives may be specific and nonspecific.

Lastly, we have compared this analysis to two other proposals for the nature of incorporation and of partitivity: one semantic and one morphosyntactic. (Chung and Ladusaw 2004; Belletti 1988) Although certainly neither can be entirely dismissed, we have shown that these approaches are not optimal for Turkish because they do not offer direct explanations for partitives that contrast in specificity or definiteness.

Although this work focuses on two types of partitive constructions, the lexically headed type and the 'naked' type, we expect that our general findings can be extended in future work to the two partitive structures in Turkish not addressed here: those that bear possessive agreement on the quantifier head of the partitive. Consider the position of the possessive marker in the following examples.

onion+PLU+GEN half+POS

'half of the onions'

b. \* soğan+lar+dan yarı+sı

onion+PLU+ABL half+POS

'half of the onions'

To account for the position of the possessive between the putative head of the partitive, the quantifiers *hiçbir* 'none' and *yarı* 'half' and the case-marked superset *soğanların* and *soğanlardan* 'onions,' we expect that, following Ozturk (2005), maximal function projections above the higher partitive NP will be needed to account quantified partitives whose quantified heads require parametrically assigned genitive and ablative case.

We expect, however, that those future proposals should not disturb the crux of this work: that the NP-internal structure of the partitive is identical to the nonpartitive.

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