GENITIVE CASE IN TURKISH

ASLI KUZGUN

BOĞAZİÇİ UNIVERSITY

2023

GENITIVE CASE IN TURKISH

Thesis submitted to the

Institute for Graduate Studies in Social Sciences

in partial fulfillment of the requirements for the degree of

Master of Arts

in

Linguistics

by

Aslı Kuzgun

Boğaziçi University

2023

Genitive Case in Turkish

The thesis of Aslı Kuzgun

has been approved by:

Assist. Prof. Dr. Ümit Atlamaz _____
(Thesis Advisor)

Assist. Prof. Dr. Ömer Demirok _____

Assoc. Prof. Dr. Aslı Gürer _____
(External Member)

June 2023

DECLARATION OF ORIGINALITY

I, Aslı Kuzgun, certify that

- I am the sole author of this thesis and that I have fully acknowledged and documented in my thesis all sources of ideas and words, including digital resources, which have been produced or published by another person or institution;
- this thesis contains no material that has been submitted or accepted for a degree or diploma in any other educational institution;
- this is a true copy of the thesis approved by my advisor and thesis committee at Boğaziçi University, including final revisions required by them.

Signature: . . . . . .

Date: . . . . . .

ABSTRACT

Genitive Case in Turkish

This thesis explores the syntactic contexts with a genitive case in Turkish. The genitive case in Turkish occurs with the pronominal complements of a set of postpositions, on possessors and the subjects of embedded clauses. The genitive case with postpositions differs from the genitive case in other positions and is identified as a lexical case due to being idiosyncratic. The distinctive allomorphy patterns of the lexical genitive case presented in this thesis point to a further division between the two contexts. Considering the syntactic and behavioral differences between the lexical and the structural genitive case, it is claimed that the genitive case with postpositions is a different case from the genitive case in other positions. The genitive case on possessors and the subjects of embedded clauses are analyzed as an unmarked case in Turkish. It is argued that the structural genitive case can only occur at Spec, DP. Following this argument, the subject case alternation in the embedded clauses is discussed. It is observed that the embedded clauses occur with nominative subjects when they combine with certain postpositions. Building on this observation, it is suggested that the embedded clauses are headed by Ds, which differ in their phrasal properties, and that the postpositions select the type of D they combine with. Overall, this thesis defines two kinds of genitive cases in Turkish and discusses the morphosyntactic conditions for realizing each.

ÖZET

Türkçede Tamlayan Durumu

Bu tez, Türkçede tamlayan durumu ekinin bulunduğu sözdizimsel bağlamları araştırmaktadır. Türkçede tamlayan durumu eki birtakım ilgeçlerin adıl özelliğine sahip tümleçlerinde, iyelik bildiren yapılarda, ve içe yerleşik tümceciklerin öznelerinde bulunmaktadır. İlgeçlerle birlikte bulunan tamlayan durumu özel olarak seçildiğinden sözlüksel bir durum olarak tanımlanmıştır ve bu bakımdan diğer bağlamlarda bulunan tamlayan durumu eklerinden ayrışmaktadır. Sözlüksel tamlayan durumu ekinin bu tezde sunulan kendine özgü biçimbirimsel değişkeleri iki bağlam arasında daha ileri bir ayrışmaya işaret etmektedir. Yapısal ve sözlüksel tamlayan durumu arasındaki sözdizimsel ve davranışsal farklar göz önünde bulundurularak ilgeçlerle birlikte bulunan tamlayan durumunun diğer bağlamlardaki tamlayan durumundan farklı bir durum olduğu ileri sürülmüştür. İyelik bildiren yapılarda ve içe yerleşik tümceciklerin öznelerinde bulunan tamlayan durumu eki Türkçede belirtisiz durum eki olarak analiz edilmiştir. Yapısal tamlayan durumu ekinin ortaya çıkabileceği tek yerin bir belirleyen öbeğinin belirleyicisi olduğu savunulmuştur. Bu argümanı takiben, içe yerleşik tümceciklerin öznelerindeki durum değişiklikleri tartışılmıştır. Özneleri yalın durumda olan içe yerleşik tümceciklerin belirli birtakım ilgeçlerle birleştiklerinde ortaya çıktıkları gözlemlenmiştir. Bu gözlemden hareketle, içe yerleşik tümceciklerin öbeksel özellikleri bakımından birbirinden farklı olan belirleyen baş yapılara sahip oldukları ve ilgeçlerin birleşecekleri belirleyen baş yapının türünü seçtikleri önerilmiştir. Sonuçta, bu tez Türkçede iki türde tamlayan durumu eki tanımlamış ve bu iki türdeki tamlayan durumu eki için biçimbilimsel sözdizime göre ortaya çıkma koşullarını tartışmıştır.

ACKNOWLEDGEMENTS

The ideas in this thesis have survived a pandemic, wildfires, one of the strongest earthquakes in history, economic struggles, several mental breakdowns, and many other natural and man-made disasters. I could not manage to come this far without the help of many people I met throughout my journey. I am happy to have the opportunity to acknowledge them in this space.

First and foremost, I would like to extend my deepest gratitude to my advisor, Ümit Atlamaz, from whom I received enormous help in writing this thesis. He is also the very first person I met at Boğaziçi on my first day as an MA student. It was at LingDay 2019, and even there, he had to cope with my never-ending and not very sensible questions about linguistics and life. I was extremely lucky to have the chance to be his advisee. I am most genuinely thankful to him for creating a safe space for me to learn from, with the invaluable comfort of knowing that I will be heard and welcomed. My mental health and this thesis owe a great deal to our intensely joyful meetings. Throughout these two years, he was always there when I needed him. He kept believing in me no matter what, even when I didn't believe in myself (and that is all the time). Under his guidance, I could learn how to approach scientific phenomena, how to build a hypothesis, and many other skills that will help me in my future studies. I cannot thank him enough for his continuous guidance, support, and patience.

Next, my special thanks go to my committee member Ömer Demirok. This thesis benefited a lot from the things I learned in his morphology and syntax classes and his insightful comments from the very beginning of this project. He not only introduced me to the wonders of morphosyntax in his classes but also helped me survive the pandemic whilst learning a lot with his highly approachable personality. I deeply appreciate that he accepted me as a TA for one of his classes. It was one of the most exciting and amusing experiences I had at Boğaziçi, and I know that it is thanks to him. I always get filled with "positive vibes" after every conversation I have with

him. I am immensely grateful to him for supporting me in many ways during my MA and being an inspiration as a person.

I also wish to express my sincere thanks to my other committee member Aslı Gürer. I am honored and touched to have her on my committee, as she supported me to start the MA program in linguistics when I was an undergraduate student. I had the chance to meet her only in my last year at Bilgi, but I am still incredibly fortunate to be her student. She was always there for me to listen and offer a napkin (literally). I am indebted to her for sharing valuable insights on linguistics and academia every time I needed. I am also thankful to her for drawing attention to the issues in this thesis that developed my arguments.

I would like to especially thank Nihan Ketrez for her encouragement and support from my undergraduate years to this day in everything I accomplished. She was my biggest inspiration for leaping into the ocean of linguistics. I would not have had the opportunity to do anything related to what I am passionate about today if she didn't believe in me from the very beginning of my undergraduate years. I am forever indebted to her for introducing me to the field, for allowing me to participate in her research, and, most importantly, for being an excellent role model for me.

I am also thankful to Elena Guerzoni for introducing me to the world of semantics. Her genuine smile, energy, and care for us as her students helped me a lot during and after the pandemic. I feel truly lucky to get the chance to know her. I would like to thank Metin Bağrıaçık for his enlightening typology class, where I got my hands dirty in linguistics for the first time. I learned how to do morphosyntactic analysis and many other linguistic phenomena that helped me a lot during my journey thanks to him. I am also grateful to Kadir Gökgöz for always making time for me when I needed anything, Stefano Canalis and Pavel Logačev for their open door for any questions, Balkız Öztürk for providing any help for me when I needed it, and Didar Akar and Mine Nakipoğlu for our insightful chats. I also owe my thanks to Sumru Özsoy for her valuable comments on this work and her encouragement during my MA years and Feride Korkmaz for uplifting me every time we come across. I

would like to thank Gülsüm Abay for always welcoming me with a smile at the department and for the delicious chats that we had so far.

I am indebted to Sevdeğer Salamin, Hande Serdar Tülüce, and Kadir Kozan from my previous department at Bilgi, which sadly does not exist anymore since it was closed due to being too fabulous. I am thankful to Bilgi ELT for making me love academia and teaching me to study. I am grateful to have met Burak Çavuşoğlu at Bilgi, who I followed to MA in linguistics at Boğaziçi. He helped me feel less like an alien, especially in my first months at Boğaziçi.

Boğaziçi turned into a natural habitat for me thanks to the dear friends I made along the way. I am obliged to Neslihan Cesur for being the guardian angel of my sanity. Everything was better with Neslihan, from being stuck in another city, working late hours to complete papers and any other catastrophe to the simplest things. She was there with me in every academic and personal struggle that I had for the last four years. I am grateful for her precious friendship.

I would like to thank Muhammed İleri and Aref Milani for their friendship and support. I have learned a lot from them through these years, and they encouraged me to do better. Büşra Marşan and Utku Türk also have been caring friends to me. They were always there to listen and give me advice in every matter in my life. I am grateful to Furkan Dikmen for spreading wisdom and especially for turning my long Marmaray rides into a fun and educational space. He was always there for me for a chat or a walk when I was overwhelmed.

I am also grateful to Semra Özdemir and Assem Amirzhanova for their sincere friendship and all the laughter we shared together. Furkan Atmaca and Demet Kayabaşı for being there for me when I needed. I appreciate all the valuable experiences they shared with me, everything they have done for me to cheer me up, and all the time we spent together on FaceTime during the pandemic, which helped me a lot to keep some of my sanity.

I was lucky to get to know Serra Gök, who worked hard to pull me out of home and depression with her bright personality, and to know Ezgi Sanıyar and Altar

Lüser for their encouragement. I am also thankful to Ege Baran Dalmaz and Noyan Dokudan for listening to my complaints and being there to celebrate the good things as well.

I would like to thank the Starlang society, which I learned a lot from. It was a pleasure to work with Elif Sarmış, Neslihan Cesur, Büşra Marşan, Ezgi Sanıyar, Merve Özçelik, Deniz Baran Aslan, and Oğuz Kerem Yıldız. I have learned a lot from each of them, and I am grateful to Olcay Taner Yıldız for giving me this opportunity.

My last two semesters at Boğaziçi have been filled with a lot of joy, laughter, and pudding, thanks to Nagihan Lüle (Nagi), Baran Günay, and Merve Yazar. I would like to especially thank Nagi for encouraging me to study and helping me stay on track with my schedule. Sometimes studying with Nagi included a little bit too much laughter. For that reason, I owe Baran and Merve for helping me focus.

I was also lucky to have my non-linguist friends İrem Şen, Gökçe Sarıoğlu, Kübra Arıkan and my favorite cousin Berkay Tayşi supporting me all these years. They have been putting up with my “Is this sentence okay for you?” messages they received at odd hours for years.

Lastly, I have the most heartfelt gratitude for my family. I would not be able to come this far without their love and belief in me. I would like to thank my mother, Aysun Kuzgun, and my father, Adnan Kuzgun, for unconditionally supporting me in every decision I made in my life. Not to brag, but I am also the luckiest person in the world to have a brother like Alper Kuzgun, who is my best friend, partner in crime, and biggest cheerleader in life. I owe him a huge thank you for listening to my naggings and patiently answering my weird linguistic inquiries even when he was in the middle of the ocean.

TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION 1
1.1 Aim 1
1.2 Distributed morphology 2
1.3 Outline 6
CHAPTER 2: GENITIVE AS A LEXICAL CASE 7
2.1 Introduction 7
2.2 Empirical observations 9
2.3 Structure of pronominals 15
2.4 Genitive in postpositions 28
2.5 PGEN on complex nominals 39
2.6 Summary 40
CHAPTER 3: GENITIVE AS A STRUCTURAL CASE 42
3.1 Introduction 42
3.2 The problem 43
3.3 Nominative licensing approaches 45
3.4 Genitive as an unmarked case 58
3.5 Proposal 62
3.6 Summary 72
CHAPTER 4: CONCLUSION 74
REFERENCES 77

ABBREVIATIONS

1	first person
2	second person
3	third person
ABL	ablative
ACC	accusative
COM	comitative
COND	conditional
COP	copula
DAT	dative
ERG	ergative
FUT	future
GEN	genitive
INS	instrumental
LOC	locative
NEG	negative
NMLZ	nominalizer
NOM	nominative
PASS	passive
PL	plural
POSS	possessive
PRF	perfect
PROG	progressive
PRS	present
PST	past
PTCP	participle
SG	singular

CHAPTER 1

INTRODUCTION

1.1 Aim

The aim of this thesis is to identify and explain the puzzles of the genitive case in Turkish. The puzzles divide into two main contexts: the genitive case with postpositions and the genitive case on the subjects of embedded clauses.

First, I focus on the nature of the genitive case with postpositions. There is a diverse set of postpositions that take genitive marked complements in Turkish. Building on this, I show that the genitive case with postpositions is idiosyncratic and lexical according to the case typology of Woolford (2006). The puzzle is that lexical genitive case is only present in bare pronominals as shown in (1). In order to capture this behavior of the genitive case with postpositions, I argue that the lexical genitive case is sensitive to a morphosyntactic feature that is only present in pronominals.

(1) a. *ben-im için*
I-GEN for
'for me'

b. *Ayten-(*in) için*
Alper-*GEN for
'for Ayten'

c. *kitap-(*ın) için*
book-*GEN for
'for kitap'

d. *bun-un için*
this-GEN for
'for this'

e. *bun-lar-(*ın) için*
This-PL-*GEN for
'for these'

Crucially, the genitive case in other positions does not show this kind of sensitivity as shown in (2). I use this data to further argue that the lexical genitive case is a different case than the structural genitive case.

(2) a. *ben-im araba-m*
I-GEN car-POSS
'my car'

b. *bun-nun kapı-sı*
this-GEN door-POSS
'the door of this'

c. *bun-lar-ın kapı-sı*
this-PL-GEN door-POSS
'the door of these'

d. *Ayten-in araba-sı*
Ayten-GEN car-POSS
'Ayten's car'

e. *araba-nın kapı-sı*
car-GEN door-POSS
'the car's door'

The second puzzle of the genitive case in Turkish is the alternation of the subject case in embedded clauses. The canonical subject case in Turkish embedded clauses is the genitive. However, we observe that *-DIK* clauses occur with nominative subjects when combined with a selection of postpositions as illustrated in (3).

(3) a. *Ali Ayşe-*(nin) git-tiğ-i-ni söyle-di.*
Ali Ayşe-GEN go-DIK-POSS-ACC say-PST
'Ali said that Ayşe left'

b. *Ali Ayşe-(*nin) git-tiğ-i için üzgün.*
Ali Ayşe-*GEN go-DIK-POSS for sad
'Ali is sad because Ayşe left.'

In order to explain this alternation, I will follow the case theory of Marantz (1991) and describe the genitive as an unmarked case in Turkish. Then, I will provide a syntax for the nominalized clauses in Turkish. Considering the fact that the alternation only occurs when the nominalized clauses combine with certain postpositions, I will offer a selection analysis for this alternation. The selection analysis will point to the existence of a diversity in the type of D heads a nominalization can combine in Turkish.

Throughout this thesis, I will focus on the morphosyntactic aspects of the puzzles presented above. I will use the tools of Distributed Morphology (Halle & Marantz, 1993, 1994) to model my analyses. The next section will provide an overview of this framework.

1.2 Distributed morphology

1.2.1 Basic principles

Distributed Morphology (DM) is a morphological theory first put forward by Halle & Marantz (1993, 1994). The theory constitutes upon three main assumptions on the shape of the grammar: Late Insertion, Underspecification, and "Syntactic Hierarchical Structure All the Way Down".

Late Insertion is a principle that ensures that the morphology interprets the syntactic terminals as a separate module. According to the Late Insertion Principle,

syntax delivers only abstract features to morphology and that is when these features match the relevant phonological forms after syntax. The phonological forms are called “Vocabulary Items”. A Vocabulary Item is a combination of a phonological form and its corresponding features stored in the “Vocabulary”.

According to the Underspecification Principle, the Vocabulary Items can match the features on the terminal nodes even though they do not have all the features specified in the terminal node. The Vocabulary Items should only have a subset of the features in a syntactic terminal to match them. When there are two Vocabulary Items that can match a terminal, the more specific one wins over the other.

The last main assumption of Distributed Morphology is “Syntactic Hierarchical Structure All the Way Down”. This principle is based on the idea that morphology and syntax are both subjected to the same constituent structure. Then, the binary tree structure built in syntax must be kept in the morphological component.

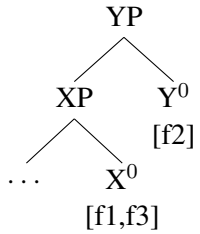
1.2.2 Vocabulary Insertion

The Late Insertion principle determines the timing of the Spell-Out which is the operation that matches the morphosyntactic features on the syntactic terminals to their corresponding Vocabulary Item. Spell-Out is a cyclic operation, that is, the interpretation of the syntactic terminals takes place in a bottom-up manner. For instance in (4b), first the [f1,f3] matches the relevant Vocabulary Item, and only then [f2] can enter Spell-Out.

The relevant Vocabulary Items are provided in (4a).

(4) a. Vocabulary Items:
   i. [f1] $\longleftrightarrow$ /-a/
   ii. [f2] $\longleftrightarrow$ /-b/
   iii. [f1,f2,f3] $\longleftrightarrow$ /-c/

b.



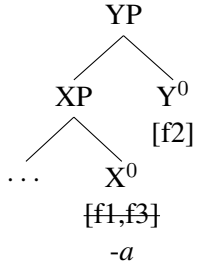
The insertion of a Vocabulary Item is determined by the Subset Principle (5). According to this Principle, a Vocabulary Item has to Spell-Out a subset of the features on a terminal node. Then, a Vocabulary Item with features that are not present in the relevant terminal node cannot be inserted. If there are several Vocabulary Items that meet these conditions, then the one with the most matching features is inserted.

(5) SUBSET PRINCIPLE (Halle, 2000): "The phonological exponent of a Vocabulary item is inserted into a morpheme if the item matches all or a subset of the grammatical features specified in the terminal morpheme."

Then, in a Vocabulary as in (4), where there is no Vocabulary Item that is a one to one match to the feature set [f1,f3], the Subset Principle applies. The Subset Principle eliminates the insertion of /-c/. Therefore, even though it has fewer matching features, /-a/ matches [f1,f3].

Another important property of the Spell-Out in DM is "rewriting". According to the rewriting principle, once the morpho-syntactic features on a terminal node match a vocabulary item, the features are "used-up" and are no longer visible (Bobaljik, 2000). Then, once the [f1,f3] feature on the X^0 matches *-a*, the [f1,f3] is deleted as illustrated in (6).

(6)



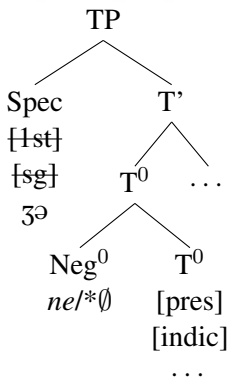
1.2.3 Allomorphy

Vocabulary Items might have additional specifications that account for different types of allomorphy. Allomorphy can be conditioned by phonological context or morphosyntactic context.

The French negation marker *ne* provides an example for both types of contexts (Meisner & Pomino, 2014). The phonological conditioning is based on the stress features of the preceding terminal node. *ne* is only overt when there is a lower bi-segmental subject, otherwise, it is realized as ∅.

(7) demonstrates the relevant syntactic terminals. Here, the subject is bi-segmental, thus, Neg^0 realizes as *ne*. This type of allomorphy is called **inward-sensitive** as the allomorphy is triggered by a preceding element in the structure. Notice that this type of allomorphy cannot refer to morphosyntactic features. By the time Neg^0 enters Spell-Out, the morphosyntactic information encoded in the preceding terminal is deleted due to rewriting.

(7)

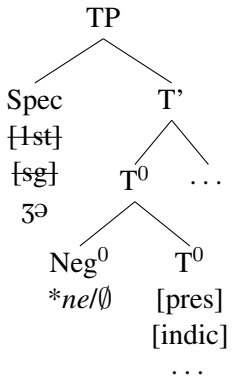


(Meisner & Pomino, 2014)

Meisner & Pomino (2014) notes exceptions to the phonological allomorphy rule of *ne*. In French, Neg^0 is always overtly marked in embedded clauses and subjunctives regardless of the phonological properties of the subject. It is zero marked in indicatives. Then, Neg^0 is also sensitive to the morphosyntactic context in T. (8) shows that Neg^0 realizes as ∅ even though the subject is bi-segmental. This type of allomorphy is **outward-sensitive**. This is because Neg^0 looks for a node that

immediately *follows* it, and is yet to enter into Spell-Out. For this reason, outward-sensitive allomorphy cannot refer to phonological information.

(8)



(Meisner & Pomino, 2014)

Above are the key assumptions of DM that I will refer to in the rest of this thesis. I will introduce any additional tools and approaches in DM when they are relevant.

1.3 Outline

In this chapter, I introduced the aims of this thesis and provided an introduction to the Distributed Morphology framework.

In Chapter 2, I present some observations on the pronominal sensitivity of the genitive case with postpositions. Then, I discuss the morphosyntax of the pronominals in Turkish. After that, I offer an inward sensitive morphosyntactic allomorphy account for the genitive case assigned by postpositions.

In Chapter 3, I focus on the subject case alternation in the embedded clauses and present the previous literature for this data. In the rest of this chapter, I motivate my proposal. I introduce the case realization disjunctive hierarchy of Marantz (1991) and show that the genitive case in this context is an unmarked case. Establishing from the previous literature, I propose a syntactic structure for the embedded clauses in Turkish. Lastly, I provide an analysis of the subject case alternation in the embedded clauses.

In Chapter 4, I summarize the basic findings and arguments of this thesis.

CHAPTER 2

GENITIVE AS A LEXICAL CASE

2.1 Introduction

Postpositions in Turkish commonly take case marked complements (Göksel & Kerslake, 2005). (1) and (2) provide canonical examples of P heads with case marked complements. In (1) the postposition *sonra* "after" assigns ABL and in (2) the postposition *göre* "according to" assigns DAT. In both scenarios, the case assigned by the postposition appears on all types of nominals ranging from common nouns, proper nouns, and various forms of pronominal expressions.

(1) a. *Ben-den sonra*
I-ABL after
'after me'

b. *Ayten-den sonra*
Ayten-ABL after
'after Ayten'

c. *gösteri-den sonra*
show-ABL after
'after the show'

d. *bun-dan sonra*
This-ABL after
'after this'

e. *bun-lar-dan sonra*
This-PL-ABL after
'after these'

(2) a. *Ban-a göre*
I-DAT according.to
'according to me'

b. *Ayten-e göre*
Ayten-DAT according.to
'according to Ayten'

c. *avukat-a göre*
lawyer-DAT according.to
'according to the lawyer'

d. *bun-a göre*
This-DAT according.to
'according to this'

e. *bun-lar-a göre*
This-PL-DAT according.to
'according to these'

There are four postpositions in Turkish that assign genitive case to their complements in Turkish (Göksel & Kerslake, 2005). These are the following: *gibi* 'like', *için* 'for', *kadar* 'as...as', *-(y)lA/ile* 'with'.

The realization of the genitive case differs from the other cases assigned by postpositions. (3b), (3c), and (3e) show that the genitive marking does not appear on proper nouns, common nouns, and plural marked pronominals. Crucially, these forms become ungrammatical when marked with an overt genitive case.

(3) a. *ben-im için*
I-GEN for
'for me'

b. *Ayten-(*in) için*
Ayten-*GEN for
'for Ayten'

c. *kitap-(*ın) için*
book-*GEN for
'for kitap'

d. *bun-un için*
this-GEN for
'for this'

e. *bun-lar-(*ın) için*
This-PL-*GEN for
'for these'

In order to determine the type of the genitive case with postpositions, I follow the case typology of Woolford (2006). She identifies three types of cases: structural, inherent, and lexical. The structural case is assigned consistently in a certain syntactic configuration. Inherent Case and lexical Case are non-structural and they are licensed by different means than the structural Case. Inherent Case is assigned to certain theta positions. Therefore, it shows some level of consistency as the structural case. The lexical Case, however, is idiosyncratic, and therefore it is not predictable. The case in postpositions is idiosyncratic. The postpositions do not always occur with the genitive case as shown in (1) and (2). There is no structural reason for a genitive to occur inside a postposition. Therefore, following Woolford (2006), I identify the case in Ps as a lexical case.

In this chapter, I aim to introduce the characteristics of the genitive as a lexical case. First, I present empirical observations regarding the distribution of the genitive inside postpositions. Then, I offer a morphosyntactic structure for the relevant pronominals. After that, I provide an allomorphy account of the genitive assignment in postpositions under the Distributed Morphology framework (Halle & Marantz, 1993) and I motivate that there are two different genitive cases in Turkish. Finally, I will provide a brief summary of this chapter.

2.2 Empirical observations

The genitive assigning postpositions *gibi* 'like', *için* 'for', *kadar* 'as...as', and *-(y)lA*[1] 'with' do not assign the same case to their complements in other languages. For instance, (4) shows that in German, the preposition "for" take accusative marked complements while the "with" takes dative marked complements. The prepositions for "like" and "as...as" take nominative complements. Similarly, in Hungarian, "like" takes complements in the nominative case. The complements of "for" and "with" show different case markings as well. This shows that these pre/postpositions do not typically share the same case marking on their complements and there is no reason for the relevant postpositions in Turkish to occur with the genitive case marking.

(4) a. *für dich*
for you.ACC
'for you'

b. *mit dir*
with you-DAT
'with you'

c. *wie du*
like you-NOM
'like you'

d. *so viele wie du*
as much as you-NOM
'as much as you'

(5) a. *neked*
for.you.DAT
'for you'

b. *veled*
with.you.INS
'with you'

c. *mint te*
like you.NOM
'like you'

d. *mint te*
as.much.as you.NOM
'as much as you'

(Vincze & Csirik, 2010)

[1] ile is also the instrumental/comitative case marker in Turkish. I argue that it is not a case marker in the genitive marked instances. (i) shows that when the genitive occurs with *-(y)lA*, it cannot be interpreted as a conjunct, rather, it consistently functions as an adjunct when the genitive marker is present with *-(y)lA*. Therefore, it is regarded as a P head when it occurs with a genitive marked nominal.

(i) a. *Sen-in-le [ben gel-di-m]*
you-GEN-COM I come-PST-1.SG
'I came with you'

b. **[Sen-in-le ben] gel-di-k*
You-GEN-COM I come-PST-1.PL
*'You and I came'

c. **Sen-le [ben gel-di-m]*
You-COM I come-PST-1.SG
'*I came with you'

d. *[Sen-le ben] gel-di-k*
You-COM I come-PST-1.PL
'You and I came'

Genitive marking is overt only on the demonstrative pronouns, personal pronouns, and the WH-word *kim* which has been analyzed as an indeterminate pronoun by Atlamaz (2015). Other pronominals such as the reflexive pronoun *kendi*, or the pronominal quantifier *herkes* do not show genitive marking. (6a) and (6b) illustrate the ungrammaticality of the genitive marker on these pronominals in genitive assigned positions. As shown in (6c) and (6d), the realization of an overt genitive marker on the proper nouns and common nouns also causes ungrammaticality.

(6) a. *kendi-si-(*nin) gibi / kadar*
self-3.POSS-*GEN like / as
'like / as herself'
b. *herkes-(*in) gibi / kadar*
Everybody-PL-*GEN like
'like / as everybody'
c. *Alper-(*in) gibi / kadar*
Alper-*GEN like / as
'like / as Alper'
d. *kitap-(*ın) gibi / kadar*
book-*GEN like / as
'like / as the book'

Bare pronominals necessarily occur with the genitive marker. Suffixing renders the pronominals ungrammatical with genitive marking. The *-lAr* suffix makes the non-personal pronouns plural. It also occurs with the plural personal pronouns and gives rise to an honorific reading. Still, it prevents the personal pronouns from having overt genitive marking as shown in (7b). (7) shows that this pattern is consistent with each postposition that takes a genitive marked complement.

(7) a. *biz-im gibi*
Us-GEN like
'like me'
b. *biz-ler-(*in) gibi*
Us-PL-*GEN like
'like us'

c. *on-un kadar*
s/he-GEN as
'as s/he'

d. *on-lar-(*ın) kadar*
they-*GEN as
'as they'

e. *bun-un-la*
this-GEN-WITH
'with this'

f. *bun-lar-(*ın)-la*
This-PL-*GEN-WITH
'with these'

g. *kim-in-le*
who-GEN-WITH
'with who'

h. *kim-ler-(*in)-le*
who-PL-*GEN-WITH
'with who'

The genitive morpheme also appears in genitive-possessive constructions in Turkish. The genitive case in these constructions has been analyzed as an unmarked case that is assigned to any nominal in the specifier of the DP (Öztürk & Taylan, 2016; Satik, 2021; Kornfilt, 1985; Baker, 2015). (8) illustrates the genitive-possessive constructions in Turkish. Here, the possessor receives a genitive case by moving to the Spec, DP. [2]. Then, there are two main positions where we find genitive case in Turkish: possessors and complements of postpositions. The genitive in genitive-possessive constructions correlates with the specificity of the possessor (Öztürk & Taylan, 2016; Barker et al., 1990; Erkman-Akerson & Özil, 1992; Öztürk, 2004, 2005). The genitive case with postpositions, on the other hand, is idiosyncratic. Only a small set of postpositions assign genitive case. Thus, it is not a structural case as the genitive on possessors but a lexical case. Another crucial difference between

[2]There are cases where the possessor is not case-marked, as shown in (i). The possessors in (i) are not referential. As a result, they are not assigned genitive as they are not raised to Spec, DP from their base position in Spec, nP. See Öztürk & Taylan (2016) for a detailed analysis.

(i) a. *A harf-i*
a letter-POSS
'The letter A'

b. *Üçgen şekl-i*
triangle shape-POSS
'The shape triangle'

(Öztürk & Taylan, 2016)

the two environments where the genitives occur is that the genitive in postpositions is only present with bare pronominals as shown in (7). These differences lead to different assignment properties for the two environments. Therefore, I will call the "genitive case" assigned by a postposition as PGEN and claim that it is a different case from the structural genitive case in that its featural composition than the structural genitive.

(8) a. *ben-im araba-m*
I-GEN car-POSS
'my car'

b. *bun-nun kapı-sı*
this-GEN door-POSS
'the door of this'

c. *bun-lar-ın kapı-sı*
this-PL-GEN door-POSS
'the door of these'

d. *İrem-in araba-sı*
İrem-GEN car-POSS
'İrem's car'

e. *araba-nın kapı-sı*
car-GEN door-POSS
'the car's door'

There is a further complexity that occurs with demonstratives. That is, they are not uniform in their distribution inside postpositions. *kadar* and *gibi* are able to occur with non-genitive marked demonstratives as well as genitive marked ones. However, their meanings are slightly different. For instance; in (9a), '*bu*' is "non-indexical"[3] while the demonstrative in (9b) is "indexical". The indexical ones select the same individual in the same context-world and context-time. This is a canonical feature of pronouns, as they always carry an index (Kratzer & Heim, 1998).

[3]Indexicals are directly referential rigid designators (Heim, 2004). The non-indexicals can change in different world-time pairs. The indexicals remain the same. This difference accounts for the reading differences between the two uses of the demonstrations in Turkish, as well as some other examples. (i) shows that the WH-pronoun *kim* can also occur without a genitive marker. Here, the appropriate answers to each question shows that the one with a genitive marker is an indexical, as the answer to this question requires a certain individual. *kim* without a genitive marker is non-indexical. Thus, its referent can be the optometrist, whose identity could change from world to world.

The difference between (9c) and (9d) is another instance of this reading difference. (9c) does not refer to a specific comparison object but (9d), on the other hand, is directly referential.

(9) a. *bu gibi bitki-ler*
this like plant-PL
'plants like this'

b. *bu-nun gibi bitki-ler*
this-GEN like plant-PL
'plants like this one'

c. *o kadar soğuk*
that as cold
'as cold as that'

d. *o-nun kadar soğuk*
that-GEN as cold
'as cold as that one'

The contrast becomes evident with the singular nouns when the "indexical" semantics is forced. (10a) is ungrammatical because *bitki* cannot have a "non-referential" semantics when there is an indefinite marker present. (10b), on the other hand, is grammatical since the genitive marking ensures that the demonstrative has individuation and refers to a certain plant in the discourse.

(10) a. **bu gibi bir bitki*
this like a plant
*'a plant like this'

b. *bu-nun gibi bir bitki*
this-GEN like a plant-PL
'a plant like this one'

Demonstratives that do not show genitive marking in postpositions and give rise to a non-indexical reading differ from their non-genitive-marked plural

(i) a. *-Kim-in için gel-di-niz?*
who-GEN for come-PST-2.PL
'For whom did you come?'
-Nagihan için gel-di-m
Nagihan for come-PST-1
'I came for Nagihan'

b. *-Kim için gel-di-niz?*
who-GEN for come-PST-2.PL
'Who did you come for?'
-Göz doktor-u için gel-di-m
eye doctor-3 for come-PST-1
'I came for the optometrist'

counterparts which are never able to show genitive marking. (12) shows that in a context like (11), only the singular non-genitive-marked demonstratives can be used. The plural demonstrative cannot be used when a non-indexical reading is forced as shown in (12b).

(11) Sukulent, Dragon ağacı, ve Benjamin dayanıklı bitki-ler-dir.
succulent dragon tree and Benjamin durable plant-PL-COP
'Succulent, Dragon tree, and Benjamin are durable plants'

(12) a. *Çabuk sol-ma-yan, fazla su iste-me-yen bu gibi*
quick fade-NEG-NMLZ-PTCP much water want-NEG-PTCP this like
bitki-ler ev-ler için ideal-dir.
plant-PL home-PL for ideal-COP
'These plants, which do not fade quickly and do not require much water, are ideal for indoors.'

b. **Çabuk sol-ma-yan, fazla su iste-me-yen bun-lar gibi*
quick fade-NEG-NMLZ-PTCP much water want-NEG-PTCP this-PL like
bitki-ler ev-ler için ideal-dir.
plant-PL home-PL for ideal-COP
'These plants, which do not fade quickly and do not require much water, are ideal for indoors.'

Singular demonstratives do not always carry genitive marking with the genitive assigning postpositions, while their plural counterparts necessarily occur without a genitive marker. However, as the examples above show, the non-genitive-marked demonstratives have different meaning restrictions than their plural counterparts, which can never host a genitive marker. In addition, as shown in (10) the genitive marked demonstratives do not have the same interpretation as the non-genitive-marked demonstratives. Case marked demonstratives are pronominal while the non-case-marked ones are not. They do not have any individuation themselves. Therefore, I differentiate between the two types of demonstratives in my analysis. Only the pronominal demonstratives can carry overt genitive marking.

Overall, the data shows that demonstrative pronouns, personal pronouns, and the WH-word *kim* form a class of words where the genitive occurs overtly when it is assigned by a P head. Plural marked pronominals, proper nouns, and common nouns

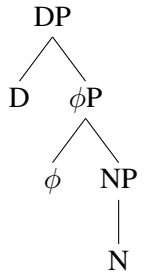
form another class of words where we do not find genitives in expected positions. Genitive does not show such differences when it is a structural case. Therefore, I call the genitive case in Ps as PGEN to differentiate it from the structurally assigned genitive case. In the remainder of this chapter, I will present a syntax for the forms that show genitive marking in Ps and motivate an allomorphy account for the behavior of PGEN.

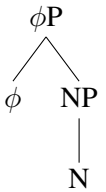
2.3 Structure of pronominals

The group of pronominals that show overt PGEN share a property that distinguishes them from the common and proper nouns. In the remainder of this chapter, I will follow Déchaine & Wiltschko (2002) (henceforth D&W) and Cardinaletti & Starke (1999) to investigate whether there is a syntactic property that distinguishes the Turkish pronominals from other nominals. Once I establish a syntactic analysis of the pronominals, I develop a deeper analysis of pronominals in order to explain the allomorphy patterns discussed in section 2.2. Then, I question which features are involved in the structure of the pronouns by following Harley & Ritter (2002) (henceforth H&R) who provide a feature geometric analysis for the morphosyntactic typology of the pronouns.

2.3.1 Personal pronouns

Cardinaletti & Starke (1999) identify three types of pronouns: strong, weak, and clitic. Each type has its own characteristics, such as being referential or not, occupying maximal projections, being a syntactic head, and so on. D&W (2002) reformulate these three types of pronouns and propose that a pronoun can be a pro-DP, pro-ϕP, or a pro-NP. (13) represents these structures respectively.

(13) a. 

b. 

c. 

According to D&W (2002), the pro-DPs behave like R-expressions. They can only occupy argument positions, and they cannot be bound. The pro-ϕP's can be arguments or predicates, and they display variable binding. The pro-NP's show NP characteristics. They can only be predicates and cannot occupy argument positions.

One way to determine the pro-DP's is to test if they can function as determiners (D&W, 2002). For Turkish, (14) shows that 1st and 2nd person pronouns can function as determiners, suggesting that they have DP level syntax. The 3rd person pronoun, on the other hand, cannot function as a determiner. The fact that the 3rd person pronoun in Turkish is also a demonstrative makes this test inconclusive for determining its syntactic representation under the approach in D&W (2002).

(14) a. *biz dilbilimci-ler*
we linguist-PL
'us linguists'

b. *siz dilbilimci-ler*
you.PL linguist-PL
'you linguists'

c. **On-lar dilbilimci-ler*
she-PL linguist-PL
'*they linguists'

(15) further shows that only the "strict identity reading" is possible when there is VP ellipsis. The sloppy reading requires the pronouns to be bound. Then, the ungrammaticality of the sloppy reading provides evidence to say that the Turkish personal pronouns cannot be bound. This suggests that syntactically they behave like R expressions which have DP level syntax. I take this to indicate that all of the overt personal pronouns to be "pro-DPs".

(15) a. *Ben$_i$ Ayten-in ben$_i$-i gör-düğ-ü-nü bil-iyor-um, Alper de*
I Ayten-GEN I-ACC see-NMLZ-3.POSS-ACC know-PROG-1 Alper too
bil-iyor.
know-PROG.3
= 'I know that Ayten saw me, and Alper knows that Ayten saw me.'
≠ 'I know that Ayten saw me, and Alper knows that Ayten saw him.'

b. *Sen$_i$ Ayten-in sen$_i$-i gör-düğ-ü-nü bil-iyor-sun, Alper de*
you Ayten-GEN you-ACC see-NMLZ-3.POSS-ACC know-PROG-2 Alper too
bil-iyor.
know-PROG.3
= 'You know that Ayten saw you, and Alper knows that Ayten saw you.'
≠ 'You know that Ayten saw you, and Alper knows that Ayten saw him.'

c. *O$_i$ Ayten-in on$_i$-u gör-düğ-ü-nü bil-iyor, Alper de*
s/he Ayten-GEN s/he-ACC see-NMLZ-3.POSS-ACC know-PROG.3 Alper too
bil-iyor.
know-PROG.3
= 'She$_i$ knows that Ayten saw her$_i$, and Alper knows that Ayten saw her$_i$.'
≠ 'She$_i$ knows that Ayten saw her$_i$, and Alper knows that Ayten saw him$_j$.'

Even though (15) points to a D level syntax for all personal pronouns, the 3rd person pronoun differs from the other two in the example (14c) and it needs closer attention. In their book on the typology of the pronouns, Bhat et al. (2004) defines Turkish as a two-person language where there are only 1st and 2nd person pronouns and the third person pronoun is a demonstrative. (16) supports this argument. Demonstratives can precede D heads as shown in (16a), (16b). This shows that the demonstratives are not located on the D head and supports that the third person pronoun is a demonstrative.

(16) a. *bu biz dilbilimci-ler*
this we linguist-PL
'us linguists'

b. *şu siz dilbilimci-ler*
that you.PL linguist-PL
'you linguists'

c. **bu on-lar dilbilimci-ler*
this s/he-PL linguist-PL
*'they linguists'

d. *ah bu ben*
oh this I
'oh this is me'

e. *ah bu sen*
oh this you
'oh this is you'

f. **ah bu o*
oh this s/he
'*oh this is s/he'

The data so far shows that Turkish has only 1st person and 2nd person pronouns, and the third person pronoun is a demonstrative pronoun. Crucially, the syntactic tests show that all three of these pronominals are "pro-DP's". Then, there is no syntactic difference between the Turkish pronouns and the proper nouns. This syntactic indifference points towards a morphosyntactic feature of the pronouns that marks them as pronouns.

H&R (2002) offers a morphosyntactic feature geometry of pronouns represented in Figure 1. This feature geometric analysis of pronouns allows us to identify the relevant features of pronouns. The pronoun features form natural classes as they are ordered according to a markedness hierarchy. The exact location of these features are undefined in H&R (2002). I assume they constitute the ϕ information in (13).

The features are privative in this approach. A feature is only present if the pronoun has that feature or if the feature creates a contrast with another pronoun in the language. The ϕ information is distributed into a hierarchy and is represented with more conceptual features in this approach. The Participant feature encodes the person information. The further differentiation of person as "speaker" and "addressee" refers to the 1st and 2nd person, respectively. The third person pronoun is not identified as a "personal pronoun" in this approach. The idea behind this is that the 1st person and 2nd person pronouns are always present in the discourse, and they are deictic, but the 3rd person pronoun always has a fixed referent (Jackobson, 1971). The Individuation represents the number and class information.

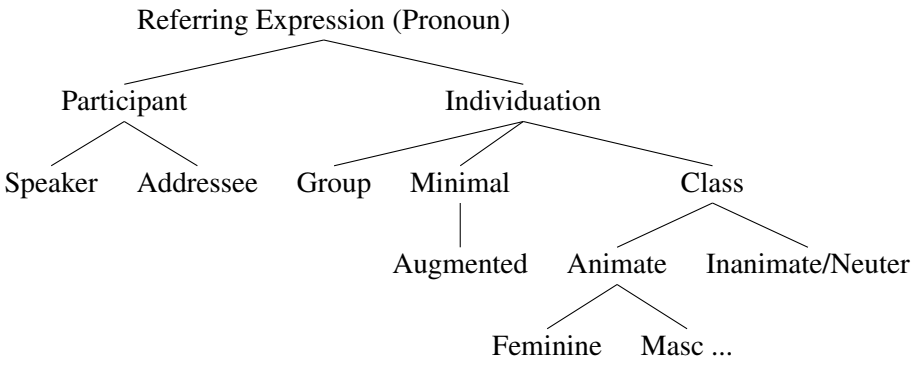


Figure 1 Feature geometry of pronouns (Harley & Ritter, 2002, p.9)

Considering the syntactic and morphological nature of the pronouns in Turkish, I combine the features represented in H&R (2002) with D&W (2002) to establish a morphosyntactic representation of the relevant pronominals. In the system of H&R (2002), the participant feature is privative, and it is only present in the 1st and 2nd person. I propose that all the pronominals have the Participant feature in

their structure. Turkish pronouns trigger allomorphy regardless of their discourse status. Therefore, the participant feature in the system I present is a bivalent feature. Its presence makes up a pronominal, and its value differentiates the personal pronouns from the other pronominals. The PartP is the highest node in a pronominal. Then, having established that the Turkish pronominals show DP characteristics, PartP corresponds to a DP level nominal (Longobardi, 2008).

Table (1) shows the personal pronouns in Turkish. Notice that the plural marker is different in the 3rd person pronoun, which I suggest is demonstrative. *-iz* marks plural only for personal pronouns, and the demonstrative has the common plural marker *-lAr*.

The plurality of the first and second person pronouns are not only different in terms of morphological marking, but also they have semantic differences. The first person plural pronoun does not mean there are multiple I's. The plurals of the personal pronouns are interpreted as "I and my associates" or "you and your associates". Dékány (2021) addresses this issue for Hungarian pronoun structure. She suggests that the plural in the 1st and 2nd person pronoun is an associative plural, and it is realized by a different syntactic head. The NP inside the pronominal structure is always singular, regardless of whether the pronoun is plural or not. I adopt a similar approach for Turkish pronouns in that the 1st and 2nd person pronouns have associative plural. However, I regard this associative plural as a feature that the personal pronouns have rather than a separate syntactic head. This feature corresponds to [group] in my analysis, which was introduced as a number feature specifically for pronominals in H&R (2002).

The pronoun structure in Turkish suggests that the number features of the 1st and 2nd person pronouns include the 'participant' information. The singular marking for the singular pronouns is *-en*, and the plural is *-iz*. These markers are only present with the pronouns and as agreement markers on verbs, unlike the default plural marker *-lAr*, which can mark plural elsewhere. These differences suggest that the

number features of the 1st and 2nd person pronouns are embedded inside their pronoun structure.

Table 1. Personal Pronouns in Turkish

Person/Number	1p.	2p.	3p.
SG	*ben*	*sen*	*o*
PL	*biz*	*siz*	*on-lar*

One last thing to mention about the personal pronouns in Turkish is their resemblance to the demonstrative pronouns. Table 2 shows the demonstrative pronouns in Turkish. Notice the *b-s-o* pattern in the two paradigms. I already established that the third person pronoun is a demonstrative in Turkish. I argue that the 1st and 2nd person pronouns have deictic information in their structure. H&R (2002) differentiates the 1st and 2nd person pronouns with the "Speaker" and "Addressee" features, respectively. Dékány (2021, p.239), on the other hand, employs deictic information for this differentiation in her analysis of the Hungarian pronouns.

The number markers *-en* and *-iz* specified for the 1st and 2nd person pronouns does not make a difference between the speaker and the addressee. The only surface difference between the two "persons", then, roots from the proximity of the interlocutors as the *b-s-o* pattern suggests. For this reason, I follow Dékány (2021) in that there is a deixis feature defined in pronouns. The deixis feature in my analysis is a part of the pronominal information, so it appears in the PartP head. It is only the deixis information that makes a distinction between the 1st and 2nd person pronouns. The [prox] marks the speaker, and the [medial] marks the addressee.

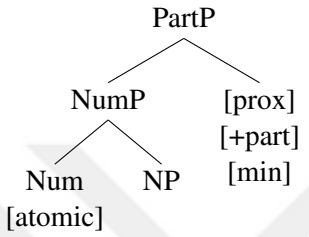
Table 2. Demonstrative Pronouns in Turkish

Prox./Number	proximal	medial	distal
SG	*bu*	*şu*	*o*
PL	*bun-lar*	*şun-lar*	*on-lar*

These observations establish the structure in (17) for the structure of the 1st person singular pronoun *ben* in Turkish. The participant feature ([+part]) introduces the nominal as a personal pronoun, the minimal feature ([min]) indicates that the

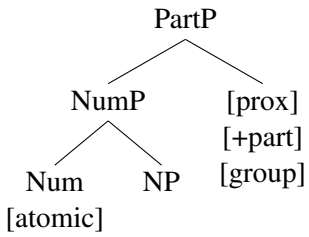
pronoun is singular, and the proximal feature in the spec PartP, [prox], determines the "person" as the 1st person. The number feature of these pronouns is not bivalent because they are only present in personal pronouns, and since the plural versions of the personal pronouns are associative, they need special kinds of number features. The [atomic] feature on the NumP defines the number of the NP which the pronoun roots from.

(17)



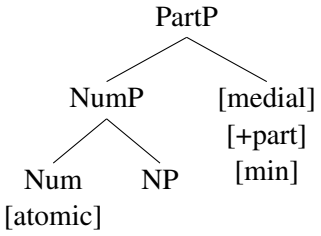
The 1st person plural pronoun *biz* has the structure represented in (18). Here, the plural information is provided by the [group] feature. This specific plural feature prevents *biz* from having an additive meaning. The NumP has the [atomic] feature even though the pronoun is plural. This is because the NP is not plural in the associative plurals. Here, the pronoun means I and my associates, as opposed to a meaning like multiple I's. Other features of *biz* are identical to those of *ben*.

(18)

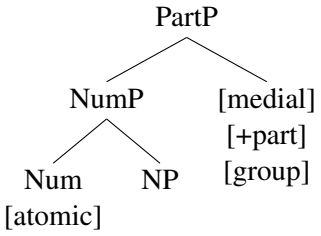


The second person pronouns *sen* and *siz* are represented in (19a) and (19b), respectively. Remember that the only difference between the 1st and the 2nd person pronouns is their deictic feature. Therefore, [medial] corresponds to the addressee in the discourse. The number bundles [min] and [group] are the same as the first person pronouns, as 2nd person pronoun is also considered a "personal pronoun".

(19) a.



b.



The 1st and 2nd person pronouns constitute all the "personal" pronouns in Turkish, as I concluded above that the third pronoun is demonstrative. Therefore, I will analyze it with the demonstrative pronouns in section 2.3.2.

2.3.2 Demonstrative pronouns

The demonstrative pronouns in Turkish are introduced in Table 2 above. The demonstrative pronouns occupy argument positions as shown in 20. Also, (15c) suggests that they cannot be bound. These properties show that they have “pro-DP” syntax.

(20) a. *Bu gel-di.*
this come-PST.3
‘This came.’

b. *Şu geldi.*
that come-PST.3
‘that came’

c. *o geldi*
s/he/that come-PST.3
‘that came.’

Sichel & Wiltschko (2021) independently suggest that demonstrative pronouns have DP level syntax as in (13a). They argue that the difference between a demonstrative pronoun and a personal pronoun is not the features related to proximity but the lack of PERSON. The [±participant] in my analysis does not necessarily

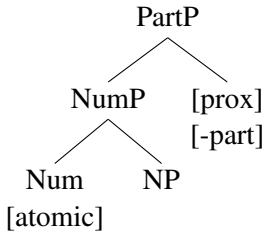
makes up a personal pronoun but a pronominal. This means that the bare demonstratives can have [±participant].

So far, I have established that the demonstrative pronouns have D-level syntax, and they have [-part] feature. The value is minus because demonstrative pronouns do not constitute discourse participants as personal pronouns. Another characteristic of these pronouns is that they are indexical. They point to a null NP in their structure. It is this NP that has to be defined as [plural] to make the demonstrative pronoun plural. It is not the number of the demonstrative pronoun that surfaces as plural but the number of the null NP in the structure.

The plural features that appear on the demonstrative pronouns, then, do not belong to themselves but to the NP in them. The compositional plural marking and this semantic difference suggest that the demonstrative pronouns do not have the [min] and [assoc] features in their structure, unlike the personal pronouns. It follows that they do not have the *-iz* in their plural forms. They make use of the canonical plural marker *-lar* to be pluralized. I propose that this plural marker is a reflection of the [plural] feature of the null NP, and it surfaces in a separate head once the referential nominal is established up to the PartP.

(21) represents the structure of *bu* as a demonstrative pronoun. The syntax of the demonstrative pronouns is identical to the personal pronouns except for their number feature. Notice that PartP does not host any number feature for demonstrative pronouns.

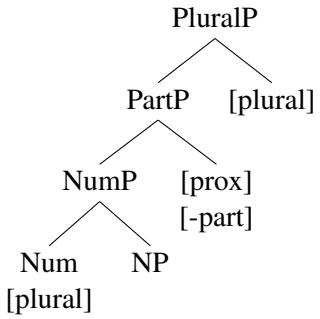
(21)



The plural form of the proximate demonstrative is *bunlar*. (22) represents its structure. The PluralP comes after the PartP. I follow the view that only referential things can be pluralized or be case marked (Sauerland et al., 2005). Then, the plural marking of the demonstratives is realized by this [plural].

The [plural] on the Num head marks the NP that *bunlar* refers to as plural.

(22)



The plural demonstratives have one other difference from their singular counterparts. They have an *-n* morpheme intervening between the demonstrative and the plural marker. Considering the fact that the bare demonstratives are not always pronominal but the plural demonstratives are always pronominal, I argue that this *-n* is always there when the demonstrative is a pronominal, but it drops in word final positions.

One could argue that the bare demonstratives do not have a PartP as they do not show *-n*. However, (20) shows that the bare demonstratives can be used as pronominals. Then, it must be that the [deix, -part] comes with an allomorph without the *n*. The "bare demonstratives" show this allomorphy when they are pronominal. The relevant vocabulary items are represented in (23). (24a) shows the allomorphy rule for [prox, -part].

(23) Vocabulary Items:
  a. [plural] $\longleftrightarrow$ *-lAr*
  b. [prox, -part]$\longleftrightarrow$ bun

(24) Allomorphy Rule:
  a. [prox, -part] $\longleftrightarrow$ bu / $]_N$__

All the demonstrative pronouns in Turkish show this *-n* drop as Table 2 suggests. (25) shows that /*-n*/ is present in all contexts where it is followed by another suffix, which supports the idea that there is the deletion of /*-n*/ in word final positions.

(25) a. *o-**n**-suz*
  s/he-without
  'without her/him'

b. *bu-**n**-suz*
this-without
'without this'

c. *şu-**n**-suz*
that-without
'without that'

d. *bu-**n**-dan*
this-ABL
'from this'

e. *şu-**n**-dan*
that-ABL
'from that'

f. *o-**n**-dan*
s/he/that-ABL
'from s/he/that'

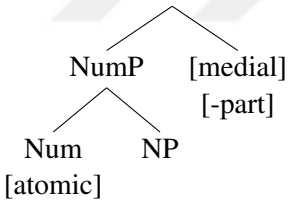
g. *bu-**n**-a*
this-ACC
'from this'

h. *şu-**n**-a*
that-ACC
'from that'

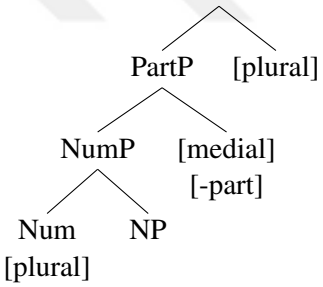
i. *o-**n**-a*
s/he/that-ACC
'from s/he/that'

The only difference amongst the demonstrative pronouns is the proximity information that they convey. The proximity feature constitutes a terminal node by itself. Since the other features are the same amongst demonstratives, the other two demonstrative pronouns *şu* and *o* are subject to the same allomorphy rule for their *n* drop. (26a) and (26b) demonstrate the final structure of the [medial] pronouns *şu* and *şunlar*, respectively.

(26) a.

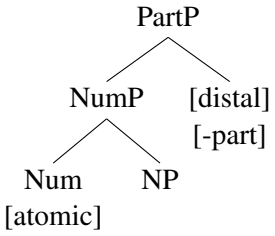


b.

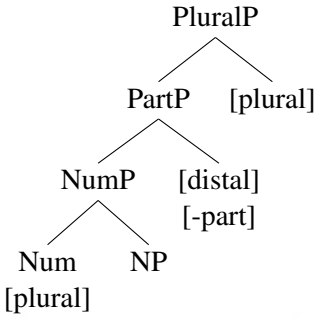


The last demonstrative pronoun, which we use as the 3rd person pronoun is *o*. It is used to point out things that are farther and also to mention people who are not a part of the discourse. Even though it is used as a "personal pronoun" it has [-part] as the other demonstratives as it cannot refer to a discourse participant. [distal] marks the "person" information of the pronoun. The final structure for *o* and its plural form *onlar* is represented in (27a) and (27b).

(27) a.



b.



To sum up, demonstrative pronouns consist of a combination of three features: a deixis feature, [-part], and the [plural]. Their plural interpretation comes from the NP inside their structure and it is marked on top of the PartP as *-lAr*. They have two allomorphs, one of which occurring only in word final positions. The Vocabulary Items in (28) shows the full insertion rules for the demonstrative pronouns.

(28) Vocabulary Items:
- a. [plural] $\longleftrightarrow$ *-lAr*
- b. [prox, -part]$\longleftrightarrow$ bun
- c. [medial, -part]$\longleftrightarrow$ şun
- d. [distal, -part]$\longleftrightarrow$ on

(29) Allomorphy Rules:
- a. [prox, -part] $\longleftrightarrow$ bu / $]_N$__
- b. [medial, -part] $\longleftrightarrow$ şu / $]_N$__
- c. [distal, -part] $\longleftrightarrow$ o / $]_N$__

2.3.3 The WH-word *kim*

The last type of nominal that shows overt genitive marking in postpositions is *kim*, meaning "who". The interpretation of *kim* indicates a human entity which the speaker does not know "who". Because of this pronominal use, it has the participant feature

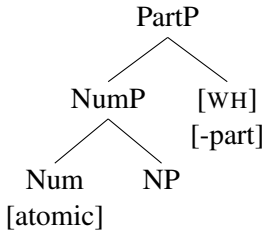
as the other pronouns, and its value is negative because it does not refer to the 1st or 2nd person in the discourse.

Another feature of this pronominal is that it can be used to question the identity of a person. (30) demonstrates an example. Therefore, it has a WH feature in its structure.

(30) a. *Kim gel-di?*
who come-PST
'Who came'
b. *Alper gel-di.*
Alper come-PST
'Alper came'

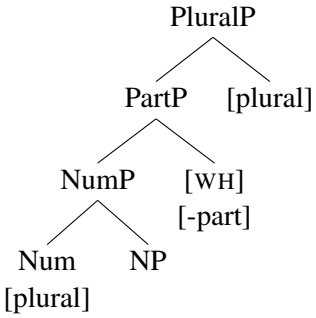
(31) illustrates the structure for *kim*. This structure does not have a proximity feature. Instead, there is the WH feature. Recall that the proximity information is what determines the person information in pronouns. This information is not present in *kim* and it follows that *kim* can be used to question that information. The [WH, -part] constitutes the PartP head.

(31)



The plural of *kim* has the same characteristics with the demonstrative pronouns. Since *kim* does not have a direct referent, the plural reflects the plurality of the NP embedded inside the structure. The plurality of this pronominal also comes from the null NP. Therefore, the [plural] surfaces on the PluralP head and not specified in the PartP. Other features remain the same as *kim*. (32) represents the structure for *kimler*.

(32)



In light of these structures, the Vocabulary Items that form *kim* and *kimler* are determined as in (33).

(33) Vocabulary Items:
   a. [plural] $\longleftrightarrow$ *-lAr*
   b. [WH, -part]$\longleftrightarrow$ kim

2.4 Genitive in postpositions

The data we observed shows that postpositions assign a case that is syncretic with the structural genitive case when it is overt. However, this case shows different behaviors in that it is not always overtly marked as the genitive case on possessors. The case assigned by the postpositions is PGEN, and it sits on the KP head. The form of this PGEN shows allomorphy across types of nominals. One group consists of the pronominals and the other group includes common nouns, proper nouns, and pronominals with suffixes. In section 2.3, I concluded that all pronominals have the [±part] in their structure, and it marks them as a pronominal. Here, I argue that this pronominal feature triggers allomorphy of the PGEN.

When the pronominal feature [±part] is adjacent to the PGEN, it triggers allomorphy, and we find overt case marking. The adjacency requirement follows from the fact that the suffixed pronominals do not trigger allomorphy. PGEN realizes as $\emptyset$ elsewhere. Thus, the nominals without the [±part] do not show overt case marking due to the absence of the trigger. The pronouns with suffixes also do not show overt case marking because of the locality violation between the [±part] and the PGEN. The *-lAr* marking on the pronominals provides evidence for this

assumption. In section (2.3), I show that *-lAr* realizes on a higher node than the pronominal. As a result, it intervenes between the [±part] and the case.

In this section, I provide a local allomorphy account for the genitive marking in postpositions (Ps). I argue that it is the pronominal feature that conditions local allomorphy of the overt genitive marking in postpositions. Then, I show that this is the reason why we do not find overt genitive marking with any pronominal that takes a suffix.

2.4.1 PGEN assignment by Ps

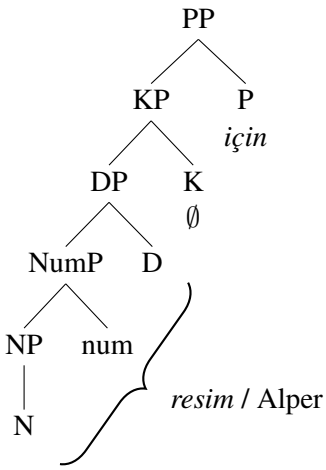
The postpositions *gibi* 'like', *için* 'for', *kadar* 'as...as', and *-(y)lA* assign case to their complements. This case looks similar to the genitive case, but the data shows that the case assigned by these postpositions behaves differently from the genitive in structurally assigned positions as shown in Section 2.2. PGEN is only overt when it is adjacent to [± part], otherwise, it realizes as ∅. The genitive in genitive-possessive constructions, on the other hand, is always overt when present.

The phrase in (34) provides examples of a common noun and a proper noun as complements of one of the postpositions that assign PGEN. I assume both of these types of nominal to be Ds. This is because the common nouns raise to Ds to check their referential features (Longobardi, 1994, 1996; Alexiadou et al., 2008; Guardiano, 2012; Cardinaletti & Giusti, 2015). Then, (35) illustrates the relevant structure for the phrases in (34).

(34) a. *resim için*
painting for
'for the painting'

b. *Alper için*
Alper for
'for Alper'

(35)



There is no [±part] present in the structure given in (35). Therefore, PGEN is in its elsewhere form. (36) shows the insertion rule for PGEN.

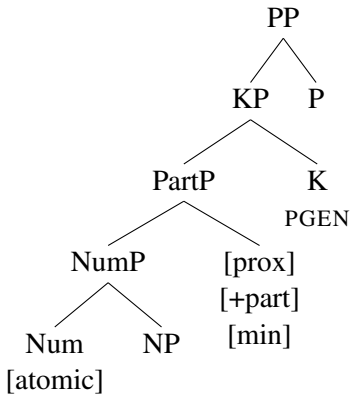
(36) PGEN $\longleftrightarrow$ ∅

2.4.2 PGEN on pronominals

The first person pronoun in a postposition is illustrated in (37). The syntax builds the structure in (37b) for the phrase in (37a). Here, PGEN assigned by the P is overt as opposed to the cases where it is assigned to a common noun. This is because the [±part] is present in the structure, suggesting that PGEN shows allomorphy depending on whether there is an adjacent [±part] is present or not. Then, the K head has to have access to the head [prox, +part, min] during the vocabulary insertion process.

(37) a. *ben-im için*
I-GEN for
'for me'

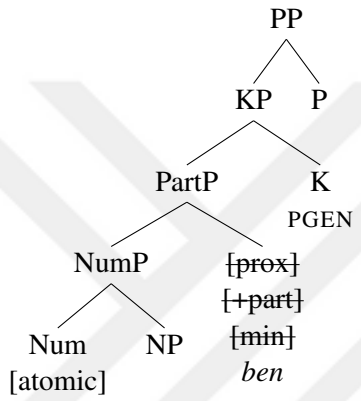
b.



However, the Vocabulary Insertion takes place in a bottom-up fashion. Thus, the Vocabulary Item for [prox, +part, min] is inserted before the PGEN. Remember that Insertion involves a rewriting operation that deletes the morphosyntactic information on the terminal nodes once a Vocabulary Item is inserted. Then, rewriting

prevents the access between the [prox, +part, min] features and the PGEN as illustrated in (38). Since the [prox, +part, min] features are deleted, the PGEN cannot show morphosyntactically conditioned allomorphy. The allomorphy can only be based on the phonological information on the preceding terminal node. This is not the case with PGEN as its allomorphy is conditioned by feature combinations and not by certain Vocabulary Items. Then, even though PGEN is inward-sensitive, it must have access to the morphosyntactic information on its preceding terminal node.

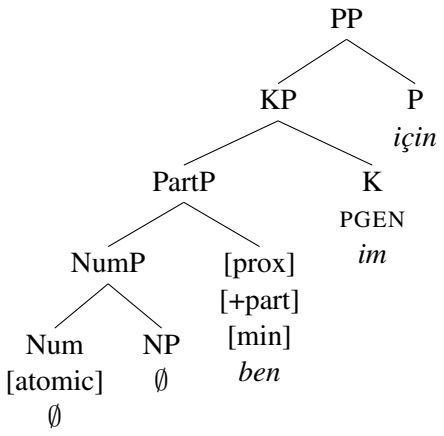
(38)



Svenonius & Bye (2012) offers a lexical insertion system that allows the inward sensitive allomorphy to be conditioned by morpho-syntactic features. This system divides the insertion into two steps: **L-match** and **Insert**. L-match applies before Insert and determines the possible vocabulary items that can match to a given terminal node solely based on the morpho-syntactic context. Then, Insert selects the right vocabulary item amongst these already determined morpho-syntactically possible candidates according to phonological criteria.

I follow Svenonius & Bye (2012) in my analysis. (39) shows the structure after L-match for (37a). Here, the K already has one candidate because *-im* allomorph occurs only with 1st person pronouns and it is conditioned by the [prox, +part]. As a result, Insert automatically selects *-im* after L-match. The allomorphy rule is given in (40). Similar to the GEN, PGEN has a specific allomorph for the first person pronouns.

(39)



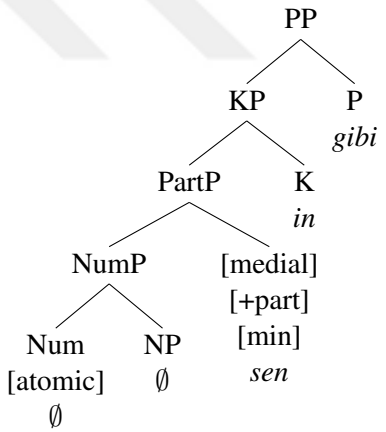
(40) a. PGEN $\longleftrightarrow$ ∅

b. PGEN$\longleftrightarrow$ im / [+part, prox]__

The second person pronoun with PGEN is shown in (41). The structure of this phrase is similar to the first person pronoun. There is only one option after L-match. Therefore, there is one vocabulary item for insert to select. The relevant allomorphy rule for PGEN is given in (42).

(41) a. *sen-in gibi*
you-GEN like
'like you'

b.



(42) PGEN$\longleftrightarrow$ in / [$\pm$part]__

The structural genitive case *nIn* has the *-In* allomorph. (43) shows that *-In* occurs only after consonants and therefore they show phonologically driven morphological allomorphy. (44) shows the relevant allomorphy rules.

(43) a. *Alper-in araba-sı*
Alper-GEN car-POSS.3
'Alper's car'

b. *Asya-nın araba-sı*
Asya-GEN car-POSS.3
'Asya's car'

c. *kaptan-ın selam-ı*
captain-GEN greeting-POSS.3
'captain's greeting'

d. *tayfa-nın selam-ı*
crew-GEN greeting-POSS.3
'the crew's greeting'

(44) a. GEN ⟷ nIn
b. GEN⟷ In / C___

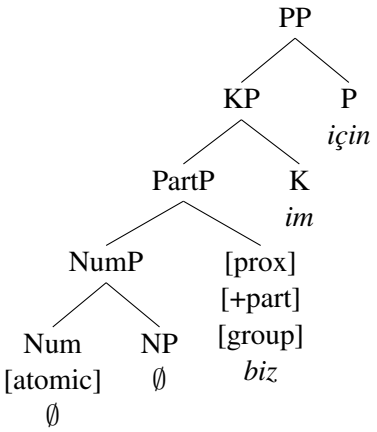
Notice that the overt allomorphs of PGEN are syncretic with GEN. This syncretism results from their morphosyntactic similarities. (45) shows possible morphosyntactic features for the two cases. I assume that PGEN has an extra [L] feature which marks it as a lexical case. Then, GEN is a subset of the PGEN. I argue that the syncretism between the two cases results from this subset relationship.

(45) a. GEN = {GEN}
b. PGEN = {GEN, L}

The plural forms of the 1st and 2nd person pronouns show the same allomorphy patterns as their singular forms. Their [+part] feature is adjacent to the K, and they have only one candidate after L-match applies. (46) and (47) illustrate the relevant phrases and their structure after insertion.

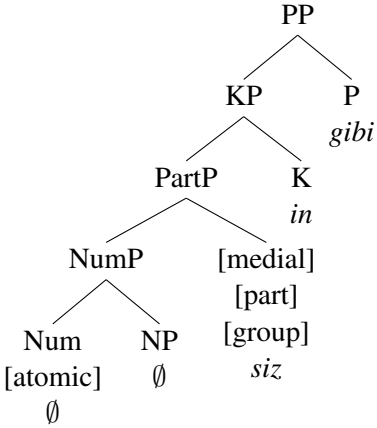
(46) a. *biz-im için*
We-GEN for
'for us'

b.



(47) a. *siz-in gibi*
you.PL-GEN like
'like you'

b.



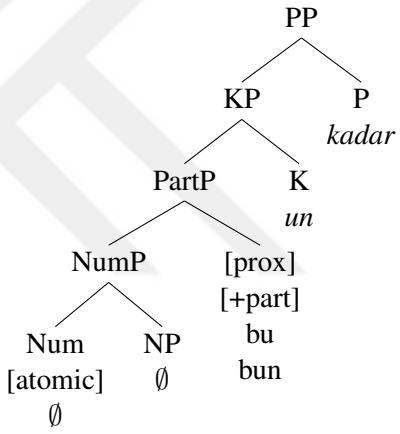
The demonstrative pronouns in Ps also show overt case marking as they have [-part] adjacent to the K. (48) shows phrases with demonstrative pronouns marked with PGEN. The demonstrative pronouns have two allomorphs. This allomorphy is not based on a morpho-syntactic feature but is a morpho-phonological condition. The allomorphy rules of the demonstrative pronouns are given in Section 2.3 and repeated in (50). (49) illustrates the structure of the proximate demonstrative pronoun after L-match. Since this allomorphy is not motivated by the morpho-syntactic features, there are two vocabulary items matching [prox, -part] at the L-match. Then, there are two candidates for Insert to match [prox, -part]. For the K, on the other hand, there is just one candidate because its allomorphy is conditioned by morphosyntactic features. The allomorphy rules for PGEN are given in (51).

(48) a. *bun-un kadar*
this-GEN as.much.as
'as much as this'

b. *şun-un kadar*
that-GEN as.much.as
'as much as that'

c. *on-un kadar*
that-GEN as.much.as
'as much as that'

(49)



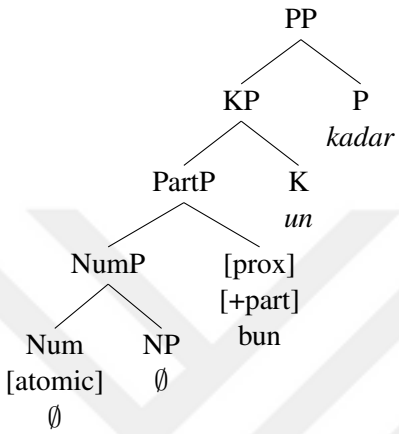
(50) a. [prox, -part] ⟷ bun
b. [prox, -part] ⟷ bu / ___#
c. [medial, -part] ⟷ şun
d. [medial, -part] ⟷ şu / ___#
e. [distal, -part] ⟷ on
f. [distal, -part] ⟷ o / ___#

(51) a. PGEN⟷ im / [+part, prox]___
b. PGEN⟷ in / [±part]___
c. PGEN ⟷ ∅

In (49), as Insert starts from the bottom, it first has to choose between the vocabulary items *bu* and *bun*. The condition in (50a) requires a suffix. Therefore, Insert has to check if there is a matching vocabulary item present in the next terminal

node. This shows that the [prox, -part] head shows outward-sensitive allomorphy based on phonological criteria. As Insert can see that there is a matching vocabulary item in the next terminal after L-match, it selects *bun* to match [prox, -part]. *un* is inserted to the K head by default as there is no other candidate. (52) shows the structure after Insert applies.

(52)



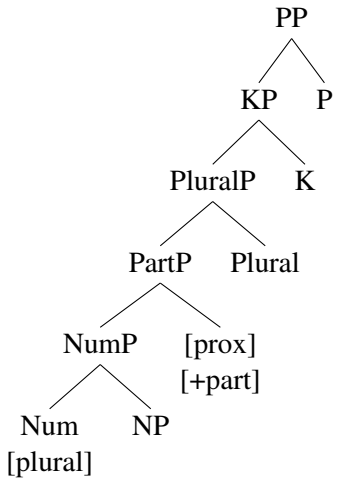
(53) shows that the plural demonstrative pronouns have an intervening plural morpheme betwen the PGEN and the pronoun. As a result, there is no overt genitive marking. The structure for this configuration is given in (54). Remember that the demonstrative pronouns do not have their number feature specified in their pronominal head. Therefore, their plural feature merges above the PartP head.

(53) a. **bun-lar-ın kadar*
this-PL-*GEN as.much.as
'*as much as this'

b. **şun-lar-ın kadar*
that-PL-*GEN as.much.as
'as much as that'

c. **on-lar-ın kadar*
that-PL-*GEN as.much.as
'as much as that'

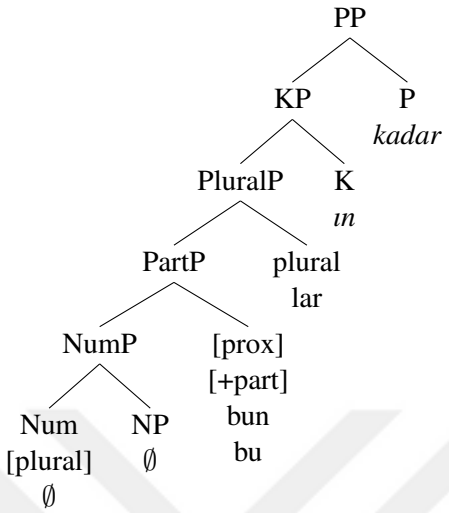
(54)



The L-match starts from the bottom and the allomorphy at this stage is inward-sensitive. Then, since there is an intervening PLURAL, *In* cannot be triggered

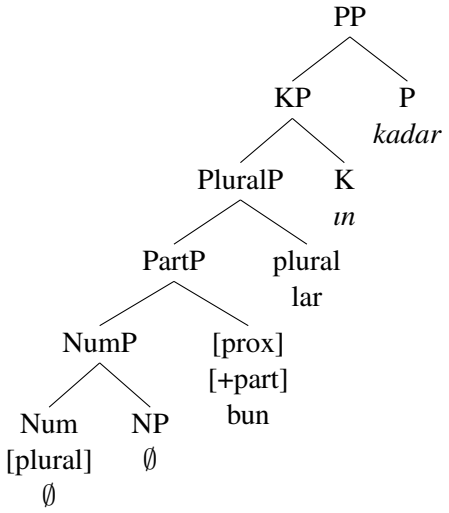
by the [-part]. As a result, K matches ∅ with the *-lAr* marked pronouns. (55) shows the structure after L-match.

(55)



Insert applies after L-match and satisfies the phonological criteria. Since the criteria for K is purely morpho-syntactic, it has only one candidate to match at Insert. The [prox, -part] on the other hand, has two candidates. The phonological rules in (50) determine the right form as *bun* and Insert successfully selects the right vocabulary item for the pronoun. The final structure after Insert is shown in (56).

(56)

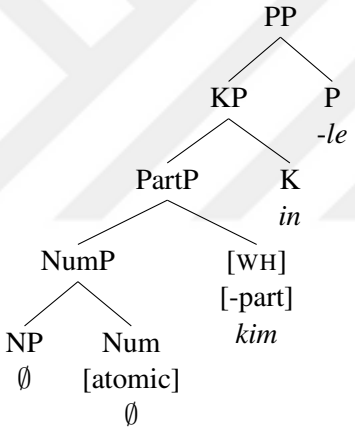


The WH-pronoun *kim* is the last pronoun that we observe overt PGEN. (57) shows the singular and plural uses of this pronoun with a relevant postposition. The plurality of *kimler* also marked with the PLURAL that comes after the PartP. It also has ∅ marking as expected due to the intervention of the local allomorphy.

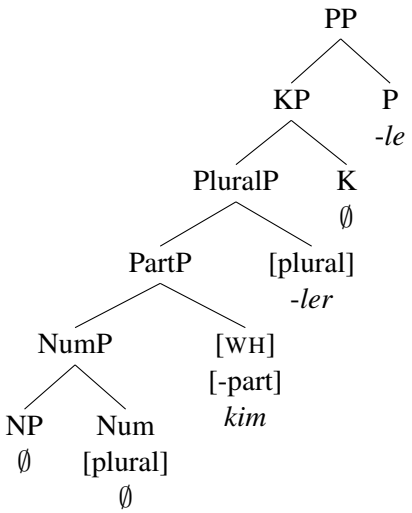
(57) a. *kim-in-le*
who-GEN-with
'with whom'
b. *kim-ler-le*
who-PL with
'with whom'

The structures for *kiminle* and *kimlerle* after vocabulary insertion are given in (58a) and (58b), respectively. When the K is adjacent to a head with [±part] as in (58a), the PGEN allomorphy rule shown in (51b) applies. When there is an intervening syntactic terminal as in (58b), it blocks the allomorphy, and K matches the ∅ form. The morpho-syntactic rules in (51) match only one vocabulary item for K, therefore, L-match leaves only the right candidate for Insert to select.

(58) a.



b.



Another place where we find *-lAr* is the double plural personal pronouns *bizler* and *sizler*. Here as well, the *-lAr* suffix prevents the pronominals from being

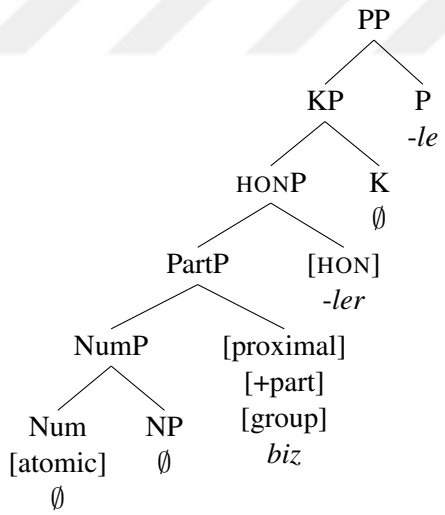
overtly marked with case. The *-lAr* here might be different from the one which marks the number of the pronoun in cases like (57b). The *-lAr* in double plurals has an honorific use. (59) shows examples where we use the double plural pronominals with the postpositions *-ylA* and *-için*.

(59) a. *Çok sev-diğ-imiz*
much love-NMLZ-1.PL
sanatçı-lar biz-ler-le
artist-PL we-HON-with
ol-du.
be-PST
'Our favorite artists were with us'

b. *Siz-ler için*
you.PL-HON for
uğraş-ıyor-um.
work-PROG-1
'I am working for you'

As expected, these forms do not show overt case marking. *-lAr* has a different projection than PluralP in these cases. However, it is still an intervener. [HON] blocks the allomorphy between the [±part] and the PGEN and therefore we have the ∅ in the K. (60) shows the relevant structure after the insertion for (59a).

(60)



The observed pronominals in postpositions provides evidence to say that what surfaces as the genitive case with these postpositions shows different allomorphy patterns than the regular genitive case of Turkish. (61) and (62) shows the full insertion rules for the PGEN and the genitive case, respectively. Notice that ∅ allomorph is not present in the structural genitive case while it is the elsewhere form of the PGEN. This shows that they are not allomorphs of the same case, but different cases.

(61) a. PGEN $\longleftrightarrow \emptyset$
b. PGEN$\longleftrightarrow$ im / [+part, prox]___
c. PGEN$\longleftrightarrow$ in / [$\pm$part]___

(62) a. GEN $\longleftrightarrow$ nIn
b. GEN$\longleftrightarrow$ In / C___
c. GEN$\longleftrightarrow$ im / [+part, prox]___

So far, I have shown that all the bare pronominals in Turkish show overt PGEN while their *-lAr* marked counterparts have the $\emptyset$ marking. In the remainder of this section, I will show how the other nominals and complex pronominals in Turkish show this blocking effect.

2.5 PGEN on complex nominals

PGEN needs to be adjacent to the [$\pm$part] feature in order to be overt. This means that any kind of suffix a pronominal has will have a blocking effect and cause the PGEN to be $\emptyset$. The following examples show that this prediction is borne out.

(63) shows pronouns with possessive morphology. In these examples, *kimi* and *biri* show overt possessive morphology. This possessive morphology intervenes between the [$\pm$part] feature of the pronoun and the K head. Therefore, the PGEN on these pronouns is silent as expected. The reflexive pronoun *kendi* in (63c) does not show overt possessive marking, however, it carries a possessive feature in its morphosyntax that binds the reflexive to its antecedent. Since the adjacency to [$\pm$part] is blocked by the possessive head, PGEN surfaces as zero.

(63) a. *kim-i-*$\emptyset$ *için*
who-3-GEN for
'for some (people)'
b. *bir-i-*$\emptyset$ *için*
one-3-GEN for
'for someone'
c. *kendi-*$\emptyset$*-*$\emptyset$ *için*
self-3-GEN for
'for herself'

(64) shows complex pronouns that are derived from quantifiers. In (64a), *hep* is a quantifier meaning 'all'. When a possessive marker is attached, it becomes a pronominal with the meaning 'we all'. Similarly, *herkes* in (64b) consists of the

quantifier *her*, and the bound morpheme *-kes*. The *-kes* here comes from the Persian word *kas* meaning 'kişi, kimse' (Nisanyan, 2021). This combination yields a pronominal, therefore, [±part] is still present in these derived pronouns. However, as the base pronoun is followed by a suffix, the adjacency is altered. As a result, the allomorphy of the PGEN cannot be triggered by the [±part]. This explains the reason why PGEN is not overtly marked on these pronouns.

(64) a. *hep-imiz-∅ için*
all-1.PL-PGEN for
'for all of us'

b. *herkes-∅ için*
every.person-PGEN for
'for everyone'

Finally, there is the WH-pronoun *kimse*. It should be noted that PGEN is overt on the bare WH-pronoun *kim*. However, when the bound morpheme *-se* is added to *kim* to form *kimse*, PGEN cannot be overtly marked anymore. (65) illustrates this use. The *-se* morpheme can be considered as a conditional suffix, as in the case of verbs in Turkish (Nisanyan, 2021). Here, this suffix appears on a terminal node that intervenes between the K head and the PARTP, thus causing PGEN to be zero marked.

(65) *kim-se-∅ için*
who-SE-PGEN for
'for anyone'

2.6 Summary

In this chapter, I have shown that the genitive case with postpositions is only overt with bare pronominals and it is zero-marked with other nominals. This contrast is not present with the genitive case in other positions as well as the other cases that occur with postpositions. Based on the observations in Section 2.2, I have concluded that the genitive case with postpositions is idiosyncratic and lexically assigned, while in other positions, it is structurally assigned.

I have argued that the lexically assigned genitive case is a different case from the structural one, and I named it PGEN for ease of reference. Having established that PGEN is sensitive to pronominals, I have investigated the morphosyntax of Turkish pronominals by using the feature geometric analysis of Harley & Ritter (2002) in

Section 2.3. In light of the data and the literature on the morphosyntax of pronominals, I have offered a [±participant] feature that is present all and only in pronominals.

After that, in Section 2.4, I have provided an allomorphy analysis for PGEN. According to this analysis, the elsewhere form of PGEN is ∅. The [±participant] feature triggers allomorphy on PGEN when they are adjacent.

Building on the fact that PGEN is structurally higher than the [±participant] feature, this analysis has revealed that the rewriting assumption of DM fails to cover inward sensitive morphological allomorphy patterns and provided a solution to this problem by following the insertion mechanism of Svenonius & Bye (2012).

Finally, I have examined complex pronominals with genitive assigning postpositions in Turkish and shown that any kind of suffix that intervenes between the base pronominal and the PGEN blocks allomorphy. I have concluded that the predictions of the inward sensitive local allomorphy analysis of PGEN are borne out.

CHAPTER 3

GENITIVE AS A STRUCTURAL CASE

3.1 Introduction

Genitive as a structural case occurs on the possessors of the genitive possessive constructions, and on the subjects of nominalized clauses in Turkish. There are several studies that show the genitive is a structural case in these contexts. In this chapter, I will provide the main views on the structural assignment of the genitive case, and I will focus on the puzzles that come from the genitive case on the subjects of nominalized clauses.

The two most common nominalization types in Turkish are -mA(K) nominalizations and -DIK/(y)AcAK nominalizations. These nominalized clauses can either occur as a complement of the matrix clause or combine with a P head to function as an adjunct. (1) illustrates the two cases for -mA(K) nominalizations. In (1a), the nominalization is the complement of the matrix verb, while in (1b) it forms an adjunct with the postposition *için*. The genitive marking on the subject is obligatory in both contexts.

(1) a. *Ali Ayşe-nin git-me-si-ni söyle-di.*
Ali Ayşe-GEN go-MA-POSS-ACC say-PST
'Ali told Ayşe to leave'

b. *Ali Ayşe-nin git-me-si için uğraş-tı.*
Ali Ayşe-GEN go-MA-POSS for work-PST
'Ali worked to make Ayşe leave.'

The -DIK and -(y)AcAK nominalizations can function as relative clauses modifying nouns as shown in (2). This type of relative clauses are referred as object relatives since they only modify non-subject arguments. Another characteristic of this type of relatives is that they always occur with the possessive agreement morphology on the verb. Notice that the subject of the relative clause carries genitive case obligatorily.

(2) a. *Ali Ayşe-*(nin) git-tiğ-i okul-a gidiyor.*
Ali Ayşe-GEN go-DIK-POSS school-DAT go-PRS
'Ali goes to the school that Ayşe went'
b. *Ali Ayşe-*(nin) gid-eceğ-i okul-a gidiyor.*
Ali Ayşe-GEN go-AcAK-POSS school-DAT go-PRS
'Ali goes to the school that Ayşe will go'

The genitive marking on the subjects of -DIK/-(y)AcAK clauses is not always obligatory. It shows a contrast between the adjunct clauses and the complement clauses. In (3a), the embedded clause is a complement of the matrix verb. In this context, the subject of the embedded clause receives genitive case. On the other hand, in (3b), the same nominalization occurs as an adjunct clause with the postposition *için*. Here, the subject of the embedded clause is ungrammatical when marked with genitive.

(3) a. *Ali Ayşe-*(nin) git-tiğ-i-ni söyle-di.*
Ali Ayşe-GEN go-DIK-POSS-ACC say-PST
'Ali said that Ayşe left'
b. *Ali Ayşe-(*nin) git-tiğ-i için üzgün.*
Ali Ayşe-*GEN go-DIK-POSS for sad
'Ali is sad because Ayşe left.'

In this chapter, I will analyze the contrastive behavior of the genitive case on the subjects of nominalized clauses. First, I will show that the genitive case is absent only in certain configurations of the *-DIK* clauses in Section 3.2. In Section 3.3, I will present the previous literature on nominative/genitive alternation. Then, I present the arguments on the unmarked case status of the genitive case in Section 3.4. Finally, in Section 3.5, I will propose an analysis that accounts for the contrastive behavior of the structural genitive case on the subjects of embedded clauses using the Case Realization Disjunctive Hierarchy of Marantz (1991) and I will provide a summary of this chapter in Section 3.6.

3.2 The problem

The embedded clauses in Turkish canonically show genitive marking on their subjects. This pattern is consistent with *-mA(K)* nominalizations, which are

nominalized lower in the structure (Kornfilt, 2003; Kornfilt & Whitman, 2011; Demirok, 2018; Göksu & Öztürk, 2021). The *-DIK* and *-(y)AcAK* nominalizations, on the other hand, show alternation on their subject case marking.

The *-DIK*/*-(y)AcAK* nominalizations combine with a postposition (i.e. *için*, *gibi*, *göre*, *sonra*, *zaman*) to create adjuncts. This combination sometimes yields a nominative subject in the embedded clause. Note that not all combinations of embedded clauses with postpositions give rise to nominative subjects. (4) shows that the nominalizations with the postposition *kadar* never show this pattern. In this example, the genitive on the subject of the embedded clause is obligatory, even though the nominalization forms an adjunct clause.

(4) *Ayşe ben-*(im) çalış-tığ-ım kadar çalış-ma-dı.*
Ayşe I-GEN çalış-DIK-POSS.1 as.much.as study-NEG-PST
'Ayşe did not study as much as I did.'

(5) shows *-DIK* nominalizations[4] combining with the same postposition, *göre*. Here, both embedded clauses are adjuncts, but (5a) has a genitive subject while (5b) has a nominative subject. Another difference between the two is that the embedded clause in (5a) functions as a relative clause in the sense that the clause refers to a "thing" that has been understood by the speaker (Aygen, 2002a).

(5) a. *Ben-im anla-dığ-ım-a göre sorun*
Ben-GEN understand-DIK-POSS.1-DAT according.to problem
çöz-ül-müş.
solve-PASS-PST.PRF
'According to what I understood, the problem has been solved.'

b. *Ben anla-dığ-ım-a göre herkes anla-r.*
I understand-DIK-POSS.1-DAT according.to everyone understand-PRS
'Now that I understood, everyone will understand.'

The subject case of the relative clauses shows alternation as well. This alternation is observed when they combine with certain heads such as *zaman*, *vakit*, *gün*, *akşam*, and so on. (6) provides examples for this alternation. In (6a), the subject

[4]I use *-DIK* clauses as an umbrella term for *-DIK* and *-yAcAK* clauses which show similar characteristics as nominalized clauses.

appears in the genitive case when the head noun is a complement of the matrix verb. When the embedded clause is an adjunct, as in (6b), the subject of the relative clause occurs in the nominative case.

(6) a. *Ben pandemi-nin başla-dığ-ı zaman-ı bil-iyor-um.*
I pandemic-GEN start-DIK-POSS time-ACC know-PRS-1
'I know the time that the pandemic started.'

b. *Ben pandemi başla-dığ-ı zaman İzmir-de-ydi-m.*
I pandemic start-DIK-POSS time Izmir-LOC-COP-1
'I was in İzmir when the pandemic started.'

In addition to the alternation on the subject case, nominalized clauses show alternation on the agreement as well as shown in (7). Here, we find that the nominalized verb does not show agreement morphology when the nominalization combines with *sonra*, which means "after". Another thing to note about this combination is that it never allows the subject of the embedded clause to have a genitive case.

(7) *Oyun ben gel-dik-ten sonra bit-ti.*
game I come-DIK-ABL after end-PST
'The game ended after I arrived.'

Overall, the examples show that the *-DIK* nominalizations divide into three types in terms of case and agreement properties. The first type shows genitive marking on their subjects and nominal agreement. This type of nominalizations can occur with or without a postposition. The second type also shows nominal agreement, but they have nominative subjects. This type can only occur with a set of postpositions. Finally, the third type has nominative subjects and no agreement. This is the least common type as we only observe this pattern with the postposition *sonra*.

3.3 Nominative licensing approaches

3.3.1 Complex finiteness feature as a case licenser

Aygen (2002b,a) provides a typological discussion on the mechanisms involved in licensing of the subject case in Turkish clausal constructions. She argues against the

previous analyses that involve case assignment through a functional head (Kornfilt, 1985, 2001), and proposes the idea that the nominative case is not assigned but licensed by a complex *finiteness* feature. She further suggests that the genitive case on the subjects of the nominalized clauses only occurs when the nominative case cannot be licensed.

Licensing is defined as feature checking in Aygen (2002b). Feature checking involves a functional head with uninterpretable features. Uninterpretable features occur on functional heads, and they encode grammatical information. This information is not visible to the semantic component (LF). Therefore, these features need to be deleted in order to prevent the derivation from crashing. The deletion can happen through two kinds of syntactic operations: Agree or Move. In either case, the deletion requires another element with interpretable features that completes the uninterpretable ones on the functional head. These features can either trigger agreement with the functional head or move from their positions to delete the uninterpretable features.

One of the arguments against the assignment of the nominative case by a functional head in Aygen (2002b) relies on the data in (8). She points out that agreement morphology is present in both (8a) and (8b). However, (8a) shows a genitive case on the subject of the embedded clause, while (8b) has a nominative subject in the embedded clause. This shows that neither case can be licensed by an Agree operation.

(8) a. *Ben-∅ Ali-nin cam-ı kır-dığ-ı zaman-ı bil-iyor-um.*
I-NOM Ali-GEN glass-ACC break-DIK-POSS time-ACC know-PRS-1
'I know the time that Ali broke the glass.'

b. *Ben-∅ Ali-∅ camı kır-dığ-ı zaman gerçeğ-i bil-iyor-du-m.*
I Ali glass-ACC break-DIK-POSS time truth know-PRS-PST-1
'I knew the truth when Ali broke the glass.'

(Aygen, 2002b)

Another argument on the assignment of the nominative case is that it is licensed by a finiteness feature on the TenseP head (George & Kornfilt, 1981). Aygen (2002b) argues against the claim that the finiteness notion equals tense and that it

licenses the nominative case. First, she provides examples in (9) that exhibit nominalized clauses with no tense morphology on the verb. The examples show that the lack of tense morphology does not prevent the subjects from having a nominative case. Then, the tense cannot be responsible for licensing the nominative on Turkish clausal constructions.

(9) a. *Sen-∅ gel-ince parti-ye gid-eceğ-iz.*
you-NOM come-when party-DAT go-FUT-1.PL
'When you come, we will go to the party.'
b. *Sen-∅ gel-dik-ten sonra parti-ye git-ti-k.*
you-NOM come-DIK-ABL after party-DAT go-PRF-1.PL
'When you come, we will go to the party'

(Aygen, 2002b)

Aygen (2002b) provides additional evidence from Exceptional Case Marking (ECM) constructions in Turkish. The examples provided here in (10) shows that if finiteness equals to tense, it cannot be responsible from the nominative licensing. This is because the ECM construction in (10) shows tense morphology, but occurs with an accusative case.

(10) *Ben-∅ [sen-i gel-di-(n)] san-dı-m.*
I-NOM you-ACC come-PRF/PST-2 think-PRF/PST-1
'I thought you came/have come.'

(Aygen, 2002b)

In this approach, the finiteness feature does not occupy the T head alone. This is because finiteness is defined as a complex feature that is divided into two heads, namely, T and C. The T head carries modality features, and the C head hosts the mood features. Since the licensing of the nominative case depends on finiteness, the subjects can receive a nominative case under two conditions. First, it is necessary to have an active mood feature on the C head of the clause, second, the Inflection Phrase has to involve an active modality feature.

Aygen (2002b) bases her proposal on the idea that certain modality configurations does not license nominative case. For instance, (11a) shows that ECM

clauses allow deontic modality. On the contrary, we see in (11b) that the ECM verb cannot occur with tense, aspect, or epistemic modality inflection.

(11) a. *Ben-∅ [Kürşat-ı gel-di-ecek-iyor-miş-ebilir] san-dı-m.*
I-NOM Kürşat-ACC come-aspect/deontic modality think-PRF/PST-1
'I considered Kürşat to have come, to be coming, to have to (to be required to) come, to be able to come'

b. **Ben-∅ [Kürşat-ı gel-iyor-du /ecek-ti /miş-ti] san-dı-m.*
I-NOM Kürşat-ACC come-PROG-PST /FUT-PST /PRF-PST think-PRF/PST-1
'I considered Kürşat to be coming/ to will be coming/ to have come'

(Aygen, 2002b)

Aygen (2002b) uses the example provided in (12) to point out a contrast between the clauses that allow epistemic modality and those which do not. (12) demonstrates a finite complement clause with a nominative subject. Here, there is a finite clausal complement with a nominative subject, *Kürşat*. The only difference between the ungrammatical sentence in (11b) and the grammatical sentence in (12) is that the subject of the embedded clause in (12) has a nominative case.

(12) *Ben-∅ [Kürşat gel-iyor-du /ecek-ti /miş-ti] san-dı-m.*
I-NOM Kürşat come-PROG-PST /FUT-PST /PRF-PST think-PRF/PST-1
'I considered Kürşat to be coming/ to will be coming/ to have come'

(Aygen, 2002b)

Building on the contrast between the ECM constructions and the finite complement clauses, Aygen (2002b) argues that the nominative case is licensed only when there is epistemic modality. This modality feature, then, is a part of the complex finiteness feature defined by Aygen (2002b) which licenses the nominative case on the subjects of clausal constructions. In the traditional sense, the finiteness feature would be hosted on the T head. Following this, the traditional TP is called a Finiteness Phrase (FP) in this approach.

Then, according to Aygen (2002b), in order for the nominative case to be licensed, not only that there have to be an FP with an epistemic modality feature, but also the clausal structure has to be as high as a CP with a [+N] feature on its head as a part of the complex finiteness feature.

In this approach, the genitive case on the subjects of the Turkish embedded clauses occurs when the nominative case licensing fails. Aygen (2002b) follows Miyagawa (1993) in that the genitive marking takes place via the covert movement of the nominal to the Spec, DP. Then, she suggests that the nominalizations have a DP layer, and when the nominative licensing fails, the subjects move from their positions to Spec, DP, where they receive a genitive case.

There is also a scope test provided in Aygen (2002b) to show that the genitive marked subjects do undergo movement to Spec, DP. (13) shows a clause with a genitive marked subject. Here, the sentence is ambiguous between the two readings. This shows that the genitive subject can have a wide scope, providing evidence that it moves to the Spec, DP.

(13) *[Bugünlerde [pırlanta ya da inci]nin ucuzlama] ihtimal-i]*
Nowadays diamond or pearl-GEN get.cheaper probability-POSS 0% *%0.*

(1) 'The probability that rubies or pearls' become cheap nowadays is over 0% (i.e. neither will become cheaper)'
(2)'The probability that rubies become cheap nowadays or the probability that pearls become cheap nowadays is over 0%' . (i.e. either rubies or pearls won't become cheaper)

(Aygen, 2002b)

(14) shows that nominative subjects do not have a wider scope, hence they do not undergo movement to Spec, DP.

(14) *[Pırlanta ya da inci] %0 ihtimal-le ucuzla-yacak.*
Diamond or pearl 0% probability-with become.cheap-FUT
'Rubies or pearls will become cheap with the probability of 0%' (i.e. neither will become cheaper)'

(Aygen, 2002b)

Having established that the genitive subjects move to a Spec, DP position to receive case when they cannot license nominative case, Aygen (2002b) argues that clauses with genitive subjects are relative clause constructions. In order to test this argument, she employs coordination and gapping tests. (15a) shows that the

nominalized clauses with genitive subjects can combine with relative clauses, which suggests they are as well relative clause constructions. In addition, the sentence in (15b) shows that a nominalized clause with a genitive subject has a gap position, supporting the idea that it has the structure of a relative clause.

(15) a. *Ben-Ø [Ali-nin git-tiğ-i zaman-ı] ve Kürşat-ın bin-diğ-i*
I-NOM Ali-GEN go-DIK-ACC time-ACC and Kürşat-GEN get.on-DIK-ACC
uçağ-ı bil-iyor-du-m.
plane-ACC know-PROG-Pst-1
'I knew the time when Ali went and the plane that Kürşat got on'

b. **Ben-Ø [Ali-nin dün git-tiğ-i zaman]-ı bil-iyor-du-m.*
I-NOM Ali-GEN yesterday go-DIK-ACC time-ACC know-PROG-PST-1
'*I know when Ali left yesterday'

(Aygen, 2002b)

Building on the idea that the nominalizations with genitive subjects are relative clauses, Aygen (2002b) shows that the nominative subjects include a complementizer by a modification test. As the example in (16a) shows, *zaman* can be modified by a determiner when the subject is genitive. On the other hand, in (16b), it becomes ungrammatical when *zaman* occurs with a determiner. As the test in (16) demonstrates, *zaman* is a C head in embedded clauses with nominative subjects. On the other hand, when the subject is genitive, *zaman* functions as a head noun of the relative clause construction.

(16) a. *Ben-Ø [Ali-nin cam-ı kır-dığ-ı **o** zaman]-ı*
I-NOM Ali-GEN glass-ACC break-DIK-POSS **that** time
bil-iyor-du-m.
know-PROG-Pst-1
'I knew that time when Ali broke the glass'

b. **Ben-Ø [Ali-Ø cam-ı kır-dığ-ı o zaman] gerçeği*
I-NOM Ali-NOM Ali-NOM glass-ACC break-DIK-POSS that time
bil-iyor-du-m.
truth-ACC know-PROG-PST-1
'*'I knew the truth that time when Ali broke the glass'

(Aygen, 2002b)

Remember that the nominalized clauses that allow a head noun can occur with postpositions as well. Then, the idea here is that they are postpositions when their

subject has genitive case, and a complementizer when the subject has nominative case. For instance, in (17a), *göre* occurs with a relative clause construction and it is a postposition. However, in (17a) where the subject of the adjunct clause has a nominative case, *göre* is a complementizer.

(17) a. *Ben-im anla-dığ-ım-a göre sorun*
Ben-GEN understand-DIK-POSS.1-DAT according.to problem
çöz-ül-müş.
solve-PASS-PST.PRF
'According to what I understood, the problem has been solved.'

b. *Ben anla-dığ-ım-a göre herkes anla-r.*
I understand-DIK-POSS.1-DAT according.to everyone understand-PRS
'Ever since I understood, everyone will understand.'

Aygen (2002a) suggests that the postpositions receive a DP complement which heads the nominalized CP clause. When a postposition functions as a C head as in (17b), then there is no DP over the nominalization. Thus, the subject cannot receive a genitive case.

3.3.2 Agr licensing Approach

Kornfilt (2003) offers an analysis where the subject case is licensed by an Agr Head, which is argued to be a separate projection in syntax. Kornfilt (2003) gives the examples in (18) from ECM constructions to show that tense cannot be licensing the subject case. Here, in (18a), we find the subject case and agreement in an embedded verbal clause. When we drop the agreement in (18b), then the subject case (i.e. nominative) is no longer licensed. Thus, we find the subject in the accusative case, which is licensed by the matrix verb.

(18) a. *Sen dün akşam ev-de yemek pişir-iyor-du-n san-dı-m.*
you yesterday evening home-LOC food cook-PROG-PST-2 believe-PST-1
'I believed (that) you were cooking food at home yesterday morning.'

b. *Sen-i dün akşam ev-de yemek pişir-iyor-du*
you-ACC yesterday evening home-LOC food cook-PROG-PST
san-dı-m.
believe-PST-1
"I believed you to have been cooking food at home yesterday morning.'

(Kornfilt, 2003)

Kornfilt (2003) uses the examples in (18) to motivate the idea that the licensing of the subject case is dependent on the presence of an agreement. She also suggests that this Agr must be hosted by a C head. This assumption follows from the examples in (19) where the ECM clause in (19a) does not allow extraction while it is possible with a "fully verbal" clause in (19b). Kornfilt (2003) claims that this is an indicator that the clauses with Agr have a CP layer that hosts the Agr.

(19) a. *??/*[Ali-nin [sen-i e_i yaz-dı] san-dığ-ı] mektup$_i$*
Ali-GEN you-ACC write-PST believe-DIK-3 letter
Intended reading: '*the letter which Ali believes you to have written'

b. *[Ali-nin [sen e_i yaz-dı-**n**] san-dığ-ı] mektup$_i$*
Ali-GEN you write-PST-**2** believe-DIK-3 letter
'the letter which Ali believes you wrote.'

(Kornfilt, 2003)

Kornfilt (2003) draws a distinction between the *-mA(K)* nominalizations and the *DIK* nominalizations in terms of their categorical properties. She shows that the *-mA(K)* nominalizations are fully nominal while the *DIK* nominalizations involve verbal properties.

The first case in this regard is the tense features of the *-DIK* nominalizations. (20a) shows the *-DIK/-(y)AcAK* clause can bear a tense independent from the matrix clause. In (20b), we find that this is not possible with the *mA(K)* nominalizations. This shows that the *mA(K)* nominalizations do not bear tense features.

(20) a. *[Sen-in ev-de yemek pişir-eceğ-in]-i duy-du-m.*
you-GEN home-LOC food cook-yAcAK-2-ACC hear-PST-1
'I heard that you will cook food at home.'

b. *[Sen-in ev-de yemek pişir-me-n]-i*
you-GEN home-LOC food cook-MA-2-ACC
isti-yor-um/iste-di-m/iste-yeceğ-im.
want-PST-1/want-PST-1/want-FUT-1
'I want/wanted/will want for you to cook food at home.'

(Kornfilt, 2003)

Second, Kornfilt (2003) shows that the *-mA(K)* nominalizations can follow determiners as shown in (21a) while *-DIK* nominalizations cannot (21b). This shows that the *-mA(K)* nominalizations have nominal properties.

(21) a. *?[Hasan-ın bu durmadan kumarhane-ye kaç-ma-lar-ın]-dan*
Hasan-GEN this constantly casino-DAT escape-MA-PL-3-LOC
hoşlan-mı-yor-um.
like-NEG-PROG-1
'I don't like these constant runnings (away) of Hasan to the gambling casino (i.e. that Hasan should run to the casino constantly).'

b. ***[Hasan-ın bu durmadan kumarhane-ye kaç-tık-lar-ın]-ı*
Hasan-GEN this constantly casino-DAT escape-DIK-PL-3-ACC
duy-ma-mış-tı-m.
hear-NEG-PRF-PST-1
'Intended reading: 'I hadn't heard (about) these constant runnings (away) of Hasan to the gambling casino.'

(Kornfilt, 2003)

The last key difference between the two types of nominalizations stated in Kornfilt (2003) is the existence of a CP layer. Kornfilt (2003) argues that the operators such as WH- operators or RC operators are hosted in Spec, CP. Thus, only CP constructions can occur with these operators. Examples in (22) show that the *-DIK* nominalizations can host these operators as they allow the narrow-scope reading of the WH-pronoun. On the other hand, *-mA(K)* nominalizations fail to license these operators. This suggests that they do not have a CP layer.

(22) a. *[Yemeğ-i kim-in pişir-diğ-in]-i sor-du-m/duy-du-m/söyle-di-m.*
Food-ACC who-GEN cook-DIK-3-ACC ask-PST-1/hear-PST-1/say-PST-1
'I asked/heard/told who had cooked the food.'

b. **Yemeğ-i kim-in pişir-me-si]-ni söyle-di-m.*
food-ACC who-GEN cook-MA-3-ACC say-PST-1
Intended reading:'I said who should cook the food.'

(Kornfilt, 2003)

All the aforementioned differences between the two types of nominalizations show that *-mA(K)* nominalizations are fully nominal while the *-DIK* nominalizations are not fully nominal. Once the category of the nominalized clause is determined, it matches the type of the Agr to enable the Agr to function as a subject case licenser.

This means that when the clause is fully nominal, the Agr licenses a genitive case on the subject. In fully verbal clauses, the Agr is also verbal and it licenses nominative as the subject case. This type of subject case licensing takes place via category match.

The *-DIK* nominalizations are not fully verbal as they are nominalized under a DP layer. However, they are also not fully nominal as the *-mA(K)* nominalizations. Thus, they cannot license subject cases via category matching. When this "category mismatch" happens, the subject case is determined by "referential indexing". That is, when the clause headed by the Agr is an argument to the matrix verb, it receives a thematic index. This index licenses the Agr as a subject case licenser. The subject case becomes genitive since the clause is nominal.

(23) provides an example clause where the Agr is licensed via referential indexing. Here, the *-DIK* nominalization is an argument of the matrix verb. Thus, it has a referential theta index which is inherited by the Agr.

(23) *[Sen-in ev-de yemek pişir-eceğ-in]-i duy-du-m.*
you-GEN home-LOC food cook-yAcAK-2-ACC hear-PST-1
'I heard that you will cook food at home.'

(Kornfilt, 2003)

The referential indexing results in the genitive case on the subjects of *-DIK* nominalizations when they are arguments. On the other hand, Kornfilt (2003) argues that adjunct clauses do not receive a referential theta index. Hence, the Agr is not licensed when the *-DIK* clause occurs as an adjunct.

When the Agr is not licensed, the subject of the embedded clause cannot receive a genuine subject case. Then, following the case typology of Chomsky (2001), Kornfilt (2003) suggests that the subjects of *-DIK* nominalizations receive a "default case" when the subject case cannot be licensed. The default case is assignment is a last-resort operation. Thus, it can only apply when all else fails for the subject to receive a structural case.

The example in (24) shows a *-DIK* nominalization as an adjunct to the matrix verb. Here, there is a category mismatch as the *-DIK* nominalizations are not fully

nominal. Referential indexing strategy for subject case licensing also fails as the adjuncts cannot have a referential theta index under the account of Kornfilt (2003). Then, the subject of the embedded clause is assigned a default case which is the nominative case in Turkish.

(24) *Sen yemek pişir-diğ-in için ben konser-e gid-ebil-di-m.*
You food cook-DIK-2 because I concert-DAT go-ABIL-PST-1
'Because you cooked, I was able to go to the concert.'

(Kornfilt, 2003)

-DIK nominalization can function as relative clauses as well. As shown in (25), these clauses have a genitive case on their subjects. The genitive case here cannot be licensed by category matching as the *-DIK* nominalization is not fully nominal. The referential indexing would also fail because the nominalization is not an argument of the matrix word, rather, it functions as a modifier.

(25) *Ali-nin geçen gün dükkan-dan al-dığ-ı bu şahane vazo.*
Ali-GEN past day shop-ABL buy-DIK-3 this magnificent vase
'this magnificent vase which Ali bought at the store the other day.'

(Kornfilt, 2003)

Kornfilt (2003) offers a third way of licensing the Agr to account for the genitive case on the subjects of the relative clause constructions. Relative clauses cannot have a referential index from the matrix verb. However, they form a predication relation with the external noun they modify. This relation yields a referential index on the modifying clause which then percolates down to the Agr to license itself.

Overall, in an Agr-based approach, the Agr needs to be licensed as a functional head. The licensing can take place via categorical match, referential indexing, or predication. Under this account, the subject case alternation on the *-DIK* nominalizations is determined purely based on their argument status. They receive a genitive case when they are in an argument position. When they are adjuncts, the subject case cannot be licensed. Thus, they end up receiving a default case, which is nominative.

3.3.3 C as case licenser

Kural (1993) argues that the genitive subjects of embedded clauses result from the T to C movement. It is claimed that the T to C movement takes place in all CP constructions in Turkish. Thus, in this analysis, the nominative/genitive alternation on the subjects of *-DIK* clauses is inferred to be optional.

-DIK nominalizations and *-mA(K)* nominalizations diverge from each other in that one of them involves tense and the other is an infinitive. Kural (1993) provides the examples in (26) to show this difference. In (26a)- (26b), the *-DIK* nominalizations can have a temporal reference that is different from the tense of the matrix verb. (26c) shows that *-mA(K)* nominalizations cannot have independent time reference. Thus, they are infinitives.

(26) a. *Ahmet Berna-ya okul-a git-tiğ-i-ni söyle-di.*
Ahmet Berna-DAT school-DAT go-DIK-3-ACC tell-PST
'Ahmet told Berna that S/he went to the school.'

b. *Ahmet Berna-ya okul-a gid-eceğ-i-ni söyle-di.*
Ahmet Berna-DAT school-DAT go-AcAK-3-ACC tell-PST
'Ahmet told Berna that S/he will go to the school.'

c. *Ahmet Berna-ya okul-a git-me-si-ni söyle-di.*
Ahmet Berna-DAT school-DAT go-MA-3-ACC tell-PST
'Ahmet told Berna to go to the school.'

(Kural, 1993)

Building on the observation above, Kural (1993) claims that *-DIK* nominalizations consist of a *-DI+K* complex where the *-DI* corresponds to the regular past tense morpheme in Turkish.

Kural (1993) offers several tests from ECM constructions in Turkish, disjoint reference effects and post-verbal scrambling to argue that the *K* morpheme corresponds to C head. For instance, (27) shows that ECM only happens when there is no *K* morpheme present. Given that ECM requires the deletion of CP, this complementary difference between ECM and *K* suggests that *K* is on the C head.

(27) a. *Ahmet Berna-yı uyu-du san-ıyor.*
Ahmet Berna-ACC sleep-PST believe-PROG
'Ahmet thinks Berna slept.'

b. *Ahmet Berna-nın uyu-duğ-u-nu san-ıyor.*
Ahmet Berna-ACC sleep-DIK-3-ACC believe-PROG
'Ahmet thinks Berna slept.'

(Kural, 1993)

Another example in Kural (1993) to support the idea that *K* is at C comes from the disjoint reference effects in Turkish. (28) shows that the existence of *K* provides an opaque binding domain for pronouns. The absence of *K* results in ungrammaticality that comes from the violation of Principle B (Chomsky, 1981).

(28) a. *Ahmet$_i$ [pro$_i$ Ankara-ya git-tiğ-i]-ni san-ıyor.*
Ahmet Ankara-DAT go-DIK-3-ACC believe-PROG
'Ahmet thinks he went to Ankara.'

b. **Ahmet$_i$ [pro$_i$ Ankara-ya git-ti] san-ıyor.*
Ahmet Ankara-DAT go-PST believe-PROG
'Ahmet thinks he went to Ankara.'

c. **Ahmet$_i$ [pro$_i$ Ankara-ya git-me-si]-ni isti-yor.*
Ahmet Ankara-DAT go-MA-3-ACC want-PROG
'Ahmet wants him to go to Ankara.'

(Kural, 1993)

In addition to supporting the idea that *K* is at C, Kural (1993) uses the examples in (28) to show that there is no separate Agr head. In the Agr head analysis, the agreement morphology on the verb results from the relationship between the Agr head and its specifier which hosts the subject. In the analysis of Kural (1993), this cannot be the case because it would require the subject to appear somewhere higher than the C head. Therefore, Kural (1993) argues that Agr is not a separate projection but it is a feature on the C head.

In Kural (1993), the nominal agreement reflects the nominal nature of the C head. This explains the genitive case on the subjects of the *DIK* clauses. However, in this approach, the case alternation on the subjects of embedded clauses is not addressed.

Gürer (2010) also provides an account where the C is the case licenser. In this account, the subject case on the nominalized clause is determined by the features

on a complex CP projection. Therefore, the case alternation in this approach is not optional.

Building on Rizzi (1997), Gürer (2010) offers a split CP structure consisting of two phase heads: c_2 and c_3. These phase heads correspond to FinP and ForceP, respectively. The phase heads carry a [±N] feature that determines the category of the clause (e.g. nominal/verbal), and the subject case (genitive/nominative).

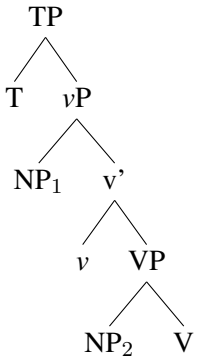
The combinations of different [±N] feature values can yield all the different types of nominalizations in Turkish. For instance, the genitive subject nominalizations have [+N] in both c_2 and c_3. On the other hand, the nominalized clauses with nominative subjects have [+N] at c_2 which marks them as a nominalized clause, and [-N] at c_3 which licenses the nominative case on the subject.

3.4 Genitive as an unmarked case

3.4.1 Defining unmarked case

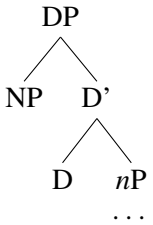
Marantz (1991) provides a mechanism of case assignment known as the case realization disjunctive hierarchy (henceforth, CRDH). This mechanism involves four types of cases: lexical case, dependent case, unmarked case, and default case. The lexical case is a non-structural, idiosyncratic type of case that requires local relation to a lexical item (Woolford, 2006). The case that occurs on nominals with postpositions provides an example of this kind of case. The dependent case requires a syntactic relation between two caseless NPs in the same domain (Marantz, 1991; Baker, 2015, 2012; Baker & Vinokurova, 2010). Which means one of the two NPs c-commands the other. When this happens, the NPs compete for a case, and one of them receives a dependent case (ACC or ERG), which is determined by the case alignment system of the language. For instance, in the syntactic structure provided in (30), NP_1 and NP_2 are in competition for case. In an accusative-aligned language, like Turkish, the NP_2 receives an accusative case. In ergative languages, the higher NP is marked. Therefore, in those languages the NP_1 (30) would receive ergative case.

(29)



The third type of case defined in the CRDH is the unmarked case. NPs receive this case without the need for a case competition or a functional head. Its occurrence is solely based on a syntactic configuration. The unmarked cases are determined as the nominative/absolutive for the TP or the CP domain, and the Genitive case for the DP domain in CRDH (Marantz, 1991; Baker, 2015, 2012; Baker & Vinokurova, 2010). This means that, in (30) above, the NP_1 receives a nominative case in languages with accusative alignment. NP_1, then, unlike the NP_2 is not "marked" Kornfilt & Preminger (2015). It will receive a nominative case regardless of the presence of another NP. The genitive case in Turkish is also analyzed as an unmarked case (Öztürk & Taylan, 2016; Satik, 2021; Miyagawa, 1993; Aygen, 2002b). Therefore, the NP in (30) will receive a genitive case only because it is at Spec, DP.

(30)



The last type of case is the default case. Default case applies as a last-resort option when the NPs cannot receive a case by other mechanisms.

3.4.2 Genitive Case in Turkish

The genitive case in Turkish mostly appears in genitive-possessive constructions. (31) shows that there is a one to one relationship between the amount of genitive marked nominals and possessive markers (Baker, 2015). The amount of genitive marked

nominals cannot exceed the number of possessive agreement markers. In addition, only the highest nominal can carry genitive marking in a genitive-possessive construction.

(31) *Ali-in Paris-(*in) resim-i.*
Ali-GEN Paris-*GEN picture-POSS
'Ali's picture of Paris'

(Baker, 2015)

Baker (2015) provides the examples in (32) which shows that Japanese allows multiple genitive marked NPs in possessive constructions. This shows that the genitive cannot be a type of dependent case as more than one NPs can receive it under the same domain. Therefore, Baker (2015) points out two possibilities for the nature of the genitive case. It can be assigned by a functional head, or it can be an unmarked case. Since there is no agreement/possessive morphology present in Japanese, the genitive case in this language must be an unmarked case. On the other hand, since Turkish does not show this pattern as shown in (31), the genitive cannot be an unmarked case in Turkish.

(32) a. *Haruki no kuruma.*
Haruki GEN car
'Haruki's car'
b. *yuubokumiN no toshi no hakai*
nomad GEN city GEN destruction
'the nomad's destruction of the city'

(Saito et al., 2008)

Following from the contrast between the Japanese and Turkish, and the example in (31), Baker (2015) argues that the genitive case in Turkish is assigned by the possessive head.

Satik (2021), on the other hand, provides another reason for the number restriction of the genitives in a possessive phrase. (33) shows that Turkish does not allow multiple NPs to be in nominative case. According to Kornfilt (1991) this suggests that the Turkish clauses have only one specifier. Thus, the nominative,

which is an unmarked case in Turkish, cannot appear on more than one NP in a clause. On the other hand, the fact that Japanese allows this nominative sequence as shown in (33) points to the existence of multiple specifiers in Japanese.

(33) a. **Medeni ülke-ler erkek-ler ortalama hayat süre-si kısa.*
civilized country-PL man-PL average life span-POSS short
'(Intended meaning) The life of men in civilized countries is short.'

(Kornfilt, 1991)

b. *Bunmeikoku-ga dansei-ga heikinzyumyoo-ga mizikai.*
civilized.countries-NOM male-NOM average.life.span-NOM short
'The life of men in civilized countries is short.'

(Kuno, 1973)

Satik (2021) further provides the examples in (34) to show that the possessive agreement is not necessarily formed with the genitive marked nominals. The agreement relation can be formed either with a nominative or a genitive NP depending on the agreement hierarchy (e.g. 2>3, 1>2).

(34) a. *Ben Deniz-in siz ol-duğu-*(nuz)-u bil-iyor-um.*
I Deniz-GEN 2.PL is-DIK-POSS.2.PL-ACC know-PROG-1
'I know that Deniz is you$_{SG,formal}$.'

b. *Ben siz-in Deniz ol-duğu-*(nuz)-u bil-iyor-um.*
I 2.PL-GEN Deniz is-DIK-POSS.2.PL-ACC know-PROG-1
'I know that you$_{SG,formal}$ are Deniz.'

(Satik, 2021)

The specifier restriction of Turkish suggests that the genitive case can be considered as an unmarked case in Turkish. In addition, the examples in (34) supports the idea that the genitive case is not assigned by a functional head. Therefore, I will regard the genitive as an unmarked case in Turkish.

Notice that the examples in (34) provide two NPs in unmarked case. Since the genitive is the unmarked case of the DP domain, and the NPs with the unmarked case are in the specifier of their phase head, the genitive marked NP is always the higher one in the nominalization.

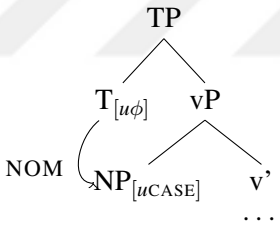
3.5 Proposal

3.5.1 No need for case licensing

The alternation on the subject case of the nominalized clauses in Turkish has been analyzed either as a result of a failure in the licensing of the nominative case (Aygen, 2002a,b; Kornfilt, 2001) or as a consequence of different types of licensing features on the phase heads (Kural, 1993; Gürer, 2010). In both models, the nominative case is considered something to be licensed by a functional head.

These models follow from the Minimalist Approach of Chomsky (2000, 2001) which regards case licensing as an agreement operation between an $NP_{[u\text{CASE}]}$ and a functional head (e.g. the head of *v*P, TP), where the NP checks its $[u\text{CASE}]$ feature. The nominative licensing of a subject NP under this approach is illustrated in (35). Here, the $NP_{[u\text{CASE}]}$ checks the phi features on the T head, and then receives case to check its [*u*CASE] feature.

(35)



I follow the case definitions in CRDH (Marantz, 1991; Baker, 2015, 2012; Baker & Vinokurova, 2010) which shows that there is no specific feature or a functional head needed to "license" or "assign" nominative case. Therefore in this system, the alternation between the genitive and the nominative case cannot be determined by the failure of the nominative assignment/licensing, as long as the nominalizations in question involve a CP and/or a TP layer. Another key assumption in this proposal is that the only way for an NP to structurally receive a genitive case is to make its way to the Spec, DP. That is because genitive is defined as the unmarked case of the DP domain. This explains why *-mAK* nominalizations always occur with the genitive subjects and never show alternation. As they are nominalized lower in the derivation (Kornfilt, 2003; Kornfilt & Whitman, 2011; Demirok, 2018; Göksu &

Öztürk, 2021), they cannot receive the unmarked case of the TP/CP. They are in the domain of a DP layer, therefore, they receive the unmarked case of the DP, which is genitive. This shows that the subjects of these nominalizations move to the Spec, DP, which is the only place the subjects can get structural genitive marking. The movement to Spec, DP is motivated by an EPP feature on the D head.

3.5.2 *-DIK* clauses

The *-DIK* clauses in Turkish have been analyzed as propositions (Demirok, 2018; Göksu & Öztürk, 2021). However, there are different accounts of the syntactic structure of these constructions. One of the main claims in this regard is that they are CPs (Kornfilt, 2003; Kural, 1993; Gürer, 2010; Aygen, 2002a). Remember that the proposals that employ a case licensing approach on the nominative point to a feature difference between the *-DIK* clauses with genitive subjects and nominative subjects (Kornfilt, 2003; Kural, 1993; Gürer, 2010). In addition, Aygen (2002a) argues that both types of *-DIK* clauses are CPs. In her proposal, the clauses with genitive subjects have an NP layer on top of the CP structure, and the others lack this layer. In CRDH, none of these assumptions is relevant to determine whether an NP can receive a nominative case or not. That is because the nominative case is unmarked, and this means that as long as the subject NP surfaces in a TP/CP domain, it is eligible to receive a nominative case.

The examples in (36) show that *-DIK* clauses can refer to present or past irrespective of the time reference of the matrix verb (Göksu & Öztürk, 2021). Then, there has to be a T layer in the structure of *-DIK* clauses that enables them to make independent time reference.

(36) a. *Ali [Aylin-in (dün/şimdi/yarın) gel-diğ/eceğ-in-i]*
Ali Aylin-GEN yesterday/now/tomorrow come-DIK/AcAK-POSS-ACC
az önce duydu.
a.bit ago heard
'Ali heard a little bit ago that Aylin came yesterday/ has just come/ will come tomorrow.'

b. *Ali [Aylin-in (dün/şimdi/yarın) gel-diğ/eceğ-in-i] bu*
Ali Aylin-GEN yesterday/now/tomorrow come-DIK/AcAK-POSS-ACC this
akşam duyacak.
evening will.hear
'Ali will hear tonight that Aylin came yesterday/ has just come/ will come tomorrow.'

(Göksu & Öztürk, 2021)

In section 3.3, I presented a similar observation from Kural (1993) on the *-DIK* clauses where he shows their independent temporal reference abilities. In addition, he presents evidence from ECM constructions and disjoint reference effects that show the *-DIK* as a nominalizer consists of two morphemes: *-DI+K*.

I repeat examples from ECM constructions in (37). Here, both the ECM construction and the nominalization have a past tense reference. However, only the one with a *-k* morpheme (i.e. the *DIK* clause) can receive a subject case. (37) explains this by suggesting that the ECM constructions must lack a CP layer in order to receive accusative marking from the matrix verb on their subjects. Since the only difference between the two clauses is *-k*, he suggests that *-k* is the C layer. Then, the rest of the *-DIK* nominalizer is equivalent to the past morpheme *-DI*.

(37) a. *Ahmet Berna-yı uyu-du san-ıyor.*
Ahmet Berna-ACC sleep-PST believe-PROG
'Ahmet thinks Berna slept.'

b. *Ahmet Berna-nın uyu-duğ-u-nu san-ıyor.*
Ahmet Berna-ACC sleep-DIK-3-ACC believe-PROG
'Ahmet thinks Berna slept.'

(Kural, 1993)

I follow Kural (1993) in that *-DIK* consists of the past tense morpheme *-DI*[5] and an additional *-K*. However, if the *-DI* is the past tense morpheme, and the only

[5]Past tense has been analyzed as a [-future] in Turkish (Kural, 1993; Kornflit, 1996). This explains the existence of sentences such as (i), where the -DIK clause can refer to the present tense as well.

(i) *[Viski iç-tiğ-iniz]-i bil-iyor-uz.*
whiskey drink-DIK-2.PL-ACC know-PROG-1.PL
'We know that you drink/drank whisky.'

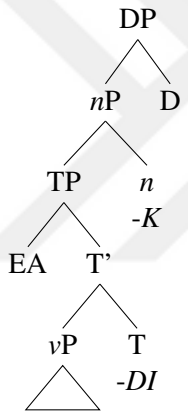
(Kornflit, 1996)

difference between an ECM clause and the *-DIK* nominalization is the existence of *-K*, then it must reflect a nominalizing head. Thus, I propose that this head is *n* which functions as a nominalizer.

In addition, (37b) shows that nominalized clauses can occupy argument positions, bear case marking, and also show nominal agreement. All of these suggest that there is a DP layer that follows the nominalizing *n*P.

In light of these, I propose the structure in (38) for the syntax of *-DIK* nominalizations. Here, there is the past tense morpheme *DI* at the T head which also introduces an external argument (EA). It is followed by the nominalizer *n* which is realized as the *K* morpheme and the whole structure is headed by a D.

(38)



3.5.3 Genitive subjects

In Section 3.2, I determined three types of nominalized clauses. The first type has genitive subjects with nominal agreement as shown in (39).

(39) *Ayşe ben-*(im) çalış-tığ-ım kadar çalış-ma-dı.*
Ayşe I-GEN çalış-DIK-POSS.1 as.much.as study-NEG-PST
'Ayşe did not study as much as I did.'

The genitive case is the unmarked case of the DP domain. This means that there is no syntactic head that assigns genitive case. The D head has an EPP feature that attracts a caseless NP to the Spec, DP where the NP receives genitive case. Then,

the subjects of nominalized clauses with genitive marking must be at Spec, DP as well.

The scrambling test in (40) shows that the genitive subjects are indeed at Spec, DP. This is because the NPs cannot scramble out of phase heads unless they move to an "escape hatch". An escape hatch corresponds to the specifier of a phase head which is the only place that can continue the derivation while the rest of the phase is sent to LF/PF Chomsky (2001). I assume the D to be a phase head. Thus, the only place for an NP to move out from the DP phase is to move to the Spec, DP. Then, the grammaticality of (40) provides evidence that the subject of the nominalized clause is at the Spec, DP where it can scramble out from the DP phase.

(40) *Furkan [t_i okul-a gel-diğ-i]-ni söyle-di Nesli-nin$_i$.*
Furkan school-DAT come-DIK-POSS-ACC tell-PST Nesli-GEN
'Furkan said that Nesli came to school.'

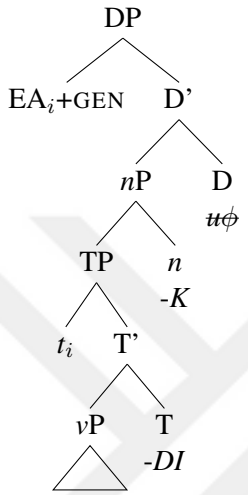
ise test provides further evidence that the genitive subjects are structurally higher. In (41a), the genitive subject can appear on the left of the focus particle *-ise*. This means that it can move as high as to the focus position, Spec, CP. The nominative subjects cannot be topicalized as they are not as high as their genitive counterparts (41b).

(41) a. *Furkan Nesli-nin-**se** okul-a gel-diğ-i-ni söyle-di.*
Furkan Nesli-GEN-COND school-DAT come-DIK-3-ACC say-PST
'Furkan said that Nesli, on the other hand, came to school.'
b. **Furkan Nesli-yse okul-a gel-diğ-i için gel-di.*
Furkan Nesli-COND school-DAT come-DIK-ACC because come-PST
'Furkan was happy because Nesli, on the other hand, came to school.'

Having established that the nominalized clauses involve a D head with an EPP feature that introduces a specifier, I further argue that this D head is also a probe with $u\phi$. This explains the nominal agreement pattern that we observe on nominalized clauses. Since it is the D head that hosts the subject of the nominalized clause, then the subject agrees with the $u\phi$ of the D.

(42) illustrates the syntactic structure for the nominalized clauses with genitive subjects. The structure shows that the subject moves out from the Spec, TP to Spec, DP to satisfy the EPP of the D head. This movement results in the genitive subjects of the nominalized clauses. Before the movement, the D probes down and agrees the NP at the Spec, TP. Thus, the $u\phi$ on the D is checked.

(42)



3.5.4 Nominative subjects in nominalized clauses

The second type of nominalization shows nominal agreement but their subjects are in the nominative case instead of the genitive. I repeat the relevant example from Section 3.2 in (43).

(43) *[Ben anla-dığ-ım]-a göre herkes anla-r.*
I understand-DIK-POSS.1-DAT according.to everyone understand-PRS
'Now that I understood, everyone will understand.'

Here, it should be emphasized that the Spec, DP is the only place that a subject NP can receive a genitive case. Then, the nominative subjects of the embedded clauses must occupy a different position from their genitive marked counterparts which move to the Spec, DP.

The scrambling test in (44) shows that this prediction is borne out. In (44a), the genitive marked subject on the Spec, DP can be extracted from the DP phase. On the other hand, the ungrammaticality of (44b) shows that the nominative subjects

of embedded clauses cannot move out from the DP phase. Then, they are not in the Spec, DP as their genitive counterparts.

(44) a. *Furkan [t_i çalış-tığ-ı] kadar çalış-ma-dı Nesli-nin$_i$.*
Furkan study-DIK-POSS as.much.as study-NEG-PST Nesli-GEN
'Furkan did not study as much as Nesli did.'
b. **Furkan [t_i okul-a gel-diğ-i] için sevin-di Nesli$_i$.*
Furkan school-DAT come-DIK-POSS for be.happy-PST Nesli
'Furkan was happy that Neslihan came to school'

In nominalized clauses with nominative subjects, the verb still carries agreement morphology. Then, this second type of nominalization also involves a D with a probe that agrees with the subject in Spec, TP.

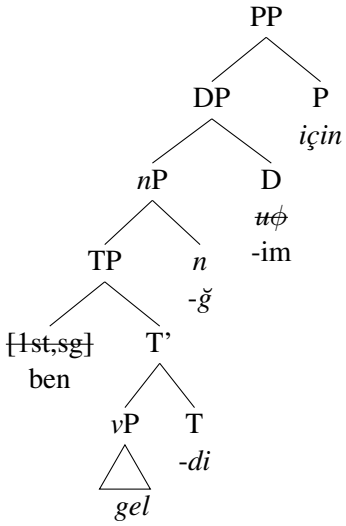
Considering that the nominalizations surface under a DP domain, the only way for the subject NP to have a nominative case is to fail to move to the Spec, DP. I argue that this failure is the result of a type of D head that does not introduce a specifier position. Then, the two types of Ds could be notated as $D_{<spec><probe>}$ for the Ds that introduce a specifier and a $D_{<probe>}$ for the ones that do not have a specifier position.

Another important note on the nominative subjects of embedded clauses is that they always combine with a postposition (i.e. *için*, *gibi*, *göre*, *sonra*, *zaman*). These behavioral characteristics of the embedded clauses with nominative subjects point to an analysis where these specific heads *select* the type of DP *without* a specifier to combine with.

In light of the observations above, I propose the structure in (46) for the embedded clauses with nominative subjects. I use the embedded clause in (45) as an example. Here, the P head *için* selects a DP without a specifier. Since there is no specifier position available at the DP, the subject *ben* remains in TP domain and it receives the nominative case. The nominal agreement is again present in this type of nominalization as the $DP_{<probe>}$ agrees with the subject in Spec, TP.

(45) *Şukufe [ben gel-diğ-im için] git-ti.*
Şukufe I come-DIK-1 for go-PST
'Şukufe went because I came.'

(46)



3.5.5 Ds without probes

The nominalized clauses in Turkish generally occur with agreement morphology. Table 3 shows that the agreement paradigm of the *-DIK* clauses corresponds to the nominal paradigm. Thus, I established that the agreement probe of the nominalizations is the $D_{<probe>}$.

Table 3. Agreement Paradigm of -DIK Clauses

Person/Number	SG	PL
1st	-Im	-ImIz
2nd	-In	-(I)nIz
3rd	-I	lArI

Remember that the *-DIK* clauses that combine with the postposition *sonra* "after" do not show agreement as shown in (47a). In addition, (47b) shows another type of nominalization that combines with the postposition *önce*, meaning "before". This combination also cannot host agreement morphology.

(47) a. *Oyun ben gel-dik-ten sonra bit-ti.*
game I come-DIK-ABL after end-PST
'The game ended after I arrived.'

b. *Oyun ben gel-meden önce bit-miş.*
game I come-mAdAn before end-PRF
'The game was ended before I came.'

The postpositions select the type of D they combine with. Then, when combined with TP level nominalizations, the temporal postpositions select a D head without an agreement probe. According to Chomsky (2001), a functional head must have a probe to be able to introduce a specifier. The data provide evidence for this restriction. As (47) shows, nominalizations without agreement morphology can never show genitive marking, which means that the non-agreeing nominalizations can never have a DP with a specifier.

Overall, there are three types of Ds that can head a nominalization. The first type is $D_{<spec><probe>}$ which is observed in clauses with genitive subjects and agreement morphology. The second type is the $D_{<probe>}$ which lacks a specifier position and thus yields nominalizations with nominative subjects. However, since it has a probe, this type of nominalization still shows nominal agreement. The last type of D neither has a specifier nor a probe. Therefore, the nominalizations with this type of D show nominative subjects, and they lack agreement morphology.

3.5.6 Where to host CASE?

The nominalized clauses that combine with postpositions such as *için*, *kadar*, or *gibi* do not exhibit case marking as shown in (48). This is expected as discussed in Chapter 2 that the case assigned by these postpositions is zero marked on non-pronominal DPs.

(48) a. *Şukufe ben gel-diğ-im için git-ti.*
Şukufe I come-DIK-1 for go-PST
'Şukufe went because I came.'

b. *Şukufe ben-*(im) çalış-tığ-ım kadar çalış-ma-dı.*
Şukufe I-GEN çalış-DIK-1 as.much.as study-NEG-PST
'Şukufe did not study as much as I did.'

c. *Şukufe ben gel-diğ-im gibi git-ti.*
Şukufe I gel-DIK-1 just.as go-PST
'Şukufe left just as I arrived.'

Examples in (49) show that the nominalized clauses do allow case marking with other postpositions overtly.

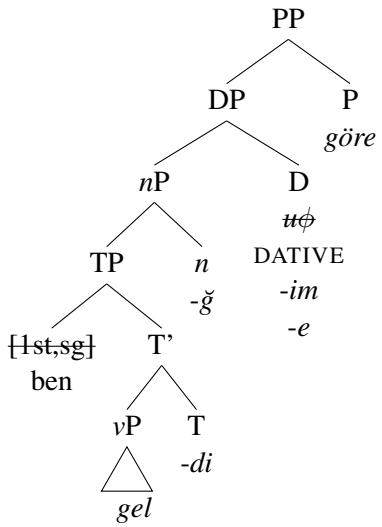
(49) a. *[Ben gel-diğ-im]-e göre Şukufe gid-ebil-ir.*
I come-DIK-1-DAT now.that Şukufe go-ABIL-PRS
'Now that I arrived, Şukufe can leave.'

b. *Şukufe [ben gel-dik]-ten sonra git-ti.*
Şukufe I come-DIK-ABL after leave-PST
'Şukufe left after I came.'

Since we have determined from the subject case examples that the postpositions select the type of D they combine with, they must be adjacent to the DPs. This adjacency requirement tells us that there is no KP projection intervening between the DP complement and the P head. Thus, the CASE assigned by postpositions must be on D.

This adjacency requirement yields the structure in (52) where the D head seems to host two different vocabulary items. The agreement morphology realizes as *-im* and the DATIVE corresponds to *-e*. However, in DM (Halle & Marantz, 1993, 1994), the features on a terminal node can match only one vocabulary item. Thus, they need to be separated.

(50)

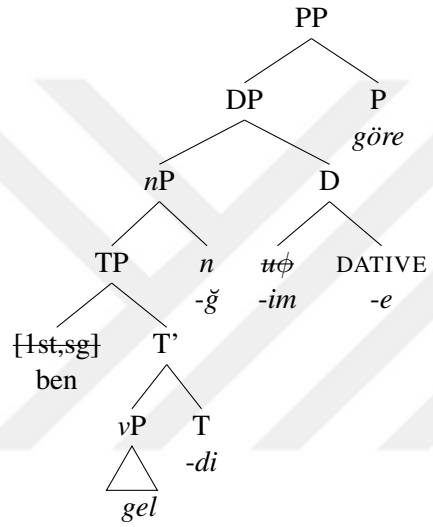


Noyer (1992) and Halle (2000) define an operation called **fission** to account for cases where a single node corresponds to more than one Vocabulary Item. In fission, first, one of the vocabulary items matches a terminal node according to the Feature Hierarchy shown in (51). Then, the unmatched feature is discharged from the node to form another branch.

(51) *Fragment of Hierarchy of Features* (Noyer, 1992)
1 person > 2 person > dual > plural > other features

I apply fission to the derivation in (52). Following the Feature Hierarchy, the ϕ features match first. Then, the remaining DATIVE feature is discharged. The discharged feature later forms the subsidiary branch next to the main terminal node where it can spell out. This operation applies during the Vocabulary Insertion. Thus, the subsidiary branch does not affect the in adjacency formed earlier in syntax.

(52)



3.6 Summary

In this chapter, I have shown that the subjects of -DIK clauses alternate between genitive and nominative cases when combined with certain postpositions. I have presented previous studies on this alternation in Section 3.3. These studies include Aygen (2002a,b), Kornfilt (2003), Kural (1993), Gürer (2010). I have concluded that the previous research regards the occurrence of the genitive case as a failure of nominative case licensing except for Gürer (2010), who argues that the subject case alternation is a result of feature combinations at a complex C.

In Section 3.4, I have introduced the case realization disjunctive hierarchy of Marantz (1991), and I have shown how the structural genitive case in Turkish fits the definition of an unmarked case. Building on this, I have assumed that the genitive

case is assigned at Spec, DP, and the nominative subjects are either at Spec, CP, or Spec, TP.

In Section 3.5, I have shown that *-DIK* clauses in Turkish have independent time references, and they are at least TPs. Then, I concluded that the subjects must be able to receive a nominative case as the unmarked case of the TP domain is nominative in CRDH (Marantz, 1991).

I have argued that the *-DIK* clauses are headed by a D layer, and this D layer renders the *-DIK* clauses a nominal domain which results in the movement of the subjects of them to move to the Spec, DP where they receive genitive case. I have assumed that this D head involves a specifier and a probe that operates agreement.

The scrambling tests have shown that the nominative subjects of *-DIK* clauses are not in Spec, DP. Therefore, building on the fact that the nominative subjects only occur with certain postpositions, I have proposed a type of D that does not introduce a Spec position and have argued that these postpositions select this $D_{<probe>}$ which results in the nominative subjects in *DIK* clauses.

Considering the fact that the *-DIK* clauses that combine with the postposition *sonra* neither show genitive case nor agreement, I have offered a third type of D which does not have a probe.

Lastly, I have pointed out that when the D head hosts the nominal agreement and is selected by a P, the case assigned by a P must be hosted by the D head as well. This causes a problem in the Spell-Out as one terminal node cannot match more than one Vocabulary Item. In order to solve this problem, I have used an operation called fission which splits features into distinct branches to match the relevant Vocabulary Items.

CHAPTER 4

CONCLUSION

This thesis investigated the intricacies of the genitive case in Turkish within the framework of Distributed Morphology (Halle & Marantz, 1993). The findings of this thesis are divided into two main contexts based on the nature of the genitive case.

First, the study focused on the genitive case with postpositions. I showed that the genitive case in this context was idiosyncratic. By following the case typology of Woolford (2006), I determined the genitive case in this context as a lexical case. Having established that the genitive case with postpositions is lexical, I argued that it differs from the genitive in other contexts. I presented the peculiar behaviors of the lexical genitive case and showed that it is only overt on bare pronominals. Any additional inflection on the pronominal complement of a genitive assigning postposition would prevent the overt marking of the genitive. I highlighted that this sensitivity was not present in the genitive case in other contexts and used this data to support the idea that the lexical genitive case differs from the structural genitive case. I offered a new type of case called PGEN which is the lexical genitive case with allomorphs that are syncretic with the structural genitive case. I argued that the syncretism is due to the shared feature content between the two cases. That is, while GEN consists of only [GEN], the morphosyntactic features of PGEN are [GEN, L]. Then, the GEN is the subset of the PGEN, which is reflected as syncretism.

To identify the cause of the pronominal sensitivity of PGEN, I presented novel data from the demonstrative pronouns in Turkish. I concluded that the genitive case was only marked on demonstratives when they are pronominal. This data showed that the allomorphy of PGEN was triggered by a morphosyntactic feature in pronominals and cannot be phonological. Then, I examined the morphosyntactic nature of the pronominals in Turkish and claimed that they all are marked with a [±participant] feature.

Building on these findings, I proposed an inward-sensitive morphosyntactic allomorphy account to explain this data. I argued that the elsewhere form of the PGEN

is a zero allomorph. The other allomorphs of PGEN, which are syncretic with the genitive case, are triggered by the [±participant] feature of the pronominals.

Following my analysis, I showed how the rewriting assumption of Distributed Morphology falls short in explaining this data since it bans the inward sensitive allomorphy from referring to morphosyntactic contexts. Then, I used the two-step insertion mechanism of Svenonius & Bye (2012), which allows the inward sensitive allomorphy to be triggered by morphosyntactic features.

In the second half of this thesis, I turned my focus to the structural genitive case that appears in genitive-possessive constructions and subjects of embedded clauses. I presented an alternation on the subject case of the embedded clauses. That is, the subject case of *-DIK* clauses surfaces in the nominative case when the clause combines with a particular set of postpositions. I identified three main types of *-DIK* clauses in terms of case and agreement patterns. The first type shows the most nominal characteristics. They have both genitive subjects and nominal agreement morphology on the embedded verb. The second type of *DIK* clauses have their subjects in the nominative case, but their verbs still carry nominal agreement morphology. The third type includes the most restricted and the least nominal embedded clauses. These are the *DIK* clauses that combine with the postposition *sonra*, and these clauses always have nominative subjects and never show agreement morphology.

Having identified the problem, I discussed the previous literature on the subject case alternation of embedded clauses, which explains it as a side effect of a failure in nominative case licensing.

Building on the case realization disjunctive hierarchy of Marantz (1991), I presented the idea that the genitive case in Turkish is the unmarked case of the DP domain. Therefore, any nominal in Spec, DP receives a genitive case. Following the definition of the unmarked case, I further argued that the nominative case in Turkish does not need any licensing because it is also an unmarked case assigned to any NP at Spec, TP/CP.

Once I determined the conditions for NPs to receive an unmarked case, I proposed a syntax for the embedded clauses and showed that they must be at least TPs. By doing this, I showed that the subject case alternation of *-DIK* clauses could result from a failure in nominative case licensing.

I further claimed that there are Ds that head the nominalized clauses. The alternations on the subject case and the existence of agreement morphology hinges on the nature of this D. Since the data shows that the alternation on these patterns comes hand in hand with the presence of postpositions, I argued that postpositions select the type of D that they combine with.

I defined three types of Ds to match the types of nominalized clauses. The first type of D has a probe and a specifier. Therefore, the clauses headed by this type of D have genitive subjects and nominal agreement morphology. The second type of D does not introduce a specifier. Therefore, the nominalized clauses headed by this type of D cannot have genitive subjects. However, they still show agreement morphology as this D has an agreement probe. The last type of D neither has a specifier nor a probe. This D is selected by the postposition *sonra*. Since this D does not have a probe or a specifier, its complement clause lacks genitive marking on subjects and verb agreement morphology.

In conclusion, I investigated the morphosyntactic characteristics of the genitive case in Turkish. I provided a novel argument on the difference between the lexical and the genitive case in Turkish. I showed that the lexical genitive case differs from the structural genitive case based on its unique allomorphy patterns. In addition, I examined the genitive as a structural case. In this syntactic context, I analyzed the genitive case as an unmarked case and proposed an analysis for the subject case alternation of the embedded clauses in Turkish.

The main aim of this study is to explain the different behaviors of the genitive case in Turkish. Therefore, the claims I made in this thesis are restricted to the data on the genitive case alternations in Turkish. I hope the findings in this thesis to be useful in future studies on the syncretism between lexical and structural cases.

REFERENCES

Alexiadou, A., Haegeman, L., & Stavrou, M. (2008). Noun phrase in the generative perspective. In *Noun Phrase in the Generative Perspective*. De Gruyter Mouton.

Atlamaz, Ü. (2015). MI Questions in Turkish. In *Turkish, Turkic and the languages of Turkey, UMass Amherst*.

Aygen, G. (2002a). Subject case in turkic subordinate clauses: Kazakh, turkish and tuvan. In *North East Linguistics Society*, volume 32 (p.1̃7).

Aygen, N. G. (2002b). *Finiteness, Case and Clausal Architecture*. (Doctoral dissertation). Copyright - Database copyright ProQuest LLC; ProQuest does not claim copyright in the individual underlying works; Last updated - 2023-03-03.

Baker, M. (2015). *Case*. Number 146. Cambridge University Press.

Baker, M. C. (2012). On the relationship of object agreement and accusative case: Evidence from amharic. *Linguistic Inquiry*, *43*(1), 255–274.

Baker, M. C. & Vinokurova, N. (2010). Two modalities of case assignment: Case in sakha. *Natural Language & Linguistic Theory*, *28*, 593–642.

Barker, C., Hankamer, J., & Moore, J. (1990). Wa and ga in turkish. In *Grammatical Relations: A Cross-Theoretical Perspective, Center for the Study of Language and Information/SLA* (pp. 21–43).

Bhat, D. S. et al. (2004). *Pronouns*. Oxford University Press on Demand.

Bobaljik, J. D. (2000). The ins and outs of contextual allomorphy. *University of Maryland Working Papers in Linguistics*, *10*, 35–71.

Cardinaletti, A. & Giusti, G. (2015). Cartography and optional feature realization in the nominal expression. *Beyond functional sequence*, (pp. 151–172).

Cardinaletti, A. & Starke, M. (1999). The typology of structural deficiency. *Clitics in the Languages of Europe*, (pp. 145–233).

Chomsky, N. (1981). Government and binding: The pisa lectures. *The Hague: Mouton de Gruyter*.

Chomsky, N. (2000). Minimalist inquiries: The framework (mitopl 15). *Step by step: Essays on Minimalist Syntax in Honor of Howard Lasnik*, (pp. 89–155).

Chomsky, N. (2001). Derivation by phase. inken hale: A life in language, michael kenstowicz (ed.), 1–52.

Déchaine, R.-M. & Wiltschko, M. (2002). Decomposing pronouns. *Linguistic Inquiry*, *33*(3), 409–442.

Dékány, É. (2021). *The Hungarian nominal functional sequence*. Springer.

Demirok, Ö. (2018). A semantic characterization of turkish nominalizations. In *Proceedings of WCCFL*, volume 36.

Erkman-Akerson, F. & Özil, Ş. (1992). en/and/dığı/crossings—genitival nps and sentential clauses as relative clause subjects. In *Modern studies in Turkish linguistics. Proceedings of the Sixth International Conference on Turkish Linguistics. Eski ehir* (pp. 12–14).

George, L. & Kornfilt, J. (1981). Finiteness and boundedness in turkish. *Binding and Filtering*, *105*, 127.

Göksel, A. & Kerslake, C. (2005). *Turkish: A comprehensive grammar*. Routledge.

Göksu, D. & Öztürk, B. (2021). A complexity hierarchy-based solution to the clausal subject puzzle in turkish. *Proceedings of the Linguistic Society of America*, *6*(1), 1039–1049.

Guardiano, C. (2012). Demonstratives, word order and the dp between syntax and semantics: Crosslinguistic remarks.

Gürer, A. (2010). Subject positions, case checking and epp in complex noun phrase constructions in turkish. *(Unpublished master thesis). Boğaziçi University*.

Halle, M. (2000). Distributed morphology: Impoverishment and fission. *Amsterdam Studies in the Theory and History of Linguistic Science Series 4*, (pp. 125–150).

Halle, M. & Marantz, A. (1993). Chapter 3: Distributed morphology and the pieces of inflection. In K. Hale & S. J. Keyser (Eds.), *The View from Building 20* (pp. 111–176). Cambridge, MA: MIT Press.

Halle, M. & Marantz, A. (1994). Some key features of distributed morphology. *MIT Working Papers in Linguistics*, *21*(275), 88.

Harley, H. & Ritter, E. (2002). Person and number in pronouns: A feature-geometric analysis. *Language*, (pp. 482–526).

Heim, I. (2004). Lecture notes on indexicality. *Notes for class taught at MIT*.

Jackobson, R. (1971). Shifter, verbal categories and the russian verb selected writings of roman jackobson. *The Hague: Mouton*.

Kornfilt, J. (1985). *CASE MARKING, AGREEMENT, AND EMPTY CATEGORIES IN TURKISH (BINDING, SYNTAX)*. Harvard University.

Kornfilt, J. (1991). A case for emerging functional categories. In *Perspectives on Phrase Structure: Heads and Licensing* (pp. 9–35). Brill.

Kornfilt, J. (2001). Subjects and their case in turkish/turkic embeddings. In *Workshop on Altaic Languages, MIT*.

Kornfilt, J. (2003). Subject case in turkish nominalized clauses. *Syntactic Structures and Morphological Information*, *7*, 129.

Kornfilt, J. & Preminger, O. (2015). Nominative as no case at all: an argument from raising-to-accusative in sakha. In *Proceedings of the 9th Workshop on Altaic Formal Linguistics (WAFL 9)*, volume 76 (p. 109).: MITWPL.

Kornfilt, J. & Whitman, J. (2011). Afterword: Nominalizations in syntactic theory. *Lingua*, *121*(7), 1297–1313.

Kornflit, J. (1996). On some infinitival wh-constructions in turkish. *Dilbilim Araştırmaları Dergisi*, *7*, 192–215.

Kratzer, A. & Heim, I. (1998). *Semantics in generative grammar*, volume 1185. Blackwell Oxford.

Kuno, S. (1973). Constraints on internal clauses and sentential subjects. *Linguistic Inquiry*, *4*(3), 363–385.

Kural, M. (1993). V-to (-i-to)-c in turkish. *UCLA Occasional Papers in Linguistics*, *11*, 17–54.

Longobardi, G. (1994). Reference and proper names: A theory of n-movement in syntax and logical form. *Linguistic Inquiry*, (pp. 609–665).

Longobardi, G. (1996). The syntax of n-raising: A minimalist theory.

Longobardi, G. (2008). Reference to individuals, person, and the variety of mapping parameters. *Essays on nominal determination: From morphology to discourse management*, *189*, 211.

Marantz, A. (1991). Case and licensing. In *Proceedings of 8th Eastern States Conference in Linguistics (ESCOL 8)*.

Meisner, C. & Pomino, N. (2014). Synchronic variation in the expression of french negation: A distributed morphology approach. *Journal of French Language Studies*, *24*(1), 9–28.

Miyagawa, S. (1993). Case-checking and minimal link condition. *MIT Working Papers in Linguistics*, *19*, 213–254.

Nisanyan, S. (2021). Nişanyan sözlük: çağdaş türkçenin etimolojisi. *(No Title)*.

Noyer, R. R. (1992). *Features, positions and affixes in autonomous morphological structure*. (Doctoral dissertation). Massachusetts Institute of Technology.

Öztürk, B. (2004). *Case, referentiality and phrase structure*. Harvard University.

Öztürk, B. (2005). Case, referentiality and phrase structure. *Case, Referentiality and Phrase Structure*, (pp. 1–280).

Öztürk, B. & Taylan, E. E. (2016). Possessive constructions in turkish. *Lingua*, *182*, 88–108.

Rizzi, L. (1997). The fine structure of the left periphery. *Elements of Grammar: Handbook in Generative Syntax*, (pp. 281–337).

Saito, M., Lin, T.-H. J., & Murasugi, K. (2008). N'-ellipsis and the structure of noun phrases in chinese and japanese. *Journal of East Asian Linguistics*, *17*, 247–271.

Satik, D. (2021). Turkic default agreement. In *Proceedings of the Workshop on Turkic and Languages in Contact with Turkic*, volume 5 (pp. 125–139).

Sauerland, U., Anderssen, J., & Yatsushiro, K. (2005). The plural is semantically unmarked. *Linguistic Evidence*, *4*, 409–430.

Sichel, I. & Wiltschko, M. (2021). The logic of person markedness: Evidence from pronominal competition. *Language*, *97*(1), 42–71.

Svenonius, P. & Bye, P. (2012). Non-concatenative morphology as epiphenomenon.

Vincze, V. & Csirik, J. (2010). Hungarian corpus of light verb constructions. In *Proceedings of the 23rd International Conference on Computational Linguistics (Coling 2010)* (pp. 1110–1118).

Woolford, E. (2006). Lexical case, inherent case, and argument structure. *Linguistic Inquiry*, *37*(1), 111–130.