SUBJECT INFINITIVES IN TURKISH

DUYGU GÖKSU

BOĞAZİÇİ UNIVERSITY

2018

SUBJECT INFINITIVES 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

Duygu Göksu

Boğaziçi University

2018

Subject Infinitives in Turkish

This thesis of Duygu Göksu

has been approved by:

Assoc. Prof. Balkız Öztürk Başaran
(Thesis Advisor)

Assoc. Prof. Elena Guerzoni

Assoc. Prof. Martina Gračanin Yüksek
(External Member)

May 2018

DECLARATION OF ORIGINALITY

I, Duygu Göksu, 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 23.05.2018

ABSTRACT

Subject Infinitives in Turkish

In Turkish, -mA(K) is the nominalizer that forms embedded infinitival clauses. This thesis focuses on the structure of infinitives that are built with this nominalizer and appear to be clausal subjects. The data consist of three sets with the following structures: i) no-control nominalized clauses, ii) control constructions, and iii) passivized embedded clauses. Firstly, the mechanism behind only certain nominalizers' promotion to subject position in transitive predicates is examined and attributed to the theta hierarchy (see Pesetsky, 1995) and theta role-nominalizer compatibility. Secondly, the type and the means of the control relation observed in subject clauses are analyzed and, contra Boeckx, Hornstein and Nunes (2010), proposed to be logophoric center-based Non-obligatory control. Unlike the English equivalents of these structures examined in Landau (2013), topicality is not enough to build this control relationship. Lastly, the passive constructions that can be built by a group of verbs including *başla*- 'to start', *iste*- 'to want', *karar ver*- 'to decide', *çalış/uğraş*- 'to try', and *kalkış*- 'to attempt' are examined and argued to be voice restructuring configurations (see Wurmbrand 2001 et seq.). Thus, it is concluded that such nominalized passives do not constitute infinitival subjects.

ÖZET

Türkçede Özne Mastar Yantümceleri

Türkçede mastar yantümceleri kuran, adlaştırıcı ek -mA(K)'tır. Bu tezde bu adlaştırıcı ekle kurulan ve özne konumunda gibi görünen mastar yantümcelerin yapıları incelenmektedir. İncelenen veriler şu şekilde üç gruba ayrılabilir: i) denetimsiz adlaştırılmış yantümceler, ii) denetim yapıları, ve iii) edilgenleştirilmiş yantümceler. İlk olarak, ana tümcenin yüklemi geçişli iken sadece belli adlaştırma ekleriyle kurulan yantümcelerin özne konumuna çıkabilmesinin arkasındaki mekanizma incelenmekte ve bunun öğeler arasındaki rol hiyerarşisine (bkz. Pesetsky, 1995) ve adlaştırma ekleri ile tematik roller arasındaki uyum durumuna bağlı olduğu öne sürülmektedir. İkinci olarak, özne yantümcelerinde gözlemlenen denetim yapısı incelenmekte ve bu yapının Boeckx, Hornstein ve Nunes (2010)'in aksine zorunlu olmayan türdeki denetim yapılarından ve ussal merkezli olduğu ileri sürülmektedir. Ayrıca, Landau (2013)'te çalışılan İngilizcedeki aynı yapıların aksine Türkçe özne tümcelerindeki denetim yapılarının kontrolünde cümlenin konusu olmanın bir etkisi olmadığı görülmektedir. Son olarak, sadece *başla-*, *iste-*, *karar ver-*, *çalış-*, *uğraş-*, ve *kalkış-* eylemlerinin de içinde olduğu bir grup eylem ana yüklem iken kurulabilen edilgen mastar yapılar incelenmekte ve çatısal yeniden yapılanma yapıları (bkz. Wurmbrand, 2001 ve sonrası) oldukları iddia edilmektedir. Dolayısıyla, bu yapılar mastar yapıdaki özne yantümcelerinden değillerdir.

ACKNOWLEDGMENTS

First and foremost, I am truly indebted to my thesis advisor Assoc. Prof. Balkız Öztürk Başaran for her valuable and constructive suggestions during the planning and development of this study. She was there for me whenever I needed guidance and support or was overwhelmed. I have been very lucky, because she never stopped believing in me.

Also, I was amazingly fortunate to take Introduction to Linguistics and two Syntax courses from Assoc. Prof. Martina Gračanin Yüksek when I was an undergraduate student at METU. She was the first person to make me truly love linguistics and encouraged me to apply for the Master's program at Boğaziçi University.

I also wish to express my gratitude to the other member of my thesis committee, Assoc. Prof. Elena Guerzoni, for her feedback and critical comments on my thesis, which greatly contributed to the analysis I attempted to develop in this study. She has been not only an excellent professor but also a real friend to me. She is one of those people who made Boğaziçi special for me.

I also thank my other professors in the Linguistics Department for their support, kindness and understanding during my education in the MA program. I also had the chance to work with them during all these years and to TA their courses, from which I have learnt an enormous amount about how to teach. I am thankful to Prof. Sumru Özsoy, who encouraged me and supported my decision to apply to Ph.D. programs in the U.S.A, to Prof. Eser Erguvanlı-Taylan for her comments, to Assist. Prof. Pavel Logačev and Assist. Prof. Kadir Gökgöz for sharing their wonderful electronic libraries, to Assoc. Prof. Meltem Kelepir Wood for her suggestions on

making the data more feminist, and to Prof. Aslı Göksel, who was very kind to me when I was the only TA in the department during my busiest and most difficult semester.

My heartfelt thanks also go to a number of friends. Thanks to them, Boğaziçi became a second home for me. My special thanks go to Melis Günekan, Aysun Kan and Lamia Kabal, the best TAs in the Western Languages and Literatures Department, who can 'help some people do some stuff' really well. I would like to especially thank Hande Sevgi and Utku Türk, with whom I had the opportunity to work in the same office during my last semester here. They created an office atmosphere that I will truly miss. I also need to specially thank Ömer Eren, Münevver Erdem, Müge Gedik, and Feyza Filiz who were always there for me. If we can refer to some friends as 'the family we choose', they are definitely that for me. Lastly, I thank my family who raised me, supported me, and loved me for who I am. If it were not for my parents' and my brother's occasional warnings for me to study less, I could not have completed the MA program or this thesis.

I dedicate this thesis to Benjamin, who never stopped supporting me, saw the 'academician' inside me, and read this thesis first.

TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION 1

1.1 Aim 1

1.2 Subordination patterns in Turkish 2

1.3 The structure of nominalized embedded clauses 4

1.4 Theoretical assumptions, questions, and outline 12

CHAPTER 2: CLAUSAL SUBJECTS AND THE THETA HIERARCHY 14

2.1 Introduction 14

2.2 The theta hierarchy: Pesetsky (1995) 16

2.3 Previous accounts of nominalized clauses in Turkish 20

2.4 Nominalizer-Theta role compatibility in Turkish 25

2.5 Proposal and conclusion 35

CHAPTER 3: CONTROL AND LOGOPHORICITY 40

3.1 Introduction 40

3.2 Two theories of control: OC vs. NOC 42

3.3 NOC into subject clauses in Turkish 49

3.4 Proposal: Logophoricity necessary and sufficient in Turkish 57

3.5 Conclusion and implications 61

CHAPTER 4: PASSIVE INFINITIVES AND VOICE RESTRUCTURING 62

4.1 Introduction 62

4.2 Two theories of restructuring: Wurmbrand (2001 et seq.) vs. Cinque (2006) 66

4.3 Earlier accounts of Turkish double passives 73

4.4 Passive voice-matching infinitives in Turkish 75

4.5 Subjecthood of infinitives embedded under a one-place predicate 82

4.6 Conclusion and implications 85

CHAPTER 5: CONCLUSION 86

REFERENCES 90

ABBREVIATIONS

1:	1st person
2:	2nd person
3:	3rd person
ABL:	Ablative case
ACC:	Accusative case
AOR:	Aorist marker
CAUS:	Causative voice
CM:	Compound marker
COMP:	Complementizer
DAT:	Dative case
FUT:	Future
GEN:	Genitive case
IMPRF:	Imperfective aspect
LOC:	Locative case
NMNLZR:	Nominalizer
NOM:	Nominative case
PASS:	Passive voice
PERF:	Perfective aspect
PL:	Plural
POSS:	Possessive agreement
PST:	Past tense
SG:	Singular

CHAPTER 1

INTRODUCTION

1.1 Aim

The aim of this thesis is to analyze the structures that are formed with the Turkish nominalizer -mA(K). This suffix forms infinitival clauses that receive their tense information based on that of the matrix predicate. We limit our data to those that appear to be clausal subjects. As such, three sets of data are discussed, exemplified in (1a-c), each with distinct syntactic and semantic properties.

(1) a. [Ali-nin gel-me/*diğ-(s)i] ben-i
Ali-GEN come-mA(K)/*DIK-POSS.3.SG-NOM I-ACC

şaşırt-tı.
surprise-PST.3.SG
'That Ali came surprised me.'

b. [PRO_i ev-e dön-mek] ben_i-i
home-DAT come.back-mA(K)-NOM I-ACC

mutlu et-ti.
happy make-PST.3.SG
'Coming back home made me happy.'

c. Ali öldür-ül-me-ye çalış-ıl-dı.
Ali-NOM kill-PASS-mA(K)-DAT try-PASS-PST.3.SG
Lit. Meaning: 'Ali was tried to be killed.'

As observed in (1a), not all nominalizers in Turkish can be promoted to subject position. We analyze this characteristic of infinitive clauses as a matter of theta hierarchy and theta role compatibility between certain roles and nominalizers. As the infinitive marker -mA(K) is the nominalizer used in control contexts such as (1b), where the direct object of the matrix predicate is the controller of the PRO subject of the non-finite clausal subject, we investigate what type of control relation is at issue (i.e., obligatory or non-obligatory) and how it is established. We propose that the

relation is Non-obligatory control (NOC) and that the controller is always the logophoric center of the matrix event. Lastly, we analyze the passivization patterns of infinitival complement clauses. We determine that only those that check their Nominative case with the matrix T^0 and do not undergo obligatory passivization are matrix clausal subjects. Because the matrix predicate is passivized, infinitival clauses that undergo obligatory passivization like in (1c) are analyzed as cases of voice restructuring. In the next section, we go over the typical subordination patterns observed in Turkish.

1.2 Subordination patterns in Turkish

In Turkish, there are three canonical ways in which complement clauses are formed. In the first option, the embedded verb bears the same person agreement, which is optionally overt, and tense/aspect markers as a matrix verb would, and the embedded subject appears in Nominative case, as shown in (2a). These are finite clauses that can just as well appear on their own. Secondly, the embedded subject might appear in Accusative case and the person agreement on the embedded predicate can be dropped, like in (2b). Since a finite clause subject never appears in Accusative case in Turkish, differently than (2a), the clause in (2b) is not a finite, independent embedded clause. Thirdly, the subordinate clause can be formed as a nominalization in which the embedded nominalized predicate bears Possessive Agreement, reflecting the person information of the embedded Genitive subject, as in (2c), which is again a dependent clause.

(2) a. Biz [sen git-ti-n] san-dı-k.
we-NOM you-NOM leave-PST-2.SG think-PST-1.PL

b. Biz [sen-i git-ti-(n)] san-dı-k.
we-NOM you-ACC leave-PST-2.SG think-PST-1.PL

c. Biz [sen-in git-tiğ-in]-i san-dı-k.
we-NOM you-GEN leave-DIK-POSS.3.SG-ACC think-PST-1.PL
'We (mistakenly) thought that you left.'

Among these three patterns, those that appear with an Accusative subject and a predicate that is not marked for the person information of its subject are labeled as Exceptionally Case Marked (ECM) constructions. There are a few verbs in Turkish that can take ECM subordinations as their complement, such as *zannet*- and *san*- 'to (mistakenly) think', etc. Also, we should note that given the optionality of the embedded subject bearing Accusative case being 'exceptionally case marked' by the matrix verb, and the disappearance of person agreement on the embedded predicate going hand-in-hand, the grammaticality of (2b) with overt person agreement on the embedded predicate is actually surprising. As the embedded subject checks its Accusative case with the little-v^0 of the matrix predicate in (2b), person information of the same subject appearing on the embedded T^0 via Agree is unexpected, as this subject is not in Nominative case (For further information on ECM construction in Turkish, see Aygen, 2000; Öztürk, 2005b; Zidani-Eroğlu, 1997).

The main difference of the structures exemplified in (2a-b) from that in (2c) is that, in the latter, the predicate is nominalized by adding one of the nominalizers -mA(K), -DIK, -(y)AcAK, or -(y)Iş, in which case the embedded clause is marked for case, as illustrated in (3a-b).

(3) a. Ayşe [Ali-nin gel-me/-iş-(s)in]-e
Ayşe-NOM Ali-GEN come-mA(K)/-(y)Iş-POSS.3.SG-DAT

şaşır-dı.
be.surprised-PST.3.SG
'Ayşe was surprised that/at the way Ali came.'

b. Ayşe [Ali-nin gel-diğ/-eceğ-in]-e
Ayşe-NOM Ali-GEN come-DIK/-(y)AcAK-POSS.3.SG-DAT

sevin-di.
be.happy-PST.3.SG
'Ayşe was happy that Ali came/will come.'

As stated earlier, among these four nominalizers, -mA(K) is the one that forms infinitival subordinate clauses and is thus the focus of this thesis. In the next section, we take a closer look at the internal structure of nominalized embedded clauses in Turkish.

1.3 The structure of nominalized embedded clauses

Kornfilt (2001) describes the nominalized forms in (3a-b) as 'degreed nominalizations' with various functional verbal layers embedded under one or more nominal layers. In her description, some of the verbal layers are missing and are replaced instead with nominal ones. Accordingly, Göksu (2017) argues that the number of functional verbal layers present could change depending on the size of the clause that each nominalizer forms and that their structures can be tested by comparing the argument positions they can appear in, as well as by comparing their clause sizes based on the adverbs they can host.

There are three main points that form the basis of this account, which we will discuss in detail in the following sections. Firstly, a regular noun can appear in any argument position as long as the c-selection and s-selection restrictions of the predicate are met, and as we will see in chapter 2, the nominalization is compatible with the theta role assigned by the matrix predicate. Thus, it is expected that these nominalizations can appear in at least most of the available argument positions. Secondly, as a noun would play a role in dependent case assignment, a nominalized clause should be able to do so if it is nominal in the outer-most layer. Lastly, to test the clause size of each nominalization, we will make use of Cinque's (1999) analysis

of adverbs targeting specific functional layers. We will assume this cartographic system, shown in (4), as an inventory of the functional layers that can(not) be present in a clause. Accordingly, adverb(s) that a clause can(not) take will be used as a diagnosis to show which functional layers are present.

(4) [frankly $Mood_{speech\ act}$ [fortunately $Mood_{evaluative}$ [allegedly $Mood_{evidential}$ [probably $Mod_{epistemic}$ [once T(past) [then T(future) [perhaps $Mood_{irrealis}$ [necessarily $Mod_{necessity}$ /[possibly $Mod_{possibility}$ [usually $Asp_{habitual}$ [again $Asp_{repetitive(I)}$ [often $Asp_{frequentative(I)}$ [intentionally $Mod_{volitional}$ [quickly $Asp_{celerative(I)}$ [already T(anterior) [no longer $Asp_{terminative}$ [still $Asp_{continuative}$ [always $Asp_{perfect(?)}$ [just $Asp_{retrospective}$ [soon $Asp_{proximative}$ [briefly $Asp_{durative}$ [characteristically(?) $Asp_{generic/progressive}$ [almost $Asp_{prospective}$ [completely $Asp_{SgCompletive(I)}$ [tutto $Asp_{PICompletive}$ [well Voice [fast/early $Asp_{celerative(II)}$ [again $Asp_{repetitive(II)}$ [often $Asp_{frequentative(II)}$ [completely $Asp_{SgCompletive(II)}$…Verb

(Cinque, 1999)

Let us start with the first claim regarding argument positions. These are as follows: subject of a transitive verb, direct object of a transitive verb, object of a postposition, and subject of an unaccusative predicate. While the nominalizations formed with -(y)Iş and -mA(K) can appear in the subject position of a transitive predicate such as *etkile-* 'to affect' as in (5a-b), the ones formed with -DIK and -(y)AcAK need an overt lexical noun and form a complex compound such as *gerçeği* 'the fact that' to be able to occur in the subject position, as in (5c).

(5) a. [Ali-nin gid-iş-i] herkes-i etkile-di.
Ali-GEN leave-(y)Iş-POSS.3.SG-NOM everyone-ACC affect-PST.3.SG
'The way Ali left affected everyone.'

b. [Ali-nin git-me-si] herkes-i
Ali-GEN leave-mA(K)-POSS.3.SG-NOM everyone-ACC

etkile-di.
affect-PST.3.SG
'That Ali left affected everyone.'

c. [Ali-nin git-tiğ/eceğ-i *(gerçeğ-i)] …
Ali-GEN leave-DIK/-(y)AcAK-POSS.3.SG fact-CM-NOM
'The fact that Ali left/ wil leave…'

On the other hand, in the complement position of a transitive verb, such as *şaşır-* 'to be surprised' and *duy-* 'to hear', all nominalizations are available, as shown in (6a-c).

(6) a. Herkes [Ali-nin git/-me/-iş-(s)in]-e
Everyone-NOM Ali-GEN leave-mA(K)-(y)Iş-POSS.3.SG-DAT

şaşır-dı.
be.surprised-PST.3.SG
'Everyone was surprised that/at the way Ali left.'

b. Herkes [Ali-nin git-tiğ/-eceğ-in-i]
Everyone-NOM Ali-GEN leave-DIK/-(y)AcAK-POSS.3.SG-ACC

duy-du.
hear-PST.3.SG
'Everyone heard that Ali left/will leave.'

As for the complement of a postposition, the postposition *sonra* 'after' can take -mA(K) and -(y)Iş clauses as its argument, as in (7a); a -DIK nominalization, on the other hand, would appear with a Nominative subject and lack the Possessive Agreement that it would bear in other positions. A -(y)AcAK form is not compatible with *sonra* or any other postposition, as illustrated in (7b).

(7) a. [Ali-nin git-me/-iş-(s)in]-den sonra biz
Ali-GEN leave-mA(K)/-(y)Iş-POSS.3.SG-ABL after we-NOM

konuş-ma-dı-k.
talk-NEG-PST-1.PL
'After Ali left /the way Ali left, we haven't talked.'

b. [Ali git-tik/-*ecek]-ten sonra her şey değiş-ti.
Ali-NOM leave-DIK/-yAcAK-ABL after everything change-PST-3.SG
'After Ali left, everything has changed.'

Lastly, as the subject of unaccusative verbs as illustrated with the verb '*kesinleş-*' 'to become certain' or *skandal ol-* 'be a scandal', all forms are grammatical as in (8a-b).

(8) a. [Ali-nin git-me/-iş-(s)i] skandal ol-du.
Ali-GEN leave-mA(K)/-(y)Iş-POSS.3.SG-NOM scandal be-PST.3.SG
'That Ali left/the way Ali left became a scandal.'

b. [Ali-nin git-tiğ/-eceğ-i]
Ali-GEN leave-DIK/-yAcAK-POSS.3.SG-NOM

kesinleş-ti.
become.certain-PST.3.SG
'It became certain that Ali left/will leave.'

Now let us move to the second argument, which is the interaction with dependent case. As we stated earlier, a noun would play a role in dependent case assignment and, thus, a nominalized clause should be able to do so if it is nominal in the outermost layer. Marantz (1991) defines dependent case assignment as follows.

(9) If there are two NPs in the same VP-phase such that NP_1 c-commands NP_2, then value the case of NP_1 as dative unless NP_2 has already been marked for case.

According to this definition, when a nominalized clause appears in the direct object position of a causative verb, we expect accusative case on the nominalization and dative case on the second object if these nominalizations are nominal in their outermost layer. This prediction is borne out as in (10a-c).

(10) a. Ali sana [Ayşe-nin git-me-sin]-i
Ali-NOM you.DAT Ayşe-GEN leave-mA(K)-POSS.3.SG-ACC

söyle-t-ti.
tell-CAUS-PST.3.SG
'Ali made you say that Ayşe must leave/tell Ayşe to leave.'

b. Ali sana [Ayşe-nin gid-iş-in]-i
Ali-NOM you.DAT Ayşe-GEN leave-(y)Iş-POSS.3.SG-ACC

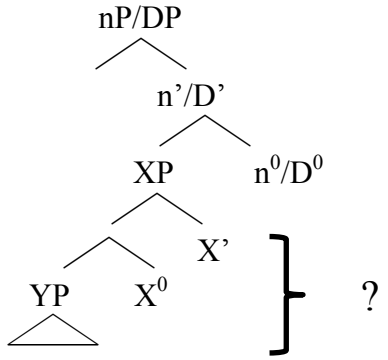
izle-t-ti.
watch-CAUS-PST.3.SG
'Ali made you watch the way Ayşe left.'

c. Ali sana [Ayşe-nin git-tiğ/-eceğ-in]-i
Ali-NOM you.DAT Ayşe-GEN leave-DIK/-(y)AcAK-POSS.3.SG-ACC

düşün-dür-dü.
think-CAUS-PST-3.SG
'Ali made you think that Ayşe left/will leave.'

To sum up, according to the tests we applied in the first part of this section it looks as though in the outermost layer these forms are indeed nouns, as in (11).

(11)



The next question is at which layer the nominal layer kicks in, which we try to answer in the rest of this section.[1] We will accomplish this by using the adverb hierarchy proposed by Cinque (1999).

Starting with the nominalization that has the smallest clause size among the four, a nominalization formed with -(y)Iş is compatible with adverbs up to *genellikle* 'usually', as shown in (12a-c), suggesting that the functional layers above $Asp_{habitual}$ in Cinque's hierarchy are absent in -(y)Iş clauses.

(12) a. Ayşe [Ali-nin (*açıkçası/*Allah'tan/*sözde/*muhtemelen) okul-u
Ayşe-NOM Ali-GEN honestly/luckily/allegedly/probably school-ACC

bitir-iş-in]-i anlat-tı.
finish-(y)Iş-POSS.3.SG-ACC tell-PST.3.SG
Lit. Meaning: 'Ayşe told (me) the way Ali honestly/luckily/allegedly/ probably graduated.'

b. Ayşe [Ali-nin (*bir zamanlar/*belki) şarkı söyle-yiş-in]-e
Ayşe-NOM Ali-GEN once/maybe song sing-(y)Iş-POSS.3.SG-DAT

şaşır-dı.
be.surprised-PST.3.SG
Lit. Meaning: 'Ayşe was surprised at the way Ali was singing a song once/ maybe.'

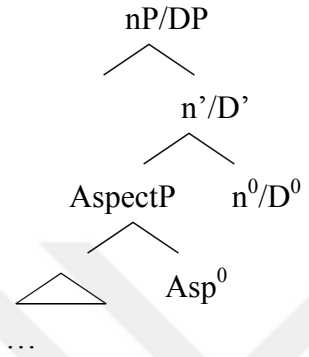
c. Ayşe [Ali-nin genellikle/yine/sık sık ders-e geç
Ayşe-NOM Ali-GEN usually/again/often class-DAT late

[1] The DP vs. nP status of this nominal layer and its semantic contribution require further research. As I also discuss in detail in footnote 4, whether this layer is a semantic type-shifter or not could change depending on the nominalizer. However, the semantic function of this layer is not within the scope of this thesis.

gel-iş-in]-e kız-dı.
come-(y)Iş-POSS.3.SG-DAT be.angry-PST.3.SG
'Ayşe was angry at the way Ali usually/again/often came late to class.'

Given the ungrammaticality of (12a-b) and the grammaticality of (12c), we argue that the top-most functional layer in -(y)Iş clauses is $Asp_{habitual}$, and thus they are AspPs taken as a complement by a nominal head, as shown in (13).

(13)



When we try to modify a -mA(K) nominalization with these adverbs, we see that the adverbs *açıkçası* 'honestly', *Allah'tan* 'luckily', and *sözde* 'allegedly' as in (14a) are not available and thus, the $Mood_{speech\ act}$, $Mood_{evaluative}$, $Mood_{evidential}$, and $Mod_{epistemic}$ layers are not present.

(14) a. Ayşe [Ali-nin (*açıkçası/*Allah'tan/*sözde) okul-u
Ayşe-NOM Ali-GEN honestly/luckily/allegedly school-ACC

bitir-me-sin]-e sevin-di.
finish-mA(K)-POSS.3.SG-DAT be.glad-PST.3.SG
Lit. Meaning: 'Ayşe was glad that Ali honestly/luckily/allegedly graduated.'

b. Ayşe [Ali-nin teklif-i muhtemelen
Ayşe-NOM Ali-GEN offer-ACC probably

red-ecek ol-ma-sın]-a şaşır-dı.
reject-FUT be-mA(K)-POSS.3.SG-DAT be.surprised-PST.3.SG
'Ayşe was surprised that Ali will probably reject the offer.'

c. Ayşe [Ali-nin bir zamanlar hukuk oku-muş
Ayşe-NOM Ali-GEN once law study-PERF

ol-ma-sın]-a şaşır-dı.
be-mA(K)-POSS.3.SG-DAT be.surprised-PST.3.SG
'Ayşe was surprised that Ali (had) studied law once.'

d. Ayşe [Ali-nin belki/bir ihtimal gel-ecek
Ayşe-NOM Ali-GEN maybe/possibly come-FUT

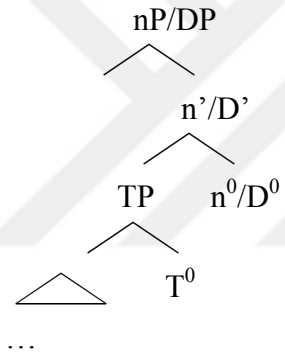
ol-ma-sın]-a şaşır-dı.
be-mA(K)-POSS.3.SG-DAT be.surprised-PST.3.SG
'Ayşe was surprised that Ali will probably/possibly come.'

e. Ayşe [Ali-nin genellikle ders-e
Ayşe-NOM Ali-GEN usually class-DAT

katıl-ma-sın-a sevin-di.
participate-mA(K)-POSS.3.SG-DAT be.glad-PST.3.SG
'Ayşe was glad that Ali usually participates in class.'

That the rest of the adverbs targeting functional layers lower than $Mod_{epistemic}$ are grammatical, as in (14b-e), suggests that -mA(K) nominalizations are nP or DP-shelled TPs,[2] which makes them bigger than -(y)Iş clauses, as illustrated in (15).

(15)



…

Lastly, the nominalizers -DIK and -(y)AcAK seem to complement each other in the environment of different adverbial modifications. While it is not possible to modify a -DIK clause with adverbs targeting $Mood_{speech\ act}$, $Mood_{evaluative}$, $Mood_{evidential}$, $Mod_{epistemic}$ and T(future), $Mood_{irrealis}$, $Mod_{necessity}$, and $Mod_{possibility}$, those that target T(past) and $Asp_{habitual}$ are compatible with it, as shown in (16a-d).

(16) a. Ayşe [Ali-nin (*açıkçası /*Allah'tan /*sözde /*muhtemelen)
Ayşe-NOM Ali-GEN honestly/luckily /allegedly/probably

git-tiğ-in]-i duy-du.
leave-DIK-POSS.3SG-ACC hear-PST.3.SG
Lit. Meaning:'Ayşe heard that Ali honestly/luckily/allegedly/probably left.'

[2] This argument on clause size is only for those that appear with a Genitive subject. We will see in chapter 4 that voice restructuring configurations built with the infinitival morpheme -mA(K) are not TPs but either VoicePs or wollPs depending on the matrix verb that embeds them.

b. Ayşe [Ali-nin bir zamanlar Türkiye-ye git-tiğ-in]-i
Ayşe-NOM Ali-GEN once Turkey-DAT go-DIK-POSS.3.SG-ACC

duy-du.
hear-PST.3.SG
'Ayşe heard that Ali went to Turkey once.'

c. Ayşe [Ali-nin (*belki/*muhakkak/*bir ihtimal)
Ayşe-NOM Ali-GEN maybe /necessarily /possibly

git-tiğ-in]-i duy-du.
leave-DIK-POSS.3.SG-ACC hear-PST.3.SG
Intended: 'Ayşe heard that Ali maybe/necessarily/possibly left.'

d. Ayşe [Ali-nin genellikle uyu-duğ-un]-u
Ayşe-NOM Ali-GEN usually sleep-DIK-POSS.3.SG-ACC

duy-du.
hear-PST.3.SG
'Ayşe heard that Ali usually participates in class.'

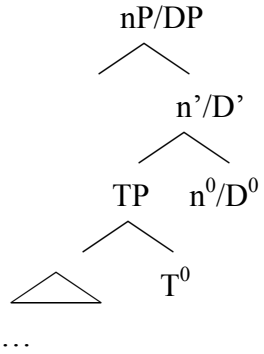
Since the top-most compatible adverb *bir zamanlar* 'once' targets T(Past), we can conclude that -DIK nominalizations can go up to that point, and this is the layer where the nominal layer is merged. This makes them nP or DP-shelled TPs just like -mA(K) clauses. On the other hand, the -(y)AcAK form is chosen in contexts with possibility/certainty in the future, as in (17a-b), filling the gap in -DIK clauses for the functional layers between T(Past) and $Asp_{habitual}$.

(17) Ayşe [Ali-nin o zaman/belki/muhakkak/bir ihtimal
Ayşe-NOM Ali-GEN then/maybe /necessarily /possibly

gid-eceğ-in]-i duy-du.
leave-(y)AcAK-POSS.3.SG-ACC hear-PST.3.SG
'Ayşe heard that Ali then/maybe/necessarily/possibly will leave.'

To summarize, we conclude that -DIK clauses can take up to T(Past) layer adverbs, with -(y)AcAK, as a more specific form, blocking the usage of -DIK in contexts referring to future certainty/possibility. When this T is [+future], the nominalizer is -(y)AcAK; when it is not, it is -DIK. Thus, similar to -mA(K) clauses, they are TPs taken as a complement by a nominal head, as shown in (18).

(18)



To conclude, in this section we first established that the nominalizations formed with -mA(K), -(y)Iş and -DIK/-(y)AcAK, are nominal by testing them in various argument positions. While -DIK/(y)AcAK forms appear in a more limited environment, -mA(K) and -(y)Iş nominalizations are compatible with all of the four syntactic positions we tested. Also, like regular DPs, we saw that these nominalizations trigger dependent Dative case assignment on the second noun under a causative-voiced predicate. Lastly, to see above which functional layer the nominal layer is merged, we tested each clause size with adverbial modification based on Cinque's (1999) analysis of functional layers and adverbs and concluded that -(y)Iş nominalizations, as nP or DP-shelled Aspect phrases, are shorter than others, while -mA(K) and -DIK/-(y)AcAK clauses are nP or DP-shelled TPs.

1.4 Theoretical assumptions, questions, and outline

Within the framework of the Minimalist Program (Chomsky, 2000, 2001, 2004), we label a DP as the matrix clause *subject* argument only if it checks its [-interpretable] Case feature and [+interpretable] phi-features with [+interpretable] Nominative Case and [-interpretable] phi-features of the finite T^0 via Agree. Secondly, following the notion of non-finiteness as 'having no temporal value' we take -mA(K) as the infinitival nominalizer. In the literature, it is frequently identified as the nominalizer in Turkish with no temporal information of its own (Kornfilt, 1985, 1987; Özsoy,

1996; Underhill, 1976). Given these assumptions, the thesis is organized as follows. Firstly, in Chapter 2, we analyze the mechanism behind the promotion to subject position of clausal arguments. Chapter 3 focuses specifically on -mA(K) clauses and the control relation established between the direct object of the matrix clause and the PRO embedded subject of the subject clause. Finally, the two different passivization patterns observed in the structure of embedded passive predicates are examined in Chapter 4. In chapter 5, we conclude with a summary and discuss the implications of our proposals.

CHAPTER 2

CLAUSAL SUBJECTS AND THE THETA HIERARCHY

2.1 Introduction

In this chapter, we focus on the infinitival nominalizations formed with -mA(K) followed by a possessive marker and analyze the mechanism behind the promotion of these clauses to the subject position. More specifically, we question why most transitive predicates in Turkish select for a clausal subject formed by -mA(K) or possibly -(y)Iş, rather than -DIK or -(y)AcAK, as in (19a-c).

(19) a. [Ali-nin gel-me-si] ben-i
Ali-GEN come-mA(K)-POSS.3.SG-NOM I-ACC

mutlu et-ti.
happy make-PST.3.SG
'That Ali came made me happy.'

b. [Ali-nin mutlu mutlu gülümse-yiş (şekl)-i] ben-i de
Ali-GEN happily smile-(y)Iş way-POSS.3.SG-NOM I-ACC too

mutlu et-ti.
happy make-PST3.SG
'The way that Ali smiled happily made me happy too.'

c. Ali-nin gel-diğ/-eceğ-i *(haber)-i
Ali-GEN come-DIK/(y)AcAK-POSS.3.SG news-CM-NOM

ben-i mutlu et-ti.
I-ACC happy make-PST.3.SG
'The news that Ali came/will come made me happy.'

While -mA(K) forms an infinitival nominalized clause in nominative case in (19a) without any additional meaning, -(y)Iş adds the meaning of 'the way/manner' with the optionally overt lexical noun *şekli* 'the way' in (19b). On the other hand, the nominalizations formed with -DIK and -(y)AcAK in (19c) can appear as subjects only if the noun *haberi* 'the news that' is overt, which can be replaced by *gerçeği* 'the fact that' as well. Thus, they cannot directly occur in the subject position of a

transitive predicate, but must instead form a complex compound. Note that -(y)AcAK can be used only in contexts with future or possibility reference, and for the present and past references Turkish would use -DIK. However, both can appear as a subject clause if the predicate is unaccusative, such as a passivized verb or a non-verbal intransitive predicate, as in (20a) and (20b), respectively.

(20) a. [Ali-nin git-tiğ/-eceğ-i]
Ali-GEN leave-DIK/-(y)AcAK-POSS.3.SG-NOM

bil-in-iyor.
know-PASS-IMPRF.3.SG
'It is known that Ali left/will leave.'

b. [Ali-nin git-tiğ/-eceğ-i] kesin.
Ali-GEN leave-DIK/-yAcAK-POSS.3.SG-NOM certain
'It s certain that Ali left/will leave.'

The chapter is organized as follows. In section 2.2, we present the theta roles causer, target, and subject matter, the hierarchy between them, and the classification and the inner structure of psych-predicates based on the theta roles they assign as proposed by Pesetsky (1995). In section 2.3, we go over the main points of the previous accounts of nominalizer selection and nominalized clauses in Turkish. In section 2.4, we propose a classification of Turkish transitive verbs based on whether they assign a causer role or not. Accordingly, we analyze how each nominalized form is selected to be the subject or not based on the theta role it is assigned and the hierarchy among the roles of the arguments in that sentence. Finally in section 2.5, we conclude with our proposal that object experiencer and causative verbs assign the causer theta role to their external arguments and only the nominalizations formed with -mA(K) and -(y)Iş are compatible with this role and thus, appear as subjects of these predicates. On the other hand, the nominalizations formed with -DIK and -(y)AcAK are compatible with only target and subject matter roles. These roles are typically linked to the object argument according to the hierarchy of theta roles in a

transitive predicate or to the only argument of unaccusative predicates. Thus, -DIK and -(y)AcAK nominalizations appear as subjects in a more limited environment than those that are formed with -mA(K) and -(y)Iş.

2.2 The theta hierarchy: Pesetsky (1995)

Experiencer predicates pose a problem for the Uniformity of Theta Assignment Hypothesis (UTAH) given in (21) because of structures like in (22) and (23).

(21) Uniformity of Theta Assignment Hypothesis (UTAH)

Identical thematic relationships between items are represented by identical structural relationships between those items at the level of D-Structure.

(22) a. Bill was angry at the article in the *Times*.

b. The article in the *Times* angered/enraged Bill.

(Pesetsky, 1995: 30a-b)

(23) a. John worried about the television set.

b. The television set worried John.

(Pesetsky, 1995: 36a-b)

In (22a) and (23a) the subject is the argument with the experiencer role, while in (22b) and (23b) it is the object that bears the experiencer role. If we label the other theta role assigned to the non-experiencer argument as 'theme', it requires an additional load to the syntax, as we have to come up with additional mapping mechanisms that involve movement not to violate UTAH. Instead, Pesetsky (1995) proposes to solve this linking problem with a finer-grained semantics and zero morphology. More specifically, he puts forward the following three distinct theta roles for the non-experiencer argument: causer, target (of emotion), and subject matter (of emotion). In addition, he claims that there is a hierarchy in the mapping of

theta roles and arguments and that the mapping among these theta roles given in (24) forms a part of this bigger hierarchy among all possible theta roles.

(24) Causer > Experiencer > Subject Matter (SM) /Target

Accordingly, the argument bearing the higher theta role is linked to the subject position while the lower one is mapped to the object position as illustrated in (25a-c).

(25) a. $[_{VP}\,[_{V'}$ Causer $[_{V}$ Experiencer $]\,]\,]$

b. $[_{VP}\,[_{V'}$ Experiencer $[_{V}$ Target $]\,]\,]$

c. $[_{VP}\,[_{V'}$ Experiencer $[_{V}$ Subject Matter $]\,]\,]$

With the VP structure in (25), the theta role-argument linking of the pairs in (22-23) would be as illustrated in (26-27).

(26) a. Bill$_{(\text{Experiencer})}$ was angry at the article in the *Times*$_{(\text{Target})}$.

b. The article in the *Times*$_{(\text{Causer})}$ angered/enraged Bill$_{(\text{Experiencer})}$.

(27) a. John$_{(\text{Experiencer})}$ worried about the television set$_{(\text{Subject Matter})}$.

b. The television set$_{(\text{Causer})}$ worried John$_{(\text{Experiencer})}$.

Since the experiencer role is placed higher in the hierarchy than the target and lower than the causer, the fact that the experiencer arguments *Bill* and *John* are linked to the subject in one sentence and to the object position in the other is not a problem for UTAH anymore.

Moving on to the details regarding the distinctness of these theta roles, let us start with what makes causers different from targets and subject matters. Pesetsky (1995) argues that the truth conditions of the sentences in (26a) and (26b) are different in the following way: for (26a) to be true, that Bill evaluated the article and holds a bad opinion of it needs to be true. On the other hand, for the sentence in (26b) to be true, that Bill holds a bad opinion of the article does not need to be true. In fact, Bill might find the article splendid, but its topic could have caused him to be

angry about something else. This distinction in the truth conditions of the two sentences shows how distinct the two theta roles are: in the first sentence *the article* is the target of Bill's anger while in the second it is the cause and the target of Bill's anger could be something else. As for the difference between a causer and a subject matter argument, likewise, in (27a) the television set is the subject matter of John's experience of worrying while in (27b) it is the cause. Thus, the truth condition of (27a) but not (27b) is that the topic of John's worry is the television set. On the other hand, in (27b) television set could have caused John to worry about something completely different than the television set.[3]

Pesetsky (1995) classifies psych-predicates according to the roles they assign to their arguments as summarized in Table 1.

Table 1. Psych-Predicates and Linking of Theta Roles

	Subject Position:	Object position:
Subject Experiencers:	*Experiencer*	*Target/Subject Matter*
Object Experiencers:	*Causer*	*Experiencer*

Based on the syntactic position an experiencer argument is linked to, there are two classes of psych-predicates: Subject Experiencers, and Object Experiencers. A subject experiencer predicate assigns experiencer and target or experiencer and subject matter roles; thus, the experiencer argument appears as the subject, as it is higher than the target or the subject matter argument that is linked to the object position. On the other hand, an object experiencer predicate assigns causer and experiencer roles to its arguments, and the causer argument, because it is higher than

[3] Note that [+human] arguments can be causer subjects or target objects as well, as in (i) and (ii) below, where John is the causer subject and the target object, respectively.
(i) *John* scared Mary.
(ii) Mary feared *John*.

the experiencer, appears in the subject position, which results in the experiencer role being linked to the object position.

Furthermore, Pesetsky (1995) claims that object experiencer predicates are derived from subject experiencers and are composed of a bound root and a causative morpheme. This morpheme can be overt or covert, and adds the causer argument. Causers and targets are incompatible and cannot be expressed simultaneously as arguments. The nominalized forms of psych-predicates like *annoyance*, *agitation*, and *amusement*, as given in (28a-c) below, never carry the causative reading.

(28) a. Mary's constant annoyance about /at /with us got on our nerves.

b. Bill's continual agitation about the exam was silly.

c. Despite Sue's frequent amusement at the goings-on, she was, deep down, quite upset.

(Pesetsky, 1995: 199a-c)

Rather, they are nominalizations of the non-causative predicates with the inner structures illustrated in (29a-f).

(29) a. [[√annoy $_{V}$] ance $_{N}$]

b. *[[[√annoy $_{V}$] *CAUS* $_{V}$] ance $_{N}$]

c. [[√agitat $_{V}$] ion $_{N}$]

d. *[[[√agitat $_{V}$] *CAUS* $_{V}$] ion $_{N}$]

e. [[√amuse $_{V}$] ment $_{N}$]

f. *[[[√amuse $_{V}$] *CAUS* $_{V}$] ment $_{N}$]

To conclude, Pesetsky (1995) proposes that every object experiencer predicate is derived from its non-causative subject experiencer form. The lack of the causative reading in the nouns derived, and some overt instances of this causative morpheme in some languages like Japanese provide support for this claim, as in (30a-b).

(30) a. Taroo-ga ongaku-o tanosin-da.
Taro-NOM music-ACC be.amused-PST
'Taro was amused at the music.'

b. Ongaku-ga Taroo-o tanosin-ase-ta.
Music-NOM Taroo-ACC be.amused-CAUS-PST
'The music amused Taroo.'

Lastly, Pesetsky (1995) also notes that in the instances where a predicate assigns inherent case to its experiencer argument in the complement position, the subject position can become available for a subject matter or a target argument, which are normally lower than the experiencer in the hierarchy proposed. The structure of such a VP would be as given in (31).

(31) $[_{VP}\,[_{V'}$ Target/Subject Matter $[_{V}$ Experiencer]]]

In the last part of the analysis of Turkish nominalizations and their subjecthood in section 2.4, we will see that there are a few subject experiencer predicates in Turkish that assign inherent dative case to their experiencer argument and thus, the subject matter or target nominalized clauses formed with -DIK or -(y)AcAK can appear as nominative subjects. Instead of reversing the hierarchy for these structures, we will form a generalization for -DIK and -(y)AcAK nominalized subjects and account for their Nominative clausal subject distribution differently.

2.3 Previous accounts of nominalized clauses in Turkish

In previous analyses, the affix -mA(K) has been labeled as an 'action nominal' and -DIK/(y)AcAK as a 'factive nominal' marker (Kornfilt, 1985, 1987; Underhill, 1976; van Schaaik, 1999). The -DIK/(y)AcAK pair is argued to form nominalizations that express a fact, whereas -mA(K) produces clauses that express an act. Furthermore, -DIK is analyzed to express non-future reference, -(y)AcAK future reference, and -mA(K) as having no temporal value (Kornfilt, 1985, 1987;

Özsoy, 1996; Underhill, 1976). In the first sub-section, we give a detailed summary of Erguvanlı-Taylan's (1998) analysis, where it is proposed that what determines nominalizer selection between three nominalizers, -DIK, -(y)AcAK and -mA(K), is epistemic and deontic modality, and future versus non-future reference. In the second sub-section, we go over the Genitive case assignment process Aygen (2002) proposes for Turkish nominalized clauses and the distinction identified in the predicates that embed -DIK/(y)AcAK or -mA(K) nominalizations.

2.3.1 Erguvanlı-Taylan (1998): Modality and nominalizer selection

Erguvanlı-Taylan (1998) proposes that while epistemic and deontic modalities play a role in choosing one of the -DIK and -(y)AcAK pair or -mA(K), presence or absence of future reference in the embedded event is relevant for the choice inside this pair.

Among the predicates that select for the nominalizer -DIK but not -mA(K) is, for example, the verb *inan-* 'to believe', as shown in (32a-b).

(32) a. Ali [ben-im on-u takip et-tiğ-im-]e inan-ıyor.
Ali-NOM I-GEN he-ACC follow-DIK-POSS.1.SG-DAT believe-IMPRF
'Ali believes that I am following him.'

b. *Ali [ben-im on-u takip et-me-m-]e inan-ıyor.

(Erguvanlı-Taylan, 1998: 9a-b)

It is claimed that the main predicate *inan-* 'to believe' reflects the speaker's 'epistemic propositional attitude'; thus, -mA(K) is not compatible as it usually expresses modalities such as obligation, necessity, permission, requests, wishes, etc.

On the other hand, a verb like *bekle-* 'to expect' expresses obligation in (33a-b) and therefore, -DIK is not compatible with this modality, while -mA(K) is.

(33) a. Ali [ben-im İngilizce öğren-me-m]-i bekli-yor.
Ali-NOM I-GEN English learn-MA(K)-POSS.1.SG-ACC expect-IMPRF
'Ali expects that I learn English'

b.*Ali [ben-im İngilizce öğren-diğ-im-] i bekli-yor.

(Erguvanlı-Taylan, 1998: 10a-b)

In addition to these, a number of predicates can embed either one of the nominalizers, such as *sevin-* 'to be pleased' as shown in (34a-b).

(34) a. [Ali-nin toplantı-ya gel-me-sin-]e
Ali-GEN meeting-DAT come-mA(K)-POSS.3.SG-DAT

çok sevin-dim.
very be.pleased-PST.1.SG
'I'm very pleased that Ali came to the meeting'

b. [Ali-nin toplantı-ya gel-diğ-in-]e
Ali-GEN meeting-DAT come-DIK-POSS.3.SG-DAT

çok sevin-dim.
very be.pleased-PST.1.SG
'I'm very pleased that Ali came to the meeting'

(Erguvanlı-Taylan, 1998: 7a-b)

However, when the tense of the main predicate is changed as in (35) only a nominalization formed with -mA(K) becomes acceptable.

(35) a. [Ali-nin toplantı-ya gel-me-sin-]e
Ali-GEN meeting-DAT come-mA(K)-POSS.3.SG-DAT

çok sevin-ir-im.
very be.pleased-AOR-1.SG
'I will be very pleased that Ali will to the meeting.'

b. *[Ali-nin toplantı-ya gel-diğ-in-]e çok sevin-ir-im.

c. *[Ali-nin toplantı-ya gel-eceğ-in-]e çok sevin-ir-im.

(Erguvanlı-Taylan, 1998: 7'a-c)

As opposed to the past tense in (34a-b), the aorist marker in (35a-c) changes the embedded event from factive to a hypothetical case with a certain level of possibility. As they are compatible with certainty but not possibility, -DIK and -(y)AcAK are no longer grammatical here.

Lastly, Erguvanlı-Taylan (1998) presents data with one-place adjectival predicates with two different readings obtained depending on the nominalizer of the embedded clause. *Doğru*, with the meanings 'right' or 'true', is one such example, as given in (36a-b).

(36) a. [O-nun gece çalış-tığ-ı] doğru değil.
s/he-GEN evening work-DIK-POSS.3.SG-NOM true not
'It is not true that (s)/he works in the evenings'

b. [O-nun gece çalış-ma-sı] doğru değil.
s/he-GEN evening work-mA(K)-POSS.3.SG-NOM right not
'It is not right for him/her to work in the evenings'

(Erguvanlı-Taylan, 1998: 1a-b)

As predicted, since -DIK is compatible with contexts denoting a reflection on one's epistemic state, when it embeds a -DIK nominalization *doğru* means 'true'. On the other hand, when the embedded nominalizer is -mA(K), *doğru* means 'right', which reflects the speaker's evaluation and reaction towards the event itself.

To conclude, modality plays a key role in the selection mechanism proposed in Erguvanlı-Taylan (1998). Nominalizations formed with -mA(K) are licit in contexts with deontic modality such as permission, request, etc. Whereas, nominalized clauses formed with -DIK or -(y)AcAK are compatible with contexts where the speaker reflects his/her epistemic knowledge about the embedded event. One member of this pair is chosen depending on whether or not the embedded event is placed in future or non-future.

2.3.2 Aygen (2002): Genitive case and nominalizers

For Genitive case assignment of the embedded subjects of nominalized clauses, Aygen (2002) argues that Turkish data supports the raising analysis of Miyagawa (1993), and that the syntactic mechanism licensing Genitive case is the covert

phrasal movement of the Genitive phrase to Spec DP position as in Miyagawa (1993). The representative data presented to support this analysis is as follows.

(37) [Pırlanta ya da inci]-nin ucuzlama ihtimal-i yüzde sıfır.
diamond or pearl-GEN get.cheaper probability-POSS.3.SG percent zero
i. 'Neither rubies nor pearls will get cheaper.'
ii. 'Either rubies or pearls will get cheaper.'

(Aygen, 2002: 40)

In (37), the Genitive subject construction is ambiguous in terms of two patterns of the scope relation between the noun 'probability' and the Genitive subject disjunction parts. As each can take scope over the other, the two readings are available. On the other hand, Aygen (2002) shows that the Nominative counterpart of this Genitive subject does not allow for the scope ambiguity, as in (38).

(38) [Pırlanta ya da inci] yüzde sıfır ihtimal-le ucuzla-yacak
Diamond or pearl-NOM percent zero probability-with get cheaper-FUT.3
'Neither will become cheaper.'

(Aygen, 2002: 41)

When they are inside a Nominative subject conjunction, wide scope reading is not available for the disjunction *pırlanta* 'diamond' or *inci* 'pearl'.

As for the -DIK vs. -mA(K) distinction, Aygen (2002) also points out the fact that a -DIK nominalization yields ungrammaticality without the overt noun *gerçeği* 'the fact that', as shown in (39a-b).

(39) a.*[Kürşat-ın gel-diğ-i] biz-i şaşırt-tı.
Kürşat-GEN come-DIK-POSS.3.SG-NOM we-ACC surprise-PST.3.SG
Intended: 'That Kursat came surprised us.'

b. [[Kürşat-ın gel-diğ-i] gerçeğ-i] biz-i şaşırt-tı.
Kürşat-GEN come-DIK-POSS.3.SG fact-CM we-ACC surprise-PST.3.SG
'That Kürşat came surprised us.'

(Aygen, 2002: 103a-b)

Aygen (2002) claims that the 'agreement/compound' marker on the lexical noun *gerçeğ-i* 'the fact that' is actually 'a manifestation of Agreement on the nominal head

that licenses Genitive and marks definiteness/specificity'. The lack of a specificity marker prevents the occurrence of a non-specific argument in the sentence initial position like the bare noun in (40).

(40) *Kitap Kürşat oku-yor.
book I read-IMPRF.1.SG
Intended: 'Kürşat is reading a book.'

(Aygen, 2002: 97b)

Thus, the agreement/compound morpheme on *gerçeği* 'the fact that' signals the presence of a nominal layer such as Kase or Determiner. Since this layer is not present in (39a), the construction yields ungrammaticality. On the other hand, when the same construction is in the complement position, a case marker on the complement is noted to mark specificity and the null head is allowed.

Predicates in passive voice are identified as the typical environment in which a -DIK nominalization occurs without the overt lexical noun. In the following section, we will highlight this fact and also claim that -DIK/(y)AcAK nominalizations appear typically in the complement position of unaccusative predicates which include passivized verbs as well.

2.4 Nominalizer-Theta role compatibility in Turkish

In the following sub-sections, in contrast to previous accounts of nominalizer selection in Turkish, which based their argumentation on modality or specificity, we analyze nominalized subject clauses focusing on the theta role they receive from the main predicate. We claim that only -mA(K) and -(y)Iş nominalizations are compatible with the causer role that is received in the subject position of a transitive

verb.[4] Further, -DIK and -(y)AcAK nominalizations are restricted to the complement of an unaccusative predicate position, where they are assigned the subject matter or target role.

We present our analysis by dividing transitive verbs into three groups according to the theta roles they assign. Object experiencers predicates and other predicates in causative voice constitute the group of predicates that assign a causer role to their external argument as opposed to subject experiencer predicates that do not, as shown in Table 2.

[4] I leave it for further research to investigate the source of the semantic incompatibility between the causer role and the nominalizers -DIK and -(y)AcAK. However, we should note that these four nominalizers behave differently in their root level derivational usages as well. For example, while the words derived with -(y)Iş and -mA(K) can only function as nouns, the ones formed with -DIK and -(y)AcAK can both be nouns or adjectives modifying a noun, as shown in (iii-vi).

(iii) ye-mek
eat-mAK
'food'

(iv) çık-ış
exit-yIş
'exit'

(v) tanı-dık (insan)
be.acquainted.with-DIK person
'familiar person'

(vi) yi-yecek (ekmek)
eat-(y)AcAK bread
'bread to eat'

In fact, the additional modifier usage of -DIK/(y)AcAK derivations is not surprising since these two morphemes can form relative clauses as well. It has been brought to my attention that this dichotomy might be signaling that the semantic type of -DIK/(y)AcAK nominalizations are different than those that are formed with -mA(K)/(y)Iş. Namely, -DIK/(y)AcAK forms could be propositions while -mA(K),/(y)Iş forms are DPs. I thank Dr. Elena Guerzoni as this was her suggestion. Hartman (2012) argues that clauses in the subject position are in fact DPs while CPs remain in the complement position. As such, -DIK/(y)AcAK forms could in fact be propositions semantic types of which are changed to <e> by being headed by a lexical overt noun like *haberi* 'the news that' when they are causer subjects, as in (vii).

(vii) [Ali-nin gid-eceğ-i *(haber-i)] Ayşe-yi üz-dü.
Ali-GEN leave-(y)AcAK-POSS.3.SG news-CM Ayşe-ACC upset-PST.3.SG
'The news that Ali will leave upset Ayşe.'

Data such as the one in (vii) support Hartman's (2012) claim that when there is no other active DP argument to be promoted to the subject position, a DP-shell might be inserted to the propositional complement. If this is what is happening in (vii), the overt noun would be the D^0 inserted as a D-shell and although there is another DP - Ayşe -, the causer -(y)AcAK clause overrides it. This could be due to the theta hierarchy between the roles of the two DPs (i.e. causer > experiencer) and because not a clausal DP but a [+human] noun can bear the experiencer role. In short, I will only speculate that the reason why-DIK/(y)AcAK nominalizations are incompatible with the causer role while -mA(K)/(y)Iş forms are not could be because of their semantic types. I leave the account of this incompatibility for future research. If such a type-based approach is on the right track, it would imply that -mA(K)/(y)Iş clauses are DPs in both the complement and the subject position with a null D^0 that could be governed following (Longobardi, 1994). On the other hand, -DIK/(y)AcAK clauses would be DP-less nPs in the complement position.

Table 2. Transitive Predicates Taking a Clausal Argument

Verb Classes:		Examples:
Those that assign a causer role	Object experiencers	*üz-* 'to upset someone', *sinirlendir-* 'to enrage someone', *kızdır-* 'to make someone angry', *sevindir-* 'to make someone happy/glad', *mutlu et-* 'to make someone happy', *endişelendir-* 'to worry someone', etc.
	Other causative verbs	*kovdur-* 'to cause someone to get fired', *vazgeçir-* 'to cause someone to give up on something', *sebep ol-* 'to cause', *neden ol-* 'to cause', *sağla-* 'to ensure', etc.
Those that do not assign a causer role	Subject experiencers	*üzül-* 'to be sad', *sinirlen-* 'to be angry', *kız-* 'to be angry', *sevin-* 'to be happy/glad', *mutlu ol-* 'to be happy', *endişelen-* 'to worry', *düşün-* 'to think', *emin ol-* 'to be sure', *aklına gel-* 'to occur to one's mind', *gör-* 'to see', etc.

2.4.1 Nominalized subjects of object experiencer predicates

As predicted in Pesetsky (1995), in Turkish, psych-predicates whose experiencer arguments are linked to the object position come with overt causative voice morphology or they are semantically causative,[5] meaning that the subject is the causer, as in (41a-b).

(41) a. [Ali-nin geç kal-ma-sı] Ayşe-yi
Ali-GEN late.be-mA(K)-POSS.3.SG-NOM Ayşe-ACC

[5] Pesetsky (1995) argues that there are two theta positions for the causer subject: i. Spec-VP and ii. the complement of $CAUS_P$ lower than the target object. Via A-movement, he claims that the causer argument raises to subject position if there is no target object and the preposition that heads this phrase interfering. This is in line with the fact that target/SM and causer arguments do not co-occur without the overt usage of 'make' in English. However, in Turkish some psych-verbs like *sevdir-* 'to make sb. love smt.' as in (vii) below can select for three arguments - causer, experiencer, and target. This provides counter evidence to the lower theta position for the causer argument and the movement that is argued to take place in between two positions.

(vii) [Sokak-lar-ın sakinliğ-i]$_{causer}$ [bana]$_{experiencer}$ [bu şehr-i]$_{target}$ sev-dir-di.
street-PL-GEN quietness-POSS.3.SG-NOM I.DAT this city-ACC love-CAUS-PST
'The quietness of the streets made me love this city.'

Thus, we will only assume the higher theta position for the causer argument for the data covered here.

endişelen-dir-di.
worry-CAUS-PST.3.SG
'Ali's being late worried Ayşe.'

b. [Ali-nin geç kal-ma-sı] Ayşe-yi
Ali-GEN late.be-mA(K)-POSS.3.SG-NOM Ayşe-ACC

üz-dü.
upset-PST.3.SG
'Ali's being late upset Ayşe.'

In both (41a) and (41b), the matrix predicate assigns the causer role to the nominative subject clause. The DP *Ayşe* is the experiencer in the object position and thus, checks its accusative case with little v^0. In (41a) *sinirlendir-* 'to make someone angry' is derived from the subject experiencer verb *sinirlen-* 'to get angry' via the addition of overt causative morpheme -DIr. On the other hand, in (41b) *üz-* 'to upset someone' does not have any overt causative morphology, which suggests that the derivational $CAUS^0$ here is covert. In fact, *üz-* bears the passive morpheme when it is used as a subject experiencer predicate, as shown in (42).

(42) Ayşe [Ali-nin geç kal-ma-sın]-a
Ayşe-NOM Ali-GEN late be-mA(K)-POSS.3.SG-DAT

üz-ül-dü.
upset-PASS-PST.3.SG
'Ayşe was upset that Ali was late.'

In (42), *üz-* changing into *üzül-* in its subject experiencer usage via the addition of the passive morphology on the verb might be signaling the suppression of the causer role, which is usual for the pairs of inchoative-causative verbs in which the causative morpheme is null.

While a -mA(K) nominalization is licit as the causer subject of such predicates and can be replaced by a -(y)Iş form with the additional 'manner' or 'the way' reading, -DIK and -(y)AcAK nominalizations yield ungrammaticality as causer subjects, as shown in (43a-b).

(43) a. [Ali-nin (pervasızca) geç kal-ış/(*-dığ)-ı] Ayşe-yi
Ali-GEN carelessly late.be-(y)Iş/DIK-POSS.3.SG-NOM Ayşe-ACC

sinirlen-dir-di.
get.angry-CAUS-PST.3.SG
'The way in which Ali was carelessly late made Ayşe angry.'

b. [Ali-nin geç kal-ma/(*-acağ)-(s)ı] Ayşe-yi
Ali-GEN late.be-mA(K)/(y)AcAK-POSS.3.SG-NOM Ayşe-ACC

üz-dü.
upset-PST.3.SG
'Ali's being late upset Ayşe.'

Also, it is possible to signal additional aspectual/temporal information about the embedded event with an infinitival subject clause by using the additional light verb *ol-* 'to be' to carry the nominalizer morpheme, while the embedded predicate bears the perfective marker *-mIş* or *-(y)AcAK*, which signals future reference. Both options are exemplified below.

(44) a. [Ali-nin de gel-miş ol-ma-sı] Ayşe-yi
Ali-GEN too come-PERF be-mA(K)-POSS.3.SG-NOM Ayşe-ACC

sevin-dir-di.
be.happy-CAUS-PST.3.SG
'That Ali has come too made Ayşe happy.'

b. [Ali-nin de gel-ecek ol-ma-sı] Ayşe-yi
Ali-GEN too come-FUT be-mA(K)-POSS.3.SG-NOM Ayşe-ACC

sevin-dir-di.
be.happy-CAUS-PST.3.SG
'That Ali will come too made Ayşe happy.'

To summarize, when the matrix predicate is an object experiencer verb, the causer argument is mapped onto the subject position, while the experiencer appears as the object. Turkish object experiencer predicates mostly appear with causative voice morphology, but there are verbs like *üz-* 'to upset', which is semantically causative and whose subject experiencer version *üzül-* 'to be upset' bears passive morphology, signaling the suppression of the causer argument.

2.4.2 Nominalized subjects of other causative predicates

Causative predicates that are not psych-verbs can assign a causer role as well. These can be divided into two groups based on their morphological form. Verbs like *kov-* 'to fire', *vazgeç-* 'to give up', etc. can take the causative morpheme -DIr and have a causer external argument, as in (45a-b).

(45) a. [Ayşe$_i$-nin hep geç kal-ma-sı] sonunda on$_i$-u
Ayşe-GEN always late.be-mA(K)-POSS.3.SG-NOM finally she-ACC

iş-ten kov-dur-du.
work-ABL fire-CAUS-PST.3.SG
'Ayşe's being always late to work finally got her fired.'

b. [Ayşe-nin İstanbul-u hiç sev-me-me-si]
Ayşe-GEN Istanbul-ACC not.at.all like-NEG-mA(K)-POSS.3.SG-NOM

Ali-yi oraya taşın-mak-tan vazgeç-ir-di.
Ali-ACC there move-mA(K)-ABL give.up-CAUS-PST.3.SG
'Ayşe's not liking Istanbul at all made Ali give up on moving there.'

In addition to verbs in causative voice, the nouns *sebep* and *neden*, both meaning 'reason' or 'cause', can form a periphrastic causative verb with the light verb *ol-* 'to be'. These also take a causer subject that can be a nominalized clause formed with -mAK or -(y)Iş, as in (46a-b).

(46) a. [Ekonomi-nin kötüleş-me-si] işsizliğ-e
economy-GEN get.worse-mA(K)-POSS.3.SG-NOM unemployment-DAT

sebep ol-du.
reason be-PST.3.SG
'The economy's getting worse caused unemployment.'

b. [Ali-nin öylece gid-iş-i] şaşkınlığ-a
Ali-GEN like.that leave-(y)Iş-POSS.3.SG-NOM surprise-DAT

neden ol-du.
cause-PST3.SG
'Ali's leaving just like that caused a surprise (to everyone).'

Expectedly, these subject clauses cannot be formed by the nominalizers -DIK or -(y)AcAK without the overt noun head *haberi* 'the news that' (47).

(47) [Kraliçe-nin öl-düğ/-eceğ-i *(haber-i)] kaos-a.
Queen-GEN die-DIK-yAcAK-POSS.3.SG news-CM chaos-DAT

sebep ol-du.
cause be-PST.3.SG
'The news that the Queen died/will die caused a chaos.'

The overt noun *haberi* in (47) bears the compound marker -(s)I(n) and thus, can be argued to form a complex compound with the GEN-POSS nominalization that precedes it. This would make the whole subject a complex noun rather than a nominalized clause.

So far the data showing that -DIK or -(y)AcAK nominalizations never appear as causer subjects suggest that they are incompatible with this theta role, and that the mechanism behind these clausal subjects is the theta hierarchy Pesetsky (1995) proposes, which is repeated in (48).

(48) Causer > Experiencer

In the next sub-section, we analyze data where subordinations formed with -DIK and -(y)AcAK appear as objects and subjects.

2.4.3 Clausal complements of subject experiencer predicates

Subject experiencer predicates assign either experiencer and subject matter roles as in (49a) or experiencer and target roles to their arguments like in (49b). In both cases, the experiencer, here *Ayşe*, appears in the subject position.

(49) a. Ayşe [Ali-nin gid-eceğ-in]-i düşün-üyor.
Ayşe-NOM Ali-GEN leave-(y)AcAK-POSS.3.SG-ACC think-IMPRF.3.SG
'Ayşe thinks that Ali will leave.'

b. Ayşe [Ali-nin git-tiğ-in]-e şaşır-dı.
Ayşe-NOM Ali-GEN leave-DIK-POSS.3.SG-DAT get.surprised-PST.3.SG
'Ayşe was surprised that Ali left.'

In (49a), *Ali'nin gideceği* 'that Ali will leave' is the subject of Ayşe's thought, which makes it the subject matter, whereas in (49b) *Ali'nin gittiği* 'that Ali left' is the

direction of Ayşe's surprise, which makes it the target. In accordance with the theta hierarchy Pesetsky (1995) proposes, in both sentences the experiencer is higher than the target and the subject matter arguments and thus, appears as the subject.

It is also possible in some cases to replace the -DIK nominalization with another one formed with -mA(K), like in (50).

(50) Ayşe [Ali-nin git-me-sin]-e şaşır-dı.
Ayşe-NOM Ali-GEN leave-mA(K)-POSS.3.SG-DAT be.surprised-PST.3.SG
'Ayşe was surprised that Ali left.'

Here, we should open a parenthesis and state that we analyze dative-marked nominalized clauses as complement clauses, not adjunct clauses. In the literature, dative case-marked nominalizations, such as the ones in (49b) and (50) above, are argued to be adjunct clauses because they are claimed to be able to be paraphrased as in (51a-b).

(51) a. Ayşe [Ali git-ti diye] şaşır-dı.
Ayşe-NOM Ali-NOM leave-PST.3.SG COMP be.surprised-PST.3.SG

b. Ayşe [Ali git-tiğ-i için] şaşır-dı.
Ayşe-NOM Ali-NOM leave-DIK-POSS.3.SG for be.surprised-PST.3.SG
'Ayşe was surprised because Ali left.'

Since *diye*-clauses and PPs formed with *için* 'for' are typical adjuncts, dative clauses paraphrased with them are claimed to be adjuncts as well. However, it is also possible to add this reason-denoting *diye*-clause and the adjunct PP formed with *için* without dropping the dative complement clause, like in (52).

(52) Ayşe [Ali-nin git-me-sin-e] parti daha yeni
Ayşe-NOM Ali-GEN leave-mA(K)-POSS.3.SG-DAT party just

başla-dı diye/ -dığ-ı için şaşır-dı.
start-PST.3.SG COMP/-DIK-POSS.3.SG for be.surprised-PST.3.SG
'Ayşe was surprised that Ali left because the party has just started.'

In (52), if *Ali* is someone who is very fond of attending parties, the embedded clause *Ali'nin gitmesi* 'that Ali left' in fact would be the target of Ayşe's surprise, while the

reason is that the party has just started and it is very unusual for someone like Ali to leave a party early, which can be expressed as an adjunct clause or PP.

The argument that these dative clauses are true arguments and not adjuncts requires an explanation for the grammaticality of the sentences in (51), as they consist of one adjunct clause and the predicate only. Some studies on psych-predicates, including Reinhart (2002), consistently assume two lexical entries for some of the psych-predicates with one transitive and one intransitive version. Our analysis also has to follow the assumption that these psych-predicates taking a dative complement can be optionally intransitive and appear with only an adjunct clause, without stating the target of emotion as the complement, like in (51a-b).

Going back to the subjecthood of nominalized clauses, as noted by Pesetsky (1995) as well, the only sentences in which -DIK and -(y)AcAK nominalizations are positioned higher than the experiencer argument and appear as subjects are those that are formed with predicates that assign inherent case to their experiencer argument. There are a few such predicates in Turkish that appear as phrasal units, but actually are composed of an 'inherently possessed noun' as the experiencer extender and an unaccusative verb. As directed motion verbs like *gel-* 'to come' are unaccusative predicates in Turkish, like in (53), we will take these complex predicates as unaccusative as well.

(53) Ali gel-di.
Ali-NOM come-PST.3.SG
'Ali came.'

One such predicate is *aklına gel-* 'come to one's mind', where *akıl-* 'mind' appears in a Genitive-Possessive phrase, and inside this phrase the possessor noun receives the experiencer role, while the whole DP appears in lexical Dative case, as in (54).

(54) [Ali-nin git-tiğ/-eceğ-i] Ayşe-nin
Ali-GEN leave-DIK-(y)AcAK-POSS.3.SG-NOM Ayşe-GEN

akl-ın-a hiç gel-me-di.
mind-POSS.3.SG-DAT never come-NEG-PST.3.SG
'That Ali left/will leave never came to Ayşe's mind.'

Here, *Ayşe* appears inside the GEN-POSS noun phrase and receives the experiencer role. Since this phrase is already marked with the inherent dative case, the subject matter clause can check its nominative case with the matrix T^0 as the subject. Another example of this unaccusative mechanism is the predicate *içine doğ-* 'to feel in one's bones', as shown in (55).

(55) [Ali-nin ayrıl-acağ-ı] Ayşe-nin
Ali-GEN break.up-(y)AcAK-POSS.3.SG-NOM Ayşe-GEN

iç-in-e doğ-du.
inside-POSS.3.SG-DAT rise-PST.3.SG
'That Ali will break up with her was felt by Ayşe in her bones.'

Similar to (54), in (55) Ayşe is inside a GEN-POSS noun phrase and the whole DP is in lexical dative case. This makes it possible for the subject matter clause *Ali'nin ayrılacağı* 'that Ali will break up' to be in nominative case, which it checks with the matrix T^0, and to appear as subject.

These unaccusative predicates are in fact parallel to passivized verbs and intransitive non-verbal predicates, which are the other environments where a -DIK/(y)AcAK nominalization can appear as the subject as in (56a-b).

(56) a. [Ali-nin git-tiğ/-eceğ-i]
Ali-GEN leave-DIK/-(y)AcAK-POSS.3.SG-NOM

bil-in-iyor.
know-PASS-IMPRF.3.SG
'It is known that Ali left/will leave.'

b. [Ali-nin git-tiğ/-eceğ-i] kesin.
Ali-GEN leave-DIK/(y)AcAK-POSS.3.SG-NOM certain
'It s certain that Ali left/will leave.'

As a psych-predicate with experiencer and subject matter roles, when passivized, *bil-* 'to know' appears as *bilin-* 'to be known' as in (56a). Its highest theta role, that of

experiencer, is suppressed and the -DIK/(y)AcAK nominalized clause appears as a nominative subject clause. As these are unaccusative predicates, they cannot check another lexical case with the predicate or structural accusative case with the Voice^0. Likewise, in (56b) what is certain is the information that Ali left or will leave denoted in the surface subject clause. In fact, what is labeled as 'epistemic modality' in Erguvanlı-Taylan (1998) could be coming from -DIK/(y)AcAK clauses bearing the subject matter role.

To conclude, we have seen that -DIK and -(y)AcAK nominalizations never appear as causer arguments that are generated higher than experiencers in Spec-VoiceP position and since -mA(K) and -(y)Iş nominalizations are compatible with this role, clausal subjects of object experiencers and other causative verbs are formed with the nominalizers -mAK or -(y)Iş. Also, we have seen that generally a -DIK or -(y)AcAK nominalization bears the subject matter role, which is generated lower than the experiencer and thus, linked to the object instead of the subject position. Lastly, we have seen that as the subject matter or target argument, a -DIK or -(y)AcAK nominalization can be promoted to the subject position only when the predicate is unaccusative. In the next section, we conclude with the tree representations of this analysis and claim that it preserves the theta hierarchy Pesetsky (1995) puts forward.

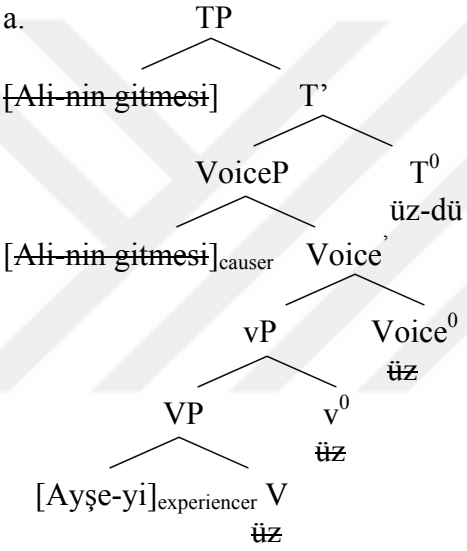
2.5 Proposal and conclusion

In accordance with the theta hierarchy put forward in Pesetsky (1995), we have reached the conclusion that the theta role assigned to a nominalized clause plays a key role in whether or not the nominalization will be promoted to the subject position. We claim that infinitival nominalized subject clauses always bear the causer role

when the matrix predicate is transitive and the incompatibility of -DIK and -(y)AcAK nominalizations with this theta role is the reason behind their limited occurrence as subject clauses. Before we conclude with the implications of these claims, let us go over the mechanism we propose for promotion to subject position for these clausal arguments.

Firstly, we propose that the causer role is linked to the argument that is base-generated in Spec vP position, higher than an experiencer in the object position, as in (57a), as the structure of sentences similar to the one in (57b).

(57) a.

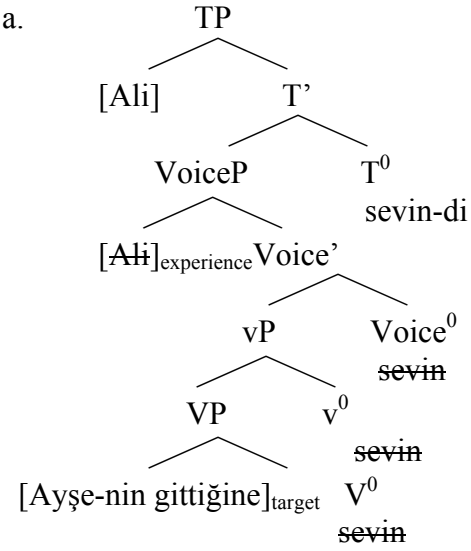


b. [Ali-nin git-me-si] Ayşe-yi üz-dü.
Ali-GEN leave-mA(K)-POSS.3.SG-NOM Ayşe-ACC upset-PST-3.SG
'That Ali left upset Ayşe.'

As a transitive object experiencer verb, *üz-* 'to upset' comes with a little v^0. The nominalized clause checks its nominative case with T^0 as the argument that is linked to the highest theta role: causer. Expectedly, the experiencer object *Ayşe* is generated lower and checks its accusative case with the little v^0.

As for a subject matter or a target nominalized clause, when the matrix predicate is not unaccusative they are not promoted to the subject as follows:

(58) a.

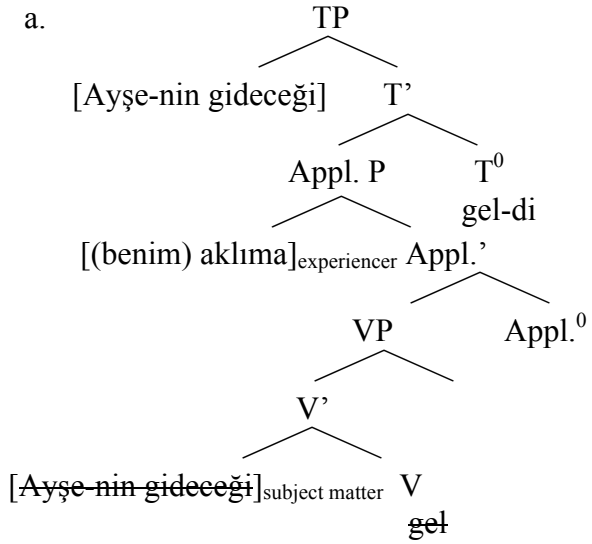


b. Ali [Ayşe-nin git-tiğ-in]-e sevin-di.
Ali-NOM Ayşe-GEN leave-DIK-POSS.3.SG-DAT be.happy-PST
'Ali was happy that Ayşe left.'

As the experiencer argument, *Ali* is linked to the argument in the Spec VoiceP position and checks nominative case with the matrix T^0 while the nominalized clause checks lexical dative case with the verb *sevin-* 'to be happy'.

Lastly, when the predicate is actually unaccusative like *gel-* 'to come' but comes with an experiencer, in line with Tonyalı's (2015) proposal for inherently case-marked experiencers, we assume an additional Applicative^0 to check this case because the unaccusative predicate *gel-* cannot do so, as shown in (59a).

(59) a.



b. [Ayşe-nin gid-eceğ-i] pro aklım-a gel-di.
Ayşe-GEN leave-(y)AcAK-POSS.3.SG-NOM my.mind-DAT come-PST
'That Ayşe would go came to my mind.'

As the predicate is unaccusative, the -(y)AcAK nominalization does not check a lexical case with the lexical V^0. The nominative case of the matrix T^0 is available, since the experiencer checks lexical dative case with the Applicative^0. This is how a -DIK/(y)AcAK nominalization appears as the nominative subject clause in a limited environment. This mechanism also allows us to preserve the hierarchy proposed for the theta roles.

In summary, it seems crucial to take theta role compatibility into consideration in addition to other features while developing an account of nominalizer selection in Turkish, and possibly other languages that exhibit nominalized embedding patterns. In addition, the dichotomy observed in the subjecthood of Turkish nominalizations provides data that supports the theta role hierarchy put forward by Pesetsky (1995), in contrast to analyses of psych-predicates that assume syntactic movement of the theme argument.

To conclude, we focused on No-control nominalized clauses that appear with a Genitive subject in this chapter. We compared infinitival -mA(K) clauses and -(y)Iş nominalizations to those that are formed with -DIK and -(y)AcAK and examined the mechanism behind their promotion to subject position. We proposed that infinitival nominalized clauses formed with -mA(K) are base-generated as causer subjects while -DIK and -(y)AcAK clauses are not compatible with this role.

In the next chapter, we will analyze control constructions observed in infinitival subjects. In contrast to those we focused on in this chapter, we will see that control clauses come with a Nominative subject and the embedded predicate does not bear Possessive Agreement. We will propose that the control relation

observed in subject infinitives in Turkish is Non-obligatory and the controller is always the logophoric center of the matrix event.

CHAPTER 3

CONTROL AND LOGOPHORICITY

3.1 Introduction

In the literature, Obligatory Control (OC) constructions as in (60a) have been typically analyzed as involving the null element PRO (see, among others, Bouchard, 1982; Chomsky, 1981; Landau, 2000; Wurmbrand, 2001) as shown in (60b). In his Movement Theory of Control (MTC), Hornstein (1999), on the other hand, proposed a movement-based account of these constructions where he argued that PRO patterns with NP-traces are derived via movement as in (60c).

(60) a. John hoped to kiss Mary.

b. $John_i$ hoped [PRO_i to kiss Mary].

c. $John_i$ hoped [t_i to kiss Mary].

Control constructions in Turkish are non-finite clauses formed with the infinitival marker -mA(K). So far studies on Turkish control structures have focused mainly on the derivation of clauses that exhibit obligatory control (OC) like in (61) (Aydın, 2005; Kornfilt, 1984; Oded, 2006; Oded and Öztürk, 2008; Özsoy, 1987).

(61) $Ayşe_i$ [PRO_i ev-e gel-mek] iste-di.
Ayşe-NOM home-DAT come-mA(K) want-PST.3.SG
'Ayşe wanted to come home.'

Recently, such structures have been analyzed from the perspective of movement-based control theories. For example, Aydın (2005) argued that Turkish OC constructions are compatible with MTC. However, Oded (2006) and Oded and Öztürk (2008) showed that non-movement based theories of control such as Landau (2000), which maintain PRO, can account for Turkish facts more comprehensively.

This chapter focuses on Turkish control constructions illustrated in (62) that occur in the subject position of sentences with psych-predicates. To the best of my knowledge, these constructions have not received much attention in the literature.

(62) [PRO$_i$ yürü-mek] Ali$_i$-yi mutlu et-ti.
walk-mA(K)-NOM Ali-ACC happy make-PST.3.SG
'Walking made Ali happy.'

In (62), the infinitival subject clause bears a causer theta role (see Pesetsky, 1995). The null subject of the infinitival clause does not immediately have a c-commanding antecedent, but it is obligatorily interpreted as co-referential with the experiencer object of the matrix clause. For the English counterparts of these constructions, Boeckx, Hornstein, and Nunes (2010) put forward a movement-based OC analysis, while Landau (2013) claims that these are Non-Obligatory Control (NOC) structures where the controller of the null subject PRO is either the logophoric center or the sentence topic.

In this chapter, we argue that the Turkish data pose a challenge to Boeckx et al. (2010) and cannot be derived as cases of movement-based OC constructions. We will show that the sentence in (62) above is better accounted for under Landau's (2013) approach, yet it does not fully pattern with English, where either logophoricity or topicality can have an effect in the NOC relation. We will show that Turkish exhibits a more restricted pattern where only logophoricity can build the NOC relation; topicality does not suffice. The chapter is organized as follows. Section 3.2 summarizes the key points of the accounts proposed in two theories of control: the MTC in Boeckx et al. (2010) and Landau (2013). In Section 3.3, aspects of the Turkish data are discussed in relation to these theories. In Section 3.4, we will present our proposal that infinitival constructions in the subject position of psych-predicates are cases of NOC that are established only via logophoricity. In Section 4,

we conclude and state the possible implications of this proposal for NOC relations involving subject infinitival clauses cross-linguistically.

3.2 Two theories of control: OC vs. NOC

This section introduces a brief summary of two theories of control by focusing on the distinctions between OC and NOC. In both MTC and Landau's (2013) theory of control, NOC is seen as the elsewhere case, where neither movement nor hierarchy applies in establishing the control relation.

3.2.1 MTC in Boeckx, Hornstein, and Nunes (2010)

In the MTC, while the PRO/trace subject in an OC relation is a result of movement, NOC is seen as the elsewhere situation which makes use of a pro subject. Also, MTC treats OC and NOC as relations, but not as structures. As shown in (63), two very similar sentences can allow OC or NOC depending on which R-expression the null element ends up co-referring with.

(63) a. John_i said that $\text{PRO}_{*i/j}$ washing herself delighted Mary_j.

b. John_i said that $\text{pro}_{i/*j}$ washing himself delighted Mary_j.

In (63a), what is claimed is an OC relation built via the movement of the embedded direct object *Mary*, whereas in (63b) a pro occupies the same (subject of the embedded subject clause) position that is in an NOC relation with the matrix subject *John*.

Following Boeckx and Hornstein (2007), according to Boeckx et al. (2010), "The distribution of *pro* is a dual function of the grammar and the parser" (p. 209). A well-behaved parser is added to the system, in addition to an economy preference of the grammar governing the choice between *PRO* and *pro* proposed in Hornstein

(2001, 2003, 2007). According to this economy preference, grammars see pronominalization as the last resort to take place where movement is not allowed. Thus, as long as movement is licit, PRO is preferred over a pro subject. The assumptions listed in (64) are made regarding parsers that drop one of the two empty categories to the phonetic gap.

(64) a. Parsers move from left to right and project structure rapidly and deterministically on the basis of local information.

b. Parsers are transparent with respect to grammars. So, if grammars encode a condition, parsers respect it.

c. Parsers are interpretively greedy.

Consequently, under MTC given that grammars prefer movement to pronominalization, a phonetic gap in a given sentence is treated as a PRO/trace rather than a pro whenever possible, which makes the relationship OC. A prediction that MTC makes when there are two antecedents to the right of the gap and there is no movement constraint between the position of the phonetic gap and one of the antecedent DPs is that the parser drops a PRO/trace that is co-indexed with this DP and the relationship obtained is OC. This prediction is borne out in English as in (65).

(65) [$PRO_{i/*j}$ having to wash behind the ears] made $Mary_i$ angry at $Bill_j$.

Since pro is not preferred by the grammar, and movement between the position of *Bill* and the embedded subject position is not allowed, the only way for the embedded subject to refer to *Bill* is to have an overt pronoun instead of a null subject, as shown in (66).

(66) Him_i having to wash behind the ears made Mary angry at $Bill_i$.

Then, since there is no gap in which to drop a null subject, the overt pronoun is not a problem for the parser.

On the other hand, when there are two possible antecedents for the null subject on either side of it, the preference of the parser to assign an interpretation to the gap as quickly as possible competes with the preference of the grammar for dropping a PRO/trace. The first preference builds an NOC relation while the second one builds an OC. Since both options have advantages, both outcomes are grammatical, as observed in (63), replicated below in (67).

(67) a. John$_i$ said that pro$_{i/*j}$ washing himself delighted Mary$_j$.

b. John$_i$ said that PRO$_{*i/j}$ washing herself delighted Mary$_j$.

In (67a), when the parser reaches the gap before the gerund, dropping a pro is the only option if the null category is to refer to *John* since movement from the subject of the embedded subject position to *John* in the matrix subject position is not allowed. Thus, dropping a PRO/trace here yields an illicit structure, since it involves movement out of a complex subject island, which is not allowed by the grammar. However, as in (67b), a PRO/trace is allowed here if it is to refer to *Mary* instead of *John*. Here, *PRO/trace* is argued to be a result of sideward movement, which proceeds via copy and merge of *Mary* as illustrated in (68), from Boeckx et al. (2010, p. 201).

(68) Applications of select and merge:

[Mary washing herself] delighted

Applications of copy and merge (sideward movement):

[Mary$_i$ washing herself] [delighted Mary$_i$]

Application of merge:

[[Mary$_i$ washing herself] delighted Mary$_i$]

Deletion in the phonological component:

[[~~Mary~~$_i$ washing herself] delighted Mary$_i$]

Based on this derivation, it is claimed that since movement is licit, pronominalization is blocked. Therefore, the possibility of movement is preserved, and the subject of the embedded clause can be analyzed as a PRO/trace as required for OC relations.

3.2.2 Landau (2013)

Landau (2013) also proposes that OC is built via grammatical processes, and that where OC is not possible, NOC applies as an elsewhere case. The following distributional distinction is proposed:

(69) Complement clauses fall under OC; subject and adjoined clauses fall under NOC.

The sentence given in (70) exhibits OC with a PRO embedded subject co-indexed with the matrix subject *John.*

(70) $John_i$ tried [PRO_i to leave early].

The OC signature is defined as given in (71).

(71) In a control construction [...X_i ...[S PRO_i ...]...], where X controls the PRO subject of the clause S:

a. The controller(s) X must be (a) co-dependent(s) of S.

b. PRO (or part of it) must be interpreted as a bound variable.

As the elsewhere situation, (72a) and (72b) are examples of NOC in English as a subject and an adjoined (extraposed) clause respectively.

(72) a. $John_i$ finally realized that [PRO_{i+j} hurting each other] really bothered Sue_j.

b. I never understood why it is bad for health [PRO_{arb} to stuff oneself with marshmallows].

As opposed to the OC signature given in (71) above, the NOC signature is defined as given in (73).

(73) In a control construction [...[S PRO...]...]:

a. The controller need not be a grammatical element or a co-dependent of S.

b. PRO needs not be interpreted as a bound variable (i.e., it may be a free variable).

c. PRO is [+human].

In this account, NOC is established based on a logophoric center- or topicality-based pragmatic relation with a [+human] controller. Logophoric centers are the subjects and objects of mental verbs (e.g., *think*, *realize*), psychological predicates (e.g., *disturb*, *angry*), and communication verbs (e.g., *tell*, *hear*). When there is a logophoric center in the event, the event is perceived from the mental state of the participant that constitutes the logophoric center. That is, these arguments are different than themes. The examples in (74), originally presented in Williams (1992) and later discussed by Landau (2000), show the differences between experiencers – whose mental state is involved in the event – and themes – whose mental state is not.

(74) a. [PRO_i having just arrived in town], the main hotel seemed to $Bill_i$ to be the best place to stay.

b. *[PRO_i having just arrived in town], the main hotel collapsed on $Bill_i$.

In (74a), *Bill* is an experiencer, as the object of the mental verb *seem*, and it can control the subject of the adjunct clause. On the other hand, *Bill* bears the theme theta role in (74b) since *collapse* is not a mental verb, and thus the same control relation yields ungrammaticality.

In addition to logophoric centers, Landau (2000) identifies a class of transparent nouns that allow NOC from within. Landau (2013) states that nouns of this class denote "abstract notions that reflect the individuality of the controller via

actions, character traits or social attributes" (p. 248). *Career* is one such example, as (75) shows, among others such as *status, confidence, image, success, fear, hope,* etc.

(75) [PRO_i causing an uproar] is important for John's$_i$ career.

Accordingly, for an NP to function as the *logophoric extension* of X in a given NOC structure where we have *X's NP*, N needs to be an inalienably possessed noun. This is what is happening in (75): *career* behaves as the logophoric extension of *John*, making the control relation possible.

The next condition in NOC that Landau (2013) puts forward is topicality. Namely, "the antecedent of NOC PRO must be the discourse or the sentence topic." This antecedent does not necessarily need to be topicalized, but like all topics it must be old information. Since indefinite DPs introduce new individuals to the context, they are not suitable controllers, as the following example shows.

(76) [After PRO_i collecting some money], a bank account was opened by the landlord$_i$ /*by a businessman$_i$.

While the definite DP *the landlord* can control the PRO in the preceding adjunct clause, the indefinite DP *a businessman* is not a licit controller for the same *PRO*.

The following example tests the [+human] restriction to see if a nonhuman topic can be the controller in NOC.

(77) As for the boots$_i$, it was obvious [that for them$_i$/*PRO_i to be produced in Italy] would increase their appeal.

Here, *the boots* is introduced as the sentence topic, but since it is nonhuman, it fails to control the *PRO* in the embedded clause. Thus, Landau concludes that [+human] is a necessity for the NOC controller.

Landau also raises the question of whether or not the two restrictions *topicality* and *logophoricity* are independent of each other. In (78), a [+human] topic

different than the logophoric center is introduced to see whether it can be the controller in NOC.

(78) All I can say about $Mary_i$ is that most people I have spoken with agree that while [PRO_i removing herself from the race so quickly] may have pleased the party hacks, it will surely distress the people whose interests she represents.

Here, *Mary* is a [+human] referent introduced as the topic, and although the logophoric center is the DP *the party hacks* as the object of *please*, *Mary* is the controller.

The final piece of data, in (79), is related to the question of whether a non-topic, [+human] noun that is the logophoric center can be the controller while another DP is explicitly marked as the topic.

(79) Concerning Times Square, [PRO_i to find himself alone there] became one of $John_i$'s most abiding fears.

Here, *Times Square* is explicitly marked as the topic, but it is possible for the logophoric center *John* to control the *PRO* in the embedded subject clause through the extension of *fear*.

To conclude, according to Landau (2013), NOC is a pragmatic phenomenon the conditions of which are as given in (80).

(80) In an NOC configuration [… DP … [PRO …] …](order irrelevant), the DP may control *PRO* iff it is [+human] *and* either a logophoric center or topic-oriented.

This definition makes the [+human] restriction a necessity, while logophoricity and topicality are each independently sufficient.

3.3 NOC into subject clauses in Turkish

In this section, we will show that contrary to the analysis put forth in Boeckx et al. (2010), the null subject in both OC and NOC structures in Turkish is *PRO*, while *pro* is only present in the absence of a control relation (i.e., in no-control structures). This makes Landau's (2013) approach more promising for an account of Turkish control clauses in subject position. However, unlike in English, topicality does not suffice to build the control relation in Turkish while logophoricity plays a key role in establishing control.

3.3.1 Distribution of PRO vs. pro in Turkish

Differently from English, in Turkish the distinction of the two null arguments pro and PRO is morphologically encoded on a verb via the presence or absence of agreement, respectively. Since it is a subject pro-drop language, Turkish allows dropping an overt pronoun and replacing it with a *pro* when the verb is inflected for person for the subject as given in (81).

(81) $\text{Ben}_i/\text{pro}_i$ gel-dim.
I-NOM come-PST.1.SG
'I came.'

In addition to finite clause subjects, embedded genitive subjects can be dropped and replaced with a pro when the embedded predicate bears possessive agreement, thus carrying the person inflection of the dropped subject. Example in (82a) illustrates these cases of no-control structures as opposed to control structures that come with a bare predicate and a PRO subject as in (82b).

(82) a. Ali_i [o-$\text{nun}_j/\text{pro}_j$ git-me-sin]-i iste-di.
Ali-NOM he-GEN leave-mA(K)-POSS.3.SG-ACC want-PST.3.SG
'Ali wanted him to leave.'

b. Ali_i [PRO_i git-mek] iste-di.
Ali-NOM leave-mAK want-PST.3.SG
'Ali wanted to leave.'

Thus, the distinction of PRO vs. pro subjects in Turkish poses a challenge against the MTC view. Recall that MTC claims that PRO in the subject position is evidence of an obligatory control relation where movement has taken place, while a pro subject is allowed only when movement is barred and the relationship is non-obligatory control. In Turkish, however, PRO occurs in all control structures, both obligatory and non-obligatory, while structures with pro subjects are strictly no-control. In (83), the key data for this distinction is provided.

(83) a. [$Ayşe_i$-nin erken git-me-si] Ali_j-yi
Ayşe-GEN early leave-mA(K)-POSS.3.SG-NOM Ali-ACC

üz-dü.
upset-PST.3.SG
'Ayşe's leaving early upset Ali.'

b. $Ayşe_i$-ye göre, [o-$nun_{i/k}$/$pro_{i/k}$ erken
Ayşe-DAT according.to she-GEN early

git-me-si] Ali_j-yi üzdü.
leave-mA(K)-POSS.3.SG-NOM Ali-ACC upset-PST.3.SG
'According to Ayşe, her leaving early upset Ali.'

c. [PRO_i erken git-mek] Ali_i-yi üz-dü.
early leave-mA(K)-NOM Ali-ACC upset-PST.3.SG
'Leaving early upset Ali.'

In (83a), the subject of the embedded infinitival clause bears genitive case, and the possessive agreement on the embedded predicate *git-* 'to leave,' indicates that the embedded subject is third person singular. As shown in (83b), it is possible to replace the R-expression with the third person singular pronoun *o* 'she' and to omit this pronoun altogether. This overt pronoun or covert *pro* can receive its referent as *Ayşe* from the preceding adjunct PP or, alternatively, from any other contextually salient individual. Still, the possessive agreement marker on the embedded predicate signals

that the embedded subject is third person singular. On the other hand, when the embedded subject and the matrix object are co-referential as in (83c), there is no agreement marker on the embedded predicate, and that is what signals the existence of a PRO subject instead of a pro.

Let us focus on the cases where the distribution of PRO vs. pro in Turkish is as the MTC predicts. The first such case is when the parser acts according to the following two preferences, since there are two possible antecedents for the null element: i) to assign an interpretation as quickly as possible by dropping a pro, and ii) to drop a PRO as preferred by the grammar. In such cases we have seen that both outcomes are allowed in English. Cases like (84) in Turkish show parallelism with the English examples in (67).

(84) a. Ali_i [PRO_j kendin-e_j bak-ma-nın Ayşe_j-yi
Ali-NOM self-DAT take.care-mA(K)-GEN Ayşe-ACC

mutlu et-tiğ-in]-i söyle-di.
happy make-DIK-POSS.3.SG-ACC say-PST.3.SG
'Ali said that taking care of herself makes Ayşe happy.'

b. Ali_i [pro_i kendin-e_i bak-ma-sı-nın Ayşe_j-yi
Ali-NOM self-DAT take.care-mA(K)-POSS.3.SG-GEN Ayşe-ACC

mutlu et-tiğ-in]-i söyle-di.
happy make-DIK-POSS.3.SG-ACC say-PST.3.SG
'Ali said that his taking care of himself makes Ayşe happy.'

In (84a), according to MTC there is an OC relation between the embedded clause object *Ayşe* and the *PRO/trace* in the subject position of the embedded nominalized subject clause. MTC claims this OC relation is possible because sideward movement applies to *Ayşe*. Note that this clause is further embedded in the nominalized object clause. Since according to Boeckx et al. (2010) movement would be illicit between this position and *Ali* in the matrix subject position, dropping a *PRO/trace* here is only possible via co-indexation with *Ayşe*, as in (84a). On the other hand, if this null

element is to refer to *Ali*, the only possibility is to drop a *pro* as in (84b). The structure in (84a) is preferred by the grammar, while (84b) satisfies the parser's greed for assigning an interpretation as quickly as possible to the phonetic gap, since the antecedent for *pro* is immediately adjacent to it. Thus, as expected, both structures are allowed, but notice that they are morphologically distinguished via verbal agreement.

The following data set exemplifies cases where the MTC fails to predict the co-occurrence of both PRO and pro. As we have seen in the English example in (65), when both DPs are to the right of the phonetic gap, there is no motivation for dropping a pro as movement is licit and so a PRO/trace which is co-indexed with Ayşe is preferred by the grammar. However, the possible interpretations of the gap that (85a) and (85b) illustrate indicate that structures involving both PRO and pro both are grammatical in Turkish.

(85) a. [PRO_i hep bulaşık yıka-mak] $Ahmet_i$-i Ali_j-den
always dishes wash-mAK-NOM Ahmet-ACC Ali-ABL

soğut-tu.
alienate-PST.3.SG
'Always washing the dishes alienated Ahmet from Ali.'

b. [$pro_{i/j}$ hiç dışarı çık-a-ma-ma-sı] $Ahmet_j$-i
never out go-(y)Abil-NEG-mA(K)-POSS.3.SG-NOM Ahmet-ACC

Ali_i-den soğut-tu.
Ali-ABL alienate-PST.3.SG
'His never being able to go out alienated Ahmet from Ali.'

In (85a), as movement is licit, the phonetic gap in the subject position of the embedded subject clause is filled with a *PRO* that can be controlled only by *Ahmet* in the matrix clause direct object position. MTC would only predict the grammaticality of (85a) as movement is possible where *PRO*/*trace* is co-indexed with the object *Ahmet*. Here, dropping a *pro* co-indexed with *Ali* or *Ahmet* is not predicted by MTC.

However, as seen in (85b), it is also possible to fill this gap with a *pro* referring to the matrix indirect object *Ali* or the direct object *Ahmet*.

PRO vs. pro distribution in Turkish being control vs. no-control comes with the consequence that a PRO and a pro subject can overlap in any structure as soon as the co-referent of the subject changes from the matrix subject that is co-indexed with the PRO to any contextually salient individual that is co-indexed with a pro. As the way parsers are defined in Boeckx et al. (2010), the co-occurrence of the two null subjects in an environment other than the one identified in the MTC (i.e. where there are two possible antecedents to the phonetic gap on either side of it) pose a problem for the MTC.

3.3.2 PRO in subject infinitives: Not a remnant of movement

The claim that pro subjects occur in no-control while PRO subjects occur in OC or NOC structures with respect to the structure of clauses in the embedded subject position constitute a further counter-argument against MTC. Recall that Boeckx et al. (2010) claims that these sentences involve a movement observed in psych-predicates that is illustrated in (68), repeated below in (86).

(86) Applications of select and merge:

[Mary washing herself] delighted

Applications of copy and merge (sideward movement):

[Mary$_i$ washing herself] [delighted Mary$_i$]

Application of merge:

[[Mary$_i$ washing herself] delighted Mary$_i$]

Deletion in the phonological component:

[[~~Mary~~$_i$ washing herself] delighted Mary$_i$]

Accordingly, the *PRO* in (85c) should be in an OC relationship with the matrix object *Ali* that is built via this movement. Labeling this relationship as NOC instead means arguing for a structure without any movement. We will first show that a movement-based control relation is not motivated for these structures in Turkish. Then, we will propose an analysis not based on movement, but rather on theta-hierarchy.

If the *PRO* subject in the embedded subject position is a leftover of movement as the MTC claims it to be, it is expected to exhibit only exhaustive control (EC) with its antecedent, as the element that moved (i.e. the controller) would have to be identical to its trace (i.e. PRO). However, the following examples of Turkish subject infinitival clauses in (87a) and (87b) show that it is possible for this *PRO* to be in split control (SC) or partial control (PC) relations, respectively.

(87) a. Ayşe$_i$-ye gore, [PRO$_{i+j}$ parti-de çift ol-mak] Ali$_j$-yi
Ayşe-DAT acc.to party-LOC couple be-mA(K)-NOM Ali-ACC
mutlu et-ti.
happy make-PST.3.SG
'According to Ayşe, being a couple at the party made Ali happy.'

b. [PRO$_{i+}$ o kafe-de toplan-mak] Ali$_i$-yi mutlu et-ti.
that café-LOC meet-mA(K)-NOM Ali-ACC happy make-PST.3.SG
'Meeting at that café made Ali happy.'

The possibility of PC and SC in fact signals not a movement-based, but a movement-free analysis for the subject clauses. Thus, we claim that the subject clause must be base-generated in the matrix subject position.

As we introduced in the previous chapter, Pesetsky (1995) proposes the theta-hierarchy for psych-predicates repeated here in (88a), wherein the highest-ranked argument is linked to the highest syntactic position in the clause that contains it, as in (88b) and (88c).

(88) a. Causer > Experiencer > Subject Matter /Target

b. [$_{VP}$ Causer [$_{V'}$ V Experiencer]]

c. [$_{VP}$ Experiencer [$_{V'}$ V Subject Matter/Target]]

When we incorporate this hierarchy into our analysis of NOC, the possibility of SC and PC in (87) becomes tenable, because movement is not required in order to form the control relations. If *causer* embedded clauses are base-generated higher than *experiencer* objects, and if there is no movement of the direct object *Ali* – as opposed to *Mary* in the English example repeated in (86) – then the acceptability of the SC and PC readings can be accounted for by a mechanism different than movement.

To conclude, the Pesetsky hierarchy further supports our claim that subject clauses whose embedded subjects are in a control relation with a matrix constituent do not exhibit movement-based OC.

3.3.3 Logophoric centers and extensions as controllers in Turkish

As proposed for English by Landau (2013), inalienably possessed abstract and concrete nouns can behave as logophoric extensions in Turkish, as (89) shows.

(89) a. [PRO$_i$ düzenli çalış-mak] Ali$_i$-nin
regularly work-mA(K)-NOM Ali-GEN

performans-ın-ı iyileştir-di.
performance-POSS.3.SG-ACC improve-PST.3.SG
'Working regularly improved Ali's performance.'

b. [PRO$_i$ her gün yürüyüş yap-mak] Ali-$_i$nin
every day walking do-mA(K)-NOM Ali-GEN

kalb-in-e iyi gel-di.
heart-POSS.3.SG-DAT good come-PST.3.SG
'Walking every day did Ali's heart good.'

In (89a), we have the abstract noun *performans* 'performance' and in (89b) the concrete noun *kalp* 'heart' as the logophoric extensions of *Ali*. Thus, the same control relation is allowed.

If we change these to a noun that is not inalienably possessed, the structure becomes illicit as expected, given in (90).

(90) *[PRO$_i$ iş-e yürüyerek git-mek] Ali$_i$-nin araba-sı için
work-DAT walking go-mA(K)-NOM Ali-GEN car-POSS.3.SG for

iyi ol-du.
good be-PST.3.SG
Lit. meaning: 'Going to work by walking was good for Ali's car.'

While *Ali* can control the *PRO* from within the NPs *Ali'nin performansı* 'Ali's performance' and *Ali'nin kalbi* 'Ali's heart' in (89a) and (89b), this is ungrammatical with the NP *Ali'nin arabası* 'Ali's car' in (90). Since *araba* 'car' is not an inalienably possessed noun, it is not transparent and thus, the control structure is not allowed. When *PRO* is replaced with *pro*, the sentence becomes grammatical, since it is no longer a control structure, as shown in (91).

(91) [pro$_i$ iş-e yürüyerek git-me-si] Ali$_i$-nin
work-DAT walking go-mA(K)-POSS.3.SG-NOM Ali-GEN

araba-sı için iyi ol-du.
car-POSS.3.SG for good be-PST.3.SG
Lit. meaning: 'His going to work by walking was good for Ali's car.'

Recall that we understand that this is not a control structure from the agreement marker on the embedded nominalized predicate that agrees with *Ali*.

Secondly, the [+human] restriction on the NOC controller seems to hold also for the Turkish data covered here. A nonhuman NP like *çizmeler* 'boots' cannot be the controller in an NOC structure, whether it is the topic or not, as in (92a-b).

(92) a. *Çizme-ler-e$_i$ gelince, [PRO$_i$ deri-den ol-mak]
boot-PL-DAT as.for leather-ABL be-mA(K)-NOM

değer-lerin-i arttır-ır.
value-POSS.3.PL-ACC increase-AOR.3.SG
Lit. meaning: ‘As for boots, being made of leather increases their value’

b. *[PRO$_i$ deriden olmak] çizme-ler-in$_i$
leather-ABL be-mA(K)-NOM boot-PL-GEN

değer-lerin-i arttır-ır.
value-POSS.3.PL-ACC increase-AOR.3.SG
Lit. meaning: ‘Being made of leather increases the value of boots.’

On the other hand, the no-control counterpart of (92a-b) in (93) is grammatical.

(93) [pro$_i$ has deri-den ol-ma-ları] çizme-ler-in$_i$
pure leather-ABL be-mA(K)-POSS.3.PL-NOM boot-PL-GEN

değer-in-i arttır-ır.
value-POSS.3.PL-ACC increase-AOR.3.SG
‘Their being made of pure leather increases the value of boots.’

We move on to the differences between Turkish and English in terms of the topicality restriction in Landau’s (2013) account in the next section.

3.4 Proposal: Logophoricity necessary and sufficient in Turkish

In English, as discussed in Section 2.2, both a non-topic logophoric center and a non-logophoric center topic could be the controller in NOC. Thus, Landau (2013) concludes that it is enough to satisfy either the logophoricity or the topicality restriction. Nevertheless, we cannot say the same for Turkish. Turkish NOC in subject clauses is only sensitive to the logophoric center. This claim is based on a two-fold argument as follows:

(94) i. If there is a logophoric center in the structure, it has to be the controller.

ii. Topicality does not suffice to build an NOC structure.

Let us examine the following data set.

(95) a. [PRO$_i$ yarış-tan çekil-mek] Ayşe$_i$-yi üz-dü.
race-ABL withdraw-mA(K)-NOM Ayşe-ACC upset-PST.3.SG
‘Withdrawing from the race upset Ayşe.’

b. Ayşe$_i$-ye gelince, [PRO$_{*i/j}$ yarış-tan çekil-mek]
Ayşe-DAT as.for race-ABL withdraw-mA(K)-NOM

antrenör-ün-ü$_j$ üz-dü.
trainer-POSS.3.SG upset-PST.3.SG
'As for Ayşe, (her) withdrawing from the race upset her trainer.'

In (95a) since *üzmek* 'to upset' is a psych-verb, we have the logophoric center *Ayşe* in the object position as the controller, as expected. In the English counterpart of (95b) given in (78), the explicitly marked topic is the controller, overriding the logophoric center. In the Turkish case, however, between the two possible controllers, the logophoric center *antrenörü* '(her) trainer' is the licit one. This is not expected according to Landau's (2013) analysis.

On the other hand, when *pro* takes the place of *PRO*, the topicalized *Ayşe* can be co-indexed with it as in (96a). However, the structure is no-control, as it can be paraphrased as in (96b) as well.

(96) a. Ayşe$_i$-ye gelince, [pro$_{i/*j}$ yarış-tan çekil-me-si]
Ayşe-DAT as.for race-ABL withdraw-mA(K)-POSS.3.SG-NOM

antrenör-ün-ü$_j$ üz-dü.
trainer-POSS.3.SG-ACC upset-PST.3.SG
'As for Ayşe, (her) withdrawing from the race upset her trainer.'

b. [Ayşe-nin yarış-tan çekil-me-si]
Ayşe-GEN race-ABL withdraw-mA(K)-POSS.3.SG-NOM

antrenör-ün-ü$_j$ üz-dü.
trainer-POSS.3.SG-ACC upset-PST.3.SG
'Ayşe's withdrawing from the race upset her trainer.'

Likewise, explicitly stating the topic makes it possible to drop the controller inside the NP formed with a transparent noun like *sağlık* 'health', as shown in (97a).

(97) a. Ali$_i$-ye gelince, [PRO$_i$ iş-e yürüyerek git-mek]
Ali-DAT as.for work-DAT walking go-mA(K)-NOM

pro$_i$ sağlığ-ı için iyi ol-du.
health-POSS.3.SG for good be-PST.3.SG
'As for Ali, going to work walking was good for his health.'

b. [PRO$_i$ işe yürüyerek git-mek] Ali$_i$-nin
work-DAT walking go-mA(K)-NOM Ali-GEN

sağlığ-ı için iyi ol-du.
health-POSS.3.SG for good be-PST.3.SG
'Going to work walking was good for Ali's health.'

The grammaticality of (97b), however, shows that topicality is not what enables NOC in (97a). Rather, topicality only provides the option of replacing the controller *Ali* with *pro*. In fact, this *pro* can be overt as well:

(98) Ali$_i$-ye gelince, [PRO$_i$ iş-e yürüyerek git-mek]
Ali-DAT as.for work-DAT walking go-mA(K)-NOM

o-nun$_i$ sağlığ-ı için iyi ol-du.
he-GEN health-POSS.3.SG for good be-PST.3.SG
'As for Ali, going to work walking was good for his health.'

Note the ungrammaticality of (99), where the transparent noun *sağlık* 'health' in (98) is replaced with a non-transparent one.

(99) *Ali$_i$-ye gelince, [PRO$_i$ iş-e yürüyerek git-mek]
Ali-DAT as.for work-DAT walking go-mA(K)-NOM

pro$_i$ araba-sı için iyi ol-du.
car-POSS.3.SG for good be-PST.3.SG
Lit. Meaning: 'As for Ali, going to work walking was good for his car.'

Here, despite being the sentence topic, *Ali* still cannot control the embedded *PRO*. The ungrammaticality of (99) indicates that the embedded *PRO* is necessarily co-indexed with the logophoric center that follows it, further supporting our claim that topics cannot control PROs in Turkish.

To summarize, we have seen that [+human] and logophoricity are the two restrictions that need to be satisfied, while topicality does not play a direct role in NOC configurations in Turkish subject infinitival clauses. We argue that given that Turkish is a pro-drop language, the overtly marked topic only provides the contextually most salient referent for *pro* and thus, makes available the option of dropping it.

Lastly, if the main pragmatic means that enables these NOC relations is logophoricity, as we claim it to be, then we expect only no-control subject clauses to be acceptable in the absence of a logophoric center in the matrix clause. We can test this hypothesis by constructing a sentence that does not trigger the introduction of a logophoric center – i.e., by excluding mental verbs, psychological predicates, or communication verbs – but nonetheless offers a DP that can potentially stand in a control relation to the embedded subject. One suitable diagnostic is to examine the case where the main predicate is not a mental verb, psych-predicate, or communication verb, but simply a verb in causative voice. The following contrast bears out the above prediction.

(100) a. *[PRO$_i$ her gün iş-e geç kal-mak] sonunda Ayşe$_i$-yi
every day work-DAT late.be-mA(K) finally Ayşe-ACC

kov-dur-du.
fire-CAUS-PST.3.SG
'Being late for work every day finally got Ayşe fired.'

b. [pro$_i$ her gün iş-e geç kal-ma-sı] sonunda
every day work-DAT late.be-mA(K)-POSS.3.SG-NOM finally

Ayşe$_i$-yi kov-dur-du.
Ayşe- ACC fire-CAUS-PST.3.SG
'(Her) being late for work every day finally got Ayşe fired.'

In (100), the matrix verb *kovdur* 'to cause to get fired' does not trigger the introduction of a logophoric center in the matrix clause. Hence, an NOC relation cannot be established between the embedded *PRO* and *Ayşe'yi*, rendering (100a) unacceptable. Replacing the NOC structure with an NC one as in (100b), however, is perfectly licit.

3.5 Conclusion and implications

To conclude, contrary to Boeckx et al. (2010) Turkish subject infinitival clauses whose embedded subjects are in a control relation with a matrix constituent do not exhibit movement-based OC. Rather, an NOC relation is built via pragmatic means alone. Also, unlike the English case, where the means of establishing a control relation can be either topicality or logophoricity, as discussed in Landau (2013), this means can only be a logophoric center in Turkish. The only function of a DP that is explicitly marked as the sentence topic is to provide the contextually most salient referent for the pro that is dropped in Turkish.

The difference observed in English and Turkish regarding the function of topicality in NOC configurations might signal a typological division between pro-drop languages like Turkish and languages like English that are not pro-drop in terms of how NOC is built.

In this chapter, we focused on infinitival subject clauses that come with a PRO embedded subject where the matrix predicate is in active voice. In the next chapter, we will analyze the passivization patterns of embedded infinitives under a passive voiced matrix predicate and argue that the embedded infinitives that undergo obligatory passivization when the matrix predicate is passivized do not exhibit biclausal behavior. In such constructions, passivized embedded infinitive does not form a subject clause. Instead, we will see that these are voice restructuring configurations that are VoicePs or wollPs taken as a complement by the matrix predicate.

CHAPTER 4

PASSIVE INFINITIVES AND VOICE RESTRUCTURING

4.1 Introduction

In addition to infinitive nominalized subordinations, covered in chapters 2 and 3, languages exhibit a different type of infinitival structure that is not available with all types of matrix verbs. These structures are labeled in the literature as 'restructuring' (see, among others, Cinque, 1999, 2006; Wurmbrand, 2001, 2015a, 2015b). Restructuring is a clause union process in which the matrix and the embedded verbs behave as one complex predicate together and the whole sentence exhibits monoclausal behavior. As a result of this clausal union, there are certain transparency mechanisms that are identified and associated with restructuring configurations. Long Object Movement (LOM) is one such construction that is associated with lexical/voice restructuring, available for example in German as illustrated in (101).

(101) a. weil Hans den Traktor zu reparieren versuchte
since John the tractor-ACC to repair tried
'since John tried to repair the tractor'

b. dass der Traktor zu reparieren versucht wurde
that the tractor-NOM to repair tried was
'that the tractor was tried to be repaired'

c. dass die Traktoren zu reparieren versucht wurden
that the tractors to repair tried were
'that the tractors were tried to be fixed'

(Wurmbrand, 2001: 5a, 6a-b)

The matrix verb *versuchte* 'tried' in active voice in (101a) gets passivized in (101b) and (101c) without any morphological change on the embedded infinitive *zu reparieren* 'to repair'. However, passivization of the matrix predicate affects the structural case-checking properties of the embedded predicate as well. Since it can

no longer check the accusative case of its object, the DP *der Traktor* 'the tractor' moves to subject position in (101b). There, it checks its nominative case with matrix T^0 and agrees with it, which can be understood from the *wurde* 'was' vs. *wurden* 'were' alternation of the matrix auxiliary in agreement with the singular or plural DP subjects *der Traktor*/*die Traktoren* 'the traktor(s)' in (101b) and (101c).

In chapters 2 and 3, we analyzed infinitival clauses that act as external arguments of mostly two-place predicates. In this chapter, we focus on subordinated infinitives that are the sole argument of a one-place predicate. Among the typical intransitive predicates that take an infinitival clause as their only argument are adjectival predicates such as *iyi* 'good', *sağlıklı* 'healthy', *doğru* 'right', active-voiced one-place predicates like *kesinleş*- 'to become certain', *yaygınlaş*- 'to become common', and passivized verbal predicates such as *isten*- 'to be wanted', *planlan*- 'to be planned' etc. Thus, restructuring structures and the question of whether Turkish exhibits voice restructuring are relevant for cases with a passivized matrix predicate taking an infinitive as its argument.

As we discussed in chapter 3, if the embedded clause is formed as a GEN-POSS structure, it is NC like in (102a) and (103a) and if not, it is NOC as in (102b) and (103b).

(102) a. [Ali-nin her gün yürü-me-si] iyi.
Ali-GEN every day walk-mA(K)-POSS.3.SG-NOM good
'It is good that Ali is walking every day.'

b. [PRO_{arb} her gün yürü-mek] sağlık için iyi.
every day walk-MA(K)-NOM health for good
'It is good for one's health to walk every day.'

(103) a. [Ali-nin git-me-si] kesinleş-ti.
Ali-GEN leave-mA(K)-POSS.3.SG-NOM become.certain-PST.3.SG
'Ali's leaving became certain.'

b. Şimdilerde [PRO_{arb} Amerika-ya git-mek] kolaylaş-tı.
nowadays America-DAT go-mA(K)-NOM become.easy-PST.3.SG
'Nowadays it has become easier to go to America.'

As predicted based on our discussion of NOC in subject clauses in Turkish, in the absence of a logophoric center, where for example the matrix predicate is intransitive, the embedded PRO subject receives an arbitrary reading in (102b) and (103b). Either as GEN-POSS NC structures or as NOC constructions with a PRO_{arb}, infinitival clauses function as Nominative clausal subjects in (102-103).

As for verbal transitive predicates in active voice that take an infinitival clause as their complement, such as the ones in (104a-b), there can be two different outcomes of the passivization process that the matrix predicate undergoes, given in (105a-b).

(104) a. $Adam_i$ [PRO_i Ali-yi öldür-me-ye] çalış-tı.
man Ali-ACC kill-mA(K)-DAT try-PST.3.SG
'The man tried to kill Ali.'

b. $Adam_i$ [PRO_i Ali-yi öldür-me-yi] planla-dı.
man Ali-ACC kill-mA(K)-ACC plan-PST.3.SG
'The man planned to kill Ali.'

(105) a. Ali (o adam tarafından) öldür-ül-me-ye çalış-ıl-dı.
Ali-NOM that man by kill-PASS-mA(K)-DAT try-PASS-PST.3.SG
'Ali was tried to be killed (by that man).'

b. [Ali-*(nin) öldür-ül-me-*(si)] (o adam tarafından)
Ali-GEN kill-PASS-mA(K)-POSS.3.SG-NOM that man by

planla-n-dı.
plan-PASS-PST.3.SG
'Ali's being killed was planned (by that man).'

In (105a), the matrix verb *çalış-* 'to try' that is in passive voice selects for a voice-matching embedded predicate and the nominalized embedded predicate checks its dative inherent case with the lexical V^0. Unlike the embedded predicate in (105a), the one embedded under the matrix verb *planla-* 'to plan' that is in passive voice in (105b) still bears possessive agreement agreeing with its genitive subject. In this

chapter, we focus on this division and investigate whether the passivized embedded predicate and the nominative subject in (105a) form an embedded infinitival subject clause similar to the one in (105b), or that predicate is a voice-restructuring configuration and thus, does not include an infinitival subject.

There is a limited class of verbs that can form this voice-matching structure when in passive voice. Among these verbs are *iste-* 'to want', *kalkış-* 'to attempt', *uğraş-* 'to try (hard)', *çalış-* 'to try', *başla-* 'to start', and *karar ver-* 'to decide', as shown in (106a-b).

(106) a. Okullar kapat-ıl-mak iste-n-di.
schools-NOM close-PASS-mA(K) want-PASS-PST.3
Lit. Meaning: 'Schools were wanted to be closed.'

b. Okullar kapat-ıl-ma-ya kalkış-/çalış-/uğraş-/başla-/
schools-NOM close-PASS-mA(K)-DAT attempt-try-start-decide

karar ver-il-di.
decide-PASS-PST.3
Lit. Meaning: 'Schools were attempted/tried/started/decided to be closed.'

Note that, two verbs among these, *iste-* 'to want' and *karar ver-* 'to decide' can form a GEN-POSS NC counterpart of these structures as well, as in (107a-b).

(107) a. [Okullar-ın kapat-ıl-ma-sı] iste-n-di.
Schools-GEN close-PASS-mA(K)-POSS.3.SG-NOM want-PASS-PST.3
'It was wanted that the schools are closed.'

b. [Okullar-ın kapat-ıl-ma-sın]-a karar veril-di.
Schools-GEN close-PASS-mA(K)-POSS.3.SG-DAT decide-PASS-PST.3
'It was decided that the schools are to be closed.'

We claim that the configurations with the same structure in (106a-b) are voice-matching restructuring configurations in which certain verbs in the matrix predicate position select for an embedded verb with a special Voice^0, VoiceR, and share their voice features with it (see Wurmbrand and Shimamura, 2017). Consequently, we propose that the infinitives exhibiting obligatory voice-matching are not subject infinitival clauses. Instead, we analyze them as cases of voice restructuring in which

the embedded and the matrix verb phrase form one complex predicate and the nominative DP raises to the matrix subject from the embedded object position.

This chapter is organized as follows: in section 4.2, the main arguments of two prominent theories of Restructuring phenomena, Wurmbrand (2001 et seq.) and Cinque (2006), are summarized. In section 4.3, we present earlier accounts of the Turkish data. In section 4.4, we show how Wurmbrand et al.'s (2017) analysis better accounts for the Turkish voice-matching data. In section 4.5, we propose that four of these six verbs are unambiguous, while the other two are ambiguous voice-restructuring verbs. Thus, the voice-matching configurations obtained when they are passivized are not infinitival subjects. While the ambiguous predicates are embedded Woll phrases (see Wurmbrand 2014), the unambiguous ones are embedded Voice phrases. In section 4.6, we conclude that only nominative clauses that do not exhibit LOM are infinitival subject clauses.

4.2 Two theories of restructuring: Wurmbrand (2001 et seq.) vs. Cinque (2006)

Wurmbrand (2001 et seq.) consistently argues that restructuring is not a single feature that is plus or minus in a given language, but that there are possible degrees of restructuring across languages. Cinque (2006), on the other hand, claims that all restructuring verbs are of the same functional category cross-linguistically and that there is a fixed order of functional layers. In the following sub-sections, we go over their main arguments.

4.2.1 Cinque (2006): All restructuring verbs are functional

In the analysis put forward in Cinque (2006), all restructuring verbs are claimed to be functional. While the presence of transparency effects (e.g., clitic climbing, long

object preposing, etc.) suggests a monoclausal structure, a restructuring verb is inserted under a functional layer in the absence of these effects as well. Furthermore, restructuring verbs appear within a fixed order whether in the absence or presence of transparency effects, which is exemplified by data from Italian in (108).

(108) a. Suole provare a farle/provarle a fare da solo.
Lit. meaning: 'He uses to try to do them by himself.'

b. *Prova a soler farle/solerle fare da solo.
Lit. meaning: 'He tries to use to do them by himself.'

(Cinque, 2006: 83)

Although *volere* 'to want' and some aspectual verbs can have a lexical usage too, the structures in which they take complements as lexical verbs like in (109) and (110) are claimed to be structurally more complex than they look.

(109) Gianni vuole una bicicletta.
'G. wants a bicycle.'

(110) a. Maria ha cominciato il romanzo.
'M. began the novel.'

b. Mario a finito il vino.
'M. finished the wine.'

c. Il concerto sta cominciando/sta finendo/continua.
'The concert is beginning/finishing/continuing.'

(Cinque, 2006: 87-88)

It is proposed that these ambiguous verbs enter a biclausal structure when they are used as lexical verbs and enter a monoclausal structure when they are used as functional restructuring verbs.

As for the passivization observed in restructuring configurations, Cinque (2006) claims that only the verbs generated lower than Voice^0 are passivizable. This claim follows the assumption that a verb that is passivized raises to Voice^0 covertly or overtly and picks up passive morphology. The prediction that comes with this

proposal is that "all the restructuring verbs that cannot passivize should be able to embed a passive, whereas the restructuring verbs that can passivize should not be able to embed a passive".

This prediction is borne out for all the verbs except for the Continuative, Completive, and Inceptive aspect heads in Italian as illustrated in (111a-c).

(111) a. Ne continuo/seguito ad essere affascinato.
from-it (he) continued/kept on being fascinated

b. Gli finirono di essere concessi prestiti.
to-him finished to be granted loans

c. Gli coinciarono/?iniziarono ad esser inflette delle punizioni
to-him began to be inflicted punishments

(Cinque, 2006: 11t-v)

To overcome the problem raised by the well-formedness of passive embeddings under the Continuative, Completive, and Inceptive aspect heads, Cinque (1999) proposes that another Continuative, Completive, and Inceptive aspect head is also present to the left of the Voice head.

To conclude, based on the various surface position combinations of the functional verbs, the (partial) hierarchy of functional layers given in (112) is obtained.

(112) . . . $Asp_{habitual}$ > $Asp_{delayed\ (or\ 'finally')}$ > $Asp_{predispositional}$ > $Asp_{repetitive\ (I)}$ > $Asp_{frequentative\ (I)}$ > $Mod_{volition}$ > $Asp_{celerative\ (I)}$ > $Asp_{terminative}$ > $Asp_{continuative}$ > $Asp_{perfect}$ > $Asp_{retrospective}$ > $Asp_{proximative}$ > $Asp_{durative}$ > $Asp_{progressive}$ > $Asp_{prospective}$ > $Asp_{inceptive}$ > $Mod_{obligation}$ > $Mod_{ability}$ > $Asp_{frustrative/success}$ > $Mod_{permission}$ > $Asp_{conative}$ > $Asp_{completive\ (I)}$ > Voice > $Asp_{celerative\ (II)}$ > $Asp_{inceptive\ (II)}$ > $Asp_{completive\ (II)}$ > $Asp_{repetitive\ (II)}$ > $Asp_{frequentative\ (II)}$ . . .

4.2.2 Wurmbrand (2001 et seq.): Degrees of restructuring

Following the degree-based approach to restructuring put forward in Wurmbrand (2001), Wurmbrand (2015a) proposes that there are two types of restructuring: size

restructuring and voice restructuring. While size restructuring is argued to be available cross-linguistically, voice restructuring is only attested in languages exhibiting Long Object Movement (LOM) constructions. Based on the comparison of data from 24 languages, certain generalizations are reached regarding the restructuring typology, summarized in Table 3.

Table 3. Types of Restructuring Languages

#	Languages	LOM	Clitic Climbing, Scrambling		
			-TNS	FUT	CP
0	Norwegian, other Mainland Scandinavian?	+	*	*	*
	Brazilian Portuguese, English, French	*	*	*	*
1	European Portuguese, Italian, Spanish, Takibakha Bunun, ?Acehnese	+	+	*	*
	Romanian	*	+	*	*
2	Chamorro, German, Isbukun Bunun, Kannada, Mayrinax Atayal; Japanese	+	+	+	*
	Czech, Dutch, Mandarin, Polish, Tagalog; Korean, Serbo-Croatian, Solvenian	*	+	+	*

(Wurmbrand, 2015a: 1)

The next two sub-sections summarize the main points of the mechanisms put forth for voice and size restructuring.

4.2.2.1 Voice restructuring

LOM, the structure that is associated with voice restructuring, refers to constructions in which the embedded object raises to matrix subject position for case assignment as the passivization of the matrix verb affects the capability of accusative case assignment of the embedded Voice^0 as well. In 'default voice' languages like European Portuguese, as given in (113a), embedded Voice^0 is not passivized by the

passivizing of the matrix Voice^0. In voice-matching languages like Chamorro, on the other hand, the embedded predicate passivizes as in (113b).

(113) a. As casas foram acabadas de construir em 1950
the houses were finished to build in 1950
'They finished to build the houses in 1950'

(Cinque, 2002: 7a)

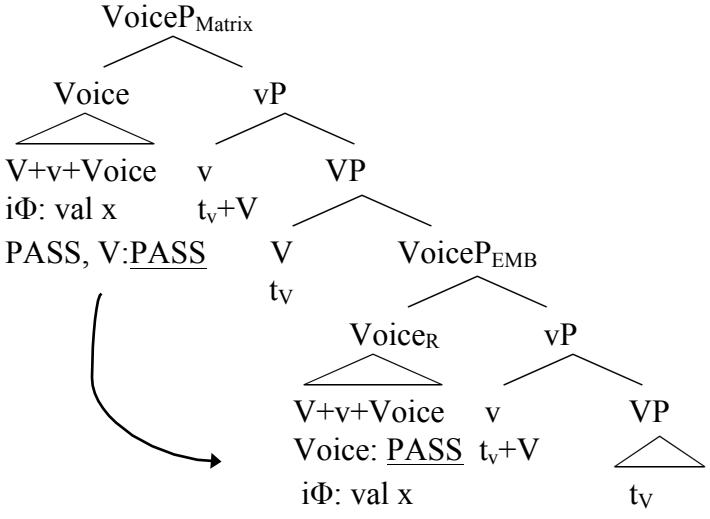
b. *Ch*in*ägi* *d*in*ispensa* *si Carmen*
N.PL.RL.IN.PASS.try NPL.RL.IN.PASS.forgive Carmen

gias Maria.
obl Maria
Lit. Meaning 'Carmen was tried to be forgiven by Maria.'

(Chung, 2004: 31a)

Importantly, whether it is morphologically passivized or not, with the passivization of the matrix predicate, the embedded predicate is unable to assign accusative case in both types exemplified in (113a) and (113b). A specific type of Voice^0, a VoiceR^0, is assumed for voice-restructuring contexts. Only certain matrix verbs select VoiceR^0 inside their VoiceP complements via syntactic selection. For the local selection of VoiceR^0, the embedded infinitival structure cannot involve the Tense layer and thus, it is always [–TNS], cannot bear sentential negation, and V^0-to-v^0-to-Voice^0 incorporation takes place, as illustrated in (114).

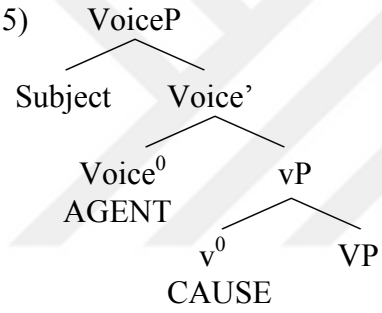
(114)



In (114) the embedded VoiceR^0 is inserted unvalued for voice features and therefore, a feature dependency is established between the embedded VoiceR^0 and the matrix Voice^0. Also, the Φ-features of the embedded VoiceR^0 are valued by the Φ-features of the matrix subject. This results in 'same implicit agent' readings in passive voice-restructuring configurations.

As for the structure inside the VoiceP, as illustrated in (115), following the recent works arguing for a split voice domain (see, among others, Alexiadou et al., 2006; Bowers, 2002; Folli and Harley, 2005; Harley, 2009, 2017; Marantz, 2008; Pylkkanen, 2008), it is assumed that Voice^0 introduces an external argument while little v^0 encodes causation and can be a verbalizer.

(115)



In addition to split voice domain, a downward Agree mechanism (i.e. Reverse Agree) is adopted as formulated in (116).

(116) A feature F: __ on α is valued by a feature F: val on β, iff

i. β c-commands α AND

ii. α is accessible to β (i.e. not spelled-out)

iii. α does not value {a feature of β/a feature F of β}.

To summarize, restructuring is claimed to involve the Voice domain, but the head of this VoiceP is of a specific kind, namely VoiceR^0 that is defective in its voice value and thus, requires a voice dependency relation with the matrix Voice^0. In this system, the availability of LOM and voice-restructuring configurations in a given language is tied to the presence versus absence of VoiceR^0 in the lexicon and

certain matrix verbs being lexically encoded to select a VoiceP headed by a VoiceR^0. The main characteristics of these configurations are: i) same-implicit agent reading, ii) possibility of LOM, and iii) defective embedded VoiceR^0.

4.2.2.2 Size restructuring

Wurmbrand (2015a) claims that size restructuring occurs universally and applies in all embedded complement clauses where the embedded structure is not a full-CP. Type 1 languages exhibit operations that signal clausal transparency such as clitic climbing or scrambling out of a tenseless infinitive, while type 2 languages allow these only out of infinitival complements with a future context. The following pair, given in (117), illustrates the difference between a tenseless versus a future-oriented infinitive.

(117) a. Today John has tried to come here (*tomorrow).

b. Today John has decided to come here tomorrow.

In a tenseless infinitive, the embedded event has to take place simultaneously with the matrix event as in (117a). On the other hand, the events take place in sequence, not simultaneously, when the infinitival complement clause has future context like in (117b).

Size restructuring is a phenomenon related to complement clauses only and takes place independently from voice-sharing infinitival constructions that exhibit LOM. Thus, we will not go into the details of this phenomenon or form an analysis of Turkish infinitival complement clauses in this chapter, although it is theoretically plausible to analyze them from the perspective of size restructuring.

4.3 Earlier accounts of Turkish double passives

Among the earlier studies on passive voice matching infinitives are Kornfilt (1996) and Keskin (2009). While Kornfilt (1996) analyzes them as a specific kind of Exceptional Government, Keskin (2009) uses them as a 'double-passive' test in order to show that these verbs form restructuring both in active and passive voice, a fact that cannot be accounted for by the analysis given in Wurmbrand (2001). We summarize the main points of these accounts in the next two sub-sections.

4.3.1 Kornfilt (1996)

Kornfilt (1996) labels voice-matching passive infinitives as Infinitival Double Passives (IDP). The constructions formed by only three of these control verbs, *çalış-* 'to try', *iste-* 'to want', and başla- 'to begin', are analyzed, given in (118a-c).

(118) a. Üniversite-ler polis tarafından kuşat-ıl-mak iste-n-di.
university-PL police by surround-PASS-mA(K). want-PASS-PST
'The universities were wanted to be surrounded by the police.'

b. Üniversite-ler polis tarafından kuşat-ıl-mağ-a[6]
university-PL. police by surround-PASS-mA(K)-DAT

başla-n-dı.
begin-PASS-PST
'The universities were begun to be surrounded by the police.'

c. Üniversite-ler polis tarafından kuşat-ıl-mağ-a
university-PL. police by surround-PASS-mA(K)-DAT

çalış-ıl-dı.
try-PASS-PST
'The universities were attempted to be surrounded by the police.'

(Kornfilt, 1996: 1-3)

Kornfilt (1996) compares these with Exceptional Case Marking (ECM) constructions in active voice such as (119a) and in passive like in (119b).

[6] '-mAğA' here is an older spelling of what is now written as '-mAyA'.

(119) a. Hasan [biz-i üniversite-yi kuşat-tı] san-ıyor.
H. we-Acc. university-Acc. surround-past believe-pres.progr.-1pl.
'Hasan believes us to have surrounded the university.'

b. Üniversite-ler$_i$ [t_i t_i kuşat-ıl-dı] san-ıl-ıyor.
university-pl. surround-Pass-past believe-Pass-pres.progr.
'The universities are believed have been surrounded.'

(Kornfilt, 1996: 12, 14)

She claims that IDPs are cases of Exceptional Government without Exceptional Case Marking instead of Reanalysis (i.e. Restructuring). That is, unlike (119a) the embedded subject does not get accusative case from the IDP matrix verb in (118a-c) because the complement of an IDP verb is nominal and thus, the matrix verb discharges its case on the infinitive itself. On the other hand, the embedded predicate of an ECM is verbal and the case of the matrix predicate is discharged on the embedded subject; thus, it bears accusative case.

To conclude, it is proposed that these three 'IDP' verbs are results of a type of transparency trigger in which a CP dominating a nominal IP becomes transparent. That is, differently than ECM constructions, the matrix verb is claimed to assign its inherent case on the embedded infinitival clause since it is nominal.

4.3.2 Keskin (2009)

Keskin (2009) argues that the structure in (120a) is restructuring, basing his argumentation on the 'double-passive' test he applies to this sentence, given in (120b). It is claimed that the double-passive version would be ungrammatical without GEN-POSS agreement if (120a) were not a restructuring configuration, as is the case with the verb *planla-* 'to plan', as we saw previously in (105b).

(120) a. Mafya adam-ı öldür-me-ye çok çalış-tı.
mafia-NOM man-ACC kill-mA(K)-DAT a lot try-PST.3.SG
'The mafia tried a lot to kill the man.'

b. Adam (mafya tarafından) öldür-ül-me-ye çalış-ıl-dı.
man-NOM mafia by kill-PASS-mA(K)-DAT try-PASS-PST.3.SG
'The man has been tried to be killed by the mafia a lot.'

(Keskin, 2009: 44a, 47)

The infinitival structure in (120a) is labeled as a 'high infinitive' and the dative infinitive is argued to be above vP, which is tested by the availability of adverb modification in between. On the other hand, in the analysis we put forward here, the inherently case-marked subordinations like the one in (120a) are taken to be inside the embedded VP, receiving their dative inherent case from embedded V^0. An intervening adverb yields ungrammaticality.

To conclude, the main claim of the analysis Keskin (2009) puts forward is that the lexical restructuring mechanism proposed in Wurmbrand (2001), where the embedded infinitive is a bare VP and thus cannot not be in passive voice, cannot account for Turkish restructuring data. Both the control structure in active voice in (120a) and the passivized version in (120b) are claimed to be examples of restructuring.

4.4 Passive voice-matching infinitives in Turkish

In section 4.1, we stated that only a handful of verbs in Turkish, most commonly *iste-* 'to want', *kalkış-* 'to attempt', *uğraş-* 'to try (hard)', *çalış-* 'to try', *başla-* 'to start', and *karar ver-* 'to decide' form voice-matching infinitives that are not GEN-POSS NC or NOC constructions when they are passivized. As the system proposed by Cinque (2006) does not allow for a double passive configuration with both predicates in passive voice, it clearly cannot account for the mechanism involved in Turkish passive voice matching infinitives covered here. While as we saw in (106a-b) and (107a-b), *karar ver-* 'to decide' and *iste-* 'to want' can form both a GEN-

POSS NC structure and a passive voice-matching configuration, the other four verbs, *başla*- 'to start', *çalış*- 'to try', *uğraş*- 'to try (hard), and *kalkış*- 'to attempt', can only form the passive voice-matching counterpart. This makes the first group of voice-matching predicates ambiguous restructuring verbs, which makes the configurations optional cases of voice restructuring as opposed to the others that are obligatory. In the next two sub-sections, we go over their properties and discuss which of those can be accounted for by the analysis given in Wurmbrand (2015b) and Wurmbrand and Shimamura (2017).

4.4.1 Optional configurations of passive voice restructuring

In (121) below, *iste*- 'to want' is used in a subject control structure in (121a), in a passive voice matching context in (121b) and in a structure with a GEN-POSS NC embedded clause in (121c).

(121) a. Sen_i [PRO_i iş-ten patron tarafından kov-ul-ma]-yı
you-NOM work-ABL boss by fire-PASS-mA(K)-ACC

kendin iste-di-n ki pro_i tazminat al-abil-esin.
yourself want-PST-2.SG that compensation receive-yAbil-OPT.2.SG
'You yourself wanted to be fired by the boss so that you can receive compensation.'

b. Sen patron tarafından iş-ten kov-ul-mak (*herkesçe)
you-NOM boss by work-ABL fire-PASS-mA(K) by.everyone

iste-n-din.
want-PASS-PST.2.SG
Lit. Meaning: 'You were wanted to be fired by the boss.'

c. [Sen-in patron tarafından iş-ten kov-ul-ma-n]
you-GEN boss by work-ABL fire-PASS-mA(K)-POSS.2.SG-NOM

herkesçe iste-n-di.
by.everyone want-PASS-PST.3.SG
'For you to be fired by the boss was wanted by everyone.'

Firstly, differently than other contexts, in the passive voice restructuring configuration in (121b), it is not licit to modify the two verbs with the two separate by-phrases *herkesçe* 'by everyone' and *patron tarafından* 'by the boss', which would indicate two separate agents. Under the view that the embedded part comes with a defective VoiceR^0 and receives the same/identical agent reading with the matrix verb via downward phi-feature sharing, this is in accordance with what is expected from a restructuring context. On the other hand, separate agentive adjunctions like *kendin* 'yourself' in (121a) and *herkesçe* 'by everyone' in (121c) do not yield ungrammaticality when they appear in addition to the other by-phrase adjunct *patron tarafından* 'by the boss'.

Secondly, the matrix predicate bears the second person agreement marker in (121b) agreeing with *sen* 'you', which suggests that it raises from the embedded object position to the matrix subject position and this is a LOM configuration. Note that this is different than (121a), where *sen* 'you' is again the matrix subject, but it is base-generated there since the embedded subject position is filled with a PRO co-indexed with it. However, in (121c) the matrix predicate bears third person agreement, which shows that the whole embedded GEN-POSS NC clause is in the matrix subject position.

To sum up, the same implicit agent reading and the LOM configuration observed in (121b), but not in (121a) and (121c) are the basic properties that make it a passive voice-restructuring configuration.

Another ambiguous passive restructuring predicate, *karar ver-* 'to decide' can form a GEN-POSS NC subject clause as well and the passive voice-restructuring version exhibits the same properties, illustrated in (122a-b).

(122) a. Sen [(patron tarafından) kov-ul-ma-ya (*herkesçe)
you-NOM boss by fire-PASS-mA(K)-DAT by.everyone

karar ver-il-din].
decide-PASS-PST.2.SG
Lit. Meaning: ‘You were wanted to be fired (by the boss).’

b. [Sen-in patron tarafından kov-ul-ma-n]-a
you-GEN boss by fire-PASS-mA(K)-POSS.2.SG-DAT

herkesçe karar ver-il-di.
by.everyone decide-PASS-PST.3.SG
Lit. Meaning: ‘It was decided by everyone that you were to be fired by boss.’

Likewise, as it exhibits LOM and yields a same-agent reading in (122a), we analyze it to be a voice-restructuring configuration. In contrast, the GEN-POSS NC in (122b) is a clause on its own. While the two predicates form one complex predicate in (122a) and take the nominative *sen* ‘you’ as their subject, in (122b) two separate agentive phrases are allowed to modify two verbs as it is a biclausal structure.

Before we move on to their syntactic representations, we need to go over one important property of these configurations that the VoiceP complementation approach of Wumbrand et al.’s (2017) analysis cannot account for. It is the fact that these embedded predicates can be modified by a temporal adverb other than that of the matrix predicate, as shown in (123a-b) below.

(123) a. Geçen yıl bazı okullar 2021-de kapat-ıl-ma-ya
last year some schools-NOM 2021-LOC close-PASS-mA(K)-DAT

karar ver-il-di.
decide-PASS-PST.3
Lit. Meaning: ‘Last year, some schools were decided to be closed in 2021.’

b. Geçen yıl bazı okullar 2021-de kapat-ıl-mak
last year some schools-NOM 2021-LOC close-PASS-mA(K)

iste-n-di.
want-PASS-PST.3
Lit. Meaning: ‘Last year, some schools were wanted to be closed in 2021.’

The availability of two separate time adverbials modifying the two events shows that the embedded event is realized at a time later than the matrix event. This suggests that the embedded restructuring clause is in fact bigger than a VoiceP. Thus, we

claim that contra Wurmbrand et al. (2017), ambiguous restructuring verbs embed another functional layer above VoiceP.

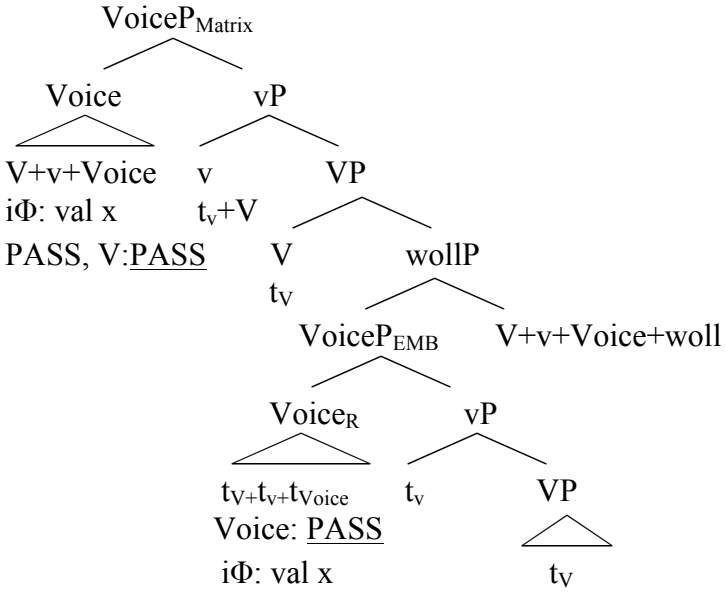
Wurmbrand (2014) puts forward a classification of infinitives in English into three groups based on their temporal composition. These are: tenseless future infinitives as wollPs, propositional attitude infinitives as TPs, and simultaneous tenseless infinitives as VPs.[7] Following this classification, given the time-ordering between the events in the two types, ambiguous restructuring infinitives would be wollPs, where woll is claimed to contribute to a modal force yielding posteriority.[8] On the other hand, unambiguous voice restructuring infinitives, where the two events are realized simultaneously, are VoicePs.

In fact, Wurmbrand et al. (2017) crosses out the option of having a Tense layer because T^0 would intervene in the local selection of the embedded $VoiceR^0$ by the matrix verb. However, under the view that future irrealis in infinitives is a different modality type rather than Tense, two separate time adverbials placing the embedded event at a time later than the matrix event would not be a problem for the Voice restructuring analysis of the two ambiguous verbs *karar ver-* 'to decide' and *iste-* 'to want'. In this case, the embedded verb must be further incorporated into $Woll^0$ as well, as illustrated in (124).

[7] Wurmbrand (2014) still assumes bare VP-complementation for restructuring, which is modified to VoiceP in later iterations of the theory.

[8] As Dr. Elena Guerzoni was the one who suggested taking future in infinitives as a modality during the BLC talk I gave in April 2018 at Boğaziçi University, I would like to thank her very much for her contribution.

(124)



As opposed to the structure in (104), where the embedded Voice receives its voice information from the matrix Voice, in a structure where we have a GEN-POSS NC in the subject clause, the two events – and by extension the two Voice heads – are independent. As such, the matrix Voice can be passive while the embedded is active, as in (125).

(125) [Hükütmet-in okullar-ı kapat-ma-sı] herkesçe
government-GEN schools-ACC close-mA(K)-POSS.3.SG-NOM by.everyone

protesto ed-il-di.
protest-PASS-PST.3.SG
'The government's closing the schools was protested by everyone.'

In the next sub-section, we go over passive voice restructuring configurations formed by unambiguous restructuring predicates.

4.4.2 Obligatory Configurations of Passive Voice Restructuring

The verbs *çalış-* 'to try', *uğraş-* 'to try hard', *başla-* 'to start', and *kalkış-* 'to attempt' form LOM constructions and yield the 'same/identical agent' reading expected from voice restructuring configurations. In addition, when the passive restructuring configuration is formed by these unambiguous verbs that cannot form a GEN-POSS

NC counterpart, we observe that they lack a Tense or a woll layer and are bare VoicePs, as proposed in Wurmbrand et al. (2017). The first evidence suggesting this comes from the ungrammaticality of the sentences where the two events denoted by the two predicates cannot be modified by two separate time adverbials, shown in (126a-c).

(126) a. Sen dün (*bugün) kov-ul-ma-ya çalış-ıl-dın.
you-NOM yesterday today fire-PASS-mA(K)-DAT try-PASS-PST.2.SG
Lit. Meaning: 'Yesterday you were tried to be fired (today).'

b. Sen dün (*bugün) kurtar-ıl-ma-ya uğraş-ıl-dın.
you-NOM yesterday today rescue-PASS-mA(K)-DAT try-PASS-PST.2.SG
Lit. Meaning: 'Yesterday you were tried (hard) to be rescued (today).'

c. Sen dün (*bugün) kaçır-ıl-ma-ya
you-NOM yesterday today abduct-PASS-mA(K)-DAT

kalkış-ıl-dın.
attempt-PASS- PST.2.SG
Lit. Meaning: 'Yesterday you were attempted to be abducted (today).'

As the two events must happen simultaneously in (126a-c), option of two different time adverbials is not available.

Secondly, Wurmbrand (2015b) states that these structures can possibly take embedded negation, but only forming constituent negation, not sentential, since they lack a Tense layer and sentential negation is associated with the presence of a Tense layer. We can test this by forming tag questions as in (127a). Note that with simplex sentences with sentential negation, exemplified in (127b), tag questions are formed using the positive polarity form of the predicate.

(127) a. Ödevler artık e-posta üzerinden al-ın-ma-ma-ya
assignments from now on e-mail via receive-PASS-NEG-mA(K)-DAT

başla-n-dı diye biliyorum, yoksa başla-n-*(ma)-dı mı?
start-PASS-PST.3 COMP. I.know or else start-PASS-NEG Q
'To my knowledge, the assignments have started not to be accepted via e-mail, haven't they?'

b. Ali gel-me-di diye biliyorum, yoksa gel-di mi?
Ali-NOM come-NEG-PST.3.SG COMP. I.know or else come-PST.3.SG Q
'To my knowledge, Ali came, didn't he?

In (127b) the tag part is formed in the opposite polarity with the verb in the first half. The fact that the tag part in (127a) is formed with negative polarity shows that the passive restructuring construction is not sententially negated, proving that embedded negation forms only constituent-level negation in these constructions.[9]

To summarize, we have shown that *çalış-* 'to try', *uğraş-* 'to try (hard)', *kalkış-* 'to attempt', and *başla-* 'to start' form obligatorily passive restructuring configurations that are [-TNS] in accordance with the mechanism proposed by Wurmbrand (2015b). On the other hand, the ones formed by *iste-* 'to want' and *karar ver-* 'to decide' are optional and [+FUT], involving another functional layer, WollP, above VoiceP. Contra Wurmbrand et al. (2017), this does not block the local selection of VoiceR.

4.5 Subjecthood of infinitives embedded under a one-place predicate

In this chapter, we analyzed complex sentences with a one-place predicate that can be an adjective, or a passive or active-voiced verb. Among these, we focused on the ones formed via the passivization of a two-place predicate and identified two separate patterns as in (105), repeated here in (128). Next, we questioned the subjecthood of infinitives like in (128a) and argued that unlike the NC examples like (128b) or other NOC examples, these voice-matching constructions do not include an infinitival subject clause.

(128) a. Ali (o adam tarafından) öldür-ül-me-ye çalış-ıl-dı.
Ali-NOM that man by kill-PASS-mA(K)-DAT try-PASS-PST.3.SG
'Ali was tried to be killed (by that man).'

[9] We should note that embedded negation in non-restructuring configurations like (122b) would only result in constituent negation as well.

b. [Ali-*(nin) öldür-ül-me-*(si)] (o adam tarafından)
Ali-GEN kill-PASS-mA(K)-POSS.3.SG-NOM that man by

planla-n-dı.
plan-PASS-PST.3.SG
'Ali's being killed was planned (by that man).'

Instead, these are passive voice restructuring configurations and they provide data partially supporting the analysis put forward in Wurmbrand (2015b).

We propose that the passive voice-matching infinitival configurations that are built with *başla*- 'to start', *çalış*- 'to try', uğraş- 'to try (hard), and *kalkış*- 'to attempt' as the matrix verb provide data supporting Wurmbrand et al.'s (2017) analysis of voice restructuring. Since a restructuring configuration behaves as if it is one clause, the infinitives that are part of a voice-restructuring configuration cannot be clausal subjects.

As for the infinitival clauses that do not exhibit this passive voice matching, and instead come with a genitive embedded subject, there is one more dichotomy to illustrate based on our theoretical assumptions stated in Chapter 1. When a transitive predicate is passivized, the remaining nominalized clause argument appears either in structural nominative or in another inherent case like dative or ablative, as exemplified in (129a-b).

(129) a. [Başkan-ın istifa et-me-si] günlerce
president-GEN resign-mA(K)-POSS.3.SG-NOM for.days

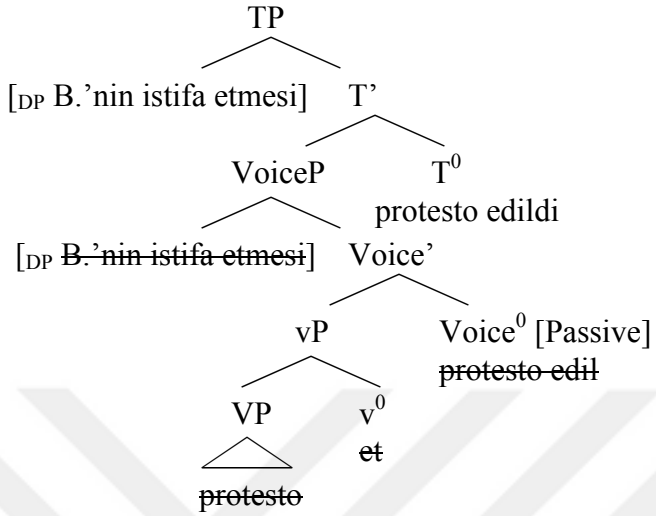
protesto ed-il-di.
protest-PASS.3.SG
'The president's resigning was protested for days.'

b. [Başkan-ın istifa et-me-sin]-e çok
president-GEN resign-mA(K)-POSS.3.SG-DAT a.lot

şaşır-ıl-dı.
be.surprised-PASS-PST.3.SG
Lit. Meaning: 'It was surprised that the president resigned.'

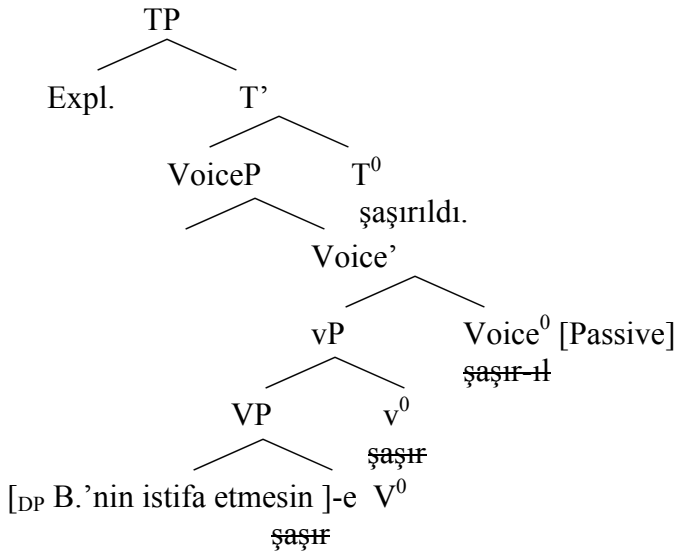
Since the matrix verb *protesto edil-* 'to be protested' cannot check the accusative case of its object, the infinitival clause in (129a) agrees with matrix T^0 and appears in structural nominative. This makes it a clausal subject, as shown in (130).

(130)



On the other hand, the inherent dative case of the lexical V^0 is intact in (129b) and hence, there is no motivation for the non-finite clause to check Nominative case with the matrix T^0. In such cases, the subject position is assumed to be filled with a covert expletive.[10] As a result, the infinitival clause in (129b) is not the subject, as in (131).

(131)



[10] There is a necessity for an expletive because we assume EPP for Turkish. However, this assumption does not affect the analyses put forward in this thesis. We should note that Öztürk (2004, 2005a), Şener (2010), İşsever and Gračanin-Yüksek (2010), and Kamali (2011) argue that EPP does not apply in Turkish.

4.6 Conclusion and implications

To conclude, when the matrix predicate is in passive voice, among the possible non-finite embeddings we analyzed in this chapter, only those that are in nominative case and do not exhibit LOM are true subject infinitives. Also, the wollP-level voice restructuring observed with the two ambiguous restructuring verbs *iste-* 'to want' and *karar ver-* 'to decide', where the local selection of the embedded VoiceR is not blocked, might signal a typological division between head-final and other languages. The V-to-v-to-woll movement argued to take place in Turkish can allow for WollP-level voice restructuring in other head-final languages besides Turkish. In the next chapter, we summarize the claims made in this study and conclude.

CHAPTER 5

CONCLUSION

In this thesis, we focused on the structure of infinitival clauses in Turkish that are formed with the nominalizer -mA(K). We analyzed three different sets of data each of which is exemplified in (1) repeated below in (132).

(132) a. [Ali-nin gel-me/*-diğ-(s)i] ben-i şaşırt-tı.
Ali-GEN come-mA(K)/DIK-POSS.3.SG-NOM I-ACC surprise-PST.3.SG
'That Ali came surprised me.'

b. [PRO_i ev-e dön-mek] ben_i-i mutlu et-ti.
home-DAT come.back-mA(K)-NOM I-ACC happy-make-PST.3.SG
'Coming back home made me happy.'

c. Ali öldür-ül-me-ye çalış-ıl-dı.
Ali-NOM kill-PASS-mA(K)-DAT try-PASS-PST.3.SG
Lit. Meaning: 'Ali was tried to be killed.'

In chapter 2, we focused on structures parallel to (132a) and proposed an analysis regarding the question why only -mA(K) and -(y)Iş clauses are promoted to subject position of transitive predicates such as *şaşırt-* 'to surprise'. Making use of the theta hierarchy Pesetsky (1995) proposes, we claimed that -DIK and -(y)AcAK nominalizations are not compatible with the causer role that is linked to the subject argument and thus, they appear only as complements of unaccusative predicates such as aklına *gel-* 'to occur to one's mind' or *kesin* 'certain' bearing the subject matter role, as in (133a-b).

(133) a. [Ali-nin git-tiğ/-eceğ-i] akl-ım-a
Ali-GEN leave-DIK/(y)AcAK-POSS.3.SG-NOM mind-my-DAT

gel-me-di.
come-NEG-PST.3.SG
'It did not occur to me that Ali left/will leave.'

b. [Ali-nin git-tiğ/-eceğ-i] kesin.
Ali-GEN leave-DIK/(y)AcAK-POSS.3.SG-NOM certain
'It is certain that Ali left/will leave.'

Thus, we claimed that the theta hierarchy and the compatibility between certain roles and nominalizers is the mechanism behind this dichotomy.

In chapter 3, we analyzed control constructions similar to the one in (132b) and proposed that as the direct object of the psych-verb *mutlu et-* 'to make someone happy', being the logophoric center of the event is what enables the direct object *ben* 'I' to control the embedded PRO here. Expectedly, in the absence of a logophoric center where the matrix predicate is a one-place adjectival predicate like in (134a), the embedded PRO receives arbitrary reading and if the matrix predicate is a causative verb that is not a psych-predicate as in (134b), the structure becomes no-control.

(134) a. [PRO_{arb} sebze ye-mek] sağlıklı-dır.
vegetable eat-mA(K)-NOM healthy-DIr
'Eating vegetables is healthy.'

b. [pro_i çok konuş-ma-sı] $Ayşe_i$-yi işten kov-dur-du.
a.lot talk-mA(K)-POSS.3.SG-NOM Ayşe-ACC fire-CAUS-PST.3.SG
'(Her) talking a lot got Ayşe fired.'

As such, we proposed that contra Boeckx et al. (2010) the control type observed in subject clauses is not movement-driven OC, but logophoric center-based NOC. In addition, unlike the English case discussed in Landau (2013), topicality does not play a role in establishing this relationship in Turkish. The overtly marked sentence topic only provides the contextually most salient referent for the pronoun that can be dropped in Turkish. We stated that there could be a typological division in terms of how NOC in subject clauses is built between pro-drop languages like Turkish and non-pro-drop languages like English.

Lastly, we examined passive voice structures similar to the one in (132c) in chapter 4 and claimed that infinitives that undergo passivization in synch with the matrix predicate are not clausal subjects. Rather, these are voice-restructuring

constructions where the whole sentence exhibits a monoclausal behavior such as LOM shown in (135) where the embedded object moves up to the matrix subject position and agrees with the matrix T^0 for case checking.

(135) Ben kaçır-ıl-ma-ya kalkış-ıl-dı-m.
I-NOM kidnap-PASS-mA(K)-DAT attempt-PASS-PST-1.SG
Lit. Meaning: 'I was attempted to be kidnapped.'

Further, we claimed that Turkish verbs that can build these structures can be divided into two groups. The first group of verbs builds voice restructuring constructions where the two events are realized simultaneously as in (135) above. On the other hand, the second group of verbs builds voice restructuring configurations in which the embedded event is realized at a time later than the matrix event as in (136).

(136) Ben öldür-ül-mek iste-n-di-m.
I-NOM kill-PASS-mA(K) want-PASS-PST-1.SG
Lit. Meaning: 'I wanted to be killed.'

Following the tense/aspect-based classification of infinitives proposed in Wurmbrand (2014), we proposed that the first group of constructions is tenseless infinitives and thus bare VoicePs while the ones in the second group are wollPs. This adds new data to voice restructuring phenomena discussed in (Wurmbrand et al. 2017) and necessitates a modification in the classification proposed there adding a new typological division to the system.

To conclude, regarding the structure of Turkish infinitival clauses formed with the infinitival nominalizer -mA(K) we analyzed three different data sets. If further data comes up and the theories on which we based our arguments are modified in a way that affects the claims made in this thesis, a need for further studies would emerge. Also, constructions build with the predicates *-mAK zorunda ol-* 'to be have to', and *-mAK lazım* 'should' which can also be followed by a

possessive agreement like *-mAsı lazım* ‘s/he should’ have not been analyzed. These could be incorporated into an analysis of -mA(K) clauses in a future study.

For further studies, the typological distinctions suggested here could be checked within a bigger data pool including data from other languages. Also, the infinitival embedding patterns analyzed here could be examined across other Turkic languages which do not have the nominalizer -mA(K) but only -(y)Iş. Lastly, only voice restructuring configurations are analyzed here. As such, a further study could include size restructuring complement clauses as well.

REFERENCES

Alexiadou, A., Anagnostopoulou, E., & Schäfer, F. (2006). The properties of anticausatives cross-linguistically. In M. Frascarelli (Ed.), *Phases of interpretation* (pp. 187- 211). Berlin: Mouton de Gruyter.

Aydın, Ö. (2005). Eklenti tümceciklerinde öznenin durumu. In M. Sarı & H. Nas (Eds.), *XIX. Ulusal Dilbilim Kurultayı Bildirileri* (pp. 344-360). Şanlı Urfa: Harran Üniversitesi Yayınları.

Aygen, G. (2000). *Is there ECM raising in Turkish?* Unpublished manuscript, Department of Linguistics, Harvard University, Cambridge, MA.

Aygen, G. (2002). *Finiteness, case and clausal architecture* (Unpublished PhD thesis). Harvard University, Cambridge, MA.

Boeckx, C., & Hornstein, N. (2007). On (non-)obligatory control. In W. D. Davies & S. Dubinsky (Eds.), *New horizons in the analysis of control and raising* (pp. 251-262). Dordrecht: Springer.

Boeckx, C., Hornstein, N., & Nunes, J. (2010). *Control as movement*. New York, NY: Cambridge University Press.

Bouchard, D. (1982). *On the content of empty categories.* Dordrecht: Foris.

Bowers, J. (2002). Transitivity. *Linguistic Inquiry, 33*(2), 183-224.

Chomsky, N. (1981). *Lectures on government and binding.* Dordrecht: Foris.

Chomsky, N. (2000). Minimalist inquiries: The framework. In R. Martin, D. Michaels & J. Uriagereka (Eds.), *Step by step: Essays on minimalist syntax in honor of Howard Lasnik* (pp. 89-155). Cambridge, MA: MIT Press.

Chomsky, N. (2001). Derivation by phase. In M. Kenstowicz (Ed.), *Ken Hale: A life in language* (pp. 1-52). Cambridge, MA: MIT Press.

Chomsky, N. (2004). Beyond explanatory adequacy. In A. Belletti (Ed.), *Structures and beyond* (pp. 104-131). Oxford: Oxford University Press.

Chung, S. (2004). Restructuring and verb-initial order in Chamorro. *Syntax, 7*(3), 199-233.

Cinque, E. (1999). *Adverbs and functional heads: A cross-linguistic perspective.* New York, NY: Oxford University Press.

Cinque, E. (2006). *Restructuring and functional heads: The cartography of syntactic structures.* New York, NY: Oxford University Press.

Erguvanlı-Taylan, E. (1998). What determines the choice of nominalizer in Turkish nominalized complement clauses? In B. Caron (Ed.), *Proceedings of the XVIth International Congress of Linguists* [CD ROM]. Oxford: Pergamon.

Folli, R., & Harley, H. (2005). Flavours of v: consuming results in Italian and English. In P. Kempchinsky & R. Slabakova (Eds.), *Aspectual inquiries* (pp. 95-120). Dordrecht: Springer.

Göksu, D. (2017). Typology of nominalizations formed with {-DIK}, {-mA}, {-(y)Iş}, and {-Im} in Turkish. *IULC Working Papers, 18*(2).

Harley, H. (2009). The morphology of nominalizations and the syntax of vP. In A. Giannakidou & M. Rathert (Eds.), *Quantification, definiteness and nominalization* (pp. 320- 342). Oxford: Oxford University Press.

Harley, H. (2017). The "bundling" hypothesis and the disparate functions of little v. In R. D'Alessandro, I. Franco & A. J. Gallego (Eds.), *The verbal domain* (pp. 3-28). Oxford: Oxford University Press.

Hornstein, N. (1999). Movement and control. *Linguistic Inquiry 30*(1), 69-96.

Hornstein, N. (2001). *Move! A minimalist theory of construal*. Oxford: Blackwell.

Hornstein, N. (2003). On control. In R. Hendrick (Ed.), *Minimalist syntax* (pp. 6-81). Oxford: Blackwell.

Hornstein, N. (2007). Pronouns in a minimalist setting. In N. Corver & J. Nunes (Eds.), *The copy theory of movement* (pp. 351-385). Amsterdam: John Benjamins.

İşsever, S., & Gračanin-Yüksek, M. (2010, May). *Türkçede çıplak nesneler ve taşıma.* Paper presented at 24. Ulusal Dilbilim Konferansı, Orta Doğu Teknik Üniversitesi, Ankara.

Kamali, B. (2011). *Topics at the PF interface of Turkish* (Unpublished PhD thesis). Harvard University, Cambridge, Massachusetts.

Keskin, C. (2009). *Subject agreement-dependency of accusative case in Turkish or Jump-starting grammatical machinery.* Utrecht: LOT.

Kornfilt, J. (1984). *Case marking, agreement and empty categories in Turkish* (Unpublished PhD thesis). Harvard University, Cambridge, Massachusetts.

Kornfilt, J. (1985). Infinitival relative clauses and complementation in Turkish. *CLS Proceedings, 21*(1), 221-235.

Kornfilt, J. (1987). Turkish and the Turkic languages. In B. Comrie (Ed.), *The World's major languages* (pp. 619-45). New York, NY: Oxford University Press.

Kornfilt, J. (1996). NP-movement and restructuring. In R. Freidin (Ed.), *Current issues in comparative grammar* (pp. 121-47). Dordrecht: Kluwer.

Kornfilt, J. (2001). Functional projections and their subjects in Turkish. In E. Erguvanlı-Taylan (Ed.), *The verb in Turkish* (pp. 183-213). Amsterdam: John Benjamins.

Landau, I. (2000). *Elements of control: Structure and meaning in infinitival constructions.* Dordrecht: Kluwer.

Landau, I. (2013). *Control in generative grammar: A research companion.* New York, NY: Cambridge University Press.

Longobardi, G. (1994). Reference and proper names: A theory of N-movement in syntax and logical form. *Linguistic Inquiry, 25*(4), 609–665.

Marantz, A. (1991). Case and licensing in German Westphal. In B. Ao & H. Chae (Eds.), *Proceedings of ESCOL '91* (pp. 234-53). Ithaca, NY: Cornell Linguistics Club.

Marantz, A. (2008). Phases and words. In C. Sook-Hee, K. Yang-Soon, K. Sung-Hun, & A. Marantz (Eds.), *Phases in the theory of grammar* (pp. 191-220). Seoul: Dong In Publisher.

Miyagawa, S. (1993). Case-checking and minimal link condition. *MIT Working Papers in Linguistics*, *19*, 213-54.

Oded, İ. (2006). *Control in Turkish* (Unpublished master's thesis). Boğaziçi University, Istanbul.

Oded, İ., & Öztürk, B. (2008). Türkçe'de taşıma denetim altında mı? In Y. Çotuksöken, Y. Yalçın & N. Yalçın (Eds.), *20. Ulusal Dilbilim Kurultayı Bildirileri* (pp. 255-263). İstanbul: Maltepe Üniversitesi Yayınları.

Özsoy, A. S. (1987). Null subject parameter and Turkish. In H. Boeschoten & L. Th. Verhoeven (Eds.), *Studies on Modern Turkish* (pp. 82-90). Tilburg: Tilburg University Press.

Özsoy, A. S. (1996). *Türkçe konuşalım* (Unpublished master's thesis). Boğaziçi University, Istanbul.

Öztürk, B. (2004). *Case, referentiality and phrase structure* (Unpublished PhD thesis). Harvard University, Cambridge, Massachusetts.

Öztürk, B. (2005a) *Case, referentiality and phrase structure.* Amsterdam: John Benjamins.

Öztürk, B. (2005b). *Accusative subject in Turkish.* Paper presented at Mediterranean Syntax Meeting, University of Rhodes, Rhodes.

Pesetsky, D. (1995). *Zero syntax*. Cambridge, MA: MIT Press.

Pylkkänen, L. (2008). *Introducing arguments*. Cambridge, MA: MIT Press.

Reinhart, T. (2002). The theta system – an overview. *Theoretical Linguistics, 28*(3), 229-290.

Şener, S. (2010). *(Non-)Peripheral matters in Turkish syntax* (Unpublished PhD thesis). University of Connecticut, Storrs, Connecticut.

Tonyalı, N. (2015). *Non-structural datives in Turkish* (Unpublished master's thesis). Boğaziçi University, Istanbul.

Underhill, R. (1976). *Turkish Grammar.* Cambridge, MA: MIT Press

van Schaaik, G. (1999). The order of nominalizations in Turkish. *Turkic languages, 3*, 87-120.

Williams, E. (1992). Adjunct Control. In R. Larson, S. Iatridou, U. Lahiri & Higginbotham (Eds.), *Control and grammar* (pp. 297–322). Dordrecht: Kluwer.

Wurmbrand, S. (2001). *Infinitives: Restructuring and clause structure*. Berlin: Mouton de Gruyter.

Wurmbrand, S. (2014). Tense and aspect in English infinitives. *Linguistic Inquiry*, *45*(3), 403-447.

Wurmbrand, S. (2015a). Restructuring cross-linguistically. In T. Bui & D. Özyıldız (Eds.), *Proceedings of the Forty-Fifth Annual Meeting of the North East Linguistics Society* (pp. 227-240). Amherst, MA: University of Massachusetts Graduate Linguistics Student Association.

Wurmbrand, S. (2015b). Complex predicate formation via voice incorporation. In L. Nash & P. Samvelian (Eds.), *Approaches to complex predicates* (pp. 248-290). Leiden: Brill.

Wurmbrand, S., & Shimamura, K. (2017). The features of the voice domain: actives, passives, and restructuring. In R. D'Alessandro, I. Franco & A. J. Gallego (Eds.), *The verbal domain* (pp. 179-204). Oxford: Oxford University Press.

Zidani-Eroğlu, L. (1997). Exceptionally case marked DPs as matrix objects, *Linguistic Inquiry, 28*(2), 219-230.