INDEPENDENCE OF CASE AND INNER ASPECT IN TURKISH

A THESIS SUBMITTED TO
THE GRADUATE SCHOOL OF INFORMATICS OF
THE MIDDLE EAST TECHNICAL UNIVERSITY
BY

DERİN DİNÇER

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF SCIENCE
IN
THE DEPARTMENT OF COGNITIVE SCIENCE

SEPTEMBER 2024

INDEPENDENCE OF CASE AND INNER ASPECT IN TURKISH

submitted by **DERİN DİNÇER** in partial fulfillment of the requirements for the degree of **Master of Science in Cognitive Science Department, Middle East Technical University** by,

Prof. Dr. Banu Günel Kılıç
Dean, **Graduate School of Informatics** _____

Assoc. Prof. Dr. Barbaros Yet
Head of Department, **Cognitive Science** _____

Assist. Prof. Dr. Umut Özge
Supervisor, **Cognitive Science, METU** _____

Examining Committee Members:

Prof. Dr. Deniz Zeyrek Bozşahin
Cognitive Science, METU _____

Assist. Prof. Dr. Umut Özge
Cognitive Science, METU _____

Assoc. Prof. Dr. Murat Özgen
Linguistics, Dokuz Eylül University _____

Date: 06.09.2024

I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

Name, Surname: DERİN DİNÇER

Signature :

ABSTRACT

INDEPENDENCE OF CASE AND INNER ASPECT IN TURKISH

DİNÇER, DERİN

M.S., Department of Cognitive Science

Supervisor: Assist. Prof. Dr. Umut Özge

September 2024, 70 pages

Inner aspect refers to how a predicate describes the temporal structure of an event. Traditionally, an event with an endpoint is defined as delimited (i.e. telic), and an event without an endpoint is defined as nondelimited (i.e. atelic). In the literature, it is widely accepted that there is a direct relationship between the accusative marked internal argument and a delimited event interpretation. Some languages such as Finnish mark delimitedness with overt morphological markers where the accusative marks delimited events and the partitive marks nondelimited events (Kiparsky, 1998). Nakipoğlu (2009) claims that Turkish is such a language and the accusative case on direct objects functions as delimiter in the language. Although there is a significant correlation between delimitedness interpretations of predicates and overt accusative marking of objects in Turkish, we will argue in this thesis that the relation between the accusative case and delimitedness in Turkish is indirect. We argue that the said relation is only indirect in Turkish on accounts of the following: (*i*) predicates with accusative marked objects can also denote nondelimited events and (*ii*) sentences without an accusative marked object can trigger delimited event interpretations. We argue in this thesis that the independent relationship between case and inner aspect follows from the autonomous structure of inner aspect following MacDonald (2006) and show that Turkish data supports this phenomenon.

Keywords: inner aspect, delimitedness, telicity, accusative case

ÖZ

TÜRKÇE'DE DURUM VE İÇSEL GÖRÜNÜŞÜN BAĞIMSIZLIĞI

DİNÇER, DERİN

Yüksek Lisans, Bilişsel Bilimler Bölümü

Tez Yöneticisi: Dr. Öğr. Üyesi Umut Özge

Eylül 2024, 70 sayfa

İçsel görünüş, yüklemlerin bir olayın zamansıl yapısını tanımlama biçimlerini ifade eder. Geleneksel olarak, sonlu bir olay bitimli (*ing.* telic), sonlu olmayan (*ing.* atelic) bir olay ise bitimsiz olarak adlandırılır. Alanyazında belirtme durumu taşıyan içsel öğeler ile olayın bitimlilik yorumu arasında doğrudan bir ilişki olduğu geniş çapta kabul edilmektedir. Belirtme durumunun bitimlilik, parçacıl durumun ise bitimsizlik getirdiği Fince gibi kimi dillerde olayın bitimliliği açık biçimbilimsel durum birimleriyle işaretlenir (Kiparsky, 1998). Nakipoğlu (2009), Türkçe'nin de bitimlilik kavramını açık biçimbilimsel durum birimleriyle işaretleyen bir dil olduğunu ve belirtme durumunun Türkçe'de bitimlilik operatörü olarak işlev gördüğünü savlar. Türkçe'de yüklemlerin bitimlilik yorumlamaları ve belirtme durumu almış nesneler arasında kayda değer bir korelasyon görülse de, bu tezde Türkçe'de belirtme durumu ve bitimlilik yorumlamaları arasındaki ilişkinin dolaylı bir ilişki olduğunu savlayacağız. Bu ilişkinin dolaylı olmasının altında yatan nedenlerin: (*i*) belirtme durumu almış bir nesnesi olmasına karşın bitimsiz yorumlanan yüklemlerin görülebilmesi ve (*ii*) içerisinde belirtme durumu bulunmayan tümcelerin bitimli olaylara gönderimde bulunabilmesi olduğunu savlayacağız. Bu tezde, MacDonald'ı (2006) takip ederek durum ve içsel görünüşün bağımsız davranışının altında içsel görünüşün otonom yapısının yattığını savlayacak ve Türkçe verinin bu savı desteklediğini göstereceğiz.

Anahtar Kelimeler: içsel görünüş, bitimlilik, belirtme durumu

to my significant otter, Batuhan

ACKNOWLEDGMENTS

Firstly, I want to express my deepest gratitude to my thesis advisor Dr. Umut Özge for his endless patience and support. His advice and guidance were absolutely critical for me to be able to complete this thesis.

Also, I wish to thank all the professors and teaching assistants in our department for introducing me to the field of Cognitive Science and guiding me through the program. I especially want to thank Prof. Dr. Deniz Zeyrek Bozşahin for taking the time to be a part of the jury and for her invaluable feedback.

I would additionally like to thank my undergrad advisor Dr. Murat Özgen, who is one of the main reasons I am even writing this thesis to begin with. I am genuinely grateful for his mentorship.

Further, I want to thank my family. First, to my mom, for always making me feel special and supported. And to my lovely siblings, Duru and Şan, for simply existing and being your crazy selves.

I also wish to thank all my friends who were nothing but supportive and always motivated me to keep going.

Last but not least, I want to thank my boyfriend Batuhan Karataş for being my partner not only in life but also in the academy. If it wasn't for him, I don't think I would be able to get through writing this thesis, especially considering that at the moment he is helping me write the acknowledgments you are reading right now. I am lucky to have him in my life.

TABLE OF CONTENTS

LIST OF ABBREVIATIONS

ABL	ablative case
ACC	accusative case
AOR	aorist
CAUS	causative
CONJ	conjunction/connective
DAT	dative case
FUT	future
GEN	genitive case
IMPF	imperfective
INF	infinitival
INST	instrumental case
LOC	locative case
NOM	nominative case
PART	partitive
PASS	passive
PAST	past
POSS	possessive
PROG	progressive
PL	plural
SG	singular
SUB	subordinator
VN	verbal noun marker

1	first person
3	third person

CHAPTER 1

INTRODUCTION

Aspect is a widely researched topic in linguistics that focuses on the temporal structure of events (Vendler, 1967; Dowty, 1979; Moens and Steedman, 1987; Krifka, 1989, 1998; Tenny, 1989, 1994; Jackendoff, 1990; Pustejovsky, 1991; Travis, 1991; Verkuyl, 1993; Ramchand, 1997; Smith, 1997; Borer, 2004; MacDonald, 2006, 2008). The general term *aspect* includes two distinct domains, namely: (*i*) outer aspect (i.e. viewpoint aspect, grammatical aspect) and (*ii*) inner aspect (i.e. situation aspect, lexical aspect). Outer aspect refers to the grammaticalized properties of aspect which are generally conveyed by grammatical morphemes, such as the progressive verbal morphemes. Smith (1997) draws a parallel between outer aspect and the focus of a camera lens, as outer aspect provides a view of the given situation similar to a camera. The following structures of Smith exemplify outer aspect in English.

(1) a. Mary walked to school.
b. Mary was walking to school.
c. Mary walked in the park.

Outer aspect in English is marked on the verb stem with suffixes such as the progressive *-ing*. In (1-a), the sentence represents an event such that the goal is reached. Further in (1-b), the same type of event is described, but the goal is not reached in this case. In (1-c), the sentence refers to a complete event. Such information is coded with suffixes *-ing* and *-ed*. Outer aspect in Russian is realized similarly where the prefix *pro-* functions as a perfective marker, whereas unprefixed forms are generally imperfective (Romanova, 2007; Poulson, 2011).

(2) a. Ja ĉita-l knigu.
I read-PAST book
'I was reading a book / used to read a book / read a book.'
b. Ja pro-ĉita-l knigu.
I PERF-read-PAST knigu
'I read a book.'

On the other hand, inner aspect refers to the internal temporal properties of eventualities such as delimitedness/telicity and it is usually not grammaticalized at the morphological level. Inner aspect, which is also referred to as Aktionsart, is closely related to the well-known situation types of Vendler (1957) (activity, accomplishment, achievement and stative) that are categorized according to their internal

temporal features. The concept of *endpoints* is a key point in understanding the temporal properties of events. An endpoint of an event corresponds to the point at which the event is concluded and whether or not an event has an endpoint determines its situation type. The concept of delimitedness/telicity refers to the property of the event having an endpoint or not. Events that have endpoints are considered delimited while events that do not have endpoints are considered nondelimited.

Many researchers agree on the relation between inner aspect and delimitedness/telicity claiming that the event structure of the predicate is affected by the properties of the internal argument of the verb (Krifka, 1989; Tenny, 1989, 1994; Ramchand, 1997; Kiparsky, 1998; Kratzer, 2004). Further, it is argued that in languages such as Finnish the accusative marker on the internal arguments functions as a delimitedness inducer and triggers delimited interpretations of predicates (Kiparsky, 1998; Tenny, 1994). For instance, Heinämäki (1984) provides the following sentences to display the aspectual interpretation differences between sentences with accusative and partitive marked objects.[1]

(3) a. Maria kantoi kirjaa.
Maria carried book-PART
'Maria was carrying a book.'
b. Maria kantoi kirjan.
Maria carried book-ACC
'Maria carried the book.'

Above in (3), the sentence receives an activity interpretation as the event does not have an endpoint. However, the latter sentence given in (3-b) is interpreted as an accomplishment as the event comes to an end. The difference in the aspectual interpretations of these sentences is argued to be tied to the case markings on the internal arguments. In Finnish, it is claimed that the partitive case on the objects brings nondelimitedness/atelicity while the accusative case brings delimitedness/telicity (Heinämäki, 1984; Kiparsky, 1998). A similar relationship between the accusative case and aspectual interpretations of predicates is argued to be present in Turkish by Nakipoğlu (2009) as she claims that the overt accusative marking on the direct objects of certain verb types functions as a delimiter. The argued delimiting effect of the accusative case can be seen in Nakipoğlu's examples below.

(4) a. Çocuk-lar merdiven-i çık-tı.
Child-PL ladder-ACC climb-PAST.3.SG
'The children climbed up the (entire) ladder.'
b. Çocuk-lar merdiven-e çık-tı.
Child-PL ladder-DAT climb-PAST.3.SG
'The children climbed the ladder.'

Similarly to the Finnish data, the Turkish data in (4) displays a correlation between delimitedness and accusative case on the internal argument. In (4-a), the predicate that has an accusative marked object receives a delimited interpretation. On the other hand, the predicate that lacks an accusative marked object in (4-b) is interpreted as nondelimited. Following this observation, Nakipoğlu (2009) argues that there is a connection between accusative case and delimitedness interpretation in Turkish.

[1] The glossary is given at it is provided by Tenny (1994).

Although there seems to be a correlation between accusative marked internal arguments and delimited readings of predicates, in this thesis we argue that the relation between case and internal aspect is only indirect following MacDonald (2006, 2007). The proposed indirect relation between case and inner aspect is supported by structures where the lack of an accusative does not cause nondelimitedness and also structures that receive delimited interpretations even though the object is marked with the accusative. For instance, passivized structures from both English and Turkish such as the sentences in (5) that do not include accusative case are free to receive delimited interpretations. Furthermore, stative predicates such as *love* in (6) below are always interpreted as nondelimited/atelic regardless of the case marking on the internal argument.

(5) a. The ship sank.
b. Gemi bat-tı.
Ship sink-PAST.3.SG
'The ship sank.'

(6) a. Leo loves the book.
b. Batuhan oyun-u sev-iyor.
Batuhan game-ACC love-PROG.3.SG
'Batuhan loves the game.'

These instances entail that the relationship between case and inner aspect may not be direct as argued in the previous studies. In the sections to come, we will investigate the relationship between case and inner aspect in Turkish.

1.1 Research Questions

For languages such as Finnish, it is argued that there is a direct relationship between the accusative marker on the internal argument and delimited/telic interpretation of the predicates (Kiparsky, 1998; Tenny, 1994). Further, Nakipoğlu (2009) claims that such a relationship is present in Turkish as well and the accusative case in Turkish functions as a delimiter when combined with a certain set of verbs. She argues that the accusative case on the direct arguments of verbs of motion, incremental theme verbs and verbs of location elicits a delimited event interpretation. For instance, the sentences in (7) with the verb *tırman* 'climb' have different aspectual interpretations. The sentence in (7-a) with the accusative marked object receives a delimited reading while the sentence in (7-b) receives a nondelimited one.

(7) a. Emre dağ-ı tırmandı.
Emre mountain-ACC climb-PAST.3.SG
'Emre climbed up the mountain.'
b. Emre dağ-a tırmandı.
Emre mountain-DAT climb-PAST.3.SG
'Emre climbed the mountain.'

Although Nakipoğlu's (2009) arguments seem to account for a considerable part of the Turkish data, some properties of the relationship between case and inner aspect cannot be explained with her anal-

ysis. For instance, her analysis does not account for the delimited/telic interpretations of passive structures such as (8) and the nondelimited/atelic interpretation of stative predicates with accusative marked objects such as (9).

(8) Tekne-∅ bat-tı.
Boat-NOM sink-PAST.3.SG
'The boat sank.'

The sentence in (8) receives a delimited interpretation even though it lacks an accusative marked object. If the accusative case is functioning as a delimiter in structures such as (7-a), we can also argue that the nominative case is also functioning as a delimiter in (8). Further in (9), although there is an accusative marked object the predicate does not receive a delimited interpretation. Structures like this indicate that there may be other mechanisms underlying the aspectual interpretations of predicates and it may not be the case that the accusative marker is a delimiting function. In this work, we will investigate such structures and test this hypothesis.

(9) Derin çiftlik-i sev-iyor.
Derin farm-ACC love-PROG.3.SG
'Derin loves the farm.'

The main purpose of this thesis is to provide an analysis that accounts for all of the instances of inner aspect in Turkish. We will attempt to answer the following linked questions to achieve this purpose:

1. Is it accurate for Turkish that the accusative case on the internal arguments functions as a delimiter as Nakipoğlu (2009) claims?
   (a) If so, do case markers other than the accusative in Turkish can function as a delimiter as well?
   (b) If not, is there another mechanism behind the delimited/telic interpretations of predicates in Turkish?

To provide answers to the given research questions, we will analyze the relation of inner aspect and case and adopt a framework that argues for the independence of these linguistic phenomena. Within this framework, the problematic instances that contradict the presumed relationship between accusative case and delimitedness in Turkish can be accounted for.

1.2 Organization of the Thesis

In this thesis, we will first analyze the literature on the concepts of inner aspect and delimitedness in the next chapter. Following, we will go over the theoretical background on case in Turkish. In the next chapter, we will review Nakipoğlu's (2009) analysis on the relation between the accusative case and delimitedness in Turkish. Further, we will examine the relationship between structural case markers other than the accusative and delimitedness interpretation in Turkish. In the following section, we

will go over MacDonald's (2006) arguments for the independence of case and inner aspect and further implement his analysis to Turkish data. In the last section, we will discuss our analysis and conclude the thesis.

CHAPTER 2

INNER ASPECT AND DELIMITEDNESS

The concept of aspect is generally divided into the following two domains: (*i*) inner aspect (i.e. situation aspect, lexical aspect) and (*ii*) outer aspect (i.e. viewpoint aspect, grammatical aspect) (Travis, 1991; Verkuyl, 1993; Smith, 1997). The outer aspect is the domain in which grammatical properties of aspect are investigated, such as the perfective/imperfective distinction. On the other hand, inner aspect is related to the event structure of the predicate and concepts such as delimitedness/telicity are investigated under this concept. Inner aspect is the aspectual domain we will focus on in this thesis and the term *aspect* will be used to refer to *inner aspect* for convenience, unless stated otherwise. In the following sections, we will revise the literature on the concepts of aspect and delimitedness.

2.1 Delimitedness in the Literature

The aspectual interpretations of natural language expressions have been a topic of debate in the literature following Verkuyl's (1972) proposal for the presence of a universal relationship between the internal argument of the verb and the aspectual interpretation of the predicate. Following this, extensive research has been conducted on the matter attempting to identify the described relationship (Krifka, 1989; Tenny, 1989, 1994; Ramchand, 1997; Kiparsky, 1998; Kratzer, 2004). Such studies investigate the asymmetric behaviors of sentence pairs similar to (10) below where some properties of the internal arguments seem to affect the interpretations of the sentences.

(10) a. Emily ate an apple.
b. Emily ate apples.

In (10-a), the sentence denotes an event of an entire apple being eaten and that the eating event is concluded. On the other hand in (10-b), the amount of apples that was eaten is not clear. This difference between the interpretations has been argued under the concept of *telicity*. Telicity is taken to be closely related to other well-known concepts of *delimitedness* and *boundedness* and there seems to be no agreement in terminology in the relevant literature. The notion of telicity, almost the same as delimitedness, is generally defined as the attribute of an event to have an inherent endpoint (Vendler, 1967; Dowty, 1979; Verkuyl, 1993). In other words, the *culmination point* of Moens and Steedman (1987) is reached in a telic event. As an alternative to *telic*, Jackendoff (1996) provides the term *temporally delimited*, in addition to *bounded* and *accomplishment*. By taking into account the most general and well-known definitions, these semantic concepts seem to be similar in many respects with

minor differences. To avoid confusion in terminology, the terms delimitedness and telicity are used synonymously following Wyngaerd (2001) in this work.

Wyngaerd describes the concept of telicity with the use of the mass-count distinction in the nominal domain, using it as an analogy following the works of Mourelatos (1981); Bach (1981); Landman (1989). Arguably the most prominent characteristic of the mass-count distinction is that while count nouns have minimal parts mass nouns do not. For instance, a subpart of a mass noun such as 'water' is still categorized as water as well. However, for count nouns like chair or pencil, this is not the case. The difference between telic and atelic events is very much similar to mass and count nouns in this respect and they can be taken as the counterpart distinction in the verbal domain. Telic events, similar to count nouns, are said to have minimal parts while atelic events lack this property. Wyngaerd provides the following sentences to showcase the difference between telic and atelic events (i.e. delimited and nondelitimited events).

(11) a. Mark knitted a sweater.
b. Mark knitted sweaters.

In (11), the contrast between telic and atelic events can be seen clearly. The former sentence (11-a) describes a telic event that has an inherent and clear endpoint. The internal object *a sweater* functions as a measurer for the event and when the sweater is exhausted by the knitting action, the event ends. On the other hand, the latter sentence (11-b) denotes an atelic event as the internal object *sweaters* is a bare plural and cannot measure the event. Such sentences are taken as an indicator that to properly analyze the aspectual properties of a sentence, at least the whole VP should be analyzed (Verkuyl, 1972; Wyngaerd, 2001).

The aspectual interpretation of telic/delimited and atelic/nondelimited structures depends on the different properties of the internal arguments of the verbs. Which properties of such internal arguments can affect the interpretation of the whole structure has been investigated in the literature extensively. Krifka (1989) describes the internal arguments that trigger delimited readings as *quantized* arguments and those that trigger nondelimited readings as *non-quantized* (i.e. cumulative) arguments. These arguments are simply described by MacDonald (2006) by making use of a [q] feature that stands for a specific quantity. While [+q]NPs correspond to delimitedness inducing internal arguments, [-q]NPs correspond to the ones that induce nondelimitedness. The [q] features of NPs affecting the delimitedness value of a predicate is named as the *object-to-event mapping* by Krifka (1989).

A similar definition is made by Tenny (1989) as she argues that the direct internal argument of the verb triggers *measuring-out* that is related to the internal temporal structure of the event, thus being an aspectual property. In this framework, the direct internal argument sort of functions as a temporal operator that applies to the event and returns a piece of information about its temporal structure that is meaningful in the semantic representation. Measuring-out refers to a consistent and uniform change in the internal argument of the verb, describing the temporal progression of the event. Tenny describes two components of measuring-out: (*i*) a measuring scale that is associated with an argument and (*ii*) a temporal bound for the measuring scale, or in other words *delimitedness*. Delimitedness is described by Tenny (1994) as a phenomenon that is of crucial service in the mapping between syntax and lexical semantics. It is an aspectual property that indicates an event with a distinct, definite and inherent endpoint in time. Some instances of measuring-out, which is a concept crucial to understanding delimitedness, are listed below.

(12) a. to eat an orange
b. to play a sonata
c. to build a lego set

In (12), all the objects *an orange*, *a sonata* and *a lego set* all establish a temporal limit for the verbs that they are arguments of. When these objects are exhausted, the event that the verb denotes comes to an end. However, not all verbs can be measured-out by their internal argument. For instance, verbs such as *love* or *know* as the act of loving a book or knowing algebra are not limited by an attribute of the objects.

(13) a. to know algebra
b. to love a book

The verbs that can participate in measuring-out and those that cannot seem to share the same event types of Vendler (1957), where events are classified by their aspectual properties in the following categories:

(14) a. *activities* denote dynamic actions characterized by their prolonged duration and absence of a specific endpoint,
b. *achievements* represent instantaneous actions with a clearly defined endpoint, leading to a distinguishable change in condition,
c. *accomplishments* express a progressive action towards a predetermined goal that possess both duration and a definitive endpoint, and lastly
d. *states* encapsulate verbs that describe static conditions such as emotion, possession or perception.

These event types are also further divided into two groups, namely statives and eventives. In this categorization states and activities fall into statives while achievements and accomplishments fall into eventives. In simple terms, statives are predicates without an endpoint and eventives are predicates with an endpoint. Due to this, between these two categories, statives are generally considered to be nondelimited/atelic and eventives are generally considered to be delimited/telic. The verbs in (12) are all eventive verbs while the verbs in (13) are statives.

The differences between statives and eventives (and also eventives in itself) are generally analyzed by implementing diagnostic tests using event structure modifiers such as durative adverbials or grade adverbials. The adverbial tests that are implemented in event diagnostics (Dowty, 1979; Moens and Steedman, 1987) are also significant tools in delimitedness diagnostics. Adverbial expressions that refer to temporal intervals are valuable in determining if a sentence denotes a delimited or a nondelimited event. For English sentences, *in-adverbials* are taken to be appropriate for delimited events whereas *for-adverbials* are appropriate for nondelimited events (Tenny, 1994). Tenny demonstrates adverbial expression tests for delimited and nondelimited eventhood with the following minimal pair.

(15) John consumed an orange *in* an hour.

(16) *John consumed an orange *for* an hour.

Between the sentences (15) and (16), the only difference is the adverbial expressions that are used. Nevertheless, while (15) is perfectly grammatical, (16) is ill-formed. This asymmetric appearance is argued to be linked to the delimitedness feature of the event in question. As the event of *consuming something* can be typically categorized as an accomplishment with a definite endpoint and a duration period, this event to take an hour to be "accomplished" conceptually makes sense, whereas the said event continuing for an hour with no exact endpoint is counter-intuitive, making the sentence in (16) ungrammatical. Activities exhibit exactly the opposite behavior, as exemplified by the sentences given below.

(17) *Abigail walked *in* an hour.

(18) Abigail walked *for* an hour.

The event of *walking* is generally classified as an activity and thus it lacks a definite endpoint and only denotes a lengthened duration. As a result of this, sentences built with activities are incompatible with in-adverbials while for-adverbials are perfectly suitable. It can be seen that while in-adverbials are free to be used with delimited events, for-adverbials cause ungrammaticality when used with such events. The exact opposite is seen with nondelimited events as they allow for-adverbials but restrict in-adverbials. Although the adverbial expression tests at hand provide significant insights, Tenny (1989) notes that they are sensitive to lexical subtleties. Therefore she argues that the use of tests for the suitability of adverbial expressions to events is not purely enough for identifying delimitedness and that diagnostics should focus on the temporal bound to the event.[2]

Furthermore, other adverbial modifiers are also discussed in the literature as viable diagnostics options for the delimitedness of events. Other than for-adverbials and in-adverbials, modifiers that refer to a graduate change such as *almost*, *entirely*, *half*, *completely* and *very* can be used to distinguish delimitedness (Tenny, 1989; Wyngaerd, 2001). What underlies this phenomenon is that in delimited events, the internal object measures-out a quantifiable property of the event as we have mentioned before. Because such adverbials are used to refer to various stages of the NPs they modify, they are only compatible with events that have temporal bounds. Therefore, adverbial modifiers that refer to graduate changes cannot be used with nondelimited events.

(19) a. The doctor ate an apple halfway.
b. The doctor ate half an apple.

Sentences in (19) have roughly the same meaning. Both (19-a) and (19-b) refer to an eating event that is delimited by the apple that is being consumed. In other words, the object apple functions as a measurer in these sentences and with a degree adverbial such as *halfway*, the intervals of the measuring-out process can be distinguished.

In addition to degree adverbs; comparatives and rate adverbials are fit to modify the measuring-out property of such events. In the following section, we will investigate such verbs further.

[2] The imperfection of such adverbial expression tests has also caught the attention of Wyngaerd (2001). He argues that the problematic instances occur because such adverbial expressions distinguish on the boundedness of the event, not on the delimitedness.

2.2 Aspectually Variable Verbs

As we have analyzed in the previous section, Vendlerian classification of event types are significant for delimitedness diagnostics. Tenny (1994) further subcategorizes verbs that allow delimitedness interpretations and argues that the following classes are the three verb classes that possess internal arguments that fulfill the conditions for measuring-out to occur and successfully measure-out the event.

(20) a. *incremental-theme verbs*,
b. *change-of-state verbs* and
c. *route verbs with path objects*.

Incremental-theme verbs are defined as verbs that require their object to be used up in the progress of the event (Dowty, 1991; Krifka, 1992, 1998; Tenny, 1994). The object in question gets exhausted piece by piece in the progression of these events.

(21) a. Leah ate the salad.
b. Linus built a treehouse.

Both of the sentences in (21) are constructed with incremental-theme verbs. In (21-a), the eating event continues as the amount of salad decreases incrementally along the way as a part of the salad is consumed in each step of the process. Consequently, the temporal process of the event comes to an end when the salad is finished. Therefore, the direct object *the salad* in (21-a) functions as a measurer in this sentence. In (21-b), it can be seen that the direct (or internal) object of the verb *treehouse* measures-out the verb. As the event of building proceeds, the treehouse comes together bit by bit and the event concludes as the treehouse is built completely. Other examples of incremental-theme verbs in addition to *eat* and *build* involve *mow*, *consume*, *drink* and so on.

Further, another verb class Tenny (1994) lists that has internal arguments that can function as the measurer of the event is *change-of-state verbs*. Change-of-state verbs denote an event involving an entity undergoing a significant change in its internal structure (Levin, 1993; Wright, 2002). Examples of this verb class are *break*, *dry*, *ripen*, *straighten*, etc. The following sentences in (22) involve change-of-state verbs, including objects that go through a change as the event takes place.

(22) a. The regular watering ripened the melons.
b. The kid shattered the window.

In (22-a), the direct object *melons* undergo a change in state and get more and more ripe with every step of the watering process. Eventually, the event concludes as the melons are ripened enough to be considered ripe. In this case, the internal formation of the object changes as it measures-out the event. Secondly in (22-b), a somewhat different type of a change-of-state verb is given. Verbs that are classified as achievements in Vendler's (1957) well-known system also fall into the category of change-of-state verbs. In (22-b), a result of the shattering event, the window changes and loses its wholeness. This is different from the previous example as the shattering action happens instantaneously as opposed to the ripening that lasts a considerable amount of time. The duration of achievement type instances

of change-of-state verbs can be viewed as short periods, sometimes instantaneous, which can still be examined in extremely short intervals.

Lastly, in addition to incremental-theme verbs and change-of-state verbs, *path objects of route verbs* can measure-out the event (Tenny, 1994). This class is rather different from the previously mentioned classes because path objects of route verbs do not go through a change along the event. Nevertheless, path objects measure-out the event by providing a path or a course to define the temporal limits of the event. Examples of this class are *walk*, *climb*, *swim*, *perform*, *play*, and so on.

(23) a. Alex climbed the Mount Everest.
b. The musician played a sonata.

Sentences in (23) exemplify such verbs that take route objects. First, (23-a) denotes an event of climbing the famous Mount Everest and the sentence entails that Alex reached the top of the mountain. Even though the mountain does not go through a change, the path of the climbing event is measured-out by it as, in this case, the height of the mountain is what temporally limits the event. When the peak is reached, the climbing event concludes. Similarly in (23-b), the object *a sonata* measures-out the playing event by restricting the course of it to the extent of the sonata itself. The musician in question continues to play the sonata until its end, and when the sonata is exhausted the playing event concludes. Thus, the path object measures-out the event.

The three verb categories Tenny (1994) lists seem to share the property of being aspectually variable verbs. Aspectually variable verbs are cross-linguistically observed in verbs of consumption/creation, motion verbs and change-of-state verbs (Aksan, 2005). These classes almost fully correspond to Tenny's classifications. For aspectually variable verbs, it is argued that the interpretations vary between accomplishment and activity readings. Many researchers agree that the relation between the event structure and argument expression is not inherent to the verb, but rather depends on the structure of the event denoted by the predicate (Verkuyl, 1972; Krifka, 1989; Dowty, 1991; Tenny, 1994; Hay et al., 1999; Aksan, 2005).

Aspectually variable verbs are generally categorized as accomplishments or achievements which denote a change in the event according to the internal argument of the predicate. However, these types of verbs can receive activity event interpretations as well. Depending on the different event interpretations, predicates can be interpreted as either delimited or nondelimited. This phenomenon can be seen in the following examples where adverbials show the differences in the delimitedness values of predicates.

(24) Haley read the magazine in an hour/for an hour.

(25) Jas ate ten cookies in an hour/for an hour.

Structures in (24) and (25) can be combined with both in-adverbials and for-adverbials. While in-adverbials bring out the possibility of a delimited interpretation, for-adverbials show that nondelimited interpretations are possible as well. For (24), the magazine could be fully read in the span of an hour resulting in a delimited interpretation or Mary could do magazine reading for an hour which will result in a nondelimited reading. For this sentence in the delimited version, the event is an accomplishment and

in the nondelimited version, it is an activity. A similar structure is seen in (25), where the in-adverbial brings out a delimited interpretation and the for-adverbial brings out a nondelimited interpretation of the predicate.

Fuırther, Aksan (2005) exemplifies aspectually variable Turkish verbs with the following sentences in (26) and (27).

(26) a. Deniz bir tabak pilav-ı on dakika-da ye-di.
Deniz one plate rice-ACC ten minute-LOC eat-PAST.3.SG
'Deniz ate a plate of rice in ten minutes.'
b. Deniz on dakika boyunca pilav ye-di.
Deniz ten minute long rice eat-PAST.3.SG
'Deniz ate rice for ten minutes.'

(27) a. Operatör hasta-nın kalp damar-ını iki saat-te genişle-t-ti.
Surgeon patient-GEN heart artery-POSS two hours-LOC widen-CAUS-PAST.3.SG
'The surgeon widened the patient's heart artery in two hours.'
b. İşçi-ler yol-u üç gün boyunca genişle-t-ti.
Worker-PL road-ACC three day long widen-CAUS-PAST.2.PL
'The workers widened the road for three days.'

In the sentences given in (26) and (27) above, only the arguments of the verbs are changed and all the other elements are kept the same. Although, while (26-a) and (27-a) receive delimited interpretations, the counterpart sentences in (26-b) and (27-b) are interpreted as nondelimited. The former sentences receive accomplishment readings while the latter sentences are interpreted as activities.

In this section, we have further delved into Tenny's (1994) classifications on the concept of delimitedness. She lists the verb classes of incremental-theme verbs, change-of-state verbs and route verbs with path objects as the only verb classes that allow for measuring-out and consequently delimitedness. Further, we have seen that these verb classes can be classified under aspectually variable verbs that can have different types of event denotations. As the changes in the aspectual interpretations of such verbs are connected to the internal arguments in a way, the case marking on these arguments could be a factor in these changes. To investigate the connection between case and aspectual interpretations of predicates, let us review the literature on case markers in Turkish in the following section.

CHAPTER 3

THEORETICAL BACKGROUND ON CASE

Turkish is considered an agglutinative language that typically exhibits the SOV word order (Erguvanlı and Taylan, 1984; Lewis, 2000; Göksel and Kerslake, 2004; Kornfilt, 2013). Additionally, Turkish allows scrambling which brings somewhat of a free word order. Whichever word order is present in a given Turkish sentence, inflectional suffixes indicate the functional properties of the elements in the structure. Case markers are an example of these inflectional suffixes. Traditionally, it is argued in the literature that every NP has case and the function of case markers is to indicate the grammatical relations of the noun they attach to has with the other elements in the sentence (Chomsky, 1981; Göksel and Kerslake, 2004; Kornfilt, 2013). These grammatical relations are the well-known concepts of subjecthood, direct objecthood, obliquehood, etc. In the following sections, we will go over the relevant literature on the concept of case in Turkish.

3.1 The case of Case in Turkish

The syntactic functions of NPs are said to be expressed in the grammar via case suffixes in Turkish (Dede, 1981; Göksel and Kerslake, 2004; Kornfilt, 2013). In the literature, the consensus is that Turkish possesses the following case markers: the nominative -∅, the accusative *-(y)I*, the dative *-(y)A*, the locative *-DA*, the ablative *-DAn* and lastly the genitive *-(n)In* (Dede, 1981; Lewis, 2000; Göksel and Kerslake, 2004). In simple definitions; nominative is argued to mark the subject and accusative the direct object while the other case suffixes mark the oblique elements. The following sentence (similar to Kornfilt's (2013) example on p.213) showcases how each of these case markers occur together.

(28) Ali-∅ [[Ayşe-nin defter-i Mehmet-e kantin-de ver-ip] [(o-nun) okul-dan ev-e gid-eceğ-i]]-ni bil-iyor
Ali-NOM Ayşe-GEN notebook-ACC Mehmet-DAT canteen-LOC give-CONJ she-GEN school-ABL home-DAT go-VN-3.SG.POSS-ACC know-IMPF.3.SG
'Ali knows that Ayşe will give the notebook to Mehmet in the canteen and she will go from school to home.'

In (28) above, first we see the subject of the matrix clause *Ali* with the nominative case marker. In Turkish, the nominative is not realized on the surface and the absence of a marking is represented with the zero morpheme -∅. Following the subject, there is a genitive-possessive construction *Ayşenin defteri* which is used in a subordinate clause. The genitive marks the NP that functions as the possessor while

the possessive marks the constituent that is being possessed. Following the gen-poss structure, we see another object in the subordinate clause which is marked with the dative case. In this subordinate object *Mehmete*, the dative indicates that the NP it is attached to is the target of the action. Further, the last object of the subordinate clause *kantinde* is marked with the locative as it expresses the location of the action. In the second subordinate clause, there is a pronoun marked with the genitive, which indicates a possession of the relevant genitive marked element in the structure. Following this structure, there is the ablative marked subordinate object *okuldan* which expresses the departure from the attached NP. Moreover, the following noun phrase *eve* is marked with the dative case and it indicates the target of the relevant action. Lastly, in the nominal verb *gideceğini* there are two case markers present, which are the possessive and the nominative. In this structure, the possessive marks the possessee that is bound with the genitive marked pronoun *onun* and lastly the accusative case marks the whole subordinate clause as the object of the matrix clause. In the following section, we analyze the concept of case in Turkish in more detail and examine the differences between structural and nonstructural cases.

3.1.1 Categorization of Case

The case phenomenon is generally classified under two branches following Chomsky's (1981) pioneer work, namely structural and nonstructural (further subcategorized to inherent and lexical case by Woolford (2006)) cases. The distinction between these two categories has been a prominent matter in the literature even before Government and Binding, as Kuryłowicz (1964) distinguished the difference between what he called grammatical case and semantic case. Structural and nonstructural cases differ in both their behavior and their manner of licensing (Woolford, 2006). Firstly, structural case markers are assumed to be licensed in different syntactic positions in the structure (i.e. subject position, object position, etc.) due to being a structural property of a formal composition. The nominative case that is assigned to the subject position and the accusative case that is assigned to the object position are examples of structural case. As a result of being a structural property, an alleged structural case-bearing NP should change its case after undergoing operations such as passivization and raising, where the syntactic function of an element may shift (e.g. object to subject via passivization). The following passivization example from Turkish demonstrates this phenomenon.

(29) a. Duru manzara-yı izle-di.
Duru view-ACC watch-PAST.3.SG
'Duru watched the view.'

b. Manzara (Duru tarafından) izle-n-di.
View Duru by watch-PASS-PAST.3.SG
'The view was watched (by Duru).'

In the example set given above, the transitive sentence (29-a) is passivized in (29-b). This process turns the object of the first sentence *manzara* to the subject of the passive structure in the latter sentence. Notice that while the NP *manzara* was an object it is marked with the accusative case whereas in the passivized sentence it is marked with the nominative case. This suggests that while the accusative case is assigned by the object position the nominative is assigned by the subject position. As there is no case preservation for these case markers, the general consensus is that the nominative, the accusative and the genitive are classified as structural cases in Turkish.

On the other hand, nonstructural case markers are assigned in accordance with a certain thematic role and as they are not a structural property, they are preserved after passivization (Chomsky, 1981; Woolford, 2006). It is assumed for nonstructural case marked NPs that whichever position they move to, the case marker they bear will not change.

(30) a. Ben su-dan içtim.
I water-ABL drink-PAST.1.SG
'I drank some of the water.'
b. Su-dan (benim tarafımdan) içildi.
Water-ABL me by drink-PASS.PAST.3.SG
'Some of the water was drunk (by me)'

It can be seen from the examples below that the ablative case is preserved under passivization. Dede (1981) associates this appearance of the ablative case to a clausal semantic reason where the case is preserved in order to conserve the exact semantics that it brought by the ablative case. If the case were to be absorbed, then the partitive reading would be lacking from the sentence. Dede also points out another case where the case marking is preserved under passivization, which occurs with the verbs that have an affectedness bound case alternation. An example Dede provides for this appearance is given below.

(31) a. Ali çocuğ-a vurdu.
Ali child-DAT hit-PAST.3.SG
'Ali hit the child.'
b. Çocuğ-a vuruldu.
Child hit-PASS.PAST.3.SG
'The child was hit.'

In Turkish, *vur-* is a polysemic verb that can have the meaning of *hit* with a dative marked object and the meaning of *shoot* with an accusative marked object. In the passivized sentence (31-b), if the dative case is not preserved the meaning changes from *hit* to *shoot*, which would lead to an incorrect semantics for the structure. As Dede (1981) shows with the given examples that case, specifically nonstructural case, can carry meaning in addition to grammatical relations. These properties of structural and nonstructural case markers broaden their extent and as a result, spark further questions about their nature. One of the most studied behaviors of structural and nonstructural case markers is the instances in which they show variation with each other. The well-known phenomenon of locative alternation can be given as an example of case variation. In the following section, we will investigate case variation and the types of case variation that are observed in Turkish.

3.2 Case Variation

In Turkish, there are distinct phenomena that display case variation in the surface structure of sentences. In the next sections, we will analyze three mechanisms in Turkish that are observed to lead to case variation. These mechanisms are the following: differential object marking (DOM), case alternation and transitivity alternations.

3.2.1 Differential Object Marking (DOM)

While in some languages the direct object gets morphologically marked with respect to its semantic and pragmatic traits, in some other languages the said marking seems optional (Krause and von Heusinger, 2019). Following Bossong's (1985) terminology, this phenomenon of the case marking of the direct object being optional is generally referred to as Differential Object Marking (henceforth, DOM). It is argued in the literature that, there are prominency scales related to grammatical properties that affect the DOM process (Böhm, 2015). Even though the different features that are important in the process of DOM vary between languages, a direct object gets assigned a case marking in accordance with its prominence in scales of grammatical properties such as animacy and definiteness. For instance, a human object is considered more prominent in the animacy scale compared to an inanimate object. Aissen (2003) argues that a direct object that is higher in prominence is more prone to being overtly case marked.

While most languages that display DOM mark their direct objects with the overt accusative case, some languages make use of other case markers and linguistic forms to do so. For instance, in Hebrew the preposition *'et'* is used for marking the direct object that is highest on the definiteness scale and the particle *'pe'* is used in Romanian for more prominent direct objects (Krause and von Heusinger, 2019). The effects of DOM in Turkish have been studied widely in the literature (von Heusinger and Kornfilt, 2005; Özge, 2011). In Turkish, DOM is widely argued to be related to the specificity of direct objects (Krause and von Heusinger, 2019). While Turkish marks all instances of definite objects with the accusative, this seems to be not the case for indefinite objects. The co-occurrence of the indefinite article *bir* and the accusative case suggests that the indefinite direct objects in Turkish are assigned case marking when it is specific and left non-case-marked when non-specific. The following minimal pair given by Enç (1991) displays this contrast.

(32) a. Ali bir piyano-yu kiralamak istiyor.
Ali one piano-ACC to-rent wants
'Ali wants to rent a certain piano.'
b. Ali bir piyano kiralamak istiyor.
Ali a piano to-rent wants
'Ali wants to rent a (nonspecific) piano.'

As it can be seen from (32), there seems to be a shift in meaning between the minimal pair where in the former a specific piano is wanted by Ali whereas in the latter the NP seems to refer to a non-specific object of the general concept of a piano. How DOM works in Turkish can be more clearly observed with the following examples where the interaction of the accusative with definite and indefinite direct objects is shown by Krause and von Heusinger (2019).

(33) a. Ben kitap-∅ oku-du-m.
I book-∅ read-PAST-1.SG
'I read book / books.'
b. Ben kitab-ı oku-du-m.
I book-ACC read-PAST-1.SG
'I read the book.'

c. Ben bir kitap-∅ oku-du-m.
I a book-∅ read-PAST-1.SG
'I read a book'

d. Ben bir kitab-ı oku-du-m.
I a book-ACC read-PAST-1.SG
'I read a (specific) book.'

Above in (33), different variants of a sentence are given where the varying factors are the definiteness and the specificity values of the direct object. In (33-a), the construction seems to act like a pseudo-incorporated construction as the non-case-marked direct object cannot be pronominalized and is not referential. Further in (33-b), the direct object is accusative marked which signals that the referent of the object is known to both the speaker and the hearer, hence definite. In (33-c), the object is constructed with the definite article *bir* and the bare noun *kitap* which results in an indefinite reading of the object. Further in (33-d), it is seen that the indefinite article and the accusative marker are compatible to be used in the same construction together referring to an indefinite but specific object. This last sentence indicates that DOM is not only limited to definite objects and indefinite objects can display DOM as well. In short, independent of the definiteness value of the NP, the specific objects get marked with the accusative case, while non-specific counterparts are left non-case-marked through DOM.

Although the literature on DOM is more focused on specificity, the animacy of the direct objects seems to also affect its process (Böhm, 2015; Krause and von Heusinger, 2019). As von Heusinger and Kornfilt (2005) note, the accusative marker is not strong enough to solely make an object specific enough to be moved to a sentence-initial position to function as a topic in some cases.

(34) a. ?Bir kitab-ı Murat aceleyle oku-yor.
One book-ACC Murat hurriedly read-PROG.3.SG
Intended reading: 'Murat is hurriedly reading a/some book.'

b. Mavi kaplı kitab-ı Murat aceleyle oku-yor.
Blue covered book-ACC Murat hurriedly read-PROG.3.SG
'Murat is hurriedly reading a (certain) blue-covered book.'

(Erguvanlı and Taylan, 1984, p.27)

As the odd sentence in (34-a) shows, the indefinite object *bir kitab-ı* is not specific enough in the sense that it can be made the focus of the sentence by moving it to sentence-initial position. On the other hand, the sentence in (34-b), the object is modified with an adjectival phrase and with the modification, there is no possibility that the object can receive a non-specific reading. Thus, the object can now function as the topic of the sentence. In contrast, an animate direct object seems to be free to move to sentence initial position independent of bearing the accusative marking or not, as can be seen with the sentence in (35) below.

(35) Bir sanatçı-yı/-∅ gör-dü-m.
An artist-ACC/-∅ see-PAST-1.SG
'I saw an artist.'

In sum, it can be said that not only specificity but in some cases also animacy has an impact on the DOM mechanism in Turkish. Independent of the semantic concepts that underlie differential object marking, the mechanism seems to operate in Turkish and impact the case marking of the objects.

3.2.2 Case Alternation

Case alternation is a widely studied topic in the literature that focuses on a set of verbs that displays an alternation in the case marking of their objects. Levin (1993) describes case alternation as alternations involving arguments within the VP, as the transitivity of the verb does not change in these alternations. In instances of case alternation, the case markers that appear on objects alternate between structural and lexical ones without causing a change in the valency structure of the verb. Some case alternations are displayed by a range of transitive verbs that specifically allow for multiple ways of expressing their arguments. For instance, arguments of verbs such as *give*, *sell*, *pay* and *refund* can be expressed in different combinations.

(36) a. Pierre sold a bag to Robin.
b. Pierre sold Robin a bag.

In contrast, some other case alternations occur with intransitive (unaccusative) verbs where the subject of the verb functions as the object in the alternative form. The well-known locative alternation or in other words the spray/load alternation can be investigated under the said phenomenon.

(37) a. Sam sprayed the paint on the wall.
b. Sam sprayed the wall with paint.

Levin (1993) describes this type of alternations as involving certain verbs that deal with applying substances to surfaces or placing objects in containers, as well as verbs that involve removing substances from surfaces or taking objects out of containers. In these types of alternations, one of the objects is expressed inside a prepositional phrase while the other is not. The locative alternation example given above in (37) is constructed with the verb *spray* where (37-a) displays the *locative variant* and (37-b) displays the *with variant*. In the locative variant, the object that functions as a container is inside a prepositional phrase, while in the with variant the container object is outside of a prepositional phrase. In (37-a) the direct object *the paint* is being applied to a surface *the wall*, which is an element of a PP. On the other hand in (37-b) the state is the opposite as it is now *the wall* that is the direct object and the indirect object *paint* is inside a PP. Even though the meanings of these sentences are quite close, there is also an indisputable difference which is caused by the case alternation.

The interpretation differences observed in the locative alternation instances have been studied heavily, and arguably the most intriguing property of locative alternation that these studies put forward is the effect commonly known as the *holistic/partitive effect*. In locative alternation instances, the location argument that is not part of the preposition phrase receives a holistic interpretation, meaning that it is thoroughly and completely affected by the denoted action. This reading is not available when the same location argument is a part of the preposition phrase. For the structures in (37), it can be seen that the NP *the paint* receives a holistic reading when it's outside of a PP as in (37-a) as if the whole paint has been exhausted in the spraying action, but the same reading is not available in (37-b). What is observed

for the locative alternation instances seems to be a difference in the delimitedness interpretations of predicates, which we will discuss in the sections to come.

Furthermore, the sibling of the verb *spray*, so to speak, is the verb *load* in the context of case alternation. As shown in the examples below, *load* displays a similar behavior to *spray* where in one structure, (38-a) here, the with variant is seen and in the other structure, (38-b), the locative variant is seen. In these examples, the meaning is the action of placing an object into a container.

(38) a. Sebastian loaded the truck with hay.
b. Sebastian loaded hay on the truck.

The notion of locative alternation that is exemplified with English examples above is observed in Turkish as well. Turkish verbs such as *doldur* 'fill', *kapla* 'cover', *yükle* 'load', *ört* 'cover', *ek* 'plant' and *sar* 'wrap' are argued to display the locative alternation (Nakipoğlu, 2009). An example Nakipoğlu provides on the locative alternation in Turkish is given below in (39).

(39) a. Küvet-e su-yu/su-∅ doldur-mak
Bathtub-DAT water-ACC/water-∅ fill-INF
'To pour the water/water into the bathtub'
b. Küvet-i su-yla doldur-mak
Bathtub-ACC water-INST fill-INF
'To fill the bathtub with water'

In (39), a structure that is quite similar to the spray/load alternation is given. As we have mentioned above, the spray/load alternation characteristically involves verbs related to either applying substances to surfaces or placing objects into containers, as well as verbs associated with removing substances from surfaces or extracting objects from containers. Here in (39), *küvet* 'bathtub' is the container while *su* 'water' is the object that is being put into the container. The verbs that display this behavior are also categorized as figure and ground verbs (Talmy, 1975; Gropen et al., 1991). In the figure-ground analogy used for this class of verbs, the object that is moving is called the *figure* and the target location it moves to is called the *ground*. For instance in (37) above, the figure is *the paint* as it is being applied to a surface and the ground is *the wall* as it is functioning as the target surface. For the sentences in (39), *küvet* 'bathtub' falls into the role of the ground while *su* 'water' falls into the role of the figure. The verbs that can be categorized as figure and ground verbs typically show the locative alternation. Another example of a verb from Turkish that fits this characterization is *ört* 'cover'. In (40) below, in both of the sentences *çocuk*[3] 'child' behaves as a ground object and *battaniye* 'blanket' behaves as a figure object.

(40) a. Çocuğ-u battaniye-yle ört-mek
Child-ACC blanket-INST cover-INF
'To cover the child with a blanket'

[3] In Turkish, there is an across-the-board phonological change phenomenon that is observed with the addition of a suffix as it can alter the realization of the final consonant or vowel in a root word. For this instance, due to the addition of the accusative case, the last consonant of the NP *çocuk* alternates and results in the form *çocuğu*. For more information, refer to Kornfilt (2013).

b. Çocuğ-a battaniye-yi/battaniye-∅ ört-mek
Child-DAT blanket-ACC/blanket-∅ cover-INF
'To spread the blanket/blanket onto the child'

(Nakipoğlu, 2009, p.1264)

3.2.3 Transitivity Alternations

Alternation operations that involve a change in the verb's transitivity are categorized as transitivity alternations by Levin (1993). She classifies such alternations in the following two forms: (*i*) [NP V NP] alternating with [NP V] and (*ii*) [NP V NP] alternating with [NP V PP]. Levin points out the disagreement in the literature about verbs that exhibit unspecified object alternation as it seems to be not clear whether the understood object in the intransitive form is explicitly represented at a level of either syntactic or lexical representation. Such verbs can be categorized as aspectually variable verbs, as there seems to be a shift in the event types between different variants.

One of the most well-known types of transitivity alternation is what is generally called the causative alternation in the literature, in which the external argument gets pruned. Causative alternation is specifically observed with verbs that have a transitive use as well as an intransitive use. These two uses of the verbs are related to each other as the transitive version can be paraphrased as "SUBJ cause to V-intransitive" (Levin, 1993; Schäfer, 2009). Arguably the most typical example to display the causative alternation is the verb *break*.

(41) a. The vase broke.
b. Vincent broke the vase.

In (41-a), the intransitive form of *break* refers to an event of breaking of the subject *the vase*. On the other hand in the transitive form (41-b), the subject of the previous form is not the object of the sentence and the pattern "cause to V-intransitive" reflects this sentence as it can be paraphrased as "Vincent caused the vase to break". In addition to the verb *break*, the causative alternation is observed with other change-of-state verbs such as *bend*, *shatter*, *crack*, *freeze*, *burn*, *blacken*, *deepen*, *decompose*, *divide*, *shrink* and so on. In the following examples, a relatively common instance of causative alternation in Turkish is given where the intransitive verb *bat* 'sink' turns into the transitive *batır*, which roughly means 'to cause to sink'.

(42) a. Gemi bat-tı.
Ship sink-PAST.3.SG
'The ship sank.'
b. Dalga-lar gemi-yi bat-ır-dı.
Wave-PL ship-ACC sink-CAUS-PAST.3.SG
'The waves caused the ship to sink.'

Further, another alternation type that can be listed as a transitivity alternation is categorized as unexpressed object alternations by Levin (1993). In verbs that show unexpressed object alternations, the subject of the transitive form of the verb is preserved with its original semantic role in the alternate versions and the alternative versions include unexpressed but understood objects. Instances of

unexpressed object alternations are generally the cases where the internal argument is allowed to be disposed of. Levin lists a range of different sub-types for unexpressed object alternations which include types such as understood body-part object alternation, way object alternation and instructional imperative alternation (see. (Levin, 1993, pp.33-40) for more details). The most extensive sub-type she provides is the unspecified object alternation (indefinite object or indefinite NP deletion), which is the one we will focus on further in this section.

Unspecified object alternation is exhibited by an extensive number of verbs that can be categorized as activity verbs in the Vendlerian sense. These activity verbs can be taken as aspectually variable verbs as they can also receive accomplishment interpretations. Such verbs include: *eat*, *cook*, *teach*, *crochet*, *play*, *recite*, *mow*, *chop*, *sweep*, *type*, *vacuum*, *wash*, *write*, *drink*, *read* and so on. In unspecified object alternation, regardless of the intransitive forms' lack of an overt object, an interpretation of an object that is appropriate to the meaning of the verb is received by speakers. For instance in (43-b) below, the meaning that the subject *Evelyn* performed the act of crocheting something that is typical to the crochet act is understood, even though there is not an overt object present. In (43-a) an accomplishment interpretation is present while in (43-b) the same verb triggers an activity interpretation.

(43) a. Evelyn crocheted a sweater.
b. Evelyn crocheted.

Moreover, the sentences below in (44) that are built with the verb *read* demonstrate the unspecified object alternation also. In (44-a), the transitive form of the verb is used with an overt object present. Further in (44-b), the verb is used intransitively although the interpretation of the sentence indicates that a reading action of a readable object is performed. Similarly to the previous example, the structure with the overt object (44-a) is interpreted as an accomplishment while the intransitive variant is interpreted as an activity.

(44) a. Eylül read a book.
b. Eylül read.

The same phenomenon is also present in Turkish verbs of action, as we have seen in Chapter 2 with Aksan's (2005) examples. In (45) below, an unspecified object alternation displayed by the verb *ye* 'eat' from Turkish can be seen. Similar to the English examples, the given Turkish verb can be used both transitively and intransitively. The transitive form receives an accomplishment event interpretation while the intransitive counterpart is interpreted as an activity.

(45) a. Didem ye-di.
Didem eat-PAST.3.SG
'Didem ate (something).'
b. Didem kek ye-di.
Didem cake eat-PAST.3.SG
'Didem ate cake.'

In this chapter, we have analyzed case variation phenomena such as DOM, case alternation and transitivity alternations that are observed in Turkish. As the case markings on the NPs differ in these

structures, there are differences in the semantics as well. In the next section, we will investigate if case variation affects the delimitedness interpretations of predicates in Turkish.

CHAPTER 4

DELIMITEDNESS IN TURKISH

In this chapter, we will first go over the analysis of Nakipoğlu (2009) on the accusative case functioning as a delimitedness marker in Turkish. Moreover, we will analyze the relationship other structural case markers, namely the nominative and the genitive, seem to have with the aspectual interpretation of the predicate.

4.1 The Accusative Case as a Delimitedness Marker

Although delimitedness is a universal semantic concept, not every language marks this phenomenon in overt morphological markers, and on top of this, even the three canonical types of measuring-out verbs (i.e. incremental-theme verbs, change-of-state verbs and route verbs with path objects) can also have nondelimited event denotations by taking non-measuring direct (or [-q]) arguments (Tenny, 1994). Further, Nakipoğlu (2009) argues that Turkish is one of the languages that morphologically mark delimitedness with the accusative case marker. Similar to the canonical types of measuring-out verbs or aspectually variable verbs mentioned above, she argues that accusative marked direct objects of verbs of motion, incremental theme verbs and location verbs in Turkish function as a measuring scale for the whole event. In this section, we will go over Nakipoğlu's analysis in detail.

Firstly, Nakipoğlu (2009) claims that activity verbs that require a certain path as a direct object denote a delimited event if the direct object is marked with the accusative case. She argues that the necessary scaling component of measuring-out is provided with the accusative case in these occurrences. In order to see how this effect is reflected in the grammar, Nakipoğlu gives case alternation examples to show the different interpretation possibilities of accusative and the other case markers.

(46) a. Emre dağ-ı tırmandı.
Emre mountain-ACC climb-PAST.3.SG
'Emre climbed up the mountain.'

b. Emre dağ-a tırmandı.
Emre mountain-DAT climb-PAST.3.SG
'Emre climbed the mountain.'

As can be seen with the discrepancy between the English translations of (46-a) and (46-b), it is clear that the case alternation brought a change in the semantics of the event. The distinction between these two sentences is that while (46-a) is understood as an action of climbing the whole mountain

and reaching the top, this is not necessarily the case with (46-b). For (46-b) the interpretation native speakers receive is that some mountain climbing, doesn't matter the degree of, has been done by the agent Emre. In opposition, for (46-a) there is a distinct endpoint of the climbing action, which is the top of the mountain, that brings out a delimited reading of the sentence. For this sentence, the accusative marked direct object *dağı* provides a scale for the aspectually variable verb *tırman* to be measured-out over a period of time. According to Nakipoğlu, this evidence suggests that the accusative marker in Turkish has measuring-out and delimitedness encoded internally and the effects of these attributes come out when the accusative marked DP is the direct object of a motion verb that requires a spatially bounded path. The proposed delimitedness effect that is brought by accusative marked direct objects can be seen with many other motion verbs such as; *yüz* 'swim', *dolaş* 'stroll', *karışla* 'span', *yürü* 'walk', *adımla* 'pace out', *uç* 'fly', *koş* 'run'. It is emphasized by Nakipoğlu that it is neither only the accusative case nor only the motion verb that brings the delimitedness effect, but the combination of them. If this was not the case, then motion verbs with different kinds of case markers or accusative marked objects with different types of verbs would cause the event to be interpreted as delimited. Nakipoğlu supports this observation with the following set of examples, where accusative marked objects do not trigger delimited interpretations of the stative verb *sev* 'love' and the perception verb *gör* 'see'.

(47) Çocuk-lar dondurma-yı sev-di / adam-ı gördü.
Child-PL icecream-ACC like-PAST.3.PL / man-ACC see-PAST.3.PL
'The children liked the ice cream/saw the man.'

Further, Nakipoğlu provides the adverbial expressions we have mentioned in Chapter 2 to test if accusative marked direct objects truly bring a delimitedness interpretation to structures with motion verbs. In the following examples, she substantiates the accuracy of her initial arguments:

(48) a. Milli yüzücü Boğaz-ı yarım saat içinde/*boyunca yüzdü.
National swimmer Bosphorus-ACC half hour in/*for swim-PAST.3.SG
'The national swimmer swam the Bosphorus in/*for half an hour.'
b. Atlet 800 metre-yi iki dakika içinde/*boyunca koş-tu.
Athlete 800 meter-ACC two minute in/*for run-PAST.3.SG
'The athlete ran the 800 meters in/*for two minutes.'

In (48) above, it can be seen that two motion verbs *yüz* 'swim' and *koş* 'run' are compatible to be used with in-adverbials, while for-adverbials yield ungrammaticality. The first sentence given in (48-a) describes a delimited action of swimming the whole Bosphorus. This interpretation is possible as the direct object of the motion verb is accusative marked. Although, as the event denoted by the sentence is delimited and has a definite endpoint, the presuppositions of for-adverbial *boyunca* and the delimitedness of the event crash. A similar structure is seen in (48-b), where the direct object of the motion verb *koş* is accusative marked leading to a delimited reading and ruling out the suitability of for-adverbials for the sentence.

Following motion verbs, Nakipoğlu presents location verbs as another verb class where the accusative marked objects provide delimitedness. Location verbs are defined as ditransitive verbs in which an agent causes one object to move to a new location (Dowty, 1991; Tenny, 1994; Nakipoğlu, 2009). Examples of this kind of verbs can be given from English where the ground object corresponds to the

direct object such as *fill* and the reverse of it, where the figure object corresponds to the direct object as *pour*. For instance, in (49-a), the ground object *the glass* is the direct object whereas in (49-b), the figure object *the orange juice* is the direct object.

(49) a. Sean filled the glass with orange juice.
b. Sean poured the orange juice into the glass.

Nakipoğlu lists the verbs *dök* and *koy* as the counterpart of *pour* and the verb *doldur* as the counterpart of *fill* in Turkish. However, in Turkish *doldur* allows for both ground and figure objects by undergoing locative change.

(50) a. Bardağ-a su dök-mek/koy-mak
Glass-DAT water pour-INF
'Pour water into the glass'
b. *Bardağ-ı su-yla dök-mek/koy-mak
Glass-ACC water-INST pour-INF
'*Pour the glass with water'
c. Bardağ-a su doldur-mak
Glass-DAT water fill-INF
'Fill water into the glass'
d. Bardağ-ı su-yla doldur-mak
Glass-ACC water-INST fill-INF
'Fill the glass with water'

With the examples above, Nakipoğlu emphasizes that both the objects that are involved in such structures should have the ability to measure-out. For the sentences in (50) that exemplify verbs that allow for locative change, it is essential for both the figure and the ground argument to fit the necessities of the measuring process. In other words, the figure argument must be suitable to incrementally move to a new location in which this new location is the ground argument that is also appropriate for this action.

Furthermore, again the delimitedness effect brought by the accusative is seen with locative verb types in the following examples.

(51) a. Kamyon-a saman-ı/saman yükle-mek
Truck-DAT hay-ACC/hay-∅ load-INF
'To load the hay/hay onto the truck'
b. Kamyon-u saman-la yükle-mek
Truck-ACC hay-INST load-INF
'To load the truck with hay'

The interpretation of the accusative marked objects in both sentences in (51) involves the figure object getting used up in time. For (51-a), the accusative marked object *saman* 'hay' is what's being moved into another area where the dative marked *kamyon* 'truck' functions as this area. On the other hand in (51-b), the meaning is reversed as now the accusative marked object is *kamyon*, and the interpretation

is that the truck is completely and thoroughly filled with *saman*. Similar to the sentences in (51), the sentences in (52) behave as such. Here in (52-a) the accusative bearing object *kağıt* 'wallpaper' is the figure where the dative marked object *duvar* 'wall' is the ground and vice versa for the sentence in (52-b).

(52) a. Duvar-a kağıt-ı/kağıt kapla-mak
Wall-DAT wallpaper-ACC/wallpaper-∅ cover-INF
'To spread the wallpaper/wallpaper onto the wall'
b. Duvar-ı kağıt-la kapla-mak
Wall-ACC wallpaper-INST cover-INF
'To cover the wall with wallpaper'

Lastly, Nakipoğlu extends the list of verbs that allow for a delimited reading with accusative marked objects with the category of incremental-theme verbs. For the category of incremental-theme verbs, Nakipoğlu notes that she follows a different definition than Tenny's (1994). Tenny describes this category as verbs that take internal arguments which are created or consumed over time such as verbs of consumption (e.g. *drink*, *eat*, etc.) and verbs of creation (e.g. *build*, *carve*, etc.). Although in Nakipoğlu's work, this category includes verbs such as *öğret* 'teach', *sev* 'love', *oku* 'read', *anla* 'understand', and so on, that refer to a piecemeal or "incremental" progression of direct objects as the event proceeds.

(53) a. Can her gün gazete oku-r.
Can every day newspaper-∅ read-AOR.3.SG
'Every day Can does newspaper reading.'
b. Can her gün gazete-yi oku-r.
Can every day newspaper-ACC read-AOR.3.SG
'Every day Can reads the newspaper inside out.'

Nakipoğlu argues that the sentence in (53-a) is interpreted as if the paper is skimmed through every day but not fully read. On the other hand, the sentence in (53-b) is understood as if a specific newspaper is entirely read every day. Similarly to other verb classes, incremental-theme verbs such as *oku* 'read' are argued to receive delimited interpretations with accusative marked direct arguments in Nakipoğlu's account.

In summary, we saw in this section that similar to Tenny's (1994) three classes of aspectually variable verbs (incremental-theme verbs, change-of-state verbs and route verbs with path objects), Nakipoğlu lists verbs of motion, incremental theme verbs and location verbs as aspectually variable verb categories in Turkish and argue that only when a verb that belongs to one of these categories is combined with an internal argument that is marked with the accusative case brings out a delimitedness reading in Turkish. However, we argue that there are some complications with Nakipoğlu's account and analyze them in the next section.

4.2 Complications of Nakipoğlu (2009)

In this section, we will go over the complications of Nakipoğlu (2009) account. First, we will analyze if the aspectual interpretations of stative verbs are analogous to eventive verbs as Nakipoğlu takes them. Further, we will analyze the treatment of bare singular objects in her account and describe where we differ from her analysis. Lastly, we will investigate the relationship between delimitedness and structural case markers other than the accusative and argue that other case markers can also function as delimiters when combined with aspectually variable verbs in Turkish.

4.2.1 Aspectual Interpretations of Statives

In the incremental-theme verbs class, Nakipoğlu (2009) categorizes stative and eventive verbs together. For instance, a state verb *bil* 'know' and a verb that can be both stative and eventive depending on its arguments *oku* 'read' are both taken as incremental-theme verbs. This categorization is slightly problematic, as under normal conditions statives cannot receive delimited readings (Vendler, 1967; MacDonald, 2006). However according to Nakipoğlu, in incremental-theme verb structures the accusative case introduces delimitedness effect like in motion verbs and location verbs.

(54) a. Öğrenci-ler fizik bil-iyor.
Student-PL physics-∅ know-PROG.3.SG
'The students know physics.'
b. Öğrenci-ler fizik-i bil-iyor.
Student-PL physics-ACC know-PROG.3.SG
'The students know physics inside out.'

For the sentence in (54-b), Nakipoğlu argues that the stative predicate *bil* 'know' receives a delimited interpretation as its internal argument is marked with the accusative. Nakipoğlu claims that the accusative marker in the sentence indicates a profound knowledge of physics and due to this, physics functions as a metaphorical path to be measured-out. However, applying the grade adverbial test shows that the interpretation of the sentence is not delimited. To test Turkish structures, the modifier *halfway* can be translated as *yarı yarıya*.

(55) *Öğrenci-ler fizik-i yarı yarıya bil-iyor.
Student-PL physics-ACC halfway know-PROG.3.SG
'*The students know physics inside out halfway.'

The incompatibility of the adverb *yarı yarıya* 'halfway' and the sentence in (54-b) is displayed with the odd sentence in (55). If the internal argument was providing a metaphorical path to be measured-out, this path would be suitable to be divided into intervals by a grade adverbial. As a result of this observation, we take statives as inherently atelic in this thesis following the works of Vendler (1967) and MacDonald (2006).

4.2.2 Bare Singulars and Delimitedness

There is another small difference between Nakipoğlu's account and the one that is adopted in this thesis concerning how non-case-marked (bare) singulars are treated. It seems that for the case variations Turkish, Nakipoğlu (2009) does not differentiate between DOM, case alternation and transitivity alternations. Due to this, the aspectual interpretations of predicates with non-case-marked objects seem to be variable, meaning they are taken as delimiters in some structures and not in others. Nakipoğlu's examples of VPs built with locative verbs and incremental-theme verbs both showcase non-case-marked objects as well as accusative marked ones. In structures that allow for DOM, Nakipoğlu (2009) treats accusative marked and non-case-marked objects as variants of each other. However, in structures that only allow for DOM and not other case variations, they are taken as contrasting. Because of this, while bare objects trigger delimited interpretations in structures that allow for other types of case alternations in addition to DOM, in structures that only allow for DOM they fail to do so. However, we argue here that bare objects cannot trigger delimited interpretations of predicates. To understand the aspectual interpretations of non-case-marked objects better, let us compare Nakipoğlu's examples in (56) and (57).

(56) a. Duvar-a kağıt-ı/kağıt kapla-mak
Wall-DAT wallpaper-ACC/wallpaper-∅ cover-INF
'To spread the wallpaper/wallpaper onto the wall'

b. Duvar-ı kağıt-la kapla-mak
Wall-ACC wallpaper-INST cover-INF
'To cover the wall with wallpaper'

(57) a. Biz yabancı-lar-a Türkçe öğret-ti-k.
We foreigner-PL-DAT Turkish-∅ teach-PAST-1.PL
'We taught Turkish to the foreigners.'

b. Biz yabancı-lar-a Türkçe-yi öğret-ti-k.
We foreigner-PL-DAT Turkish-ACC teach-PAST-1.PL
'We taught the foreigners Turkish.'

In (56), the non-case-marked object is taken to trigger a delimited reading and treated as a variant of the accusative marked object. Whereas in (57), the non-case-marked and the accusative marked NPs are taken as contrasting. While the non-case-marked object is taken to be a delimiter similar to its accusative marked counterpart in (56-a), it is taken as a nondelimitedness inducer in (57-a). The question of why non-case-marked objects trigger delimited interpretations in instances of DOM and trigger nondelimited interpretations in instances of case alternation is left unanswered by Nakipoğlu (2009).

Analogous to the previous incremental-theme verb example, in (58) Nakipoğlu takes non-case-marked object *keman* in (58-a) as the nondelimited reading counterpart to the accusative marked *keman-ı* in (58-b).

(58) a. Çocuk keman çal-ıyor.
Child violin-∅ play-PROG-3.SG
'The child plays the violin.'

b. Çocuk keman-ı çal-ıyor.
Child violin-ACC play-PROG-3.SG
'The child plays the violin very well.'

The observed switch of the delimitedness effect triggered by non-case-marked objects seems to be related to a phenomenon called *pseudo-incorporation* by Massam (2001). With pseudo-incorporation, the verb and its direct object behave as if they are a single semantic unit while not being a single lexical unit, in simple terms. Studies argue that Turkish is classified among languages that exhibit pseudo-incorporated behavior with non-case-marked objects (Öztürk, 2005; Sağ, 2022). Due to being pseudo-incorporated, non-case-marked objects are non-referential and cannot be referred to with a pronominal element, as shown by Öztürk with the following example.

(59) a. *Ali kitap oku-du. Reng-i kırmızı-ydı.
Ali book read-PAST.3.SG Color-POSS red-PAST
'Ali read a book. It was red.'
b. Ali kitab-ı oku-du. Reng-i kırmızı-ydı.
Ali book-ACC read-PAST.3.SG color-POSS red-PAST
'Ali read the book. It was red.'

The ungrammaticality of (59-a) stems from the incorporated object and its lack of referentiality. As it can be seen from the latter example (59-b), when the object is case marked with accusative it has referentiality and as a result of this, it can be referred to with a pronominal. Theories argue that for languages that exhibit pseudo-incorporation, in addition to the canonical forms of verbs, the lexicon also includes incorporated versions (Dayal, 2011; Sağ, 2022). Taking this into account, a more proper translation for (59-a) is *Ali did book-reading* (as provided by Öztürk (2005)), as the VP is built with the incorporated version of the verb and acts as a single component.

Whether or not there is pseudo-incorporation in Turkish lies outside the scope of this thesis. In this work, we will argue that predicates with bare singular objects are interpreted as nondelimited and attempt to account for this behavior by implementing the framework of MacDonald (2006) to Turkish data in Section 5.

4.2.3 Structural Case and Delimitedness Interpretation in Turkish

In this section, I will try to demonstrate that Nakipoğlu's (2009) observations of the overt accusative case seem to require some revisions due to the observation that not only the accusative but also all the other structural case markers seem to induce delimitedness reading when used overtly. On top of the accusative case, other structural case markers such as the nominative and the genitive are able to trigger delimitedness readings as in (60) below.

(60) a. Ali rota-yı tırman-dı.
Ali route-ACC climb-PAST.3.SG
'Ali climbed up the route.'

b. Rota tırman-ıl-dı.
Route climb-PASS-PAST.3.SG
'The route was climbed.'
c. Rota-nın tırman-ıl-ma-sı ben-i üz-dü.
Route-GEN climb-PASS-VN-POSS I-ACC upset-PAST.3.SG
'The route being climbed upset me.'

If we assume that it is the overt accusative case that elicits the delimited interpretation of the predicate in (60-a), we can further assume that the nominative in (60-b) and the genitive in (60-c) has the same effect on the corresponding predicates. In the context of rock climbing, for all the sentences in (60) the route functions as a scale for the predicate. In the following sections, we will analyze the effects of structural case markers on the aspectual interpretation of predicates.

4.2.3.1 The Accusative Case

As we have analyzed in the previous section, according to Nakipoğlu (2009) the overt use of the accusative case on the direct objects of verbs of motion, incremental theme verbs and location verbs functions as a marker of measuring-out or delimiting. She establishes her claims by giving examples constructed with aspectually variable verb classes such as the following.

(61) a. Çocuk-lar merdiven-i çık-tı.
Child-PL ladder-ACC climb-PAST.3.SG
'The children climbed up the (entire) the ladder.'
b. Çocuk-lar merdiven-e çık-tı.
Child-PL ladder-DAT climb-PAST.3.SG
'The children climbed the ladder.'

(Nakipoğlu, 2009, p.1259)

In (61), two minimal pair sentences built with the motion verb *çık* 'climb' are given, where the only difference is that the case marker on the direct object is the accusative in (61-a) while it's the dative in (61-b). Nakipoğlu points out that the difference in the interpretations of these sentences is that even though *merdiven* 'ladder' is a spatially delimited object by definition, only when it is marked with the accusative case it functions as a path to go through and causes a delimited reading. One of the most critical points in Nakipoğlu's claims is that it is not solely the accusative marker or another element such as the tense morpheme that precipitates the delimited interpretation, but the combination of the accusative and a verb that can measure-out its internal argument ultimately brings about the delimitedness reading. Her claims can be captured in the simplified condition given below.

(62) *Nakipoğlu's Delimitedness Condition*: The denotation of an event is delimited if;
(*i*) the internal argument is marked with overt accusative case, and
(*ii*) the meaning of the verb allows it to measure-out it's internal argument.

The proposition given in (62) although accurate, appears to be an undergeneralization for Turkish data since on top of the accusative, the nominative and the genitive case markers seem to also trigger

delimitedness when they are combined with a verb that is able to measure-out its internal argument. In the sections to come, we will analyze structural case markers other than the accusative and test this hypothesis.

4.2.3.2 The Nominative Case

In addition to the accusative case, the data in (63) show that the nominative case can also function as a delimitedness marker in Turkish.

(63) a. Rota-∅ tırman-ıl-dı.
Route-NOM climb-PASS-PAST.3.SG
'The route was climbed.'
b. ?Rota-ya tırman-ıl-dı.
Route-DAT climb-PASS-PAST.3.SG
'The route was climbed to.'

In (63), two structures of passivization are given, where the external argument is pruned from the structure. Firstly in (63-a), the noun *rota* 'route' has the nominative case on it, marked with a zero morpheme, and has a delimited reading.[4] On the other hand, in (63-b) the noun has the dative case on it, and does not have the delimited reading.[5] Nevertheless, the interpretations of the sentences display a critical difference. The interpretation of the first sentence (63-a) is quite similar to the one that we assume the accusative case triggers in the canonical version of the sentence, given in (64) below, as they both denote a delimited event.

(64) Ali rota-yı tırman-dı.
Ali route-ACC climb-PAST.3.SG
'Ali climbed the route (till the top).'

The sentence in (64) can be described as the canonical version of (63-a), as it is what the sentence in (63-a) would be if it was not passivized. To native speakers of Turkish, this sentence brings the meaning of an event of a person named Ali climbing a route till he reaches the top, which corresponds to the delimited reading. In line with Nakipoğlu's (2009) claims, the accusative case on the internal argument of (64) seems to trigger a delimitedness reading. This in turn results in a meaning that the temporal limits of the event of climbing are determined by the object. This is expected in Nakipoğlu's work, but as we see with (63-a), the delimitedness reading appears to be preserved under passivization considering the interpretation of the sentence also involves delimitedness. This instance requires further investigation of the changes in the readings of delimitedness under operations such as passivization. In order to better analyze this matter, let us first look at the structure in (63-b) which is the same sentence

[4] in (63-a), the noun acts as a convenetional subject, since it has a nominative on it, but the subjecthood of the noun in (63-b) is not exactly clear, since the noun still has the dative marker. Since in this study argumenthood diagnostics are not critical, I will not discuss the subjecthood status of the given noun in (63-a).

[5] It is worth noting here that this sentence seems to sound odd to some native speakers, and because of this I have marked it with a question mark to include these reading. Nevertheless, the structure never receives a delimited interpretation.

as (63-a) only that it is structured with the dative instead of the nominative on the subject and (65), the canonical version of (63-b).

(65) Ali rota-ya tırman-dı.
Ali route-DAT climb-PAST.3.SG
'Ali climbed to the route.'

Above in (65), the motion verb *tırman* 'climb' is used with an object marked with the dative case. As expected by Nakipoğlu's (2009) observations, the dative case is not able to trigger a delimitedness reading, even though the meaning of the verb is suitable for it. The meaning of the sentence denotes that a climbing action to a route has been done, in which the top has not necessarily been reached. The only thing that is necessary is that some portion of the route to have been climbed by the person Ali. As the sentence carries nondelimitedness, there seems to be no possibility that the passivized version of it should be delimited. This assumption holds in the passivized form given in (63-b), repeated below in (66). Although the sentence has undergone passivization, the noun is still marked with the dative case. In line with the nondelimited reading associated with nonstructural case markers such as the dative case, the passive structure similar to the active structure receives a nondelimited interpretation.

(66) ?Rota-ya tırman-ıl-dı.
Route-DAT climb-PASS-PAST.3.SG
'The route was climbed to.'

In sum, similarly to the accusative case, the nominative case seems to be able to operate as a delimitedness marker in passivized structures. We can further test this observation on passivized versions of some of Nakipoğlu's (2009) original data.

(67) a. Okyanus-∅ uç-ul-acak.
Ocean-NOM fly-PASS-FUT.3.SG
'The ocean will be flown over.'
b. Kamyon-∅ saman-la yükle-n-di.
Truck-NOM hay-INST load-PASS-PAST.3.SG
'The truck is loaded with hay.'
c. Çocuk-∅ battaniye-yle ört-ül-dü.
Child-NOM blanket-INST cover-PASS-PAST.3.SG
'The child is covered with the blanket.'
d. Gazete-∅ oku-n-du.
Newspaper-NOM read-PASS-PAST.3.SG
'The newspaper is read.'

In all of the structures above, even though the accusative is lacking, a delimitedness interpretation is present. Firstly the passive sentence in (67-a) gives a meaning that the ocean will be flown over from one end to the other. This interpretation fits with the definition of delimitedness since the verb is measuring-out its internal argument, which is *okyanus-∅* here. This in turn results in a flying action denotation that is temporally bound by the span provided by the internal argument. Secondly in (67-b), a verb that is classified by Nakipoğlu (2009) as a location verb, namely *yükle* 'load', is used in the

passive form. This sentence denotes a meaning such that the nominative marked internal argument *kamyon* 'truck' is completely loaded with hay. To give the same meaning in active form, the accusative case would be needed as Nakipoğlu suggests. Nevertheless, the lack of the accusative case does not appear to be an obstacle for the structure to receive a delimited reading as undergoing passivization the delimitedness effect is preserved with the nominative case. Further in (67-c), a structure that is very much alike to the previous one is given where the verb *ört* 'cover' is passivized and the meaning of the sentence denotes an action of covering the internal argument is done completely, resulting in a delimited reading. Lastly in (67-d), a nominative marked NP is able to limit an event temporally and the verb allows for it. This last sentence denotes a meaning such that the newspaper is read inside out, such that there is not a single page that is not read. Again in this example, it is seen that the delimitedness effect is preserved under passivization.[6]

To test this observation, we can implement relevant tests we have discussed in Section 1, such as adverbial expression tests that utilize for-adverbials and in-adverbials and modifier tests that make use of items that refer to a graduate change such as *halfway* or *entirely*. For Turkish, we can translate the modifier *halfway* as *yarı yarıya* and *entirely* as *tamamen* and implement the test with these elements.

(68) a. Okyanus-∅ yarı yarıya uç-ul-acak.
Ocean-NOM halfway fly-PASS-FUT.3.SG
'The ocean will be halfway flown over.'

b. Kamyon-∅ saman-la tamamen yükle-n-di.
Truck-NOM hay-INST entirely load-PASS-PAST.3.SG
'The truck is entirely loaded with hay.'

c. Çocuk-∅ battaniye-yle tamamen ört-ül-dü.
Child-NOM blanket-INST entirely cover-PASS-PAST.3.SG
'The child is entirely covered with the blanket.'

d. Gazete-∅ yarı yarıya oku-n-du.
Newspaper-NOM halfway read-PASS-PAST.3.SG
'The newspaper is halfway read.'

Every structure that we analyzed to see the delimitedness readings of nominative marked internal structures in (67) above is suitable to be used together with graduate change modifiers as shown in (68). This evidence illustrates that all these structures denote a delimited reading, as our initial intuitions suggested. By looking closely at the given structures the delimited readings can be easily seen. First, the structure in (68-a) involves the modifier *yarı yarıya* 'halfway', an aspectually variable verb *uç* 'fly' and an internal argument marked with the nominative. From the interpretation of this structure, it is seen that the verb successfully measures-out the internal argument and the denotation of the structure points to a measurable part of the event (which is its half here) as the half of the ocean functions as a temporal bound in this structure. Further in (68-b), a similar structure is seen but with the modifier *tamamen* 'entirely' instead of *yarı yarıya* 'halfway'. There is again an internal argument marked with the nominative used with an aspectually variable verb. As the meaning of this sentence shows, the temporal bounds of the event are determined by the nominative marked argument for the reason that the event can only come to an end when the size/capacity of the internal argument *kamyon* 'truck' is reached. Hence, a measurable property of the internal argument functions as a scale for the event to

[6] It is worth noting that the interpretation of this sentence should not be mistaken for a possible impersonal passive reading, which can essentially be translated as "A newspaper was read here (I can tell from the smell of the ink)".

be measured-out. Moreover in (68-c), an almost identical sentence to the previous one is given. In this structure, analogous to the previous one, a measurable property of the nominative marked internal argument sets the temporal boundaries of the event and causes a delimited interpretation. For these two sentences in (68-b) and (68-c), it is important to note that while there are two arguments combined with their respective ditransitive verbs, for neither of these sentences the external argument object is the one that plays a role in the process of measuring-out. For both these structures it is the internal argument that sets the temporal boundaries of the event. For instance, for the structure in (68-b) it is not the case that the hay is exhausted by being loaded to the truck but the capacity of the truck is exhausted, which is the measurable property here. Further in (68-c), it is the child that is entirely covered which corresponds to the internal argument. The interpretation of the sentence does not denote a meaning that the external argument, *battaniye* 'blanket' here, is what is being used up during the event. The fact that these internal arguments are marked with the nominative instead of the accusative seems to not result in an impediment in the delimitedness interpretation. Lastly in (68-d), again the modifier *yarı yarıya* 'halfway' is used with an incremental-theme verb *oku* 'read' and the nominative marked internal argument is measured-out in the denotation of the event.

From our analysis thus far, the nominative case in passivized structures seems to be able to provide delimitedness interpretation when it is used with an internal argument of an aspectually variable verb. This behavior of the nominative case is exactly what Nakipoğlu (2009) claims the accusative has in Turkish as she claims the accusative case to be a delimitedness marker in the language. In order to further test if the accusative shares this feature with the nominative, we can examine types of verbs that cannot measure-out their internal argument and observe the semantic changes that are brought by the nominative case in both passive and active structures. As Nakipoğlu notes, the accusative fails to bring out a delimitedness effect when it is used with such verbs. If the nominative shares the characteristic of a delimitedness marker, we would expect it to behave likewise. In (69) below, we see that it does.

(69) a. Ali çocuğ-u gör-dü.
Ali child-ACC see-PAST.3.SG
'Ali saw the child.'

b. Çocuk-∅, gör-ül-dü.
Child-NOM see-PASS-PAST.3.SG
'The child is seen.'

The sentences in (69) are built with the stative perception verb *gör* 'see' and they are the passive and active counterparts of each other. In (69-a), the active version of the sentence is given where the internal argument is marked with the accusative. Although the internal argument carries an accusative, we see that the interpretation of the sentence does not carry delimitedness as a result of the given perception verb not being an aspectually variable verb. The seeing action that is denoted by the sentence does not entail that the person Ali sees the child fully, such that a feature of the child in question designates the temporal span of the seeing event. Further in (69-b), the passivized version of the same sentence is given and in this instance, the internal argument is marked with the nominative. Similarly to its active counterpart, the verb here does not measure-out its internal argument as well and consequently, a delimitedness effect is not seen in the interpretation of either of these sentences.

In this section, we have analyzed Turkish passivized structures of aspectually variable verbs and have seen that the nominative marked NPs can also trigger a delimited interpretation. In the next section,

we will see that the genitive case can also induce delimited reading as well as the accusative and the nominative in Turkish.

4.2.3.3 The Genitive Case

As we have discussed in the previous section, in addition to Nakipoğlu's (2009) claims that the accusative case in Turkish can function as a delimiter in certain scenarios, it seems like another structural case marker which is the nominative case also can do so. Considering that the accusative and the nominative are analyzed as structural case markers in Turkish, testing other structural case markers on account of delimitedness may be of value. Along with the accusative and the nominative, the genitive case is generally categorized as a structural case marker in Turkish. The primary function of the genitive case marker is to indicate that a noun phrase represents the possessor of some item expressed by another element and secondarily to indicate the subject of certain types of non-finite subordinate clauses and the case is realized as *-(n)In/-Im* in Turkish (Göksel and Kerslake, 2004). In this section, we will analyze if structures such as the ones in (70), in which the internal arguments of aspectually variable verbs are marked with the genitive case, provoke a delimitedness reading or not.

(70) a. Dağ-ın tırman-ıl-ma-sı
Mountain-GEN climb-PASS-SUB-POSS
'The mountain being climbed'

b. Saman-ın kamyon-a yükle-n-me-si
Hay-GEN truck-DAT load-PASS-SUB-POSS
'The hay being loaded to the truck'

c. Matematik-in öğret-il-me-si
Mathematics-GEN teach-PASS-SUB-POSS
'Mathematics being taught (inside out)'

All verbs that are used in the given structures fit the Delimitedness Condition of Nakipoğlu given in (62) above and repeated for ease below in (71).

(71) *Nakipoğlu's Delimitedness Condition*: The denotation of an event is delimited if;
(*i*) the internal argument is marked with overt accusative case, and
(*ii*) the meaning of the verb allows it to measure-out it's internal argument.

When we analyze the non-finite structures in (70) according to the Delimitednes Condition in (71), as a result, all of their meanings come out to be nondelimited as none of the internal arguments have an overt accusative case. Nonetheless, the interpretations of these structures tell otherwise. Firstly in (70-a), the meaning native speakers get from the non-finite structure is an action of the mountain being climbed till the top is reached, which is quite similar to the reading of a finite sentence structured with the same verb but only with an internal argument marked with the accusative case. From this structure, it seems like the genitive marked argument is able to trigger the delimited interpretation that the Delimitedness Condition ties to the accusative. Further, a similar outlook is seen with the second structure which is given in (70-b). In this structure, a ditransitive verb *yükle* 'load' is combined with an argument marked with the genitive (the internal argument) and another argument marked with

the dative case. This structure also receives a delimited interpretation as the genitive marked internal argument is what sets the temporal boundaries of the loading action. The structure denotes a meaning such that the loading of the truck is done until the hay at hand is exhausted, indicating that the hay is being measured-out by the verb. Due to this, the whole structure receives a delimited reading. Lastly in (70-c), an incremental-theme verb *öğret* 'teach' is used with a genitive case marked internal argument. Even though the internal argument lacks an accusative case, the meaning of this structure is also a delimited one. The interpretation of the structure demonstrates that the internal argument is being measured-out by the verb as the meaning points to the whole of mathematics being taught inside out. The teaching act is temporally bounded by the extent of mathematics, therefore resulting in a delimited reading. In order to confirm that the interpretations of these sentences are indeed delimited, we can implement the adverbial tests from the previous section. In (72) below, we implement the graduate change adverbials *tamamen* 'entirely' and *yarı yarıya* 'halfway' to the structures we discussed above in (70).

(72) a. Dağ-ın tamamen tırman-ıl-ma-sı
Mountain-GEN entirely climb-PASS-SUB-POSS
'The mountain being climbed entirely'

b. Saman-ın kamyon-a yarı yarıya yükle-n-me-si
Hay-GEN truck-DAT halfway load-PASS-SUB-POSS
'The hay being loaded to the truck halfway'

c. Matematik-in tamamen öğret-il-me-si
Mathematics-GEN entirely teach-PASS-SUB-POSS
'Mathematics being taught entirely'

All the structures from (70) appear to be compatible with the graduate change adverbials we implement as testing tools. Firstly the structure in (72-a) denotes a delimited event in which the properties of the internal argument establish the temporal limits of. The meaning of the structure refers to an act of climbing a mountain entirely or fully, which results from the measuring-out of the genitive marked internal argument. Further in (72-b), the adverbial *yarı yarıya* 'halfway' is used and the interpretation of the structure is shown to be a delimited one. Here, the use of the graduate change adverbial results in the meaning of the structure to refer to an interval of the loading act. The boundaries of this interval are determined by a measurable property of the genitive marked internal argument, namely its quantity and as a result, the structure receives a delimited reading. Lastly, the structure in (72-c) involves the use of the graduate change adverbial *tamamen* 'entirely' with the incremental-theme verb *öğret* 'teach'. This structure also has a delimited reading, as the interpretation refers to the temporal bounds of the act of teaching is determined by the limits of the field of mathematics. This act can only be completed when every detail of mathematics is taught. For this last example, it might be problematic to use the graduate change adverbial *yarı yarıya* 'halfway' as a tool to test delimitedness as the structure turns out to be a bit odd as it can be seen in (73) below.

(73) ??Matematik-in yarı yarıya öğret-il-me-si
Mathematics-GEN halfway teach-PASS-SUB-POSS
'??Mathematics being taught halfway'

I argue that the reason underlying the oddness of the above structure is not that it is nondelimited, but that there is a semantic mismatch between the meaning of the verb *öğret* 'teach' and the adverbial *yarı*

yarıya 'halfway'. It is conceptually odd that half of a vast area such as mathematics being taught. On top of this, it is arguably impossible to sort mathematics into two parts and measure them as equals. Although it is possible to find other examples of verbs that cannot be matched with modifier elements, these instances are motivated by a different phenomenon than delimitedness and do not contradict the given tests. We take that the odd instances such as the one in (73) as related to a semantic mismatch between elements and not to the concept of delimitedness.

4.3 Summary

In this chapter, we have gone over the literature on delimitedness in Turkish. Nakipoğlu (2009) claims that the accusative case in Turkish operates as a delimiter in certain structures and accusative marked direct objects of verbs of motion, incremental theme verbs and location verbs function as a scale for the event. Although the analysis of Nakipoğlu partially accounts for the relationship between the accusative and delimitedness interpretations of predicates in Turkish, we argued that there are some complications regarding her analysis.

Firstly, the analysis of Nakipoğlu (2009) includes stative verbs such as *sev* 'love' and *anla* 'understand' as verbs that can receive delimited interpretations with accusative marked objects. However, in this thesis, we take stative verbs as inherently nondelimited and argue that they cannot denote delimited events even with accusative marked direct objects. Secondly, in Nakipoğlu's work, bare singular objects are taken as delimiters similar to accusative marked ones in certain structures and not in others. In this thesis, we argued that bare singulars cannot function as delimiters in Turkish. Lastly, we saw in this chapter that in addition to the accusative, the nominative and the genitive case markers can also function as delimiters in Turkish. This may indicate that the argued relationship between the accusative case and delimitedness is only a correlation and there is another mechanism that affects the aspectual interpretations of predicates in Turkish.

In the next chapter, we will present the main proposal of the thesis and argue that case and inner aspect in Turkish are independent linguistic phenomena, following the work of MacDonald (2006, 2007, 2008).

CHAPTER 5

INDEPENDENCE OF CASE AND ASPECT

In this chapter, we will first analyze MacDonald's (2006) account for the aspectual projection AspP that is argued to be responsible for the aspectual interpretations of predicates. Moreover, we will go over the arguments for the independence of case and aspect. Then, we will argue that Turkish is a language that displays this independence.

5.1 An Aspectual Projection: Aspect Phrase

The independence of case and aspect can be accounted for with the framework MacDonald (2006) proposes, where he implements an aspectual projection *AspP* (Aspect Phrase) which is situated between vP and VP following Travis (1991). With this framework, MacDonald (2006) attempts to account for the different aspectual interpretations of bare plurals (BPs) and mass nouns (MNs) with a syntactic viewpoint. To fully understand MacDonald's account, let us briefly analyze his arguments about the aspectual interpretations of BPs and MNs.

It has been observed for some time in the literature that count nouns and mass nouns evoke different aspectual interpretations of events (Verkuyl, 1972; Mourelatos, 1981; Bach, 1981; Landman, 1989; Wyngaerd, 2001). This behavior is often used to display the concept of telicity as generally count nouns trigger telic/delimited readings while mass nouns trigger atelic/nondelimited ones. Due to this, traditionally delimited predicates are considered to be incompatible with for-adverbials and nondelimited ones to be incompatible with in-adverbials as we have seen in Chapter 1 (Vendler, 1967; Dowty, 1979). Nevertheless, there are cases, such as the ones given below in (74) by MacDonald (2006), in which the durative interpretation brought by for-adverbials is compatible with telic predicates (Jackendoff, 1996; Verkuyl, 1972; Wyngaerd, 2001; MacDonald, 2006, 2007).

(74) a. The farmer dragged a log into the barn for ten minutes.
b. The captain spotted a plane for an hour.

Both these sentences are grammatical under an interpretation that the actions denoted by the predicates are repeated an indefinite number of times for the duration that is stated by the for-adverbial. For instance (74-a) denotes an action of the farmer dragging a log in and out of the barn iteratively for ten minutes. On the other hand in (74-b), a plane is spotted in the sky by the captain repeatedly throughout an hour as it leaves the line of sight and comes back again. Structures such as these demonstrate that telic predicates can be combined with for-adverbials under an iterative reading. This finding indicates

that the durative adverbial (for-adverbial) is in fact modifying the entire event and specifies that it continues for a certain amount of time, rather than modifying solely the predicate (MacDonald, 2006). The iterative interpretation of such telic predicates can be described as subevents of the main event that are iterated through the specified period. This effect is not seen with atelic predicates as events without an endpoint cannot be repeated in a specified time. From our discussion so far, it seems like the durative phrase modifiers such as for-adverbials in (74) modify the entire event whether or not it is telic. Leaving the verbs that cannot denote an iterated meaning because of their internal meaning aside, it seems like the generalization that all predicates in English are suitable to be combined with for-adverbials holds. However, the resulting structure has an iterative meaning only if the predicate is telic.

As we have seen all verbs, regardless of their telicity, can be used with for-adverbials, we can now analyze the aspectual interpretations brought by MNs and BPs. It is commonly accepted in the literature that MNs trigger atelic interpretations. MNs being inherently atelic fits into the measuring-out requirements by Tenny (1994) as BPs cannot act as measurers. Also, it fits with Krifka's (1989) definitions of quantized NPs, as MNs are taken as non-quantized (cumulative). Since MNs can only bring out nondelimited readings and therefore have no endpoints, iterative interpretations of predicates with MNs are not possible. Similarly, BPs are generally assumed to bring out nondelimited readings of predicates. Because of this, MNs and BPs are taken to be in the same category regarding their aspectual categorization (Borer, 1994; Dowty, 1979; Vendler, 1967; Tenny, 1994). Examples such as (75) are taken as evidence for this similarity (MacDonald, 2007).

(75) Darrel ate cake/cakes #in three minutes/for an hour.

Although MNs (e.g. *cake* in (75)) and BPs (e.g. *cakes* in (75)) are generally assumed to elicit equivalent aspectual interpretations in the literature, MacDonald (2006, 2007) observes that this is not the case and various properties can affect the aspectual contribution of these elements. To support this observation, he points out the interpretation variation of BPs with the structures in (76) below.

(76) a. The girl ate cookies in the afternoon.
b. The girl ate cookies for an hour.

The sentences in (76) both have the same BP *cookies* as the internal argument and in addition to in-adverbials, for-adverbials are suitable in these structures. The interpretation brought by the BP *cookies* in (76-a) is similar to an MN-like interpretation, as the sentence does not necessitate a specific number of cookies that the girl must eat in the afternoon. For this sentence, the scenario could be that she just ate half a cookie and left the rest for later. On the other hand in (76-b), another type of interpretation is triggered by the same BP. Here, the for-adverbial that is used in the structure triggers the iterative meaning that is argued to arise with the combination of telic predicates. The reading of the sentence denotes an event such that the girl ate an unclear number of cookies throughout the period defined by the for-adverbial, which is an hour in this case. The possibility of such iterative interpretations shows that BPs and for-adverbials are compatible to be used together. This compatibility is also observed with structures that include in-adverbials on top of duratives such as the sentences in (77-a) and (78-a).

(77) a. The girl ate apples in three minutes for an hour of the competition.
b. The girl ate cake #in three minutes for an hour of the competition.

(78) a. The kid built bikes in an hour for the first week with Downtube.
b. The kid built equipment #in an hour for the first week with Downtube.

Although BPs are compatible to be used in the same structure with both in-adverbials and for-adverbials, the sentences in (77-b) and (78-b) display that this is not the case for MNs. The reason for this is that as MNs trigger an atelic interpretation of the predicate, the aspectual interpretations of BPs and MNs differ (MacDonald, 2006). In cases like these, BPs (e.g. *apples* in (77-a) and *bikes* in (78-a)) trigger an interpretation involving iterative occurrences of similar events, in which MacDonald calls the *Sequence of Similar Events* (SSE) interpretation. For instance, in (77-a) the sentence is understood as if the girl continued eating apples for an hour straight by eating up each apple in three minutes. A similar meaning is available in (78-a) also. Although, as can be seen in (77-b) and (78-b), the SSE reading is not available with MNs as the atelic event interpretation is not applicable for an iterative interpretation. Due to this, the SSE interpretation of a predicate seems specific to BPs. Therefore, considering the SSE interpretation on top of the MN-like interpretation, for BPs two potential interpretations are available. This can be seen with MacDonald's data in (79) below.

(79) a. The kid pushed *stereos* into a garage for an hour.
b. The farmer dragged *logs* onto a tarp for an hour.
c. The girl carried *bags* into a store for an hour.

All three of the sentences in (79) above involve BPs as objects and all these objects can trigger two different interpretations. For instance, the sentence in (79-a) can denote either a pushing event of several stereos into a garage for an hour in an iterative manner or a pushing event of a single stereo, multiple stereos or a group of stereos into a garage for an hour. The former interpretation is the SSE interpretation and the latter is the MN-like interpretation of BPs. These readings are also available for similar structures in (79-b) and (79-c). In order to fully understand the aspectual effects of BPs, MacDonald reviews the aspectual distributions of BPs as complements of goal prepositions with structures in (80) and as external arguments with structures in (81).

(80) a. The kid pushed a stereo onto *pieces of plywood* for an hour.
b. The farmer dragged a log onto *tarps* for an hour.
c. The girl carried a bag under *palm trees* for an hour.

Firstly, the sentences in (80) show that BPs which are complements of a goal phrase have an effect on the aspectual interpretation of the predicate (MacDonald, 2006). SSE interpretation is accessible for every sentence given above in (80). For example, (80-c) denotes an event of a single bag being carried one after the other under distinct palm trees over the course of an hour.

(81) a. *Kids* pushed a stereo into a garage for an hour.
b. *Farmers* dragged a log onto a tarp for an hour.
c. *Girls* carried a bag into a store for an hour.

Furthermore, with the sentences given in (81), MacDonald argues that BPs in external argument positions do not trigger an SSE interpretation and therefore do not affect the aspectual interpretation of the predicate. It is not the case that for any of the sentences in (81) that the external argument NP is understood to go under the event denoted by the predicate in an iterative manner for an hour. The observation that external arguments do not contribute to the aspectual interpretation of the predicate is also pointed put by researchers such as Tenny (1994) and Hay et al. (1999).

The discussion so far shows that BPs and MNs exhibit different aspectual interpretations and distributions. BPs can trigger an SSE interpretation of a predicate while MNs cannot. Additionally, while BPs can affect the aspectual interpretation of the predicate as an internal argument and a complement of goal prepositions, MNs can only affect the aspectual structure as internal arguments. MacDonald (2006) aims to account for this distinction with a syntactic viewpoint and argue that an aspectual projection AspP that is situated between vP and VP is responsible for these differences, as he claims that MNs and BPs establish distinct relations with AspP. In this account, MNs form an Agree relation with Asp^o while BPs move up to the specifier position of the AspP. MacDonald states that in theory, considering the principles of movement, items c-commanded by Asp^o can move up to the specifier position of the AspP. With this setup, the aspectual distribution of BPs is accounted for. The BPs that are c-commanded by Asp^o move into the specifier position of the AspP and consequently elicit SSE interpretation. MacDonald presents a potential island structure for BPs as evidence for the proposed movement relationship between the specifier of AspP. He argues that the BPs that do not leave this potential island cannot receive SSE interpretation. The following structures in (82) provided by MacDonald show that this argument holds.

(82) a. John smoked a box of cigars #for ten hours.
b. John destroyed a row of houses #for a day.
c. John wrote a book of poems #for a week.

Neither of the sentences in (82) can receive an SSE interpretation. In (82-a), it cannot be the case that over the course of ten hours John smoked cigars one after the other. Similarly for (82-b), the interpretation that John destroyed one house after another iteratively for a day is not available. Lastly in (82-c), the interpretation of an event of John writing poem books back to back for the course of a week is not accessible. The unavailability of SSE interpretation in these structures stems from the complex NPs not letting the BPs to move out of the island (MacDonald, 2007). As a result of this blockage, BPs cannot move into the specifier position of AspP and, consequently, cannot trigger SSE interpretation. Furthermore, MacDonald claims that BPs function as existential quantifiers when they affect the aspectual interpretation of the predicate. In order to evoke SSE interpretation, a BP must bind a variable inside the aspectual domain of interpretation as they bring existential quantification to the structure. The aspectual domain of interpretation is defined as a syntactic domain that includes every item that AspP dominates and only the elements inside of this domain can affect the aspectual interpretation of a predicate. So, for a BP to bind a variable that is inside the aspectual domain of interpretation, it must originate in a position below the AspP and eventually move to a position above it.

We have seen that in order to elicit SSE interpretation BPs must move to specifier position of AspP and bind a variable inside the aspectual domain of interpretation. Through this movement, SSE interpretation which brings delimitedness is available. How are the aspectual distributions of MNs accounted for with this framework? MacDonald (2006) argues that MNs form an Agree relationship with Asp^o and

value the head as nondelimited as it is the innate value of MNs. MacDonald takes the Agree relation with Asp^o as the syntactic instantiation of the aspectual relationship between the predicate and its internal argument (what Krifka (1989) defines as object-to-event mapping). This suggests that the internal argument's aspectual structure determines the aspectual interpretation of the event. If the internal argument NP is delimited (or [+q]), the event will have a delimited interpretation. On the other hand, if the internal argument is nondelimited (or [-q]) the event will also be interpreted as nondelimited. The aspectual interpretations brought by MNs and BPs are elucidated with this proposal. Since MNs are inherently nondelimited, they trigger nondelimited event interpretations as internal arguments. Further, as BPs can elicit both delimited and nondelimited interpretations, the event interpretations they trigger are dependent on the Agree relation that is established with Asp^o. Because of how Agree is defined, only the NP that is closest to Asp^o can form an Agree relationship with Asp^o and value it. As in this framework Asp^o merges with VP, the closest NP to the Asp^o is the internal argument of the verb. This further explains why NPs can only affect the aspectual interpretations of predicates as internal arguments but not as external arguments (Tenny, 1994; Hay et al., 1999). The reason for this is that the value assignment of Asp^o is a local relation between the VP and the AspP. As external arguments are merged into the structure after this relation is settled, they cannot further affect the aspectual interpretations.

According to MacDonald (2006), the varying aspectual interpretations brought by BPs and MNs serve as a diagnostic tool for the existence of AspP. By implementing this diagnostic tool, the aspectual interpretations of stative predicates can also be analyzed. It is assumed in the literature that regardless of the aspectual structure of the internal argument, stative predicates such as *love*, *know*, *hate*, *smell*, *own* and so on always receive nondelimited readings (Vendler, 1967; MacDonald, 2006). This means that object-to-event mapping is not present with stative predicates. The following examples of MacDonald display the lack of object-to-event mapping in statives, regardless of the aspectual nature of the internal arguments.

(83) a. John loved a woman/peanut butter for a year.
b. John loved olives for ten years.
c. John owned stereo equipment/a TV for a month.
d. John owned books for a month.

None of the predicates of the sentences given in (83) receive delimited interpretations. For instance in (83-a), it is not the case that John loved an indefinite number of women or peanut butter for the course of a year. Similarly, it is not the case for (83-b) that that John loved a numerous amount of olives iteratively for ten years. The same goes for the sentences in (83-c) and (83-d) as well. These structures show that the aspectual structure of the internal argument does not affect the aspectual interpretation of stative predicates.

As in the current framework, the Agree relation with Asp^o is taken as the syntactic instantiation of the aspectual relationship between the predicate and the internal argument, the lack of such a relationship is an indicator that statives do not have AspP in their structure. For statives, MacDonald (2006) proposes a structure without an aspectual projection between vP and VP which accounts for the absence of object-to-event mapping in these predicates. The proposed structure is supported by the well-known observation about the *do so* structures where eventive predicates can participate in such constructions but statives cannot. This observation can be seen in (84) below where sentences with eventive predi-

cates in (84-a) and (84-b) can appear in do so structures but a sentence with a stative predicate such as (84-c) cannot.

(84) a. Mary ate a pizza and John did so too.
b. Phil built a house and Karen did so too.
c. *John loved a movie and Mary did so too.

Up to now, we have analyzed MacDonald's (2006) account for the distinct aspectual interpretations of BPs and MNs. In this framework, AspP is an aspectual projection located between vP and VP and the internal argument's effect on the aspectual interpretation of a predicate is dependent on Asp^o within AspP. In other words, Asp^o is the syntactic instantiation of object-to-event mapping. Following this, the NP that Agrees with the Asp^o determines the aspectual interpretation of the predicate. If the NP is delimited, the predicate receives a delimited reading and if the NP is nondelimited, the predicate in turn receives a nondelimited interpretation. MacDonald claims that the differences in aspectual interpretation between MNs and BPs stem from the different relations they form with AspP. While MNs Agree with Asp^o to elicit nondelimited interpretation, BPs either stay in their original position and elicit MN-like interpretation or move to the specifier position of the AspP and elicit an SSE interpretation which brings delimitedness. Further, MacDonald argues that the availability of object-to-event mapping interpretations and SSE interpretations can be used as a diagnostic for AspP. Through this diagnostics, it shows that while eventive predicates project AspP stative predicates do not. In sum, in the given framework aspect is taken to be an Agree relation with Asp^o, which is the syntactic instantiation of object-to-event mapping. The aspectual nature of the internal argument affects the aspectual interpretation of the predicate by the Agree relation it establishes with Asp^o. In the next section, we will see how the relationship between case and aspect is accounted for within this framework.

5.2 Independence of Case and Aspect

Telicity, or delimitedness, is a central topic in both syntax and semantics literature as the differences between telic and atelic predicates have been studied extensively. In many syntactic approaches, the notion of telicity is argued to have a functional projection above the VP whether it is defined as aspect phrase AspP (Travis, 1991; Ramchand, 1997), as the feature [*telic*] (Kratzer, 2004), as object agreement (Borer, 1994; Ritter and Rosen, 1998) or as quantity aspect ASP$_Q$ (Borer, 2004). On top of this, many researchers agree on a direct relationship between the telicity reading of a predicate and the accusative marked internal argument (Borer, 1994; Ramchand, 1997; Kiparsky, 1998; Ritter and Rosen, 1998; Kratzer, 2004; Nakipoğlu, 2009). The proposal of a direct relation between the accusative case and the aspectual interpretation of the predicate is often supported with structures from Finnish, such as the following example of Kiparsky (1998).

(85) a. Ammu-i-n karhu-a / kah-ta karhu-a / karhu-j-a.
Shoot-PAST-1.SG bear-PART / two-PART bear-PART / bear-PL-PART
'I shot at the (a) bear / at (the) two bears / at (the) bears.'
b. Ammu-i-n karhu-n / kaksi karhu-a / karhu-t.
Shoot-PAST-1.SG bear-ACC / two-ACC bear-PART / bear-PL.ACC
'I shot the (a) bear / two bears / the bears.'

With the sentences in (85), Kiparsky (1998) displays the interpretation differences triggered by the partitive and the accusative in Finnish. In (85-a), the verb has a partitive marked object which results in a nondelimited interpretation and the predicate denotes an activity. On the other hand in (85-b), the object is marked with the accusative case and the denotation is of a delimited accomplishment. The difference in the event denotations is the difference between "to shoot at" and "to shoot dead" while the former corresponds to the meaning brought by the partitive, the latter better suits the meaning brought by the accusative. Following this, Kiparsky (1998) argues that due to the aspectual function it possesses, the partitive case functions as a nondelimitedness licencer at the VP level (unboundedness in his work). For the same structures, the accusative can be used for the corresponding boundedness interpretation. Following this reasoning, direct objects of nondelimited VPs get assigned partitive case and direct objects of delimited VPs get assigned accusative case in Finnish.

Similar to the claims made for Finnish in the literature, Nakipoğlu (2009) provides evidence for the relationship between the accusative case and delimited readings of the predicate as she claims that the accusative case in Turkish functions as a marker of measuring-out. She displays this relationship with examples such as the structures we analyzed in Section 4, repeated below in (86).

(86) a. Emre dağ-ı tırman-dı.
Emre mountain-ACC climb-PAST.3.SG
'Emre climbed up the mountain.'
b. Emre dağ-a tırman-dı.
Emre mountain-DAT climb-PAST.3.SG
'Emre climbed the mountain.'

Sentences in (86) and similar structures are essential to Nakipoğlu's claims as she makes a case for the connection between the accusative and delimitedness. In (86-a) the interpretation of the structure is a delimited one and the internal argument of the verb is marked with the accusative. On the other hand, the sentence in (86-b) has a nondelimited reading and the internal argument here is marked with the dative case. In such structures, Nakipoğlu claims that the measuring-out function of the accusative marker is at work and the aspectual interpretations of the sentences differ due to this property.

Although the data from Finnish and Turkish seem to support the direct relationship between the accusative on the internal arguments and the delimited event reading, some problems arise when we look at more data. Firstly, there are instances without an accusative case marking on the internal argument that can elicit delimited readings such as the ones we have analyzed in Section 4. In these instances, we see that marking of the accusative is not a condition for delimitedness as the nominative and the genitive case markers can also elicit delimited reading. This behavior is also seen in English passive structures that are given below in (87) where the internal argument that measures-out the event is marked with the nominative and still triggers a delimited reading (MacDonald, 2006).

(87) a. John drank the bottle of beer #for an hour.
b. The bottle of beer was drunk #for an hour.

In (87-a), the structure has an [+q]NP as an internal argument and the event has a delimited reading which can be seen with the unsuitable use of the for-adverbial. Further in (87-b), the same structure is passivized and the structure still receives a delimited reading. This observation raises questions about

the validity of the argued relationship between the accusative case and the aspectual interpretation of the predicate. The same problem is recognized in Finnish as well, where the passive structure marked with the nominative still elicits a delimited interpretation. MacDonald (2006) displays this observation with the structures given below in (88).[7]

(88) a. Hän luki kirjan.
S/he read.PAST book.ACC
'S/he read the book (and finished it).'
b. Kirja luettiin.
Book.NOM was-read
'The book was read (and finished).'

The data in (88) shows that Finnish displays similar behavior to English in passivization structures with [+*q*]NPs. In (88-a), a delimited event is denoted with the predicate *luki* 'read' which has an accusative marked internal object. On the other hand in (88-b), the structure is passivized and the same NP is now in turn marked with the nominative case. Although the accusative case is not present, the delimited reading is still available. This data from Finnish supports the idea that as well as in English, there is not a direct relationship between the accusative case and inner aspect in Finnish. The same profile is observed in Turkish also as can be seen below in (89), where the delimited reading is available with or without the accusative.

(89) a. Uçak okyanus-u uç-acak.
Plane ocean-ACC fly-FUT.3.SG
'The plane will fly over the ocean (from one end to the other).'
b. Okyanus-∅ uç-ul-acak
Ocean-NOM fly-PASS-FUT.3.SG
'The ocean will be flown over (from one end to the other).'

Another observation that causes problems for the relation between the accusative case and delimitedness is the instances where the presence of the accusative case on the object does not trigger a delimited reading. Sentences constructed with stative verbs such as the ones given by MacDonald (2006) display this problem.

(90) a. John owned stereo equipment/a TV for a month.
b. John knew gaming software/the answer for a while.

Both of the sentences in (90) include accusative marked internal arguments although the interpretations are not delimited. The compatibility of for-adverbials with these structures shows that they are non-delimited. MacDonald (2006) points out that these behaviors given in (87) and (90) are not expected in languages that have a direct relation between case and aspectual interpretation of the structure. On top of English, languages that are argued to involve a direct relation between accusative marking and delimitedness such as Finnish and Turkish display this problem. As a result of this, MacDonald (2006) argues for the absence of a direct relationship between accusative and the aspectual interpretation of

[7] The data is originally of Pereltsvaig (2000) and the glossary is taken as it is provided by MacDonald (2006).

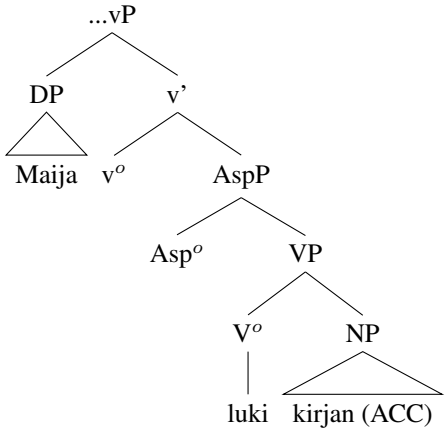
the predicate and claims that case and aspect are independent syntactic relations. He argues that the alleged relationship between the two concepts is only an indirect one.

In this framework, MacDonald (2006) claims that the object-to-event mapping is syntactically instantiated with an Agree relation with Asp^o. But according to Chomsky (2001), accusative case is instantiated with an Agree relation with v^o. As a result of this, it seems like the values of case and aspect are assigned by two different syntactic heads. If this is accurate, it should follow that (*i*) there should be instances where object-to-event mapping is seen but the accusative case is lacking and additionally (*ii*) there should be instances where the presence of accusative case does not trigger object-to-event mapping (MacDonald, 2006). As we have discussed with the examples above, both of these predictions are borne out. With the passivization example given above in (87), it is seen that the lack of accusative case does not necessarily entail nondelimitedness as the structure receives a delimited reading nonetheless. Further, with the structures in (90) we see that structures with accusative marked internal objects can receive nondelimited interpretations.

As the relationship between case and aspect in Finnish seems to be not as direct as it is argued in the literature, MacDonald (2006) proposes the structure given below in (91-b) to account for the relation between the accusative case and delimitedness in Finnish that is seen with the sentence in (91-a).

(91) a. Maija luki kirjan.
Maria read.PAST book.ACC
'Maria read the book (and finished it).'

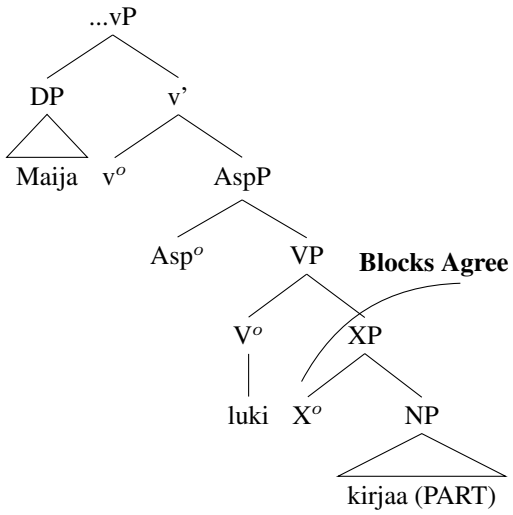
b.



In (91), the internal argument can form an Agree relation with v^o and get assigned a case without a problem. Furthermore MacDonald (2006) argues that, given the structural proximity of v^o and Asp^o, there is no syntactic reason for the internal argument to not Agree with Asp^o as well. MacDonald claims that when the accusative case is present on the internal argument, then the internal argument can Agree with Asp^o and as a result value it as delimited. Moreover, MacDonald presents the structure given below in (92-b) for the relation between partitive case and nondelimitedness in Finnish for the sentence in (92-a).

(92) a. Maija luki kirjaa.
Maria read.PAST book.PART
'Maria read the book (for a while).'

b.

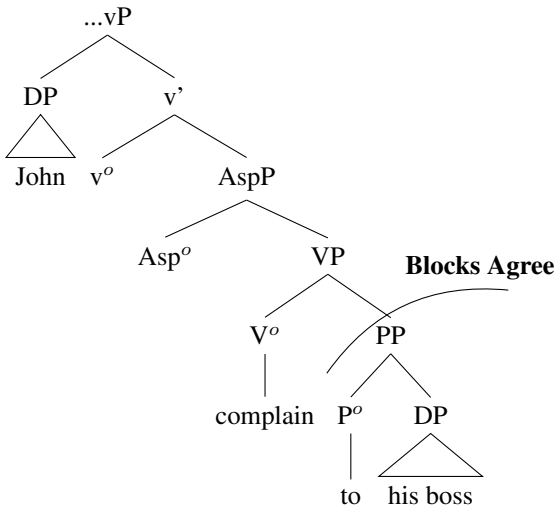


For partitive case marked structures in Finnish, MacDonald assumes a null X^o as a complement of the verb which takes the partitive marked NP as its complement. He argues that the proposed X^o blocks the Agree relation between the NP and both v^o and Asp^o. He states that the partitive marked NP does not Agree with v^o, since otherwise it would be marked with the accusative case. Therefore, he further argues that the non-accusative marked NP cannot Agree with the proposed Asp^o as well. He proposes that this hypothetical extra structure called XP is the reason for the blocked Agree relations, and since to receive the delimited interpretation the NP needs to Agree with Asp^o, the predicate is interpreted as nondelimited. In other words, it seems that his motivation for proposing the XP layer stems from the assumption that v^o is associated with assigning the accusative marker to objects, and since there is no accusative marker on the object he proposes that there is some form of structural configuration that blocks this Agree with the v^o and the given object. MacDonald (2006) further abstracts this configuration by giving it a variable name, namely XP. If there was Agree with v^o there would be accusative marker on the object, but there isn't, therefore the object does not Agree with v^o which indicates that this object may not be available for any kind of Agree, including Agree with Asp^o. As a result of agreeing with neither v^o nor Asp^o, the predicate receives the default nondelimited reading.[8] MacDonald (2006) supports the presence of a null X^o with structures involving prepositional phrases such as (93-a), as he argues that agreement is also blocked between the internal argument and Asp^o as shown in the tree structure of the sentence in (93-b).

[8] The default value of Asp^o being nondelimited/atelic is a result of the relationship between event features MacDonald proposes and the domain of aspectual interpretation Since we focus on the independence of case and inner aspect in this work, we will not be getting into the details of event features. For more information on the topic, see MacDonald (2006).

(93) a. John complained to his boss for an hour.

b.



According to MacDonald (2006), the overt prepositional phrase in (93) has the same blocking effect the null XP has in (92) above. In (93), as no DP Agrees with Asp^o, the object receives a default nondelimited value and in turn, the predicate receives the default partitive case. MacDonald further argues that the null XP is the source of the partitive case as well, entailing that in Finnish partitive case is nonstructural. It seems to be the case that the partitive case in Finnish is indeed nonstructural as partitive case marked NPs preserve their case marking after passivization as can be seen in (94) below[9].

(94) a. Hän luki kirjaa.
S/he read.PAST book.PART
'S/he read the book (for a while).'

b. Kirjaa luettiin.
Book.PART was-read
'The book was read (for a while).'

The blocking effect in these examples causes a structure where no DP is available to Agree with Asp^o. As a result of this, the objects receive the default aspectual value and get interpreted as nondelimited. The structure MacDonald (2006) shows here is similar to the case alternation instances we have analyzed in Section 3, repeated below in (95).

(95) a. Sebastian loaded the truck with hay.

b. Sebastian loaded hay on the truck.

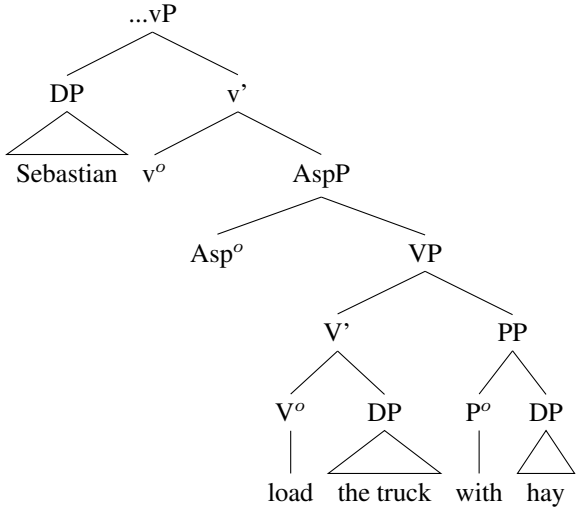
Sentences in (95) display the well-known spray/load alternation where there are two variants of how the verb is combined with its arguments. In these variants, the argument that is expressed inside a prepositional phrase switch. For the sentences in (95), the direct object *the truck* is outside of a PP in the former and inside a PP in the latter. There is an aspectual interpretation difference that is observed with spray/load alternations which is generally called the holistic/partitive effect, where an object is

[9] The data and gloss are taken from MacDonald (2006) who cites Pereltsvaig (2000) as the source.

understood to be completely affected by the predicate. This effect is blocked for objects that are inside of a PP and can only be received by objects that are not. This blocking effect seems quite similar to the blocking property of the null XP MacDonald proposes. The holistic/partitive effect instances can be accounted for with this account by taking PPs as overt realizations of the null XP, similar to (93).

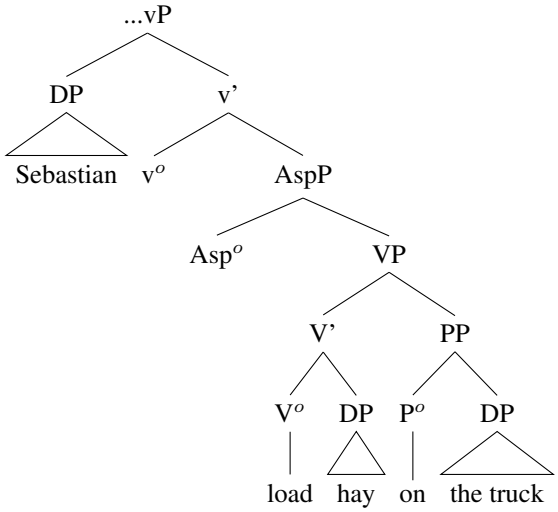
(96) a. Sebastian loaded the truck with hay.

b.



In (96-b), the DP *hay* which is inside the PP is blocked from forming an Agree relation with available heads. But this is not the case for the DP *the truck* and the object can Agree with both v^{o} and Asp^{o}. As a result of this, v^{o} assigns accusative case and Asp^{o} assigns delimitedness. The holistic/partitive reading of the DP is a consequence of its Agree with Asp^{o} as the delimited value assigned by the Asp^{o} gives rise to the interpretation of the object *the truck* being completely exhausted by the predicate. The same blocking effect of the PP is seen with the other variant of the sentence given below in (97) as well. In this structure, the argument that receives the delimited value in the previous structure is inside a PP and blocked from Agree. However, the other object *hay* can Agree with both v^{o} and Asp^{o}. As a result, it receives accusative case and delimitedness. The interpretation of the predicate denotes a delimited event such that the object *hay* is completely affected by the event.

(97) a. Sebastian loaded hay on the truck.

b. 

So far, we have analyzed MacDonald's (2006) account on the independence of case and aspect. In this framework, case is a relation between a DP and v^{o} while inner aspect is a relation between a DP and Asp^{o}. As the value assignments of case and aspect depend on distinct syntactic heads, they should also be treated as independent syntactic relations. However, MacDonald notes that this independence does not entail that there is no connection between case and aspect. Assuming that the accusative case marks a specific syntactic position within the verb phrase, then its presence on a particular argument can signify which argument occupies this position. As the argument in this specific syntactic position engages in object-to-event mapping with the predicate, accusative case can indirectly influence the aspectual interpretation of the predicate which indicates an indirect relation between case and aspect.

In this section, we have analyzed Finnish data that supports MacDonald's claims on the independence of case and aspect. In the following section, we will investigate if the argued independence is seen in Turkish as well.

5.3 Independence of Case and Aspect in Turkish

The relationship between the accusative case and the delimited interpretation of a predicate which is argued for Finnish is also claimed to be present in Turkish by Nakipoğlu (2009). To remember Nakipoğlu's analysis, an example from her study that is given previously in Section 4 is repeated below in (98).

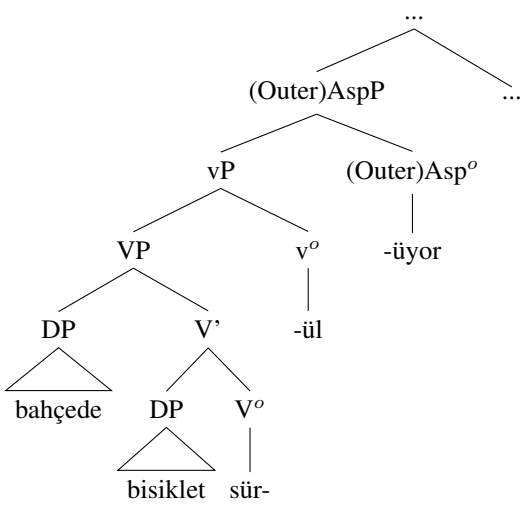
(98) a. Emre dağ-ı tırman-dı.
Emre mountain-ACC climb-PAST.3.SG
'Emre climbed up the mountain.'

b. Emre dağ-a tırman-dı.
Emre mountain-DAT climb-PAST.3.SG
'Emre climbed the mountain.'

For structures in (98), Nakipoğlu (2009) claims that the differences between the interpretations are due to the delimiting properties of the accusative case which the other case markers lack. In this account, the accusative case in (98-a) acts as a delimiter and measures-out the event. As a result, the predicate receives a delimited interpretation. On the other hand, the dative case in (98-b) is not able to function as a delimiter and the event in turn receives a nondelimited interpretation. Although Nakipoğlu (2009) claims that only the accusative case marked direct objects of a certain set of verbs can trigger a delimited interpretation of a predicate in Turkish, there are counterexamples to show that this may not exactly be the case. For instance, stative verbs such as *sev* 'love' and *bil* 'know' which she lists as verbs that receive delimited readings with accusative marked objects cannot be interpreted as delimited. Further, there are instances of delimited event interpretations that arise without the presence of an accusative marker which indicates that there may not be a direct relation between the accusative case and delimitedness in Turkish. The picture so far seems similar to what MacDonald (2006) observed for Finnish accusative and partitive case markers. Since Finnish data can be accounted for with the framework MacDonald proposes for the independence of case and aspect, let us see if the account can further be implemented to Turkish data. In this account, MacDonald (2006) postulates the presence of an aspectual layer between vP and VP that corresponds to the inner aspect. It must be noted here that this layer is for the inner aspect and not for the outer aspect, as we can see that in Turkish the outer aspect is positioned above the vP. This can be seen with the passivized structure given below in (99) that has a grammaticalized aspect marker *-Iyor* that codes imperfectivity.

(99) a. Bahçe-de bisiklet sür-ül-üyor.
Garden-LOC bicycle ride-PASS-IMPF
'A bicycle is being ridden in the garden.'

b.

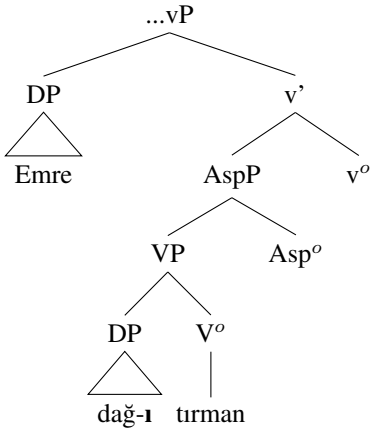


Now, coming back to the inner aspect, let us see how MacDonald's (2006) account can be implemented to Turkish. The following tree structure represents a part of the sentence in (98-a) repeated below in (100-a).[10]

[10] Turkish is categorized as a head-final language and because of this property, the heads in the tree structures come after their complements.

(100) a. Emre dağ-ı tırman-dı.
Emre mountain-ACC climb-PAST.3.SG
'Emre climbed up the mountain.'

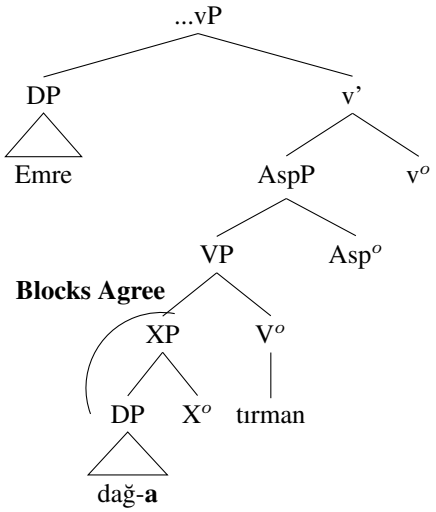
b.



The tree structure in (100-b) represents the vP structure of the given sentence. Following MacDonald's (2006) analysis of Finnish, I argue that the delimited sentences with accusative marked objects in Turkish have the given tree structure. For these sentences, the objects are free to Agree with both v^o and Asp^o as there is no syntactic factor blocking the Agree relation. Following this, as Chomsky (2001) argues, v^o assigns the accusative case to the object DP. Further, Asp^o assigns delimitedness value to the object. As a result of this process, the predicate is interpreted as delimited. Within this system, the dative marked structure in (98-b), repeated below in (101-a), is represented with the following tree structure.

(101) a. Emre dağ-a tırman-dı.
Emre mountain-DAT climb-PAST.3.SG
'Emre climbed the mountain.'

b.



The sentence in (101-a) has a dative marked object and the predicate receives a nondelimited interpretation which fits with Nakipoğlu's (2009) analysis. Within the framework of MacDonald (2006), the nondelimited sentences that have nonstructural case marked objects can be represented by implement-

ing the null XP the account provides. In (101-b), we see the null X^o as a complement of the verb *tırman* 'climb'. The null XP in this structure blocks the potential Agree relations between the object DP and any available head that can Agree with it. In this case, neither v^o nor Asp^o can Agree with the object and as a result, the object receives the dative case and also the predicate receives nondelimited reading. If v^o could Agree with the object position, the object would be marked with the accusative case instead of the dative. The lack of accusative case marking on the object position entails that it is blocked from Agree with v^o. We assume that the mechanism that causes the blocking of Agree with v^o also blocks Agree with Asp^o. Further, as there is no available DP that can Agree with Asp^o, it receives a default value and in return the predicate gets interpreted as nondelimited. We argue, in line with MacDonald, that in Turkish the nondelimited sentences with nonstructural case marked objects have the null XP in their tree structure which blocks the necessary Agree relations for a delimited reading. Further, as we will briefly discuss later on, the null XP could correspond to KP (Case Phrase) in Turkish, just as it seems to correspond to PP in English.

The verb *tırman* 'climb' in the examples above is a motion verb in Nakipoğlu's classification which is an aspectually variable verb that can denote different event types. Let us analyze a verb from Nakipoğlu's (2009) location verbs class *yükle* 'load', with the data set we analyzed in (51) in Chapter 4 that is repeated below.

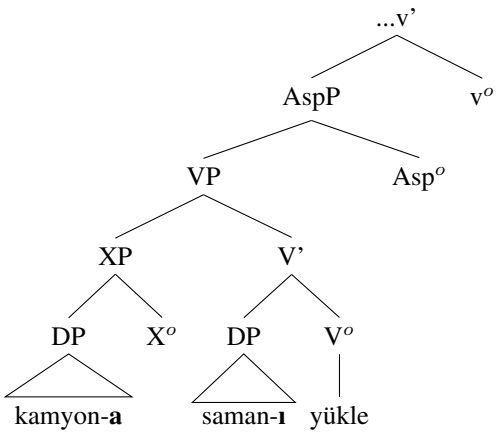
(102) a. Kamyon-a saman-ı/saman yükle-mek
Truck-DAT hay-ACC/hay-∅ load-INF
'To load the hay/hay onto the truck'

b. Kamyon-u saman-la yükle-mek
Truck-ACC hay-INST load-INF
'To load the truck with hay'

Within Nakipoğlu's (2009) analysis, the case alternations seen in (102) display the delimiting effect of the accusative marker as the accusative marked internal objects function as a scale for the given event in each case. Although in (102-a), a bare singular is argued to trigger the same delimited interpretation effect an accusative marked object triggers. Within the framework implemented in this thesis, we take structures with bare singulars as instances of pseudo-incorporation and argue that they cannot elicit a delimitedness interpretation. We argue that the overt accusative case marking on the objects is also the reason that allows for the relationship between Asp^o and the delimited reading of the predicate. At this point, it is unclear what this relation could be but with this reasoning, in structures where the accusative case is blocked (in other words, the Agree relation with v^o is blocked), Asp^o would be blocked as well. Hence, as a result, delimited interpretation of the predicate would also be blocked. The differences between such structures with accusative marked objects and bare singular objects are represented with the trees in (103) and (104) below.

(103) a. Kamyon-a saman-ı yükle-mek
Truck-DAT hay-ACC load-INF
'To load the hay onto the truck'

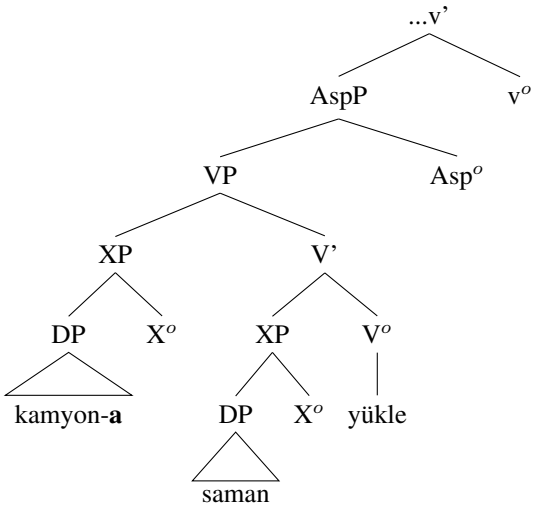
b.



In (103-a), a ditransitive verb *yükle* 'load' is combined with two arguments, one marked with the dative case and one marked with the accusative case. For structures like this, our account proposes a tree construction like the one in (103-b). In this tree, the dative marked object *kamyona* is inside a null XP and we assume that this XP blocks its potential Agree relations with v^o and Asp^o. What is significant for our purposes in (103-b) is that the position of the accusative marked object is able to form an Agree relation with both v^o and Asp^o. As a result of this Agree, v^o assigns the accusative case to the object position and Asp^o assigns delimited interpretation to the predicate. Let us see how this structure differs from its counterpart with a bare singular object given below in (104).

(104) a. Kamyon-a saman yükle-mek
Truck-DAT hay-∅ load-INF
'To load hay onto the truck'

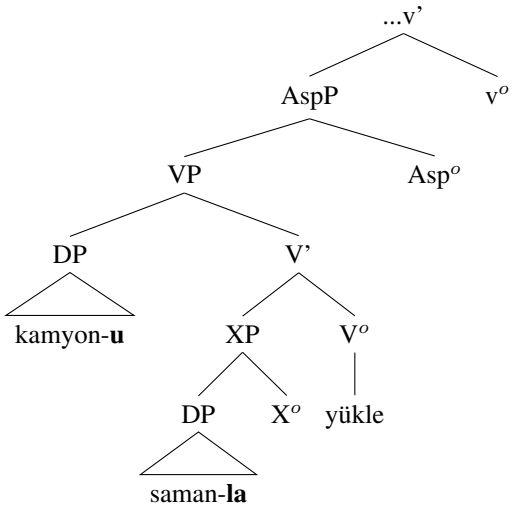
b.



In (104), the same ditransitive verb *yükle* 'load' is combined with a dative marked object on top of a bare singular object. Here, I diverge from Nakipoğlu (2009) and argue that the bare singular object does not induce a delimited interpretation of the predicate. For the structure in (104-a), it is not the case that the object functions as a measuring-rod in Tenny's (1994) terms. We argue that this is because a bare singular DP is inside a null XP similar to nonstructural case marked DPs from the previous examples. As a result, the Agree relation between the object position inside the XP and v^o is blocked.

Accordingly, the object DP cannot be assigned case and consequently remains bare. In this work, we argue that the seemingly pseudo-incorporation structures in Turkish have a null XP in their structures and because of this, the predicate receives nondelimited interpretations unless there is another object in the structure that can Agree with Asp^o and elicit delimitedness. Lastly, the final example with the verb *yükle* 'load' is analyzed with the following tree structure.

(105) a. Kamyon-u saman-la yükle-mek
Truck-ACC hay-INST load-INF
'To load the truck with hay'

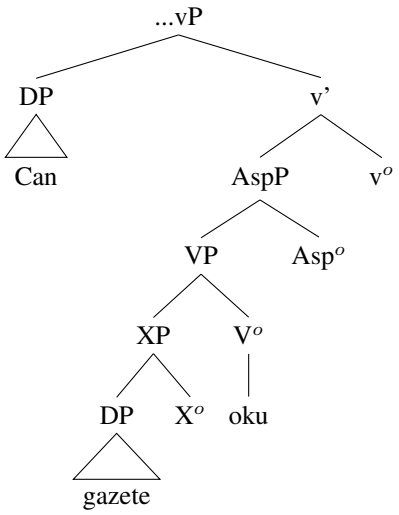
b. 

The predicate in (105-a) receives a delimited reading where the accusative marked object provides the scale for measuring-out. The tree structure provides the reasoning for this interpretation since the position of the accusative marked DP can freely Agree with v^o and following this, the DP gets assigned the accusative case. Similarly, Asp^o can also Agree with the position and elicit delimitedness. However, this is not possible for the DP inside the XP as the null XP blocks the possible Agree relations with suitable syntactic heads. Because of this, the instrumental case marked DP *samanla* cannot function as a scale for measuring-out.

Further, let us see how Nakipoğlu's (2009) third and last category, namely incremental-theme verbs, can be analyzed in this framework. In (106) and (107), minimal pair sentences built with the verb *oku* 'read' is given. Firstly, the sentence in (106-a) has a bare singular object and as we have seen with the structure in (104-b) above, the object is positioned inside an XP. As the XP layer blocks the Agree relation with v^o and Asp^o, the object can neither receive accusative case nor elicit delimitedness.

(106) a. Can her gün gazete oku-r.
Can every day newspaper-∅ read-AOR.3.SG
'Every day Can does newspaper reading.'

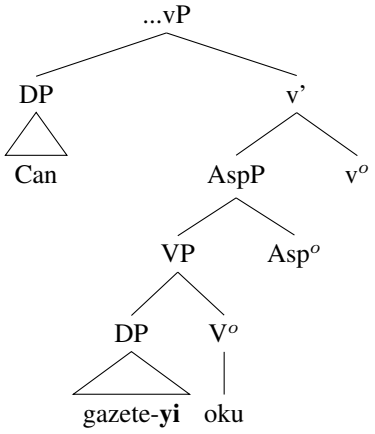
b.



On the other hand, the sentence in (107-a) has an accusative marked object and the predicate has a delimited interpretation. This interpretation results from the Agree relation between the Asp^{o} and the accusative marked object. As both Asp^{o} and v^{o} can Agree with the object in this structure, it results in the structure receiving delimited interpretation.

(107) a. Can her gün gazete-yi oku-r.
Can every day newspaper-ACC read-AOR.3.SG
'Every day Can reads the newspaper inside out.'

b.



So, what exactly is the nature of XP? As a seemingly ad-hoc solution, it allows us to capture the delimited readings we associated with structural case markers such as the accusative. But, how can we make sure that there is an additional layer on top of the DPs with nonstructural case markers, whereas this layer is not present on DPs with structural case markers? To see this, we have to go back to MacDonald's (2006) reasoning for postulating XPs. First, he notes that there is an aspectual projection AspP in between vP and VP in line with Travis (1991). Next, he proposes that while accusative case marker behaves as a typical structural case, the partitive behaves as a nonstructural case in Finnish

following certain structural tests such as passivization (MacDonald, 2007, pp. 85-89)[11]. Since partitive is taken to be a nonstructural case, it does not receive its case value from v^o which traditionally assigns accusative case, which indicates that there is some reason that disallows for partitive marked DP to receive the accusative value from v^o. To capture this, he proposes a null XP layer on top of the nonstructural case marked object position for Finnish. Since this XP is attributed as the reason for the blocking of the accusative agreement, it is essentially taken as a layer that creates an opaque domain for any kind of agreement with available syntactic heads. A natural extension of this set of ideas is that due to the presence of this XP which creates an opaque domain, not only the accusative case is not assigned, but no feature is assigned including any aspectual feature that is associated with Asp^o. As a result, since the Asp^o cannot assign the relevant value due to the opaque domain that stems from XP, the predicate is interpreted as nondelimited. Then, MacDonald further analyzes other languages such as English, Spanish and French where he identifies what this XP layer corresponds to in these languages. For instance, he argued that XPs may correspond to PPs in English, as PPs also seem to not allow for Agree with the complement of P^o. The same analysis can be extended to Turkish by proposing that the XP corresponds to a KP (Case Phrase) that is headed by a lexical case marker. Let us implement a Turkish correspondence of the passivization tests that MacDonald applies to Finnish.

(108) a. Ali rota-yı tırman-dı.
Ali route-ACC climb-PAST.3.SG
'Ali climbed the route (till the top).'

b. Rota-∅ (Ali tarafından) tırman-ıl-dı.
Route-NOM Ali by climb-PASS-PAST.3.SG
'The route was climbed (till the top) (by Ali).'

(109) a. Ali rota-ya tırman-dı.
Ali route-DAT climb-PAST.3.SG
'Ali climbed the route.'

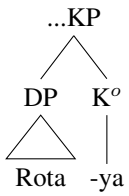
b. Rota-ya (Ali tarafından) tırman-ıl-dı.
Route-DAT Ali by climb-PASS-PAST.3.SG
'The route was climbed to (by Ali).'

As can be seen with the examples in (108) and (109), the accusative-partitive distinction in Finnish has almost a direct correspondence in Turkish with accusative-dative distinction. In (108-a) we see the accusative case marker on the object, which means that the object position is free to Agree with v^o and thus it is also able to Agree with Asp^o. As a result, it can receive delimited value. Further, in the passivized version of this sentence (108-b) there is a similar behavior but in this case the DP does not Agree with v^o due to the passivization and rather it possibly agrees with T^o in order to receive a case (nominative in this structure). Since the said DP can Agree with T^o to receive the nominative case, it can also agree with Asp^o that is below the T^o to receive aspectual value meaning that as long as the DP is able to Agree with any kind of head, whether v^o or T^o, it is also transparent for other kinds of Agree. In this case, Agree with Asp^o. However, as we see in (109-a), when the object has a lexical case on it such as the dative in this instance, we see a lack of Agree between v^o and the object position. Because otherwise it would have been marked with the accusative. Following MacDonald's (2007) proposals,

[11] In addition to passivization, other possible tests might be required to further show that lexical case truly constitutes and opaque domain. At this point, it is unclear to me what kind of tests could illustrate this, and therefore I leave the identification of the opaqueness of lexical cases for agreement for future studies.

since the object is opaque for Agree with v^o, it is also inaccessible to Agree with Asp^o. Thus, it receives nondelimited value. A similar behavior is also present in (109-b), which is the passivized version of (109-a). In this structure, due to the presence of the lexical case marker, the DP cannot receive the nominative case marker that would have been assigned to a passivized internal argument. To capture the lack of Agree with the relevant syntactic heads (i.e. v^o and T^o), we have adopted the XP layer on top of these nonstructural case marked objects. Following MacDonald's (2006; 2007) analysis of English PPs as a correspondence of XP, we propose here that the nonstructural case marker is the head of the proposed XP layer in Turkish. The structure of XP in Turkish, which we argue to be a KP, is given below in (110).

(110)

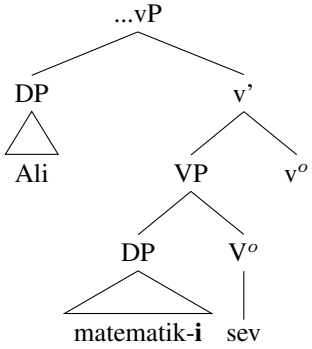


With such a structural proposal, we are able to capture some properties of the nature of the XP layer in Turkish. However, with this proposal, other questions arise such as why the only nonstructural case markers project onto KP or if these lexical cases come from the lexicon directly. Since the discussions regarding the interaction between the DP and KP projections are not directly within the scope of our work since it requires a considerable discussion regarding case overall, we have to leave the exact identification of XP in Turkish and if it can truly be realized as a KP that is headed by a lexical case marker to future work. But the indication is that the lexical case markers seem to have a prominent role in creating opaque domains for agreement and to capture this, we have proposed the structural representation that is seen above in (110), which we also claim that it corresponds to the XP layer of MacDonald (2006).

Lastly, let us see how structures with stative predicates can be accounted for with this account. We have seen that stative predicates are inherently nondelimited and cannot receive delimited interpretations. MacDonald (2006) argues that the reason for this is the fact that stative predicates lack an aspectual projection in their tree structures. The representation of structures built with stative predicates is exemplified below in (111).

(111) a. Ali matematik-i sev-er.
Ali mathematics-ACC love-AOR.3.SG
'Ali loves mathematics.'

b.



Nakipoğlu (2009) claims that the sentence in (111-a) is interpreted as delimited. However, the sentence does not receive an interpretation such that mathematics is the scale in which the event of loving is being measured. The reason for the lack of delimitedness interpretation in this structure follows from the lack of Asp^o. Although v^o assigns accusative case to the internal object, there is no syntactic head to assign delimitedness. Consequently, the predicate is interpreted as nondelimited.

In summary, we have analyzed MacDonald's (2006) arguments on the independence of case and inner aspect in this chapter and argued that the data from Turkish supports this idea. In MacDonald's framework, the underlying mechanism that blocks the Agree relation between an object position and v^o is also the mechanism that blocks the object-to-event mapping for the same position. Pursuing a deductive reasoning, MacDonald (2006, 2007) assumes that object positions that do not have accusative case marking on them are blocked from Agree with v^o. Consequently, such positions are also blocked from Agree with Asp^o, which is the head that is proposed to mediate object-to-event mapping. To give a syntactic reason for this blocking of Agree, he postulates a null XP layer which he proposes that acts as a some sort of barrier for Agree. Hence, we neither see an accusative case nor object-to-event mapping. Although we have briefly discussed that this XP layer in Turkish may correspond to KP in Turkish, the exact nature of the proposed XP layer requires further research. In the next section, we will discuss our findings and conclude the work.

CHAPTER 6

DISCUSSION AND CONCLUSION

In this thesis, we set out to explore the relationship between case and delimitedness in Turkish. The literature showed that it is widely accepted that internal arguments affect the aspectual interpretations of predicates in languages such as Finnish. For Turkish, Nakipoğlu (2009) argues that the accusative case marker functions as a delimiter or a measurer for certain kinds of verbs. Although Nakipoğlu's framework can account for a portion of the Turkish data, we have seen that it fails to explain certain structures such as unaccusatives and passives without an accusative marked object that receives delimited predicate interpretations. Following MacDonald (2006, 2007), we argued that the observed structures that lack an accusative but still receive delimited interpretations are due to the autonomous form of inner aspect. As in the account of MacDonald, inner aspect is shown to be an independent system that is distinct from other linguistic phenomena such as lexical meaning, thematic relations and case. In this analysis, Turkish falls into the category of languages with an aspectual projection between vP and VP such as English, Spanish and Finnish, as opposed to a language like Russian that lacks such a projection.

The Turkish data we analyzed in this work supports MacDonald's (2006) claims for the independence of inner aspect and case, as it seems like there is only an indirect relation between delimited readings of predicates and their accusative marked internal objects, which can be seen from the fact that other structural case markers also elicit delimited interpretations. The given telic interpretations are argued to be only a byproduct of the underlying mechanism that allows for the Agree relation between object DPs and c-commanding syntactic heads. In this account, when a null XP layer blocks an object position, it results in an opaque domain. DPs inside this opaque domain cannot form Agree relations with available syntactic heads such as v^o and Asp^o. As a result of this, the DPs are assigned default case and nondelimited value.

We have further seen that for English, it was argued that the null XP layer that blocks the possible Agree relations between DPs and appropriate syntactic heads can also be overtly realized as PPs. The holistic/partitive interpretations that are observed with locative alternation instances are examples of such structures. The object that is inside an XP/PP is blocked from Agree, whereas the object that is not inside an XP/PP can freely Agree with available heads and receive delimited value.

The independence of case and inner aspect we argue for in this work accounts for the supposed relationship between accusative case and delimited event interpretations for languages such as Finnish and Turkish. A significant amount of data is argued to display a correlation between a predicate with an accusative marked object and delimited interpretations in these languages. However, we see in this work that this is not due to a delimiting function of the accusative case but rather it is a sign that the

position of the accusative marked object is not blocked from available Agree relations. As the said position is available to form an Agree relation with v^o, it can receive accusative case. Further, as there is no element blocking the Agree, the position can also Agree with Asp^o and receive delimited value. The described mechanism gives a reason for the observed correlation between the accusative case and delimited event interpretations. In structures where the object position can be assigned accusative case, it can also freely be assigned delimited value. Hence, structures with accusative case marked objects can receive delimited interpretations.

Our account also clarifies why certain structures where an accusative marked object is present, are interpreted as nondelimited. For instance, we argue that stative predicates do not have an aspectual projection layer in their internal structure. As a result of this, the lack of Asp^o makes a delimited value inaccessible for the predicate. In such structures with stative predicates, even though v^o assigns accusative case on the object, delimitedness cannot be assigned to the position.

Further, we have argued that structures with bare singular objects are interpreted as nondelimited in Turkish and discussed why this is the case. For structures that have bare singular objects, we argue for a null XP layer above the object that blocks the possible Agree relations for the position, similarly to what MacDonald (2006) argues for MNs (mass nouns). As the null XP blocks the possible Agree relations, the position can neither receive overt case marking from v^o in the form of an accusative nor delimitedness value from Asp^o. Consequently, the object stays bare and receives a default nondelimited value.

One shortcoming of this study is the identification of the correspondence of the null XP of Turkish which was not within the scope of this study. But one possibility, as we have briefly mentioned before, could be that the lexical cases such as the locative and the dative could correspond to the PPs in English where they constitute an opaque domain for Agree. Thus, blocking all possible Agree relations with an outside element. Such an idea requires further elaboration, however since getting into the literature on KP (Case Phrase) was not possible for practical reasons for this study, I have to leave this idea for further research.

Another lack in this study is related to the bare singular objects in Turkish, since the DOM structures are arguably a research question on their own I did not get into the details of such structures. For instance, the exact mechanism of the case marking of bare objects and their difference from overt accusative marked objects is not elaborated on in this study. This difference could play a critical role in the aspectual interpretation of the predicates with bare objects. To stipulate, it might be the case that whatever reason may block the overt accusative marker from being assigned to these bare objects, might also be the reason that the aspectual head Asp^o cannot Agree with them. Perhaps, for overt accusative markers in Turkish some form of movement is necessary and this movement may allow the Asp^o to access for Agree. However, this idea requires further investigation and we leave it for further studies.

Another aspect of telicity that can be further understood from the perspective of cognitive science is related to the acquisition of this seemingly semantic notion. For instance, Wagner (2010) looks at the link between transitivity and telicity in children's ability to use syntactic structures to infer telicity. Naturally, transitivity could be construed as being related to telicity. However, there are telic interpretations of non-transitive predicates and also atelic interpretations of transitive ones. Therefore, transitivity is "a weak cue for telicity semantics" as pointed out by Wagner (2010). Yet, in this study, it is shown that children seem to utilize transitivity to make inferences about the telicity values of

a given structure. The point here is that, although intuitively we may assume that transitivity may not play a meaningful role in the acquisition period of telicity, we seem to have a counter-evidence if we follow the work of Wagner (2010). A possible implication of such a study for Turkish is that the apparent relation between case and telicity that we see in Turkish may also be a cue for children, where the children in the acquisition period may utilize relevant case markers to make inferences regarding the telicity interpretations of predicates. In simple terms, the default hypothesis seems to be that children will map nonstructural case markers to atelic interpretations and structural case markers to telic interpretations of predicates.

Nonetheless, as we see in Wagner (2010), such intuitive hypotheses may sometimes be unfounded. Thus, we may need experimental work that may support or contradict the hypothesis. If the hypothesis is unfounded, then we would require an understanding of why this correlation is not exactly interpreted by the children. For instance, it could be the case that this correlation may not be interpreted by 2-year-olds while it is interpreted by 3-year-olds. In this case, such a result might have implications for the stages of the acquisition of telicity, and perhaps similar notions in general. In short, some experimental work could be implemented to better understand the acquisition of telicity and its correlation with case markers in Turkish. This in turn could provide a further understanding of the acquisition of telicity cross-linguistically and if it turns out that cross-linguistically telicity acquisition shows similar behavior, the indication may be that telicity might have some universal acquisitional behavior which may have further implications toward the innateness of the notion of telicity.

To sum up, in this thesis we claimed that Turkish is a language that projects AspP and the object-to-event mapping is syntactically instantiated with an Agree relation with Asp^o. In structures with eventive predicates in Turkish, Asp^o assigns the delimitedness value to the object position and the predicate receives its aspectual interpretation accordingly. On the other hand, in structures with stative predicates, AspP is lacking and as a result of this, there is no object-to-event mapping in such structures. As the case markings of the object positions are assigned by v^o and delimitedness values by Asp^o, it follows that two distinct syntactic heads assign these values. Consequently, case and inner aspect are taken to be independent of each other.

REFERENCES

Aissen, J. (2003). Differential object marking: Iconicity vs. economy. *Natural language & linguistic theory*, 21(3):435–483.

Aksan, Y. (2005). Scalar semantic representation of aspectually variable verbs in turkish. In *Advances in Turkish Linguistics: Proceedings of the 12th International Conference on Turkish Linguistics*, pages 93–106.

Bach, E. (1981). On time, tense, and aspect: an essay in English metaphysics.

Borer, H. (1994). The projection of arguments. *University of Massachusetts occasional papers in linguistics*, 17(20):19–48.

Borer, H. (2004). The grammar machine. *The unaccusativity puzzle: Explorations of the syntax-lexicon interface*, 5:288–331.

Bossong, G. (1985). Empirische universalienforschung: differentielle objektmarkierung in den neuiranischen sprachen.

Böhm, S. (2015). Differential object marking in Standard Turkish and Caucasian Urum. *STUF-Language Typology and Universals*, 68(4):421–438.

Chomsky, N. (1981). *Lectures on government and binding: The Pisa lectures*. Foris Publications-Dordrecht.

Chomsky, N. (2001). Derivation by phase. In Kenstowicz, M., editor, *Ken Hale: A Life in Language*. The MIT Press, Cambridge, Massachusetts.

Dayal, V. (2011). Hindi pseudo-incorporation. *Natural Language & Linguistic Theory*, 29(1):123–167.

Dede, M. (1981). Grammatical relations and surface cases in Turkish. In *Annual Meeting of the Berkeley Linguistics Society*, volume 7, pages 40–49.

Dowty, D. (1979). *Word meaning and Montague grammar*. D. Reidel.

Dowty, D. (1991). Thematic proto-roles and argument selection. *language*, 67(3):547–619.

Enç, M. (1991). The semantics of specificity. *Linguistic inquiry*, pages 1–25.

Erguvanlı, E. E. and Taylan, E. E. (1984). *The function of word order in Turkish grammar*, volume 106. Univ of California Press.

Göksel, A. and Kerslake, C. (2004). *Turkish: A comprehensive grammar*. Routledge.

Gropen, J., Pinker, S., Hollander, M., and Goldberg, R. (1991). Affectedness and direct objects: The role of lexical semantics in the acquisition of verb argument structure. *Cognition*, 41(1-3):153–195.

Hay, J., Kennedy, C., and Levin, B. (1999). Scalar structure underlies telicity in" degree achievements". In *Semantics and linguistic theory*, pages 127–144.

Heinämäki, O. (1984). Aspect in Finnish. *Aspect bound*, 153:177.

Jackendoff, R. (1996). The proper treatment of measuring out, telicity, and perhaps even quantification in English. *Natural Language & Linguistic Theory*, 14(2):305–354.

Jackendoff, R. S. (1990). *Semantic structures*, volume 18. MIT press.

Kiparsky, P. (1998). Partitive case and aspect. *The projection of arguments: Lexical and compositional factors*, 265:307.

Kornfilt, J. (2013). *Turkish*. Routledge.

Kratzer, A. (2004). Telicity and the semantics of objective case. *The syntax of time*, page 389.

Krause, E. and von Heusinger, K. (2019). Gradient effects of animacy on differential object marking in Turkish. *Open Linguistics*, 5(1):171–190.

Krifka, M. (1989). Nominal reference, temporal constitution and quantification in event semantics. *Semantics and contextual expression*.

Krifka, M. (1992). Thematic relations as links between nominal reference and temporal constitution. *Lexical matters*, page 29.

Krifka, M. (1998). The origins of telicity. In *Events and grammar*, pages 197–235. Springer.

Kuryłowicz, J. (1964). The inflectional categories of Indo-European.

Landman, F. (1989). Groups, i. *Linguistics and philosophy*, pages 559–605.

Levin, B. (1993). *English verb classes and alternations: A preliminary investigation*. University of Chicago press.

Lewis, G. (2000). *Turkish grammar*. Oxford University Press.

MacDonald, J. E. (2006). *The syntax of inner aspect*. PhD thesis, Stony Brook University Stony Brook, NY, USA.

MacDonald, J. E. (2007). The independence of case and inner aspect. In *Proceedings of ConSOLE XIV*, volume 189, page 202.

MacDonald, J. E. (2008). *The syntactic nature of inner aspect*. John Benjamins Publishing Company.

Massam, D. (2001). Pseudo noun incorporation in Niuean. *Natural Language & Linguistic Theory*, 19(1):153–197.

Moens, M. and Steedman, M. (1987). Temporal ontology in natural language. In *25th Annual Meeting of the Association for Computational Linguistics*, pages 1–7.

Mourelatos, A. P. (1981). Events, processes, and states. In *Tense and aspect*, pages 191–212. Brill.

Nakipoğlu, M. (2009). The semantics of the Turkish accusative marked definites and the relation between prosodic structure and information structure. *Lingua*, 119(9):1253–1280.

Özge, U. (2011). Turkish indefinites and accusative marking. In *Proceedings of the 7th workshop on Altaic formal linguistics*, pages 253–267. Citeseer.

Öztürk, B. (2005). Pseudo-incorporation of agents. Technical report, University of Pennsylvania working papers in linguistics.

Pereltsvaig, A. (2000). On accusative adverbials in Russian and Finnish. *Adverbs and adjunction. Linguistics in Potsdam*, 6:155–176.

Poulson, L. (2011). Meta-modeling of tense and aspect in a cross-linguistic grammar engineering platform. *University of Washington Working Papers in Linguistics (UWWPL)*, 28.

Pustejovsky, J. (1991). The syntax of event structure. *cognition*, 41(1-3):47–81.

Ramchand, G. (1997). *Aspect and predication: The semantics of argument structure*. Oxford University Press.

Ritter, E. and Rosen, S. T. (1998). Delimiting events in syntax. *The projection of arguments: Lexical and compositional factors*, 83:135–164.

Romanova, E. (2007). *Constructing perfectivity in Russian*. PhD thesis, University of Tromsø.

Sağ, Y. (2022). Bare singulars and singularity in Turkish. *Linguistics and Philosophy*, 45(4):741–793.

Schäfer, F. (2009). The causative alternation. *Language and linguistics compass*, 3(2):641–681.

Smith, C. S. (1997). *The parameter of aspect*. Kluwer Academic Publishers.

Talmy, L. (1975). Figure and ground in complex sentences. In *Annual meeting of the Berkeley linguistics society*, pages 419–430.

Tenny, C. (1989). *The aspectual interface hypothesis*, volume 31. Lexicon Project, Center for Cognitive Science, MIT.

Tenny, C. (1994). *Aspectual roles and the syntax-semantics interface*, volume 52. Springer.

Travis, L. (1991). Derived objects, inner aspect, and the structure of vp. *A paper presented at NELS*, 21.

Vendler, Z. (1957). Verbs and times. *The philosophical review*, 66(2):143–160.

Vendler, Z. (1967). *Linguistics in philosophy*. Cornell University Press.

Verkuyl, H. J. (1972). *On the Compositional Nature of the Aspects*. Springer.

Verkuyl, H. J. (1993). *A theory of aspectuality: The interaction between temporal and atemporal structure*. Cambridge University Press.

von Heusinger, K. and Kornfilt, J. (2005). The case of the direct object in Turkish: Semantics, syntax and morphology. *Turkic languages*, 9(3):44.

Wagner, L. (2010). Inferring meaning from syntactic structures in acquisition: The case of transitivity and telicity. *Language and cognitive processes*, 25(10):1354–1379.

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

Wright, S. K. (2002). Transitivity and change of state verbs. In *Annual Meeting of the Berkeley Linguistics Society*, pages 339–350.

Wyngaerd, G. V. (2001). Measuring events. *Language*, pages 61–90.