T.C.
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TURKISH INFINITIVAL COMPLEMENTS

Özge YÜCEL

YÜKSEK LİSANS TEZİ

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Danışman
Prof. Dr. Mustafa AKSAN

Mersin, 2008

Mersin Üniversitesi, Sosyal Bilimler Enstitüsü Müdürlüğüne,

Özge YÜCEL tarafından hazırlanan "Turkish Infinitival Complements" başlıklı bu çalışma, jürimiz tarafından İngiliz Dili ve Edebiyatı Anabilim Dalında YÜKSEK LİSANS TEZİ olarak kabul edilmiştir.

Başarılı	Başarısız		
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Onay

Yukarıdaki imzaların, adı geçen öğretim elemanlarına ait olduklarını onaylarım.

18.../08/2008

Prof. Dr. [illegible] ADIYEKE

Enstitü Müdürü

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ÖZET

Bu çalışmanın amacı Türkçede mastar tümcelerinin özelliklerini ve bu tümcelerde görülen Denetleme ilişkilerini anlambilimsel kısıtlamalar temelinde tanımlamaktır. Çalışma Denetleme yapılarını ana tümce eylemlerinin sözlüksel yapılarını göz önünde bulundurularak Kavramsal Yapı çerçevesinde açıklamaktadır.

Birinci bölüm Denetleme Kuramı'nın temellerini literatürde farklı kuramlarda ele alındığı şekliyle sunmaktadır. Yönetim ve Bağlama Kuramı ağırlıklı olarak boş ADIL kategorisine bağlı olarak ortaya çıkan problemlere odaklanmaktadır. Yönetim ve Bağlama Kuramı'nı takiben, Sınırlama Kuramı ADIL'ı Durum Kuramı bağlamında incelemekte; yönetim, bağlama ve ROL kuramlarını kapsam dışı bırakmaktadır.

İkinci bölüm üretimsel dilbilgisinin açıklayamadığı Denetleme örneklerini sunmaktadır. İlk olarak, aynı yapıya sahip iki tümce farklı denetleyici seçimi ile sonuçlanabilir ya da aynı denetleyici farklı sözdizimsel yapılarda görünebilir. Her iki durumda da denetleyici seçiminin sözdizimsel kısıtlamalardan bağımsız olması gerektiğini göstermektedir. İkinci olarak, ana tümcede denetleyici olacak bir Ad Öbeği bulunmayabilir ya da tam tersine denetleyici olabilecek birden fazla Ad Öbeği bulunabilir. Bu tür durumlarda yapısal yaklaşımlar denetleyici seçiminin nasıl yapılması gerektiğini açıklayamayabilir.

Üçüncü bölüm yukarıda değinilen problemleri Culicover ve Jackendoff (2005) tarafından önerilen ve Yalın Sözdizimi Hipotezi'nin (Simpler Syntax Hypothesis) bir uzantısı olan DTZD (Devinimsel Tümleçlerin Zorunlu Denetlemesi) Hipotezi'ni temel alarak çözmeyi amaçlamaktadır. Buna göre, denetleyici ve tümleç seçimi ana eylemin ve tümleç Eylem Öbeği'nin anlambilimsel özellikleri göz önüne alınarak yapılmaktadır.

Dördüncü bölüm Culicover ve Jackendoff (2003, 2005, 2006) tarafından önerilen sınıflandırmada yer almayan bir deneteme türü olan Kısmi Denetlemeyi incelemektedir. Kısmı Denetleme Landau (1999) takip edilerek açıklanmaktadır. Aynı bölümde, eklenti tümcelerinde denetleme ele alınmakta, eklenti tümceleri de denetleme ile ilgili sorunları çözmede anlambilimsel ve edimbilimsel etmenlerin göz ardı edilemeyeceğini göstermektedir.

ABSTRACT

The intent of this study is to describe the properties of Turkish infinitival complements and the Control relations they reveal based on semantic constraints. We explain Control relations considering the lexical decomposition of matrix predicates on the level of Conceptual Structure.

Chapter 1 presents the basics of Control Theory as it is laid out in different theories in literature. Government and Binding Theory mostly focuses on the problems related to the existence of the empty subject PRO. Following Government and Binding Theory, the Minimalist Program examines PRO on the basis of Case Theory excluding government, binding, and theta theories.

Chapter 2 highlights the cases of control generative grammar cannot account for. First, the same configuration can be associated with different controller choice, or the same controller can appear in different syntactic configurations, both of which show that controller choice should be independent of syntactic constraints. Second, there may be no overt NPs in the matrix clause to serve as the controller, or there may be two potential NPs in the matrix clause to serve as the controller. In such cases, configurationally determined approaches cannot explain how the controller choice is made.

Chapter 3 aims to solve the above mentioned problems following UCAC (Unique Control of Actional Complements), an extension of Simpler Syntax Hypothesis (SSH) by Culicover and Jackendoff (2005). Accordingly, controller and complement choice is made considering the semantic properties of the matrix predicate and the complement VP.

Chapter IV investigates Partial Control, which is absent from the typology of control offered by Culicover and Jackendoff (2003, 2005, 2006). To explain Partial Control in Turkish, we follow the typology offered by Landau (1999). In chapter IV, we also handle control in adjunct clauses which furthermore proves that we have to take semantic and pragmatic factors into consideration in order to solve the control puzzle.

CONTENTS

LIST OF TABLES

INTRODUCTION

Basic Notions

Infinitival clauses are claimed to include a type of empty element, which is the covert subject of the infinitival complement. In syntax, Empty Categories (ECs) are defined as phonetically null elements that are present in mental representation. This means that although ECs lack phonological content, they are acquired and construed by the speaker as if they are overt. The distribution of ECs is bound by projection principle, theories of government, binding, and Case in Government and Binding Theory in generative grammar. The projection principle, a principle proposed regarding the existence of empty categories and later on revised as extended projection principle, maintains that a lexical item (overt or covert) should categorically take its place at every syntactic level:

> A consequence of projection principle is … that if some element is 'understood' in a particular position, then it is *there* in syntactic representation, either as an overt category that is phonetically realized or as an empty category assigned no phonetic form … at every syntactic level: that is, at D-structure, S-structure, and LF but, of course, not necessarily at surface structure (PF). If there is no overt element in this position, then there must be an empty category of the required type (Chomsky, 1986: 84).

ECs come in four different varieties: NP-trace, Wh-trace, pro, and PRO. These empty categories may be displaced or wholly absent. While NP-trace, Wh-trace, and pro result from displacement of reflexive pronouns, referring expressions (henceforth r-expressions), and personal pronouns respectively, PRO is wholly absent (Featherston, 2001). Below, we exemplify one of the ECs, PRO, appearing in control structures:

(1)

I_i want [_____$_i$ to smoke]

It is clear that the complement of the verb *want* is a clause. More specifically, it is an infinitival clause with inflection *to*. As exemplified here, infinitival complements reveal a kind of control structure which typically embodies the empty subject PRO. Control at this point can be defined as "a relation of referential dependence between an unexpressed subject (the *controlled* element) and an expressed constituent (the *controller*)" (Bresnan, 1981: 317). It is argued that only subjects are controlled and only non-finite clauses such as infinitive or gerund have controlled subjects (Chomsky, 1986, 1993a).

In sentence (1), we see that the bracketed complement clause of the sentence is subjectless although there are two separate predicates in the sentence, one in the matrix clause and the other in the embedded clause. Traditionally, in generative grammar, it is claimed that there is an empty (= covert= null) subject in the infinitival complement unpronounced but somehow understood by the speaker. The reason is that just as matrix subject *I* bears the subject θ-role of *want*, there must be another subject in the lower clause to receive the θ-role assigned by complement verb *smoke*. Sentence (1) demonstrates that the unexpressed subject of *smoke* is interpreted to be the same person as the subject of the higher clause. This relation is shown by co-indexing the covert subject of the complement VP with the matrix subject. Using the relevant terminology, we might say that the null subject in (1) is controlled by (i.e. refers back to) the matrix subject *I* or that *I* is the controller or antecedent of null pronoun. Verbs such as *want* that take an infinitive complement with an empty subject are defined as control verbs.

In a case like this, the covert subject of the embedded infinitival complement is tagged as PRO, specifically in syntactocentric analyses following Chomskyan tradition. Mainstream Generative Grammar (MGG)[1] proposes that empty subject PRO has both syntactic and semantic properties that prove its existence. So in the notation below, PRO, treated like a genuine syntactic subject which bears a semantic content at the same time, is used to symbolise the null pronominal controlled by the matrix subject:

(2)

I_i want [PRO_i to smoke]

However, there exist some other theories such as Head-Driven Phrase Structure Grammar (HPSG) and Lexical-Functional Grammar (LFG) that do not accept the existence of empty categories in the way MGG does. These theories simply presume that complement VPs in infinitival constructions are subjectless.

In the present study, we follow Culicover and Jackendoff's Simpler Syntax Hypothesis (SSH) (2005), which favours an understanding of grammar constructed on the basis of phonology, syntax, semantics, and lexicon rather than on syntax per se. Instead of focusing on the issues related to the existence of the empty subject PRO, Simpler Syntax Hypothesis centres the discussions on control relations. Accordingly, we remain neutral on the existence of PRO, and use the following notation, instead of the preceding ones:

(3)

I_i want [to $_i$smoke]

[1] Throughout this study we use the term Mainstream Generative Grammar (MGG) to refer to the studies in line with Chomskyan tradition such as the Standard Theory, the Extended Standard Theory, Principles and Parameter's Theory (PPT), and the Minimalist Program (MP).

Traditionally, control has been discussed in two groups as Obligatory Control (OC) and Non-Obligatory Control (NOC). OC includes the cases of subject and object control, while NOC includes cases of arbitrary control.

CONTROL		
OBLIGATORY CONTROL		NON-OBLIGATORY (OPTIONAL) CONTROL
Subject Control	Object Control	Arbitrary Control

Table 1: Traditional Classification of Control Relations

In the below examples, we have instances Non-Obligatory (optional) Control. In both sentences, the complement VP could be controlled by the matrix subject as the compatibility of the complement with reflexive *himself* suggests, or else the complement VP could optionally have a generic reading as the compatibility of the complement with the reflexive *oneself* suggests:

(4) *Optional Control*

a. John thought that it was important [[PRO to behave himself/oneself]].

b. John asked [how [PRO to behave oneself/himself]].

On the other hand, none of the sentences in the following examples comply with the generic reading. These sentences are obligatorily controlled by either the matrix subject or the matrix object:

(5) *Obligatory Control*

a. John tried [[PRO to behave himself/*oneself]].

b. John promised Mary [[PRO to behave himself/*herself/*oneself]].

c. John abandoned the investigation [[PRO to keep himself/*oneself sane]].

d. John was reluctant [[PRO to behave himself/*oneself]].

e. John told Mary [[PRO to behave herself/*himself/*oneself]].

(Haegeman, 1991: 256)

Sentences (a, b, c, and d) exemplify *subject control* since matrix subject is co-referential with the understood subject of the infinitival complement. In such a case, matrix subject is said to control the complement VP or be its controller, and this relation is defined as *subject control*. We notate this relation by co-indexing the matrix subject with the verb it controls. On the other hand, sentence (e) exhibits *object control* since the infinitival complement is only compatible with the reflexive pronoun *herself* referring to the matrix object *Mary* as the controller.

Hereby, we may go into further detail considering the structure of infinitival complements and the relations they reveal. In Turkish, infinitival complements are obtained by suffixes *-mE* and *-mEk* with the properties of [-tense, -agreement]. Turkish infinitival constructions comply with the properties of typical control constructions in that it is not possible for Turkish infinitival complements to have overt subjects. Thus, complement VPs in these structures do not have subject-verb agreement markers (except for the inflected infinitivals we cover in chapter III).

In the below example, the complement predicate *sigara iç- (smoke)* is controlled by the matrix subject. We notate this relation by co-indexing the matrix subject with the verb it controls:

(6) *Subject Control in Turkish*

Ben$_i$ [sigara $_i$iç-mek] isti-yor-um.

I cigarette smoke-Inf want-Prog-1SG

'I want to smoke.'

The other control type belonging to the category of OC, object control, appears in the following example from Turkish:

(7) *Object Control in Turkish*

Ben$_i$ Ahmet-i$_j$ [sigara $_j$iç-me]-ye zorla-dı-m.

I Ahmet-Acc cigarette smoke-Inf-Dat force-Past-1SG

'I forced Ahmet to smoke.'

In this example, the understood subject of the complement VP is co-referential with the matrix clause object *Ahmet*, interpreted as the character whose smoking is under discussion. We notate this relation by co-indexing the matrix object with the verb it controls.

The third basic control type is *arbitrary control* where no antecedent exists to serve as the controller:

(8) *Arbitrary Control*

[Sigara $_{gen}$iç-mek] tehlikeli-dir.

cigarette smoke-Inf dangerous-DIR

'It is dangerous to smoke cigarettes.'

In arbitrary control, the covert subject of complement VP is interpreted to be generic, with no specific controller in mind. The control relation in question is notated with subscript *gen* as is seen in the just cited example (cf. 4a and 4b in this section).

The Purpose of the Study

Control in infinitival complements has been investigated by different frameworks in literature. Control relations and the controller choice they reveal have posed a problem for the studies, and each has taken its stand from a different perspective, either semantic or syntactic on the whole.

More specifically, as it is summarised in Chomsky (1993a: 74), MGG is mainly concerned with the questions raised by the existence of the empty subject PRO:

(i) Where may it appear?

(ii) Where must it appear?

(iii) How is its reference determined?

(iv) Should PRO carry Case or receive a θ-role?

(v) Should PRO be accepted as a pronoun or an anaphor?

On the other hand, avoiding the questions raised by the existence of an empty category, semantic approaches focus on different problems:

(i) How is control and complement choice made?

(ii) On what criteria do the different control types arise?

(iii) How is the control type a certain basic semantic predicate picks up determined?

In this context, our intent in the present study is to answer these questions for Turkish. We also aim to refresh the crucial place of semantics in the control problem and to handle the semantic factors involved more closely than has been possible so far. This study may contribute to the description of control in Turkish infinitival complements by providing a typology in trace of Culicover and Jackendoff's Simpler Syntax Hypothesis.

In this study, we will firstly describe the properties of Turkish infinitival complements and different control relations they reveal based on the semantic constraints. Following this, we will investigate the motivation behind distinctions among different control relations. Our goal is to analyze the problem of controller choice on a semantic basis. More specifically, we focus on the semantics of matrix predicates to determine the control relation a certain matrix predicate reveals. To do this, we will investigate the applicability of Culicover and Jackendoff's (2003) Unique Control of Actional Complements (UCAC) Hypothesis, a treatment that brings into play the conceptual structure and syntax-semantics interface.

Research Questions

We investigate to answer following questions throughout the study:

1. How can we define infinitival constructions in Turkish?
2. What is responsible for the distinction among different control relations in Turkish?
3. What determines the controller and the complement choice in Turkish and can the typology be deduced from the principles of Unique Control of Actional Complements Hypothesis?

Hypotheses

Our hypotheses are as follows:

1. Any construction with suffix *–mEk* and the constructions with suffix *–mE* where no affix to mark tense or agreement exists are accepted to be infinitival constructions. The understood subjects in these constructions are the elements to be controlled.

2. Since the same syntactic structure can lead to different control types, and the same control type can be deduced from different syntactic structures, control cannot be analysed solely on the basis of a configurationally determined approach. Control type is appointed by the lexical decomposition of the basic predicate. It is a semantic selection rather than syntactic position that determines whether a predicate governs Free, Nearly free, or Unique control.

3. Both complement and controller choice can be determined via UCAC Hypothesis, where conceptual structure is employed to enable the interaction between verb meaning and the meaning of complement.

Limitations

We limit our study with control in infinitival complements *-mA* and *-mAK* and exclude other control relations in different structures such as gerunds, or other nominalizations.

Organization of the Study

Chapter 1 provides a review of literature on *control theory* and consists of three sub-parts: control theory as it is discussed in Government and Binding Theory, control theory as it is discussed in the Minimalist Program, and finally Turkish control relations as they are investigated in configurationally determined approaches or semantically determined approaches in literature.

Chapter 2 provides data both from English and from Turkish to show why we need a study based on semantics.

Chapter 3 investigates control relations in Turkish infinitival complements based on Unique Control of Actional Complements Hypothesis, an extension of the Simpler Syntax Hypothesis.

Chapter 4 examines control relations that are out of the classification we have laid out in Chapter 3 such as Partial Control and control in adjunct clauses.

CHAPTER I

REVIEW OF LITERATURE

Control has always been acknowledged to exist in non-tensed structures where a subject cannot appear. These structures are clauses like infinitives and gerunds which prohibit a local subject in the configuration. The early literature referred to this prohibition of a local subject as *Obligatory Subject Deletion* and *Obligatory Equi*.

In its earliest form, control structures used to be analysed in two categories: local (Equi NP Deletion) and long distance (Sper Equi). In this context, when the complement VP is controlled by an antecedent within the same domain, i.e. either subject or the object of the matrix clause, Equi NP Deletion is said to apply in the configuration. On the other hand, when the antecedent and the complement VP are not clause mates, the configuration is tagged as Super Equi.

(1)

a. Tom wants to pass the exam. *Equi NP Deletion*

b. Tom thinks that passing the exam will be hard. *Super Equi*

In (1a), Equi deletes the so called subject of the complement VP. In such cases, complement VP is locally controlled by the nearest domain in structure, either subject or object, in the existence of an object in the matrix clause. The antecedent of the controlled complement is determined by the Minimal Distance Principle, first offered by Rosenbaum (1967). On the other hand, in (1b), Super Equi deletes the so called subject penetrating a bounding node, viz. *that*. This means empty subject of the complement clause is deleted across clauses.

Following this classification of Equi and Super Equi, the theory of Government and Binding arrives in literature. Government and Binding theory (Chomsky, 1980, 1986, 1993a) abides by the classification offered by the previous literature, but with a different terminology. Instead of Equi NP Deletion, it employs Obligatory Control, and, instead of Super Equi, it employs Nonobigatory Control. Also, it introduces the term PRO to stand for the missing subject of the complement VP. In the following examples, we observe PRO symbolizing the null subject NP both in Obligatory Control (2a) and Non-obligatory Control (2b):

(2)

a. Tom wants [PRO to pass the exam]

b. Tom thinks [that [PRO passing the exam is hard]]

Finally, in the aftermath of GB, that is, under the Minimalist Program (set by Chomsky, 1993b, 1995; Chomsky and Lasnik, 1977, 1993; Lasnik, 1999 and developed by Hornstein, 2001; Epstein and Seely, 2003), raising and control configurations are both evaluated as cases of movement, and both structures are derived by Move and Merge operations as will be highlighted in the sections to follow. Sentence (3) shows a control structure as it is analysed in the Minimalist Program.

(3)

a. Tom wants to pass the exam.

b. Tom [Tom [wants [Tom to [Tom pass the exam]]]]

Following the general tendency in literature, we consider the Government Binding (GB) Theory and the Minimalist Program as a sub-branch of Principles and Parameters Theory. Below, we first highlight the basic principles of Government and Binding Theory. Second, we investigate the changes that Government Binding Theory goes through in the Minimalist Program. Finally, we provide a brief sketch of the studies on Turkish infinitival complements.

I. 1. Government and Binding Theory

A theory of grammar, as is particularly adopted in Principles and Parameters Theory and its extensions Government Binding (GB) and the Minimalist Program, should pursue a set of grammatical principles shared by all natural languages (Chomsky, 1986, 1993a). This theory is called Universal Grammar (UG), and it must meet two conditions as underlined by Chomsky (1993a:3):

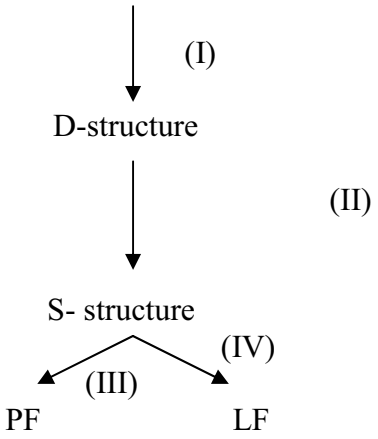
> On the one hand, it must be compatible with the diversity of existing (indeed, possible) grammars. At the same time, UG must be sufficiently constrained and restrictive in the options it permits so as to account for the fact that each of these grammars develops in the mind on the basis of quite limited evidence.

The first condition maintains that a grammatical operation that applies in a certain language should be applicable for any other natural language and that a principle that explains a phenomenon in a specific language should be explanatory across languages. The second condition is suggested in defence of Plato's problem, which questions how speakers end up acquiring languages easily in spite of a quite limited source of input- referred to as *poverty of stimulus* argument in relevant literature meaning that the data in the stimulus are not strong enough to support the knowledge constructed through them.

Chomsky's solution to such a problem is UG, which exists in the minds of speakers from birth. This conclusion also lightens the burden put on the child throughout acquisition process since the principles presented by UG constitute an inherent part of the child's language faculty.

Components of UG as shown below include subsystems of rules.

(4)



It is the rules of phrase structure (or syntax as it is referred to in Chomsky, 1993a) that generate D-structures (deep structures), i.e. an infinite set of grammatical functions and relations. Transformational rules alter these relations into S-structures (surface structures) which are in turn converted into phonological form (PF) by means of phonological rules. Independently, rules of the logical form (LF) component apply to convert S-structures to representations in LF. The two components PF and LF mediate between form and meaning (Chomsky, 1986, 1993, 1995).

GB also embodies some overlapping modules of grammar:

(i) bounding theory

(ii) government theory

(iii) θ-theory

(iv) binding theory

(v) Case theory

(vi) Control theory

These modules are sub-theories, and each has its own principles. The theories interact with one another, and it is not possible to draw a clear-cut boundary among them.

The distribution and interpretation of PRO is designated by the module of grammar termed as Control Theory. Control theory is directly related to non-finite structures with empty subject PRO, and it differentiates first off between two types of infinitival constructions: *raising* and *control*. This distinction between raising and control structures at the same time explains how PRO was invented.

Much as the below sentences seem to be alike on the surface, they exhibit two distinct structures: while sentence (5) displays a raising structure, sentence (6) displays a control structure.

(5) *Raising Structure*

$Jean_i$ is likely [t_i to leave]

(6) *Control Structure*

$Jean_i$ is reluctant [PRO_i to leave]

(Carnie, 2002: 255)

GB offers some evidence to prove that raising and control are two distinct phenomena. To begin with, embedded clause in sentence (5) can function as sentential subject, or it can be extraposed via a pleonastic subject with no theta roles:

(7) *Clausal Subject*

[That Jean left] is likely

(8) *Extraposition*

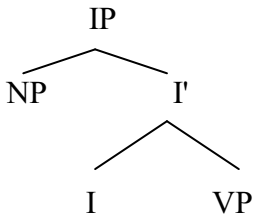
It is likely [that Jean left]

It becomes possible to derive these two alternative constructions for sentence (5) thanks to the fact that *is likely* refers to the whole proposition of Jean leaving but not to the subject NP *Jean* particularly. Besides, what assigns an agent theta role to the element in the subject position is *to leave* in the embedded clause not *is likely* in the matrix clause. Thus, there exists a close relationship between the *Jean* and *to leave*, not between *Jane* and *is likely*. This shows that *Jean* cannot have originated in the matrix subject position.

Although, the embedded clause carrying the properties of [-tense] and [-agreement] cannot assign case to its subject, Extended Projection Principle (EPP) requires that NPs always carry Case, and every clause have a subject.

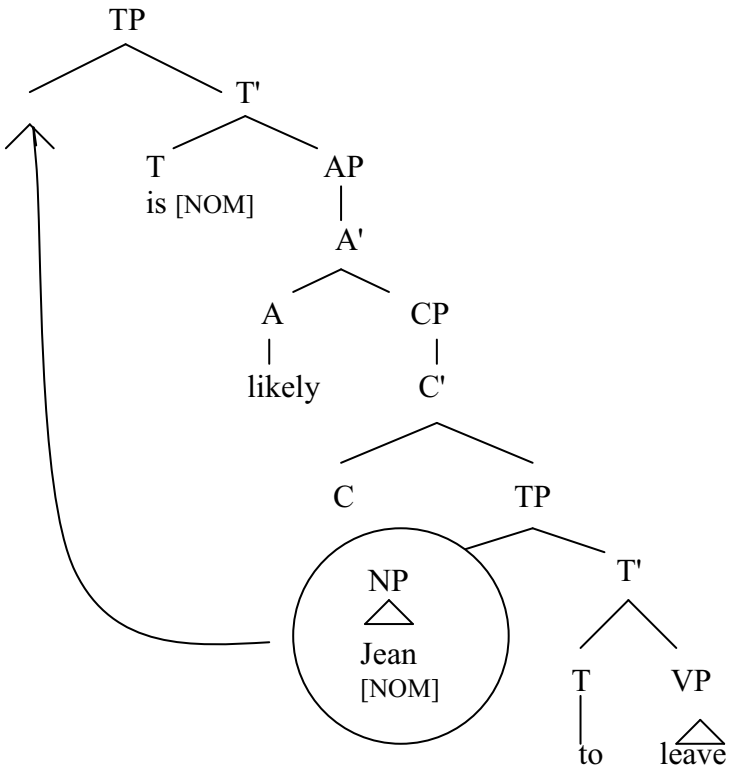
(9) *Extended Projection Principle*

All sentences, all I projections, must have subjects (Haegeman, 1991: 241):



So *Jean*, which is supposed to occupy the subject position of the infinitival clause originally, is moved to the sentence initial position to receive its case from *is likely*, whereby exhibiting a typical raising construction.

(10) _____ is likely [Jean to leave]



(Carnie, 2002: 259)

As for sentence (6), it is not possible to derive the clausal subject or extraposition constructions.

(11) *It is reluctant [that Jean left]

(12) * [That Jean left] is reluctant

In (11), expletive *it* is placed at a position where a theta role, that of an experiencer, already exists. However, expletive *it* may in no way receive a theta role. That's why, sentence (11) is considered to be ill-formed. Similarly, the experiencer role in (12) is held by a clausal subject. The question here should be *who is reluctant* not *what is reluctant*. Therefore, the answer may not come as the whole proposition *that Jean left*. So sentence (12) is also considered to be ill-formed. In (6), *is reluctant*, unlike *is likely*, can assign a theta role to its subject *Jean*. In fact, Jean receives two theta roles which are *experiencer* and *agent* assigned by *is reluctant* and *to leave* respectively.

(13) [1]$\text{Jean}_{i/m}$ is reluctant $[\text{to leave}]_k$

However, the theta criterion requires that "the number and types of arguments in a sentence and the theta grid" be equal.

[1] The symbols i, m, and k are used to denote thematic roles of i) experiencer, ii) agent, and iii) proposition, respectively.

(14) *The Theta Criterion*

Each argument bears one and only one theta role, and each theta role is assigned to one and only one argument (Chomsky, 1993a: 36).

Although sentence (6) has three theta roles which are *agent*, *experiencer*, and *proposition*, there are just two arguments. Thus, there is a mismatch between the number of theta roles and the number of arguments. Not to violate the theta criterion, another NP called as PRO is considered to exist in the subject position of the embedded clause to receive the remaining *agent* theta role.

Now that we have explained how the existence of PRO is explained, we can go on with another question: which positions can PRO occupy? The foremost deduction of control theory regarding the distribution of PRO is that PRO occurs only in non-Case marked subject position of a non-finite clause:

(15)

a. I tried to PRO understand the problem.
b. It is important PRO to understand the problem.
c. *PRO is/are singing.
d. *I spoke to PRO.
e. PRO to understand the problem is important.
f. PRO running away would be unwise.
g. PRO sitting in my office one day, I remembered the solution.

(Culicover, 1997: 76)

These sentences, especially the ungrammaticality of (15c,d) show that PRO cannot occupy a position where agreement (either person or tense) exists. This means that PRO is restricted to the subject position of infinitives and gerunds, the basic ungoverned positions. The existence of PRO in such clauses is especially important since it enables the theory to describe non-finite clauses just like finite clauses, i.e. as if they have subjects. Thus, control theory forms a uniformity of structures, accepting the existence of a subject NP in non-finite clauses as we have already discussed in the introduction part. In conclusion, the structure of an embedded clause, whether it is finite or non-finite will be as follows:

(16) S → NP INFL VP (Chomsky, 1993a:25)

In line with this rule, sentences (17) and (18) exhibit the same structure in terms of the existence of a syntactic subject:

(17) We persuade John [that he should finish college]

(18) We persuade $John_i$ [PRO_i to finish the college]

Apart from that, sentences (17) and (18) have also one more property in common: inflection. The structure of (17) and (18) are parallel to each other in that the bracketed finite S in (17) has the form [NP M VP], and similarly, the bracketed non-finite S in (18) has the form [PRO to VP]. Thus, modal auxiliary *should* and infinitival particle *to* are claimed to belong to the same category, which is INFLECTION (henceforth I). Past tense morpheme *–d* that is attached to *should* shows that the modal is inflected for tense, whereas infinitival particle *to* is uninflected. Hence, the modal *should* and uninflected particle *to*

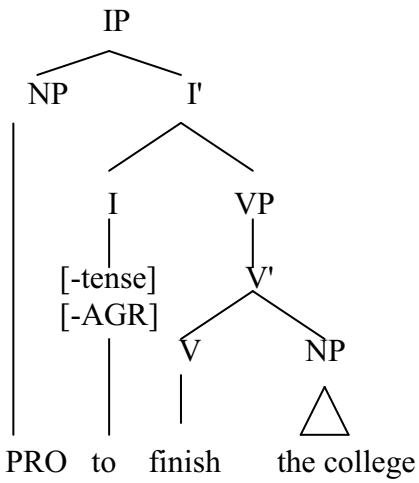
can just be seen as two different subclasses of a category, that is, I. In "Essays" (1977: 87), Chomsky also supports that Modals and infinitive *to* be just two different branches under I. His argument is that "Modals and *to* cannot co-occur" (qtd in Radford, 1988: 304). This shows that a clause like **she can to come now* would be ill-formed. Accordingly, it is possible to make a generalization like (19) below.

(19)

"All Ordinary Clauses contain an I constituent, which may be either filled (e.g. by a Modal if I is finite, or by infinitival *to* if I is nonfinite), or left empty" (Radford, 1988: 308-309).

That infinitival *to* is considered to be a member of I category shows that the Extended Projection Principle (cf. 9 in this section) is applicable to the infinitival constructions also.

(20) We persuade $John_i$ [PRO_i to finish the college]



As is clear, The Extended Projection Principle verifies all the arguments that have been put forward so far in that all the control constructions have syntactic subjects which are filled by covert pronouns, i.e. PRO.

To determine the distribution and properties of PRO, Control theory interacts with the theories of Government, Binding, and Case. To begin with, government is one of the prominent relations that determine the distribution of PRO. Government is the basic relation which the other modules of grammar also make us of. So as the central grammatical relation, government can be defined as follows:

(21) *Government*

α governs β if and only if

(1) α is a governor (e.g. N, V, P, A, etc.)

(2) α and β mutually c-command each other

Government is a more restricted version of c-command in that only certain elements are allowed to govern (lexical heads) and these can only govern as far as their complements, but no further. Considering these restrictions, we contrast pro and PRO to see if PRO can occupy governed positions that can be occupied by overt pronouns:

(22)

a. *Direct Object*
I saw John /*PRO

b. *Subject of Tensed S*
John thinks that he/*PRO will win

c. *Subject of infinitive*
I was wondering what PRO to do
*Bill
*for Bill

d. *ECM subject position*
John believes Mary to be strange
himself
*PRO

(Culicover, 1997: 77)

A consequence of all these arguments is that PRO and overt NPs are in complementary distribution; if a position is filled by PRO, it can never be filled by an overt NP, or vice versa. Accordingly, the difference between a PRO and a pronoun is that the phonetic existence of PRO makes the sentence ungrammatical while a pronoun may or may not be dropped according to the way that the Null Subject Parameter is set in a certain language (Carnie, 2002: 260; Haegeman, 1991: 241-243).

All these cases acknowledge that PRO cannot appear in governed positions, i.e. the subject position of a tensed clause, or the object position of a VP or a PP. The subject position of a tensed clause is governed by AGR, and the object positions of PP and VP are governed by the heads of these phrases. It is only the subject position of the non-finite clause that is ungoverned and thus that can be filled by PRO. This outcome is also confirmed by Chomsky (1993a: 274, 275), which states that PRO has no governing category and is therefore ungoverned and derives the following Empty Category Principle:

(23) ECP: If α is an empty category, then

(i) α is PRO if and only if it is ungoverned

(ii) α is trace if and only if it is properly governed

(iii) α is a variable only if it is Case-marked

Another theory that accompanies Control Theory is Case Theory, which is at the same time quite related to government. Through Case Theory, we investigate whether null PRO receives Case or not. The reasons to follow underline that it is impossible for PRO to carry Case.

On the one hand, *the Case Filter* maintains that "Every phonetically realised NP must be assigned (abstract) Case." Additionally, assigning Case to an NP makes it visible- referred to as visibility condition- for theta role assignment (Chomsky, 1986: 74). However, as is stressed before, PRO is a phonetically null category, which makes it impossible to receive Case.

On the other hand, *The Case Assignment Principle* suggests that Case is assigned under the restrictions of government. "That is, the basic and central instances of Case assignment are instances of government by a Case-assigner" (Chomsky, 1993: 183). The fundamental properties of Case-assignment are as follows:

(24)

(i) NP is nominative if governed by AGR

(ii) NP is objective if governed by V with the subcategorization feature: -NP (i.e., transitive)

(iii) NP is oblique if governed by P

(iv) NP is genitive in $[_{NP}$- X]

(v) NP is inherently Case-marked as determined by the properties of its [-N] governor

(Chomsky, 1993: 170)

These features reason that in order for an element to assign Case to an NP, it has to be the governor of that category. As we have already stressed, AGR governs the subject of a finite clause; hence, it assigns Nominative Case to the subject. Verbs and Prepositions, on the other hand, govern their objects and thereby assign Accusative and Oblique Case respectively. In case of non-finite clauses, since there is no AGR to serve as the governor of the subject, i.e. since PRO is ungoverned as already emphasized, it is not possible for PRO to carry Case. Thus, GB theory acknowledges that no Case is assigned to PRO (Chomsky, 1993a: 74).

However, that PRO carries no case means that it is not visible for theta assignment because in order for an element to be assigned a theta role, it has to carry Case. As an exception, Chomsky (1986:104) notes that "the element PRO, which is always an argument, is visible for theta marking even though not Case-marked …"

Another theory to do with control theory is the theory of binding. Binding Theory is concerned with referential properties of elements such as pronouns and

anaphors. Binding theory subdivides nominal expressions into three basic categories: (i) anaphors, (ii) pronominals, and (iii) R-expressions. The theory proposes one principle for each of these categories:

(25) *Binding Theory*

(A) An anaphor is bound in its governing category

(B) A pronominal is free in its governing category

(C) An R-expression is free

(Chomsky, 1993: 188)

Anaphors, as it is offered by the theory, must have a c–commanding antecedent within the same clause. On the other hand, pronominals cannot have a c-commanding antecedent with the same clause. Finally, r-expressions such as proper names can never have c-commanding antecedents anywhere in the sentence. In this connection, the question to do with control structures is whether to accept PRO as a pronoun or anaphor.

Before we investigate this question in detail, let us consider the relationship of overt and empty categories more closely. The categories schematised in binding theory, .i.e. anaphors, pronominals, and r-expressions, have their overt and empty correspondences certainly. To begin with, the movement of reflexive pronouns leads to *NP-trace*. Secondly, the deletion of personal pronouns leads to *pro*. On the other hand, empty PRO is observed to be wholly absent. Below, we see overt and empty categories defined by their binding behaviour (Chomsky, 1995: 41):

OVERT	EMPTY	ANAPHOR	PRONOMINAL
Reflexives and Reciprocals	NP-trace	+	-
Personal pronouns	Pro	-	+
R-expressions	Wh- trace	-	_
-	PRO	+	+

Table 1: Overt and Empty Categories in Government and Binding Theory

The chart in fact answers our question regarding the category of PRO. As is seen in the chart, the only category presented with the properties of [+ anaphor] and [+pronominal] is PRO: a pronominal anaphor. This means pronominal anaphor PRO is both free and bound in its governing category.

PRO is observed to behave anaphorlike in configurations where it is obligatorily bound by a local antecedent, either subject or object of the matrix clause. "PRO behaves much in the manner of an anaphor; its structural relation to its controller is essentially the same as that of an antecedent-anaphor pair, and its interpretation is very much like that of a reflexive" (Chomsky, 1986: 124-125).

(26)

a. John decided [PRO to vote twice]
b. John's decision [PRO to vote twice]
c. John persuaded Bill [PRO to vote twice]
d. The students asked the teacher [PRO to leave the room]
e. *Bill wanted [Tom to decide [PRO to swim across the pond together]]

PRO in sentences (26a, b) is obligatorily controlled by *John*. Similarly, PRO in (26, d) is obligatorily controlled by the matrix object, *Bill* and *the teacher* respectively. What these two sentences have in common is that although there are two potential arguments in the matrix clauses, i.e. a matrix subject and a matrix object, PRO in each case is obligatorily controlled by object, not by subject. This shows that PRO acts like anaphor taking the nearest NP as its antecedent. Additionally, sentence (26e) reveals that infinitival complement do not permit split reading since the sentence is ill-formed with *together*. The reason is that in this configuration, PRO has to be controlled by the local antecedent *Tom* only. Also, none of the structures under (26) permit arbitrary control or control from an argument locally unbound, which proves the anaphoric characteristic of PRO.

On the other hand, PRO can also be observed to behave pronounlike in configurations where it is not locally bound. Non-Obligatory control cases such as arbitrary control, long distance, and split control are the types of control relations where PRO appears to be pronounlike:

(27)

a. It is illegal [PRO to vote twice]
b. It was decided [PRO to vote twice]
c. The decision [PRO to vote twice] (p. 124)
d. John thought Mary said that the decision [PRO to feed himself] was foolish
e. Bill wanted [Tom to approve the decision [PRO to swim across the pond together]]

In (27a, b, c), PRO does not have controller in the matrix clause; they, moreover, receive generic reading, which shows that it is not bound by an antecedent in these cases just like pronouns which are free in their governing category. In (27d), PRO is controlled by the higher clause subject, which is called as Long-Distance Control. In such a case, the controller and the controllee are not clause mates. As for (27e), PRO can have split control, i.e. can be controlled by both matrix subject an object at the same time, as the grammaticality of the sentence with *together* shows. All these cases prove that PRO can also behave like a pronoun without any antecedents in the local domain.

Summary

In GB theory, it could be said that control structures are examined by certain modules of Universal Grammar in GB theory. The modules in question (government, binding, case, theta, control theories) are structurally distinct. Each explains a distinct phenomenon by using different principles. However, they function in a chain relationship; each module supports the other modules serving to achieve explanatory adequacy and to support Universal Grammar as a solution to Plato's problem.

Among these modules, control theory is directly related to the investigation of null subjects in non-finite clauses such as infinitives and gerunds. Control theory is escorted by other modules of grammar throughout this investigation process.

To begin with, Theta theory works to prove the existence of PRO. According to theta theory, the existence of PRO is obligatory since it puts on the extra θ-role assigned by the complement VP. Otherwise (in the absence of PRO), the theta criterion will be violated with two θ-roles assigned by two predicates to only one argument in the matrix

clause. Thus, PRO becomes the only category that carries a θ-role although it is invisible for θ-marking.

Secondly, theory of government works to determine the distribution of PRO and concludes that PRO exists only in ungoverned positions since there is no AGR in infinitivals or gerunds to serve as the governor of PRO.

Also, interacting with government theory, Case theory suggests that PRO is caseless with no governors in its local domain to assign it a Case.

Finally, Binding theory explains whether PRO is pronominal or anaphor like reflexives and reciprocals. Accordingly, although every DP is either a pronominal or an anaphor, PRO is both anaphor and pronoun.

I. 2. The Minimalist Program

The minimalist Program is an extension of Principles and Parameters approach to grammatical theory. Like GB Theory, it sticks to UG in order to achieve a uniformity of linguistic representations valid for all of the natural languages. However, the structure of UG reflected in the Minimalist Program is different from the one GB based theories offer in that some modules of UG are eliminated in the Minimalist Program for the sake of simplicity.

The most prominent characteristic of the Minimalist Program is that it tries to keep the linguistic system maximally economical. Thus, it avoids most of the details offered by previous approaches in Mainstream Generative Grammar (MGG). As it is offered in Chomsky's *Minimalist Program* (1995:10), the concepts and principles abandoned in his formation of the Minimalist Program are as follows:

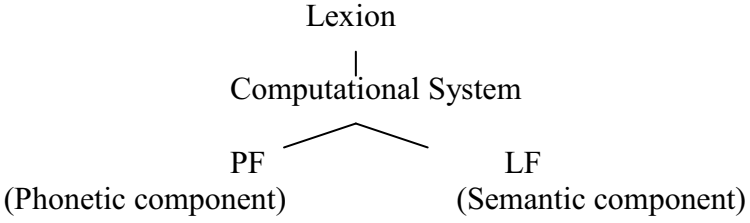
> … the basic ideas of the Extended Standard Theory that were adopted in the P&P [Principles and Parameters] approaches: D-structure; S-structure; government; the Projection Principle and the θ-Criterion; other conditions held to apply at D- and S- structure; the Empty Category Principle; X-bar theory generally; the operation Move α; the split-I hypothesis; and others.

So what grammatical accounts does the Minimalist Program offer? To begin with, according to the Minimalist Program, knowledge of language consists of a lexicon and a Computational System (CS). Second, grammar in this program has two distinctive levels: Phonological Form (PF) and Logical Form (LF). Getting rid of D-structure and S-structure, Chomsky (1993b:3) considers the modules of PF and LF to be the only indispensable levels of representation since the interface between sound and meaning is sine qua non if a theory is to thrive:

> … it [UG] must specify he interface levels (A-P, C-I) [articulatory-phonetic, conceptual-intentional], the elements that constitute these levels, and the computations by which they are constructed. A particularly simple design for language would take the (conceptually necessary) interface levels to be the only levels. That assumption will be part of the 'minimalist' program…

In this context, grammatical account of the Minimalist Program is as follows: "For each particular language, the cognitive system, we assume, consists of a computational system CS and a lexicon. The lexicon specifies the elements that CS selects and integrates to form linguistic expressions – (PF, LF) pairings, we assume" (Chomsky, 1995:6). This means that lexicon gives birth to PF and LF via CS, which stands for the mechanism forming linguistic structures. So the design of UG according to the Minimalist Program would be something like the following:

(28)



Structure building process starts with lexicon. Computational system works on lexicon and then forms PF, the interface between the grammar and phonetics; and LF, the interface between the grammar and semantics.

These structural descriptions (SDs) are formed through two operations: Merge and Move. Lexical items are combined to construct larger units, and this operation is called Merge. Then, the elements are moved since the Minimalist Program is transformational and since the movement is part of the CS. As is obvious, this latter operation is called Move.

The operation movement is restricted by three constraints: Minimal Link Condition, Procrastinate, and Greed. Minimal Link Condition limits the distance that an item can move to. More specifically, it merely allows an element to move to the nearest relevant position (referred to as *shortest move* in literature). The other constraint put on the Move operation, Procrastinate, as the name suggests, hinders any movement unless it is obligatory. The final limitation, Greed, holds that move raises α to a position β only if morphological properties of α itself would not otherwise be satisfied in the derivation.

As for the distribution of PRO, it is also explained on the basis of Move and Merge operations. In fact, the approaches offered in the Minimalist Program can be mainly investigated into two separate discussions: the null-Case theorem offered by Chomsky and

Lasnik (1993) on the one hand, and the movement theorem offered by Hornstein (1999, 2001) on the other hand.

We begin with the former and highlight how the approach offered by Chomsky and Lasnik (1993) in MP differs from GB Theory. In GB framework, as we have already suggested in the previous section, the distribution of PRO is determined by the theory of government; consider (29) below:

(29) PRO must be ungoverned

However, the Minimalist Program does not acknowledge the existence of government phenomenon any more; instead, it employs Case Theory: "If Case is checked (only) in Spec-head configurations with appropriate functional heads, is the notion 'government' necessary at all in the theory" (Lasnik, 1999: 63)? This being case, we encounter problems in accounting for the distribution of null subject PRO. Since (21) is no longer a valid theorem for the existence of PRO, Chomsky and Lasnik (1993) tries to solve the problem within the scope of Case Theory, where PRO is restricted to non-Case-marked positions.

Nevertheless, as it is also underlined by Cook and Newson (1988), it is not possible to maintain the view that PRO can only occupy non-Case-marked positions since there are positions PRO cannot take place even though these positions are not Case-marked:

(30) *It was killed PRO

Hence, the Minimalist Program comes up with an alternative solution suggesting PRO carries Case like any other DP, but with one difference: it carries Null Case.

(31)

PRO must be Case-marked with 'null' Case, where null Case is licensed by (certain instances of) non-finite Tense (Lasnik, 1999: 64).

This way, PRO, which carried no Case in GB, is assigned a Null Case, whereby it also becomes visible for theta assignment. Additionally, since finite Tense carries AGR, that is nominative Case, null Case-marked PRO is restricted to non-finite Tenses. Consequently, the Minimalist Program justifies the existence of PRO through Case Theory, having discarded the notion of government.

Be that as it may, the proposal offered by Chomsky and Lasnik (1993), viz. the possibility of determining the distribution of PRO on the basis of Case Theory, is highly criticised by Hornstein (1999, 2001), another perspective in the Minimalist framework. Hornstein has some deviations both from GB and from Chomsky's conceptualisation of control theory around null-Case theorem. The main points he makes are as follows on the whole:

(i) A single DP can carry more than one theta roles; theta theory should be abandoned.

(ii) Null Case theory just serves to prove the existence of PRO and to make PRO visible for theta role assignment. The subject of the infinitive is simply Caseless; the null Case theory should be abandoned.

(iii) Just like raising, control can be analyzed as a kind of NP movement; both PRO and control phenomena should be abandoned.

(iv) The movement in Control and Raising structures should be explained via Move and Merge operations.

As is clear, Hornstein abandons not only D-strucure and S-structure but also the element PRO and the theory of control, which is proposed to explain PRO. According to Hornstein (1999, 2001), both Control and Raising structures can be explained on the basis of movement, referred to as Movement Theory of Control in literature.

> … PRO, like NP-t[race], is the residue of movement. Strictly speaking, then, there is no grammatical formative like PRO (or trace). Rather, PRO is simply a residue of movement, simply the product of copy and deletion operations that relate two theta-positions (Hornstein, 2001: 37).

This said, in this theory, a close look at the structures of control and raising will be something like (32) below:

(32)

a. John$_i$ expects [t_i	to win the prize]	*Control*
John$_i$ seems [t_i	to have won the prize]	*Raising*

In view of that, the only difference between control and raising structures is that in raising NP is moved to a position no theta role is assigned, whereas in control NP is moved to a position which is already assigned a theta role. So the subject position in infinitive constructions is raised upwards to receive both Case and theta role.

The applicability of Hornstein's movement theory will be discussed in the following chapter.

Summary

In the MP, two levels of UG representations, D-structure and S-structure, are eliminated and only the necessary levels, PF and LF that reflect the correspondence between sound and meaning, are kept. Also, some modules of grammar such as government, binding are abandoned. All these deletions, of course, reflected on the control theory. Government and binding having been crossed out, the existence of PRO is explained on the basis of Case theory at the early stages of the program by Chomsky and Lasnik (1993). Later on Hornstein (1999, 2001) tailored the Minimalist Program some more, making the program more minimal than ever. To put it another way, Hornstein dispensed with even PRO and the control theory explaining control on the basis of movement. Accordingly, the only difference between Control and Raising is that the subject of the former is moved to a θ-position, whereas the subject in the latter is moved to a non- θ-position.

I. 3. Studies on Turkish Control Structures

A number of studies in Turkish such as Kural (1994, 2007), Özsoy (1987), Oded (2006) centre on configurationally determined approaches, while some other studies such as Erguvanlı Taylan (1996), Haig and Slodowicz (2006), Slodowicz (2007) base their studies on semantically determined approaches.

To begin with, Kural (1994, 1998) discusses the much discussed classification of subordinate inflections in Turkish. Most importantly, he acknowledges both *–mE* and –

mEK as infinitive markers. The classification offered by Kural is as follows, (cf. the version offered by Underhill (1976)):

(33)

Category	Underhill (1976)	Kural (1996)
-DIK	gerundive	Past; cf. main clause past -DI
-EcEK	gerundive	Future; cf. main clause future -EcEK
-mE	gerundive	Infinitive
-mEK	infinitive	Infinitive
-Iş	nominalizer	True gerundive; equivalent to English -ing

Table 2: Subordinate Inflections in Turkish

Accordingly, the only difference between *–mE* and *–mEk* is that the former takes place in environments where subject and verb agreement exists and where subject receives Case while the latter takes place in non-agreement contexts. The subject of *–mE* clauses could be lexical NPs, pro, or the operator-traces in relative clauses, and the subject of *–mEK* could be PRO.

(34)

Ahmet-∅ [PRO araba kullan-may]ı ist-iyor-∅

A.-NOM car use-mEK-ACC want-PRES-AGR

'Ahmet wants to drive cars'

(35)

Ahmet-∅ [Berna-nın araba kullan-ma-sı]nı ist-iyor-∅

A.-NOM B.-GEN car use-mE-AGR-ACC want-PRES-AGR

'Ahmet likes Berna to drive cars'

(Kural, 2007: 9)

Kural (1994) considers *–mE* to be the original infinitival (base form) and maintains that *–mEK* is a version of *–mE* derived by adding a final –K, which is categorized as C° (COMP). Being such, *–mE* and *-mEK* are the allomorphs of the same morpheme, i.e, *-mE.* Thus, these inflections are in complementary distribution: a verb selects *–mE,* or else it selects *–mEK,* not both of them at the same time. The verb selecting *–mE* creates a non-control context, whereas the one selecting *–mEK* creates a PRO-control context.

A most recent approach to Turkish control structures is conducted by Oded (2006) in line with Landau (1999), based on GB theory. Oded (2006) investigates the applicability of Landau's theory of control to Turkish. The aim of the study is to contrast the Minimalist Program (more specifically Hornstein's MTC) and the GB theory. The conclusion is that GB brings a more exhaustive perspective to the analysis of control and that Hornstein's MTC is not applicable cross-linguistically.

Following Landau's (1999) approach, Oded (2006) categorizes Obligatory Control into two groups as Exhaustive Control (EC) and Partial Control (PC). In EC, the complement VP is controlled by only one argument in the matrix clause, either subject or the object. In PC, on the other hand, an argument from the matrix clause plus an argument outside the matrix clause control the complement VP. These two control relations are analyzed on the basis of Agree features. Accordingly, EC agrees with PRO, whereas PC

agrees with tense. That is, PC relation is compatible with conflicting time adverbs while EC relation is not.

(36)

a. Kaya$_1$ [PRO$_1$ saat 6'da çalış-ma-ğa] *başla-dı* (EC verb)

Kaya-Nom clock 6-Loc work-Inf-Dat start-Pst-3S

"Kaya started to work at 6 o'clock"

b. Kaya$_1$ [PRO$_{1+}$ saat 6'da buluş-mak] *iste-di.* (PC verb)

Kaya-Nom clock 6-Loc. Meet-Inf want-Pst-3S

"Kaya wanted to meet at 6 o'clock"

Sentence (a) includes an EC predicate, which is not compatible with conflicting time adverbs. However, sentence (b) includes a PC predicate, which is compatible with conflicting time adverbs. Thus, considering these examples, in PC it is possible to say ‘Kaya bugün yarın saat 6’da buluşmak istedi.’ Nonetheless, it would be ill-formed if we said ‘Kaya bugün yarın saat 6’da çalışmaya başladı.’

As for the semantically determined approaches on Turkish control structures, one of the earliest studies is Erguvanlı Taylan (1996), which investigates the ways used to identify the referent of the controlled subject in the complement VP.

The study reveals that it is not the structural relations but the semantic properties of the matrix verb that determines the controller choice in a control configuration. For example, in the absence of an overt syntactic subject in the matrix clause to control the complement VP, normally, the controlled element is interpreted to be

non-specific. However, some other factors such as tense of the matrix verb can switch the non-specific reading of the controlled to the specific reading. For example, in (37a) the sentential subject receives a generic reading due to the aorist attached to the matrix verb. However, in (37b) the controllee is bound by the speaker and some other participants referred to by the speaker. A generic reading would be inappropriate with this structure.

(37)

a. (Ø Deniz kenar-ın-da piknik yap-mak) çok zevkli ol-*ur*
sea side-Poss3-Loc picnic do-inf vert pleasurable be-Aor
'It is very pleasurable to have a picnic by the seaside.'

b. (Ø Deniz kenar-ın-da piknik yap-mak) çok zevkli ol-*du*
sea side-Poss3-Loc picnic do-inf vert pleasurable be-Past
'It was very pleasurable to have a picnic by the seaside.'

(Erguvanlı Taylan, 1996: 50)

Following Erguvanlı Taylan (1996), Haig and Slodowicz (2006)[2] also analyze control structures on a semantic basis in the light of verb classes. Slodowicz (2007) presents a different typology of Turkish control verbs. In this typology there are two types of control relations: *inherent control* and *structural control*.

[2] Haig and Slodowicz (2006) follows the approach to control as outlined by Stiebels, Barabara (2007)

Inherent control verbs carry control properties in their lexical entry and do not allow for possessive marking. *Zorla- 'force'* in Turkish is an inherent control verb as is seen in the below example.

(38)

Ahmeti Ayşe-yij [_j İstanbul'a git-me/*-sin/*eceğ-in]-e zorladı.

A. A.-ACC I.-DAT go-INF/*-3SG.P/*GER-3SG.P-DAT force-PST.3SG

'Ahmet forced Ayşe to go to Istanbul.'

(Slodowicz, 2007: 150)

Inherent object control verbs like *zorla-* tend to be manipulative verbs on the whole while inherent subject control verbs are Modal, Phase, and Implicative verbs.

The other category of control verbs, that is structural control verbs, go with infinitive complements that may be possessed or non-possessed:

(39)

a. Ayşei Ahmet-ej [_i/j alışveriş yap-mağ]-ı öner-di.

A. A.-DAT shopping do-INF-ACC propose-PST.3SG

'Ayşe proposed doing the shopping to Ahmet.'

b. Ayşe Ahmet-e [Murat-ın alışveriş yap-ma-sın]-ı öner-di.

A. A.-DAT [M.-GEN shopping do-INF-3SG.P-ACC propose-PST.3SG

'Ayşe proposed to Ahmet that Murat should do the shopping.'

(Slodowicz, 2007: 152)

(39a) exhibits a control structure since both the subject and the subject agreement marker are missing in the lower clause. On the other hand, (39b) cannot be a control construction since the complement VP carries the possessive marker. *Öner- (suggest)* in these examples appears to be a structural control verb since it is compatible with both possessed and non-possessed configurations.

Additionally, variable control outlined by Erguvanlı Taylan (1996) is possible only with structural control verbs. The verbs that serve as structural control verbs can only be Desiderative, Propositional-attitude, and Utterance verbs. To sum up, all the data in this study proves that lexical semantics of the matrix verb plays a crucial role in determining a typology for control verbs (Slodowicz, 2007).

A noteworthy point made in Slodowicz (2007) and Haig and Slodowicz (2006) is that although it has been repeatedly mentioned in literature that where possessive morphology exists control cannot, there are some cases in Turkish where control occurs in spite of a possessed complement.

(40) *Quirky Possessive Marking*[3]

Ahmet$_i$ [Ø$_i$ bisiklet-i tamir et-me-sin]-i becer-di.

Ahmet bike-ACC fix LV-INF-POSS3SG-ACC manage-PST(3S)

(a) ʻAhmet managed to fix the bike.ʼ (accepted by the majority of informants)

(b) *ʻAhmet managed (someone elseʼs) fixing the bike.ʼ(rejected by all)

(Haig and Slodowicz, 2006: 174)

[3] The same issue is investigated by Özsoy (1988) in detail as *possessed impersonal infinitives* as will be discussed in Chapter III at length.

As is observed in the example the matrix verb *becer- (manage)* assigns subject control irrespective of the possessive marker attached on the infinitival. In such a case, it is important to note that the possessive morphology cannot have a semantic content. In conclusion, according to Haig and Slodowicz, this example shows that possessive marking of the complement VP cannot be matched with lack of control in every case.

Bozşahin (2006) criticizes the *quirky possessive marking* definition offered by Haig and Slodowicz (2006). Contrary to what is offered in Haig and Slodowicz- that there are some cases in Turkish where control occurs in spite of a possessed complement- Bozşahin (2006) concludes that the co-reference between the empty subject and the matrix subject in this clause is not triggered by the control of the finite embedded clause. The reason is that there are similar cases where the subject in the complement VP and the matrix subject are not co-referent in spite of the so called possessive marking:

(41) Wright kardeş-ler uç-ma-sın-ı/uç-mağ-ı becer-di
W brother-PLU fly-mA-POSS.3SG-ACC/fly-INF-ACC manage-PAST
'The Wright brothers managed flying/to fly.'
(Bozşahin, 2006: 125)

In this case, it is possible to define only one of the Wright brothers as the controller, or alternatively, both of them can take on the same responsibility of flying. Under such circumstances, in conclusion, it is not possible to claim that possessive morphology marks the antecedent of the controlled element.

Differing from other studies on control structures, Bozşahin (2006) also focuses on the controlled element rather than the controller in the context of ergativity/accusativity. This study investigates the controllee in Turkish as an accusative language. It is maintained that it is not always the syntactic subject that is controlled; semantic subjects that are not syntactic subjects can also be controlled. In some languages, especially in ergative languages such as Tagalog and Inuit, although there is a syntactic subject in the complement clause, the controllee is the semantic subject rather than the syntactic subject. As for Turkish, it controls the syntactic subject just like English does.

CHAPTER II

THE NEED FOR A SEMANTIC ANALYSIS

In this chapter, we aim to show control structures which syntactocentric approaches fail to explain; thus, we mainly analyze the rules and the principles put forward by mainstream syntax. The term mainstream syntax (or Mainstream Generative Grammar) is used to cover the studies under Chomskyan tradition such as Government and Binding Theory *(Lectures on Government and Binding, 1993a)* and the Minimalist Program *(1993b, 1995)* to mention some.

In the section to follow, we will discuss the principle of uniformity in MGG. The principle of Uniformity (Occam's Razor) is examined in connection with control structures, both from English and from Turkish. This first section shows that the syntactocentric approach of MGG fails to explain how controller choice is made in the existence of more than one potential argument in the matrix clause to serve as the controller.

Following this, c-command relation of mainstream research will be investigated to see if this relation holds true for control configurations. This second section shows that control structures violate c-command relation both in English and in Turkish.

In the third section, we will investigate if Rosenbaum's Minimal Distance Principle (MDP) (refreshed as Minimal Link Condition in Hornstein 1999) is valid for control structures. Cases from both English and Turkish prove that controller choice cannot be made on the basis of MDP or MLC.

In the final section, we narrow down our focus to a specific scope: Hornstein's (1999, 2001) Movement Theory of Control. Normally, Hornstein's MTC is categorized under MP; nevertheless, we discuss it in a separate section since its complications are far

beyond than we could cover in a combined section. This final section shows that Hornstein criticises previous approaches in the mainstream grammar and proposes an alternative approach to PRO theorem. However, we will see that Hornstein's proposal has certain shortcomings and is inapplicable across languages. We show these shortcomings following Landau (2003) and Culicover and Jackendoff (2001) respectively.

II. 1. Control Shaped by Occam's Razor

As it is laid out in the previous chapter, control has mostly been analyzed from a "syntactocentric" perspective (to borrow Culicover and Jackendoff's (2005) term). The GB framework and the MP, along with the principles they produced, are two prominent syntactocentric approaches. The main goal in GB theory is to propose as fewer principles as possible for the languages to utilize. Following the GB theory, with a similar aim to keep the principles maximally economical, the MP gets rid of all the stuff such as Deep Structure, Surface Structure, government, binding- and even PRO and control theory bounded to PRO (by Hornstein 1999, 2001 most specifically).

However, contrary to expectations, the theories in question equipped MGG heavily with abstract machinery rather than simplifying it. The aim has been to keep rules and principles as uniform as possible (in line with Universal Grammar); nonetheless, this effort to minimize the principles has turned out to be a burden more than help. According to Clicover and Jackendoff (2005: 5), the origins of such loaded theories should be tied to concealed levels such as Deep Structure (in GB) and Logical Structure (in the MP) together with the unseen insertions, deletions, and movements:

> Although the principles that characterize syntactic structure in the mainstream research are relatively general, the actual syntactic structures ascribed to sentences have turned out to be not at all that simple. The derivation of sentences is regarded justifiably complex and abstract, and even surface structures are full of *complexity that does not show in the phonological output* [italics mine].

At this point, it should be underlined that the main device mainstream syntactic theory has used to justify its tenets is the principle of Uniformity. Basically, Uniformity rests on Occam's Razor, which maintains that "two primitive relations are worse than one, two levels are better than four, four modules are better than five, more is worse, fewer is better" (Hornstein, 2001: 5). This suggests that, if possible, one single principle be used to explain two distinct forms. Accordingly, grammatical account should be kept as concise as possible by utilizing already present mechanisms to explain a new development.

There are three types of Uniformity as it is outlined in Culicover and Jackendoff (2006a: 132): Structural Uniformity (SU), Interface Uniformity (IU), and Derivational Uniformity:

> - *Interface Uniformity:* The syntax-semantics interface is maximally simple, in that meaning maps transparently into syntactic structure; and it is maximally uniform, so that the same meaning always maps into the same syntactic structure. If such structure is not present at the surface, it is nevertheless present at some covert level of structure (e.g., D-structure or LF, depending on the version of MGG).
> - *Structural Uniformity:* An apparently defective or misordered structure is regular in underlying structure and becomes distorted in the course of derivation.
> - *Derivational Uniformity:* Where possible, the derivations of sentences are maximally uniform.

II. 1. 1 Structural Uniformity

As we have also underlined in the previous chapter, Structural Uniformity maintains that complement clauses such as infinitives and gerunds be treated just like tensed clauses, that is, as if they have subjects. According to *the Extended Projection Principle*, "all sentences, all I projections, must have subjects" (Haegeman, 1991: 241). In conclusion, all the clauses are treated in the same way whether they are [+tense] or [-tense] (cf. the examples (17) and (18) in § I.1 repeated here for convenience):

(1)

a. We persuade John [$_{IP}$ PRO to finish the college]

b. We persuade John [$_{IP}$ that he should finish college]

The null pronoun PRO, as Culicover and Jackendoff (2005: 46) maintains, owes its existence to SU in that by using PRO to symbolize the syntactic subject of infinitivals and gerunds, SU aims to set a uniformity of structures. Thus, mainstream research acknowledges the existence of two syntactic NPs in the sentence. The first NP is the phonologically absent but syntactically present subject of the infinitival complement tagged as PRO. The second NP is the overt subject of the matrix clause and controls PRO by serving as its antecedent.

Be that as it may, the evidence provided by Culicover and Jackendoff (2003: 519) supports that there are cases where, contrary to the above formalization of MGG, no antecedents exist to control the covert subject of the complement VP[1]:

[1] As cited in Culicover and Jackendoff (2003: 519), examples (3a,b) are from Williams (1985) and example (3c) is from Sag and Pollard (1991).

(2)

a. Any such attempt [to leave] will be severely punished.
b. Yesterday's orders [to leave] have been canceled.
c. How about [taking a swim together]? (controller is speaker and hearer jointly)
d. Undressing myself/yourself in public may annoy Bill.

In these examples, there are no overtly mentioned NPs in the higher clause to control the complement VP. For cases such as (2d), mainstream grammar maintains that there should be an antecedent for reflexives myself/yourself and thus justifies the existence of PRO in the matrix clause which serves as the antecedent of reflexives. Similarly, following the same principle, one expects to find an antecedent for PRO, which is claimed to be [+ pronominal] and [+anaphor]. However, this is not the case with examples under (2) where no way is possible to find a syntactic NP as the controller. Especially, examples (2a, d) receive no overt controller since the controller is the speaker and/or hearer.

Similar cases exist in Turkish as well. Sentence (3) exhibits control in subject complement, and sentence (4) exhibits control with nominals instead of verbs, both of which miss an overt NP to control the complement VP:

(3)

[Böyle davran-mak] kendim-e/kendin-e/kendileri-ne zarar ver-ir.
Such behave-Inf myself/yourself/themselves-Dat harm give-3SG
'Behaving this way harms myself/yourself/themselves'

(4)

a. Müdür$_i$-ün [dışarı $_i$çık-ma] isteğ-i

Head-Gen out leave-Nom desire-Acc

'Head's desire to $_i$go out'

b. Müdür$_i$-ün [dışarı $*_i$çık-ma] emr-i

Head-Gen out leave-Nom order-Acc

'Head's order to $*_i$go out'

Examples under (4) constitute a special case in that even change in head noun triggers a change in control relations although there are no syntactic arguments to be the actor of *leaving*. While in (4a) the actor of going out could be *the head* or alternatively *the head* plus some other people, the actor of going out in (4b) could in no way be *the head.*

The examples presented in this section show that the existence of a syntactic NP in the matrix clause is not obligatory in control structures. Control can be triggered without an antecedent that functions as the controller for the complement VP. This conclusion in turn shows that an argument that assumes SU results in a more complex grammar than claimed by MGG. Considering all these complications, we should dispense with the extra theories produced to prove the existence of PRO and to prove the claim that infinitival and gerundial complements are not different from tensed clauses structurally.

II. 1. 2 Interface Uniformity (IU)

Interface Uniformity, observed by syntactocentric approaches to grammar, suggests that meaning transparently reflects onto grammar. Namely, the same meaning always corresponds to the same syntactic structure; semantics (the meaning) is always derived from syntax. In order to justify this claim, Deep Structure (or more recently Logical Form) is proposed. If the same configuration results in two different meanings, it means the configuration in question has two Deep Structures, or else if any two configurations reveal the same meaning, it means they share the same Deep Structure.

The extension of Interface Uniformity on control structures is harshly criticised by Culicover and Jackendoff (2003, 2005, 2006). If Interface Uniformity should prove true, it has to be revealed that the same syntactic structure always corresponds to the same control relation, or different syntactic structures always correspond to different control relations. However, this is not the case with control structures: the same control relation can appear in different syntactic configurations according to Culicover and Jackendoff (2003: 520).

(5)

a. Bill ordered Fred$_i$ [to $_i$leave immediately]
b. Fred$_i$'s order from Bill [to $_i$leave immediately]
c. the order from Bill to Fred$_i$ to $_i$leave immediately
d. Fred$_i$ received Bill's order to $_i$leave immediately

Although the structures from (5a) to (5d) go through some changes each time, *Fred* remains as the controller irrespective of the change the structure encounters. A similar observation can be made with Turkish.

(6)

a. Müdür$_i$ öğrenci-ler-e$_j$ [sınıf-ı $_{j/*\,i}$ boşalt-ma]-yı emret-ti.

Head student-PL-Dat classroom-Acc leave-Inf-Acc order-Past3SG

'The head ordered students to $_{j/*\,i}$ leave the classroom'

b. Müdür-ün$_i$ öğrenci-ler-e$_j$ [sınıf-ı $_{j/*\,i}$boşalt-ma] emr-i

Head-Gen student-PL-Dat classromm-Acc leave-Nom order-Poss

'Head's order to students to $_{j/*i}$ leave the classroom'

In (6b) the controlled argument is nominal differing from (6a) and from other classical cases of control constructions. Nonetheless, both examples exhibit object control irrespective of their different syntactic architecture.

Also, different control relations can appear in the same syntactic configuration as observed in the below examples. Both (7a) and (7b) have complement VPs marked by Ablative Case. Although the sentences under (7) are structurally the same, (7a) exhibits object control, while (7b) exhibits subject control.

The same explanation is valid for the rest of the pairs, each of which includes a different Case marking but the same configuration. Pair (11) displays a special case in that while (a) revels an object control configuration, (b) reveals *variable* control. Accordingly, (11b) can be interpreted

(i) to be controlled by the matrix subject

(ii) to be controlled by the matrix object

(iii) to be controlled by both the matrix subject and the matrix object jointly.

Finally, pair (12) is also a special instance because the examples under it exhibit different control relations in spite of the fact that both sentences include the same matrix verb: *çağır- (to call, to invite)*.

NUMBER	OBJECT CONTROL	SUBJECT CONTROL
(7)	a. Tolga$_i$ sen-i$_j$ (Ø$_j$ iflas et-mek)-ten kurtar-dı you-Acc bankrupt do-inf-Abl save-Past 'Tolga saved you from going bankrupt.'	b. Tolga$_i$ san-a$_j$ (Ø$_i$ evlen-mek)-ten bahset-ti you-Dat get married-inf –Abl talk about-Past ' Tolga talked to you about getting married.'
(8)	a. Tolga$_i$ sen-i$_j$ (Ø$_j$ git-meğ)-e zorla-dı you-Acc go-inf-Dat force-Past 'Tolga forced you to go.'	
(9)	a. Tolga$_i$ sen-i$_j$ (Ø$_j$ yalan söyle-mek)-le suçla-dı you-Acc lie tell-inf-with accuse-Past ' Tolga accused you of telling a lie.'	b. Tolga$_i$ biz-i$_j$ (Ø$_i$ ev-i hava-ya uçur-mak)-la tehdit et-ti. we-Acc house-Acc air-Dat blow up-inf-with threaten do-Past 'Tolga threatened us with blowing up the house'
(10)	a. Tolga$_i$ san-a$_j$ (Ø$_j$ sinema-ya git-meğ)-e izin ver-di you-Dat movies-Dat go-inf-Dat permission give-Past 'Tolga gave you permission to go to the movies.'	b. Tolga$_i$ san-a$_j$ (Ø$_i$ erken gel-meğ)-e söz ver-di you-Dat early come-inf-Dat word give-Past ' Tolga promised you to come early'
(11)	a. Doktor$_i$ san-a$_j$ (Ø$_j$ içki iç-meğ)-i yasakla-dı doctor you-Acc alcohol drink-inf-Acc forbid-Past 'The doctor forbade you to drink alcohol.'	b. Tolga$_i$ Orhan-a$_j$ (Ø$_{i/j}$ o bina-yı satın almağ)-ı öner-di[2] -Dat that building-Acc buy-inf-Acc propose-Past 'Tolga proposed Orhan to buy that building.'
(12)	a.Tolga$_i$ sen-i$_j$ (Ø$_j$ musluğ-u tamir et-meğ)-e çağır-dı you-Acc tap-Acc repair do-inf-Dat call Past 'Tolga called you to fix the tap.'	b. Tolga$_i$ biz-i$_j$ (Ø$_i$ yeni araba-yı göster-meğ)-e çağır-dı. we-Acc new car-Acc showing-Dat invite-Past 'Tolga invited us to show the new car.'

Table 1: Different Control Relations Revealed by Parallel Syntactic Configurations Erguvanlı Taylan (1996: 52-53)

[2] Different from the rest of the sentences, (11b) reveals variable control in that it could be control by matrix subject, or by matrix object, or by both of them.

All the examples examined here suggest that controller choice be made irrespective of Case and theta relations the sentences exhibit. The examples show that both the arguments with the theta role of goal (as in object control cases) and the arguments with the theta role of source (as in subject control cases) can be the controllers. What counts in such a situation is the semantic structure of the matrix clause. According to Erguvanlı Taylan (1996: 53), manipulative verbs trigger object control, while cognition/utterance verbs trigger subject control.

Manipulative verbs

kurtar- (to save), zorla- (to force), suçla- (to accuse), izin ver- (to permit), yasakla- (to forbid), çağır- (to call)

Cognition/utterance Verbs

bahset- (to talk about), tehdit et- (to threaten), söz ver- (to promise), çağır- (to invite)

So the difference between (12a) and (12b) is something to do with the semantics of the matrix verb each sentence has got. That is, *çağır-* in (12a) is a manipulative verb with a meaning of *call* triggering object control; on the other hand, *çağır-* in (12b) is a cognition/utterance verb with a meaning of *invite* triggering subject control.

II. 1. 3 Derivational Uniformity

MGG takes it for granted that where possible, the derivations of sentences are maximally uniform. According to MGG, transformations such as movement, deletion, and addition take place in all the languages. The only difference among languages is that some languages go through the changes overtly, whereas some languages do it covertly. For example, wh- movement occurs covertly during question formation, i.e. in the logical form.

A more relevant case of Derivational Uniformity regarding this study is the proposal of MGG, which underlines that PRO behaves like an anaphor (especially a reflexive), its licensing should fall under the mechanisms that license anaphors. However, further evidence provided by Culicover and Jackendoff (2006a: 132) defies this claim.

The first difference between an NP or a trace and a PRO is that PRO can be deleted, whereas the others cannot:

(13)

a. Arthur expects Mary to go dancing, and Archie *(expects Mary), to go to the movies.
b. John tried PRO to leave, and Mary (tried PRO), to stay.

Second, the PRO subject of the complement of verbs like *expect* does not block gapping of an adjacent verb, but the overt NP subject of the complement of *expect* does:

(14)

a. We expect Mary to be rich and Bill *(expects) Sam to be poor.

b. We expect PRO to be rich, and Bill (expects) PRO to be poor.

Third, PRO is not compatible with a relative pronoun although a reflexive is a perfect match for the relative:

(15)

a. John expects himself, who deserves it, to win the prize.

b. *John expects PRO, who deserves it, to win the prize.

Finally, PRO cannot be coordinated with an overt NP:

(16)

a. *We expect PRO and John to go to Italy.

b. We expect myself and John to go to Italy.

All these examples verify that however hard mainstream research tries to combine the covert PRO and overt NPs into one syntactic category, it is in no way possible for PRO to act like an overt NP. Nor is it possible to unify these categories. In brief, as it is also proposed by Culicover and Jackendoff, we can get rid of PRO so that we will not have to deal with its complications any more.

II. 2 Control in a C-command Relation

The MGG view is that there are two potential controllers in the sentence, either the subject or the object NP, which is bound by c-command relationship. Namely, the controller should c-command PRO in a control structure.

However, Chomsky (1993a: 77) presents examples where the main verb has no arguments to control the complement VP, so that PRO cannot have a c-commanding antecedent. In the below examples, we see that c-command is not required for control:

(17)

a. [PRO to clear myself of the charges] is important to me

b. [PRO to finish my work on time] is important to me

The following cases show further violations of c-command relation since they are the structures where the controller is embedded in an argument. In both (a) and (c) the controller is *John*. However, they exhibit a difference: in (a) the controller is a full NP as an argument, whereas in (c) the controller is just an element in the NP. Moreover, while (b) and (c) are structurally the same, the control relations they reveal are different in that the former has *John's friends* as the controller, while the latter has *John* as the controller:

(18)

a. PRO_i finishing his work on time is important to $John_i$

b. PRO_i finishing his work on time is important to John's $friends_i$

c. PRO_i finishing his work on time is important to $John's_i$ development.

Landau (1999: 43) also argues against the idea that the controller of OC construction must c-command PRO or the controller cannot be split. Below examples are in harmony with the previous examples provided in this section. In (19a), the obligatory controller *Mary* is embedded inside the matrix object, and that's why, it fails to c-command PRO. As for (19b), normally sentential subjects can quite easily exhibit NOC; however, in this case, the subject complement is obligatorily controlled by the object of the matrix predicate. Still, there is no c-commanding relation between the controller and PRO:

(19)

a. Yesterday, it spoilt $Mary's_i$ mood [$PRO_{i/*arb}$ to listen to the news]

b. [PRO_i/ *$Bill's/his_{i/j}$ making that comment] was very rude of $John_i$

In (20b), the two obligatory control verbs, *promise* (subject control) and *persuade* (object control) are both observed to reveal split control contrary to the common view that the controller in OC cannot be split:

(20)

a. John$_i$ promised$_j$ his son [PRO$_{i+j}$ to go to the movies together]

b. John$_i$ persuaded$_j$ Mary [to$_{i+j}$ kiss in the library]

Correspondingly, we provide the Turkish counterparts:

(21)

a. [Çok para $_i$kaybet-mek] Ali'-nin$_i$ can-ı-nı sık-tı.
Much money lose-Inf Ali-Gen mood-Poss-Acc bore-Past3SG
'It spoilt Can's$_i$ mood to $_i$lose a lot of money.'

b. [Çok para $_i$kaybet-mek] Ali'nin eş-i-ni$_i$ üzdü.
Much money lose-Inf Ali-Gen wife-Poss-Acc upset-Past3SG
'It upset Can's wife$_i$ to $_i$lose a lot of money.'

Although (21a) and (21b) exhibit the same syntactic structure, they exhibit two different control relations. In (a), the controller *Ali* is embedded in an argument and therefore can c-command neither complement VP nor matrix VP. Contrary to this, in (b), the controller is *Ali'nin eşi* as a whole argument.

To sum up, control relations cannot be bound by c-commanding since there are examples with the same syntactic structure both in English and in Turkish where controllers may or may not exhibit c-command relationship. Under these circumstances, it is not possible to reach configurationally determined generalizations, and once more we have to turn to semantic constraints.

II. 3 Control in Minimal Distance Principle (MDP)

The other restriction put forward by MGG on control relations is MDP refreshed as Minimal Link Condition by Hornstein (1999, 2001) in the Minimalist Program. Simply put, MDP proposes that the NP closest in the structure to the infinitival be the controller. Consider the below sentences where MDP is verified:

(22)

a. John wants to leave

b. John wants Mary to leave

This being case, Rosenbaum (1967) observes control relations change as the matrix verb changes from intransitive to transitive, or vice versa. Turkish data support this inference as is seen in the examples below:

(23) *Subject Control*

Ali$_{¡}$ [Can-ı ¡ara-ma]-ya ikna ol-du

Ali Can-Acc call-Inf-Dat persuasion LVC-Past3SG

'Ali agreed to ¡call Can'

(24) *Object Control*

Ali$_i$ Can-ı$_j$ [Suzan-ı $_j$ara-ma]-ya ikna et-ti.

Ali Can-Acc Suzan-Acc call-Inf-Dat persuasion LVC-Past3SG

'Ali persuaded Can to $_j$call Suzan'

In (23) the matrix verb is intransitive, so infinitival complement is controlled by subject NP. However, in (24) matrix verb is transitive, and infinitival complement is controlled by the object NP.

There are some other pairs in Turkish that comply with this rule such as *mahrum et- (deprive)* versus *mahrum ol- (be deprived of)*, *mecbur et- (oblige)* versus *mecbur ol- (be obliged)*, *men et- (forbid)* versus *men ol- (be forbidden), sevk et (compel)* versus *sevk ol- (be compelled), zorunda bırak-(force)* versus *zorunda ol/kal- (be forced),* and *razı et- (make sb. give consent)* versus *razı ol- (consent).*

However, further data both in English and in Turkish refute MDP. In below examples, sentence (a) and (b) well supports MDP, but sentence (c) fails for the very same principle.

(25)

a. John wanted to work harder

b. John persuaded Mary to work harder

c. John promised Mary to work harder

Below is an example in Turkish (the extension of which will be dwelt on in the following sections) to show that although the closest NP to the infinitival complement is the object NP, what we have at hand is not object control but subject control.

(26)

Ali$_i$ Can-a$_j$ [ders $_j$çalış-ma]-ya söz ver-di.

Ali Can-Dat lesson study-Inf-Dat promise give-Past-3SG

'Ali promised Can to $_j$study his lesson.'

Boeckx and Hornstein (2003, 2004, and 2006) underline that *promise* type of verbs are marked forms and just constitute an exception to the theory. However, the number of matrix predicates that trigger subject control in spite of the existence of an object in the sentence is not limited to *promise* only. There exist some other verbs with the same tendency. Landau (2003: 480) provides two such groups: verbs of commitment such as *commit, wow, threaten* and verbs of request for permission such as *ask, beg, plead,* and *petition*. Accordingly, controller choice with such predicates is something to do with pragmatic factors. Landau underlines that second group is especially ambiguous in this respect in that different languages exhibit different degrees of freedom.

Additionally, Culicover and Jackendoff (2005: 433) also provide some nominals for these types of verbs assigning unique control to the subject across an object:

(27)

a. John$_i$ promised Susan$_j$ to $_{i/*j/*gen}$take care of himself/*herself/*oneself.

b. John$_i$ vowed to/pledged to/agreed with/is obligated to Susan$_j$ to $_{i/*j/*gen}$take care of himself/*herself/*oneself.

c. John$_i$ learned from Susan$_j$ to $_{i/*j/*gen}$take care of himself/* herself/*oneself.

d. John$_i$'s vow to/pledge to/agreement with/obligation to Susan$_j$ to $_{i/*j/*gen}$take care of himself/*herself/*oneself.

e. John$_i$'s offer/guarantee/oath/commitment to Susan$_j$ to $_{i/*j/*gen}$take care of himself/*herself/*oneself

As for Turkish, three other control verbs that trigger subject control across an object can be proposed apart from *söz ver- (promise)*: *and iç- (vow), taahhüt et- (pledge),* and *yemin et- (vow).*

As is seen, neither MDP nor its revision MLC offers any solution for the cases where complement VP is controlled by the matrix subject in spite of the existence of a matrix object closer to the infinitival complement. Hornstein (1999, 2001) just refers to such cases as marked-cases and does not bring an appropriate explanation to the problem.

II. 4 Control as Movement (Hornstein, 1999, 2001)

In this section, our aim is to show that the Movement Theory of Control offered by Hornstein (1999, 2001) is inapplicable for Turkish. To do this, we firstly examine how Hornstein (1999, 2001) criticises the GB theory and the Minimalist Program

(as it is offered by Chomsky 1993b, 1995; Chomsky and Lasnik, 1993). Second, we introduce Hornstein's (1999, 2001) Movement Theory of Control (MTC). Following this, we outline criticism by Runner (2006), Landau (2003), and Culicover and Jackendoff (2001) on Hornstein's theory and provide examples of why MTC does not apply for Turkish.

II. 4.1 Hornstein On Preceding Studies

In GB, PRO is explained on the basis of government, binding, and Case modules of UG. Accordingly, since PRO is both pronominal and anaphor (binding theory) and since PRO cannot be assigned any Case, PRO is ungoverned. Besides, PRO is phonetically absent since in order for a DP to be phonetically visible, it should have both a Case assignor and a governor. However, PRO lacks both of these, and therefore, it is phonetically absent. This PRO theorem offered by GB theory bears some problems according to Hornstein (1999, 2001).

First, MTC defends there are some obstacles to binding approach to PRO which underlines that PRO is both pronominal and anaphor at the same time (cf. (26) and (27) in § I.1). According to Hornstein, to solve the problem, it is necessary to handle the issue from the very beginning; that is, the distribution of pronouns and anaphors should be reconsidered. The GB claim regarding the distribution of anaphors and pronouns is that these two categories are in complementary distribution. However, this is not the case, especially when we consider the cases where either a pronoun or an anaphor may appear alternatively:

(28)

a. The man saw their mothers

b. The men saw each other's mothers

(Hornstein, 2001: 30)

In (a), a pronoun *their* appears while in (b) an anaphor *each other* appears, and both sentences are acceptable. Moreover, according to binding theory, the existence of PRO in the same position should be acceptable too since PRO is both a pronoun and an anaphor at the same time:

(29)

* The men saw PRO mothers

(Hornstein, 2001: 31)

However, the impossibility of this structure shows that although the binding theory predicts the above structure to be well formed, it is an ill-formed configuration.

Apart form these, PRO theorem has further complications. According to Hornstein (2001: 32), the GB interpretation that every PRO is simultaneously a pronoun and an anaphor is useless and vague one. The interpretation that PRO is both a pronoun and an anaphor is meaningful only if we consider these categories in the contexts of Obligatory and Non-obligatory control. More specifically, the case is that PRO appears as an anaphor in Obligatory control structures and as a pronoun in Non-obligatory control structures. Below, we have obligatory control and non-obligatory control examples respectively.

In the following examples, sentence (a) is ill-formed since PRO has to be preceded by an antecedent. Sentence (b) is ill-formed since the antecedent of PRO is not local but a component of the higher clause. Sentence (c) is ill-formed since the controller does not c-command PRO although it has to in Obligatory Control. Sentence (d) shows that PRO can only have sloppy reading when it undergoes ellipsis. Sentence (e) shows that split control is not possible in cases of Obligatory Control. The sentence (f) shows that PRO can have only *de se* (the belief about self) interpretation, not *de re* interpretation.

(30) *Obligatory Control*

a. * It was expected PRO to shave himself

b. * John thinks that it was expected PRO to shave himself

c. * John's campaign expects PRO to shave himself

d. John expects PRO to win and Bill does too (=Bill win)

e. * John_{i} told Mary_{j} $\text{PRO}_{i/j}$ to leave together

f. The unfortunate expects PRO to get a medal

(Hornstein, 2001: 31)

As for the above examples, sentence (a) shows that Non-Obligatory PRO does not have to be followed by an antecedent contrary to the Obligatory Control. Sentence (b) shows that even if PRO has an antecedent in Non-Obligatory Control, that antecedent does not have to be local. That is, Non-Obligatory Control is compatible with Long-Distance Control. The sentence (c) shows that the controller does not have to c-command PRO and could be embedded in an argument. Sentence (d) can be paraphrased as "Bill thinks that John's getting his resume in order is crucial" contrary to its counterpart (30d) which can

only be paraphrased as “Bill expects himself to win.” Sentence (e) shows that split control is possible under Non-Obligatory Control. Finally, sentence (f) shows that only *de re* reading (beliefs about a certain individual apart from the matrix subject the unfortunate”) is possible in Non-Obligatory control.

(31) *Non-Obligatory Control*

a. It was believed that PRO shaving was important

b. $John_i$ thinks that it is believed that PRO_i shaving himself is important

c. $Clinton's_i$ campaign believes that PRO_i keeping his sex life under control is necessary for electoral success

d. John thinks that PRO getting his resume in order is crucial and Bill does too

e. $John_i$ told $Mary_j$ that PRO_{i+j} washing each other would be fun

f. The unfortunate believes that PRO getting a medal would be boring

(Hornstein, 2001: 32)

This being case, it is not necessary to refer to binding theory in order to grasp the distribution of PRO, which is simply anaphorlike when it is obligatorily controlled and pronounlike when it is non-obligatorily controlled, not both of them at the same time as binding theory suggests.

This conclusion also explains why binding theoretic approach is abandoned in control module of MP. As we have repeatedly underlined in the preceding chapter, contrary to government and binding centred approach of GB theory, the early approaches

to Minimalist Program (as it is offered by Chomsky 1993b, 1995; Chomsky and Lasnik, 1993) analyse PRO on the basis of Case theory. However, this Case theoretic approach of MP too comes with certain problems according to Hornstein (1999, 2001), which analyse control on the basis of movement.

> This story [Case theoretic approach] has some problems. The most glaring is that it essentially stipulates the distribution of PRO. Null case is special in two ways. First it is designed to fit only one expression- PRO. Lexical expressions don't bear null case nor do other phonetically null expressions such as Wh-t[race] or NP-t[race]. Second, only non-finite T°s can check/assign it. In effect, the case properties of PRO and non-finite T are constructed to exactly fit the observed facts. Had the data been otherwise, the theory would change accordingly. This comes close to restating the observations; PROs appear in the spec IPs of non-finite clauses (Hornstein, 2001: 34).

As is clear, the problem, should we move onto practical footing leaving theoretical issues aside, is something to do with the Case assignment of PRO. Although the approaches offered by Chomsky and Lasnik (1993) in the MP explain the distribution of PRO within the boundaries of Case theory on the whole, Lasnik (1992) includes cases where the existence of PRO is prohibited in spite of the lack of any case marking (qtd. in Hornstein, 2001: 29):

(32)

a. *John believes sincerely Mary/PRO to be clever

b. *it is likely [John/PRO to solve the problem]

c. *My belief [Harry/PRO to be intelligent]

The second problem regarding Case theoretic approach is that there are cases where PRO acts as if it does not carry any null Case. PRO, as we underlined it in the introduction part, is accepted as an empty category (just like NP-trace, Wh-trace, and pro). Wh- traces block *wanna* contraction but NP-traces do not because, as it is maintained in Jaeggli (1980), case marked traces hinder the combination of *want* and *to* (to produce *wanna*) (qtd. in Hornstein, 2001: 35).

(33)

a. Who do you want [WH-t to vanish]

*Who do you wanna vanish

b. John's going [NP-t to leave]

John's gonna leave

Among the empty categories, PRO is claimed to behave like Wh-traces. However, in their harmony with *wanna* constructions, PROs comply with NP-traces rather than Wh-traces:

(34)

I want [PRO to leave]

I wanna leave

(Hornstein, 2001: 35)

To sum up, this section shows that both binding theory and Case theory have too many shortcomings to explain the distribution of PRO.

II. 4.2 An Alternative by Hornstein (1999, 2001)

We assume that MP has two extensions regarding its approach to control theory: the early 'null Case' theory offered by Chomsky and Lasnik (1993) and its alternative, 'Movement Theory of Control,' offered by Hornstein (1999, 2001). First, Chomsky and Lasnik adopted the basics of MP to control module, getting rid of the theories of government and binding. This former study explained the distribution of PRO on the basis of Case theory. However, this (null)-case theoretic approach has been criticised by Hornstein due to the reasons outlined in the preceding section.

Hornstein is content with the idea of eliminating certain modules and principles of UG that existed in GB since, as a minimalist theoretician, he also aims to keep the program as simple and economical as possible. According to Hornstein (2001: 14), "One way of fruitfully launching a minimalist research program is to simplify, naturalize and economize earlier GB accounts." Actually, Hornstein's eventual aim is to dispense with even PRO and the control module of UG.

> Jettisoning the vestiges of the GB conception of DS has two potentially positive consequences. First, it allows for the elimination of PRO from the inventory of empty categories. Second, it allows for the elimination of PRO [control] module from UG. Each consequence is attractive on methodological grounds if empirically sustainable. The conceptual superiority of fewer levels extends to modules, too; one less is better than one more! As foe PRO, it is a theory internal abstract entity whose worth must be supported on empirical grounds. All things being equal, it is no better to have grammar internal abstract entities than it is to have grammar internal interfaces (Hornstein, 2001: 11).

Rather than categorizing Raising and Control as two distinct structures, MTC considers both the structures to be instances of the same phenomenon: movement. Both

raising and control structures include empty categories since empty subjects in these positions are moved upwards. The only difference between the two is that while the subject NP in Raising moves to a non-theta position, the subject NP in control moves to a theta position. Consider how both structures are laid out according to MTC in following examples:

(35)

a. $John_i$ seemed $[[_{NP}\ e]_i$ to kiss a koala] *Raising: intra-chain*

b. $John_i$ hoped to $[[_{NP}\ e]_i$ to kiss a koala] *Control: inter-chain*

(Hornstein, 2001: 24)

Sentences with raising structures involve only one theta role as the tests with idiom chunks and expletives[3] also prove. Since it is the theta role that triggers a chain, in raising we have only one chain. So the movement occurs within a single chain: from a theta position to a non-theta position. On the other hand, in control structures there exist two theta roles, one in the complement VP and one in the matrix VP. This means that we have two separate chains where movement occurs from one theta position to another. The moved element in control receives both theta role and a Case throughout its journey to the Spec IP position in the higher clause.

As is seen, MTC does not abide by Theta Criterion. A single DP can receive multiple theta roles (in fact such is the case with control structures). Regarding both

[3] Expletives can replace subject position in Raising because subject position in such sentences lack any theta features. However, control structures are not compatible with expletives and idiom chunks since control structures carry theta roles in the subject position while expletives and idioms themselves do not carry standard theta roles.

Control and Raising as instances of movement, this theory asserts that there is no such syntactic unit as PRO.

> Finally, the deepest question concerning PRO given minimalist inclinations is the very existence of a formative like PRO. PRO is theory internal construct. In GB, PRO is structurally analogous to NP-traces and Wh-traces. All have the same shape viz. ′[$_{NP}$ e]′. The main difference between traces and PRO is the source of their indices, the former derive from movement while the latter are assigned via control module. In MP, however, this technology is all suspect; there is little reason to think that traces (qua distinctive grammatical constructs) exist at all. Traces are not grammatical formatives but the residues of the copy and deletion operations necessary to yield PF/LF pairs. Traces as such have no common structure as in MP as they do in GB. They are simply copies of lexical material and so have no specific shapes whatsoever. As such, they cannot be structurally analogous to PRO. This leaves the theoretical status of PRO up in the air. What kind of expression is it and why do grammars have them? (Hornstein, 2001: 37)

Thus, instead of the modules and principles employed in GB such as government, binding and control and instead of the base generated empty subject PRO, MTC focuses on the phenomenon of *movement* to explain control and follows some other assumptions:

(36) *Movement Theory of Control*

a. θ-roles are features on verbs

b. Greed is enlightened self interest

c. A D/NP "receives a θ-role by checking a θ feature of a verbal/predicative phrase that it merges with

d. There is no upper bound on the number of θ roles a chain can have

(Honstein, 2001: 37)

Theta roles are especially important in MTC: (i) theta roles are assigned by heads- here we analyze mostly verbs as theta role assignors (ii) only theta roles trigger chains (iii) movement occurs only if there is a match between the theta features of a DP and a verbal/predicative phrase that a DP merges with (iv) a single DP can carry more than one theta role or can move to a theta position to check the relevant theta feature of the predicate.

Considering these assumptions, a closer look at control structures in MTC would be something like the following:

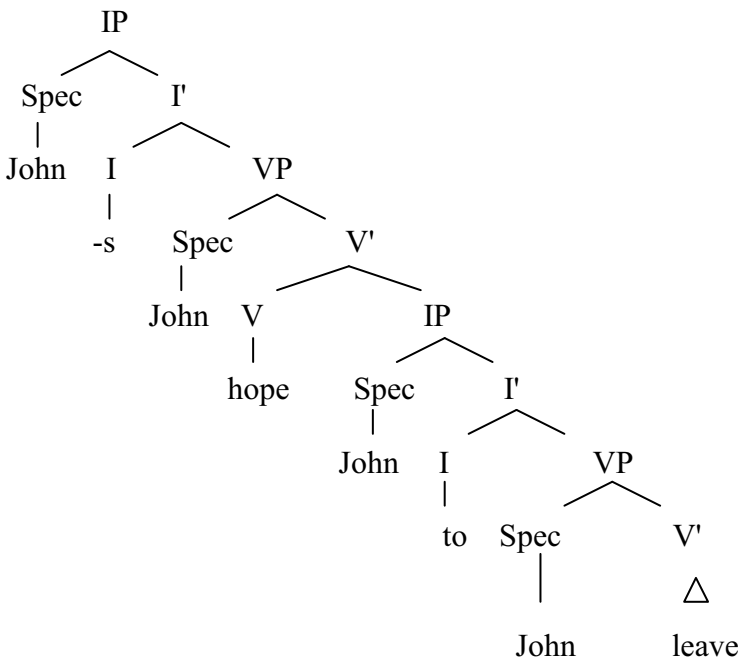
(37)

a. John hopes to leave

b. [$_{IP}$ John [$_{VP}$ John [hopes [$_{IP}$ John to [$_{VP}$ John leave]]]]]

(Hornstein, 2001: 38)

(38)



The process works as fallows according to MTC:

(i) *John* merges with *leave* and is thus assigned the theta role of *leaver* by the verb (remember that theta roles are features on verbs and predicates and thus are assigned by them).

(ii) *John* is copied and move to Spec of the embedded IP to merge with it. Here, *John* is supposed to receive Case; however, this is a [-Case] position (since IP here is tenseless) and hence cannot assign Case.

(iii) *John* further moves to Spec of the matrix VP and is assigned another theta role *hoper* (remember there is no limit on the number of theta roles a DP can check)

(iv) *John* takes one final step and moves to Spec IP position (which is the only position for *John* to receive Case) to check nominative Case.

As for Non-Obligatory Control, Hornstein reintroduces the term pro (the null pronominal that is found in certain Romance and East Asian pro-drop languages like Turkish and Spanish) used to symbolize empty subject that is dropped alternatively. In the below example we have a pro to symbolize the pronominal dropped optionally in Turkish:

(39)

pro [sigara PRO iç-mek] ist-iyor-um

cigarette smoke want-Prog-1SG

'I want to smoke'

In Hornstein's theory, *pro* is used to symbolize the empty subject of the infinitive in NOC. The only criterion for NOC cases to occur is the prohibition of movement from [spec IP] position. Hornstein defines three such instances: *sentential subjects, wh- islands*, and *extraposed clauses*.

Hornstein acknowledges subject sentences as islands, which means movement from [spec, IP] of these structures is prohibited. Consequently, in sentential subjects, OC is impossible; only NOC is permitted:

(40) *Sentential Subjects*

a. It was believed that PRO shaving was important
b. $John_i$ thinks that it is believed that PRO_i shaving himself is important
c. $Clinton's_i$ campaign believes that PRO_i keeping his sex life under control is necessary for electoral success
d. John thinks that PRO getting his resume in order is crucial and Bill does too
e. $John_i$ told $Mary_j$ that PRO_{i+j} washing each other would be fun
f. The unfortunate believes that PRO getting a medal would be boring
g. Only Churchill remembers that PRO giving the BST speech was momentous.

The second category Hornstein attests the mere existence of NOC is wh-islands. Accordingly, "NOC typically obtains when movement is prohibited—for example,

from *wh*-islands … OC and NOC are effectively in complementary distribution. This suggests that NOC is the 'elsewhere' case" (Hornstein, 1999: 92).

(41) *Wh- islands*

a. John told Sam how PRO to hold oneself erect at a royal ball.

b. *John told Sam PRO to hold oneself erect at a royal ball.

Tagging NOC as 'elsewhere' case, Hornstein maintains that Non-Obligatory control obtains wherever Obligatory Control is missing. Thus, Hornstein (1999: 92) underlines that pro serves just like do-support in English, that is, as a last resort operation: "… *do* is a formative of the computational system of English that can be inserted in any derivation, though at a cost and, hence, only when all other relevant grammatical options have failed. A similar treatment of pro in NOC structures would yield the correct empirical results."

Finally, another position where the features of [Spec, IP] cannot be checked is extraposed clauses. Again, it is not possible for the control structures to yield Obligatory Control relation in the cited examples (Hornstein, 1999: 91, 92; also, 2001: 57, 58):

(42) *Extraposed Clauses*

a. It is believed that Bill's/pro shaving is important.

b. *Bill's is believed that shaving is important.

(43)

a. It is impossible for Bill/pro to win at roulette.

b. *Bill is impossible to win at roulette.

For all of the above mentioned examples, i.e., Non-Obligatory Control instances, Hornstein proposes that pro can be inserted to meet the feature checking requirement. Considering these, Hornstein (1999: 92) suggests that pro has two important characteristics: "(a) it is able to check the requisite features of infinitival I, but (b) using pro to check such features is derivationally costly. Assumption (b) suffices to account for the fact that pro and PRO are in complementary distribution."

II. 4. 3 Criticism on Hornstein's Movement Theory of Control

Although MTC appears to provide a light solution (free of most modules and principles in Government and Binding Theory and in early treatment of the Minimalist Program offered by Chomsky and Lasnik and referred to as "Null-Case" theorem) to control problem, MTC certainly poses some problems itself. The main argument is that the theory is mainly concerned with OC cases rather than NOC cases (which are roughly tagged as 'elsewhere' cases), and it ignores most control configurations like cases where two potential controllers exist or the configurations where implicit, partial or split control relation exists. In this section, we lay out the shortcomings of MTC in connection with Runner (2006), Landau (2003), and Culicover and Jackendoff (2001).

II. 4. 3. 1 Runner (2006)

Runner (2006) focuses on object control cases in his study and maintains that a movement based analysis may hold true for subject control, raising to subject, and raising to object, whereas the same analysis may prove problematic for the object control cases. The arguments put forward by Runner are as follows:

(i) MTC focuses on subject control rather than object control which is a control type that poses some problems for the movement based approach.

(ii) Control and raising cannot be regarded as two identical configurations since extraction is possible with the former but not with the latter.

(iii) Control and raising cannot be regarded as two identical configurations since "tough-movement" is possible with the former but not with the latter

(iv) The instances where the controller is embedded in a prepositional phrase which are also discussed by Culicover and Jackendoff (2003, 2006) cannot be analyzed under movement.

(v) The instances where the controller is composed of split antecedents cannot be analyzed under movement.

To begin with, the first difference between raising and control is that extraction applies to control and true objects as the acceptability of (a) and (b) sentences show in the below examples, whereas extraction is not applicable for raising structures as the (c) sentence shows. Note that sentence (b) includes a control verb *persuade* although sentence (c) includes a raising verb *expect* in the matrix clause:

(44)

a. Which famous person did John hear stories about?

b. Which famous person did Martha persuade friends of to sign her program?

c. *Which famous person do you expect stories about to terrify John?

Based on Chomsky (1973), Runner (2006: 205) notes another difference between raising and control: “though-movement” applies to control, while it is not applicable for raising-to object structures:

(45)

a. It was easy for Jones to force Smith to recover.

b. Smith was easy for Jones to force to recover.

(46)

a. It was easy for Jones to expect Smith to recover.

b. *Smith was easy for Jones to expect to recover.

Another problem arises with cases where the object controller is embedded in a prepositional phrase:

(47)

Rene signaled/appealed to Jean to leave the room.

(Runner, 2006: 206)

In such a case, movement occurs into the object position of a PP, which is not a case proposed in the Movement Theory of Control.

To sum up, due to the complications proposed here, Runner (2006) underlines that all cases of control especially object control, cannot involve movement as Hornstein

and Boeckx maintains. The matrix clause object which serves as the controller cannot be a raised object; rather, it must be a base generated argument of the matrix clause.

II. 4. 3. 2 Landau (2003)

Landau (2003, 2007) criticizes the solutions to the control theory offered by Hornstein (1999, 2001) and Boecx and Hornstein (2003, 2004, 2006). Landau (2003: 471) maintains that the theory offered by Hornstein (1999, 2001) is a rather rough and underdeveloped one since this "reductionist" view "(a) overgenerates nonexisting structures and interpretations, (b) fails to derive a wide range of well-known raising/control contrasts, and (c) involves unstated stipulations belying the appeal to Occam's razor."

Firstly, as we have also underlined in the previous section (in § II.4.2), Hornstein erases the difference between Raising and Control structures by analyzing both structures as instances of movement. Accordingly, the only nuance between the two is that in raising the lexical DP moves to a non-theta-position, whereas in control the DP raises to a theta position to receive the second theta roles assigned by the matrix predicate. However, this deduction can easily be overgeneralized to create ill-formed sentences like the one below (Landau, 2003: 475):

(48)

a. *John was hoped to win the game.

b. It was hoped that John would win the game.

c. $John_1$ was hoped [IP t_1 to [VP t_1 win the game]].

Should we stick to the theory offered by Hornstein, in the above examples we have to consider (a) to be grammatical along with its interpretation (b) and derivation (c).

Secondly, Hornstein fails to explain the ungrammaticality of below sentences, where the controller is determined as the element embedded inside a matrix DP. If control is a relation of movement as Hornstein put it, there is no obstacle for *John* to serve as the controller. Thus, the Movement Theory of Control predicts (though in a wrong way) below sentences to be grammatical with *John* as the controller:

(49)

a. *John's$_1$ friends prefer [t_1 to behave himself].

b. *We urged John's$_1$ friends [t_1 to talk about himself].

c. *People biased against John$_1$ constantly attempt [t_1 to incriminate himself].

(Landau, 2003: 477)

Thirdly, as we have referred to it in the previous section, Hornstein defines three environments where Non-Obligatory Control is possible: sentential subjects, extraposed clauses, and interrogative complements. Landau observes two problems with this definition. To begin with, the definition of Non-Obligatory Control as it is offered by Hornstein is just a random generalization since all cases of NOC are not limited to these three areas only. Hornstein incorrectly presupposes below sentences to be instances of OC since these examples are out of his categorization:

(50)

a. [After PRO_{arb} pitching the tents], darkness fell quickly.

b. $Mary_1$ was baffled. [Even after PRO_1 revealing her innermost feelings], John remained untouched.

c. $Mary_1$ lost track of $John_2$ because, [$PRO_{1,2}$ having been angry at each other], he had gone one way and she the other.

d. [PRO_1 having just arrived in town], the main hotel seemed to $Bill_1$ to be the best place to stay.

e. *[PRO_1 having just arrived in town], the main hotel collapsed on $Bill_1$.

Besides, the Obligatory Control – Non-Obligatory Control distinction cannot be deduced on configurational grounds. The structures that are restricted to NOC relation can also exhibit OC as below examples suggest. The presupposition of Hornstein underlining that interrogative complements are cases of NOC fails in some situations:

(51)

a. John said that Mary asked [how PRO to feed herself/*himself].

b. I thought they wondered [how PRO to feed themselves/*myself].

(Landau, 2003: 482)

As a last point, Landau (1999: 42) underlines that PC never complies with raising constructions, which shows that Hornstein's reduction of OC to raising is not valid:

(52)

a. *John is likely to meet tomorrow. *Raising*

b. *The chair appeared to be gathering once a week. *Raising*

c. The chair claimed to be gathering once a week. *Control*

Landau supports that irrespective of the semantic type of the infinitival complements, which is all propositional in all three sentences above (also note that propositional complements are compatible with PC), the contrast between (a-b) and (c) examples results from the control versus raising structures. The PC reading is possible only with control, but not raising as the ungrammaticality of (a) and (b) proves. That's way, the distinction between Raising and Control structures should be maintained and cannot be eliminated for the sake of movement.

II. 4. 3. 3 Culicover and Jackendoff (2001)

In the previous section (in § II.4.2), we highlighted that MTC does away with binding theory underlying that the theory is not required to determine the distribution of PRO. Accordingly, binding theory leads to confusion in that it considers PRO to be both an anaphor and a pronoun at the same time. However, according to MTC, PRO is pronounlike in cases of NOC only, and anaphorlike in cases of OC only (cf. (30) and (31) in § II.4.1). Hornstein tests this conclusion by replacing PRO with a reflexive in OC cases and with a pronoun in NOC cases.

Nevertheless, Culicover and Jackendoff (2001: 495) identifies a problem with this distinction maintaining that the distinction is laid out on the basis of an exceptional verb *expect* and is not valid for other control verbs:

(53)

a. John expects [PRO to win]

b. John expects himself to win

c. John expects Fred to win

d. John expects there to be trouble

Sentences (a) and (b) are compatible with MTC since OC PRO can be replaced by a reflexive. However, the problem with *expect* is that it is not a pure control verb since it is also compatible with ECM cases as is observed in (c) and (d).

The same test could be applied with a true control verb, and the result is rather different as it is laid out in Culicover and Jackendoff (2001: 496):

(54)

a. John tried [PRO to win]

b. *John tried himself to win

c. *John tried Fred to win

d. *John tried there to be trouble

The examples above show that the criteria determined by MTC are not valid for true control verbs.

Another problem with MTC is that there are cases where no overt NPs exist in the matrix clause to control the infinitival complement (cf. (3) and (4) in § II.1.1). As it is

cited in Culicover and Jackendoff (2001: 501), Postal (1969) provides one of the earliest examples of such configurations as is observed in the below example:

(55)

a. an American attempt to invade Vietnam
b. the Anglo-French agreement to respect each other's territorial claims

In this example, the only candidates to serve as controllers are the derived adjectives, which refutes MTC since an NP cannot have moved up to that position. In fact, even if NP had moved up, it would have been exposed to a mutation, i.e. change from noun to adjective. Additionally, example (b) shows that such a mutation is impossible as *Anglo-French* is not a good match for the nouns *England* and *French* whatsoever.

Alternatively, below examples from Culicover and Jackendoff (2001: 501) totally lack overt controllers. Example (a) exhibits obligatory control, whereas there is no NP in the matrix clause to serve as the controller. Also, example (b) includes a specifier, which makes it impossible for an empty subject to move up.

(56)

a. [A furtive attempt to leave] would be a good idea now.
b. [Those attempts to leave] were too conspicuous.
c. [An attempt to shoot oneself] would be out of order.
d. Last night there was [an attempt to shoot me/ *oneself/ *himself/ *myself].

To conclude, the examples in this section on the whole prove that an approach to control based on movement fails to explain some control configurations due to the following reasons:

(i) There are configurations where no positions exist for the empty subject in the subordinate clause to move up to the matrix clause (that is, instances of control in sentential subjects and nominals which are to be covered in the following chapter)

(ii) Hornstein's classification of OC and NOC control is not applicable to all the control verbs, and moreover this classification ignores certain control verbs and control relations.

(iii) MLC in MTC brings no further improvement to Rosenbaum's MDP; still, there exist infinitival complements which are not controlled by the nearest NP, for example, consider the case with *promise*.

II. 5. Summary

The characteristics of control outlined here show that syntactocentric approaches to control fail to cover all the aspects of phenomenon, especially to solve the problem of the controller choice.

First, the tenets of uniformity are hard to comply with for the control structures due to following reasons:

(i) Contrary to structure uniformity, there may be cases where no overt NP exists in the matrix clause to control the complement VP, for example,

control with nominals and control with sentential subjects (cf. (2,3,4) in § II.1.1).

(ii) Contrary to interface uniformity, there are cases where different syntactic configurations end up with the same controller choice (cf. (5, 6) in § II.1.2). Similarly, there are cases where the same syntactic configurations end up with different controller choice (cf. (7-12) in § II.1.2). These two conclusions prove that the problem of controller choice is independent of syntactic constraints.

(iii) There are cases which prove that PRO can in no way be acknowledged as a syntactic NP (cf. (13-16) in § II.1.3).

Second, contrary to c-command restriction of MGG on control structure, there are cases both in English and in Turkish where the controller is an argument embedded in an NP (cf. (18c) and (21a) in § II.2). Third, MDP (or MLC as it is offered by Hornstein) does not work for certain control verbs like *promise* (cf. (25) and (26) in § II.3).

Third, MTC, which analyses both control and raising structures to be instances of NP movement, could be criticised for its certain shortcomings:

(i) The [spec IP] position of a matrix clause may not always be available for the controlled NP to move to.

(ii) There may not be any apparent controller NP which one can claim to have moved to the spec IP from the complement clause (such is the case with implicit and partial control structures or other control cases in nominals and sentential subjects).

(iii) The distribution of NOC cases cannot be specified on the basis of "elsewhere" condition per se.

(iv) There exist many control predicates where subject controls the infinitival complement across the object, which shows that Obligatory Control cannot be explained on the basis of Minimal Link Condition.

CHAPTER III

CONTROL IN TURKISH

III. 1 Simpler Syntax Hypothesis (SSH)

III.1.1 Preliminaries

So far, we have shown that the grammar reflected by MGG is mostly based on syntactic constraints (what Jackendoff calls as 'syntactocentricism'), with no particular attention to lexicon, semantics, or pragmatics. The components of this mainstream grammar are Deep Structure, Surface Structure, Logical Form, and Phonological Form.

One of the most prominent properties of mainstream research is that meaning (semantics) and sound (phonology) are derived from syntax in mainstream syntax, which in turn shows that syntax is meant to be central, whereas semantics and phonology, and lexicon as well are peripheral. The model of grammar offered by MGG includes logically ordered multiple levels which are in fact in a kind of hierarchical order (cf. (4) in § I.1). Each level has certain rules, and the rules of each level apply to the output of the previous level.

Another property of mainstream grammar is that it includes many abstract representations, deletions, and additions. This results from MGG's (particularly beginning with Principles and Parameters Theory and going on in its latest extension MP) aim to create a minimal theory on the existence of human knowledge of language, with an effort to solve Plato's problem: How do children end up acquiring languages so easily and quickly in spite of *the poverty of stimulus*? This way, mainstream syntax aims to move the burden form the child to UG. Nevertheless, MGG becomes overpacked with such abstract machinery at the expense of achieving a uniformity of principles that is valid for all human languages. All the theories in the mainstream research result in a mass of abstract entities

such as extra nodes, hidden elements, and covert movements which are all triggered by UG. In short, mainstream syntax becomes the storage of unseen operations that can only be grasped via UG.

Considering all these details, it could be said that such a syntactocentric view of language also fails to explain the acquisition process. The researches on language acquisition prove that a child captures any message in an utterance analyzing context, lexical input, and the grammatical structure of the utterance. Thus, a syntactocentric approach fails to reach explanatory adequacy since it is not possible to explain the whole acquisition process on the basis of grammar (syntax) per se as Culicover and Jackendoff (2005: 12) also underlines it:

> … a theory of language … stands a better chance of being learnable if its syntax can be shown to have less abstract machinery such as extra nodes, hidden elements, and covert movements all of which require the learner to be prompted by UG … one can dispense with all this machinery, so that there is there is less to acquire, period. This is the direction in which the Simpler Syntax Hypothesis points …

Jackendoff (1972) also specifically underlines that semantic constraints precede syntactic constraints in language acquisition process. Conceptual structure precedes linguistic structure both in the language learner and in evolution. In fact, once the child works out the meaning of a construction, the syntactic discovery appears automatically. Grammar is deduced from meaning; that is, unless the learner decodes the meaning of a structure, the construction of grammar (syntax) never follows.

Being such, contrary to MGG, SSH provides us with a grammar of Conceptual Structure where syntax, semantics, and phonology are placed equally on a continuum and

where lexicon reflects onto the three components simultaneously. These components of conceptual grammar are independent from one another and interact among each other through interface rules. Such a hypothesis aims to abandon the syntactocentric view of grammar and also to eliminate hidden levels and all other abstract machinery.

> We sketch the Simpler Syntax Hypothesis, which holds that much of the explanatory role attributed to syntax in contemporary linguistics is properly the responsibility of semantics. This rebalancing permits broader coverage of empirical linguistic phenomena and promises a tighter integration of linguistic theory into the cognitive scientific enterprise. We suggest that the general perspective of the Simpler Syntax Hypothesis is well suited to approaching language processing and language evolution, and to computational applications that draw upon linguistic insights (Culicoer and Jackendoff, 2006b: 413).

To show how fatty the MGG has become, Culicover and Jackendoff (2006b: 415) contrast the structures of a sentence as it is provided in the most recent mainstream theory, i.e. the Minimalist Program, (Figure A) and in Simpler Syntax (Figure B):

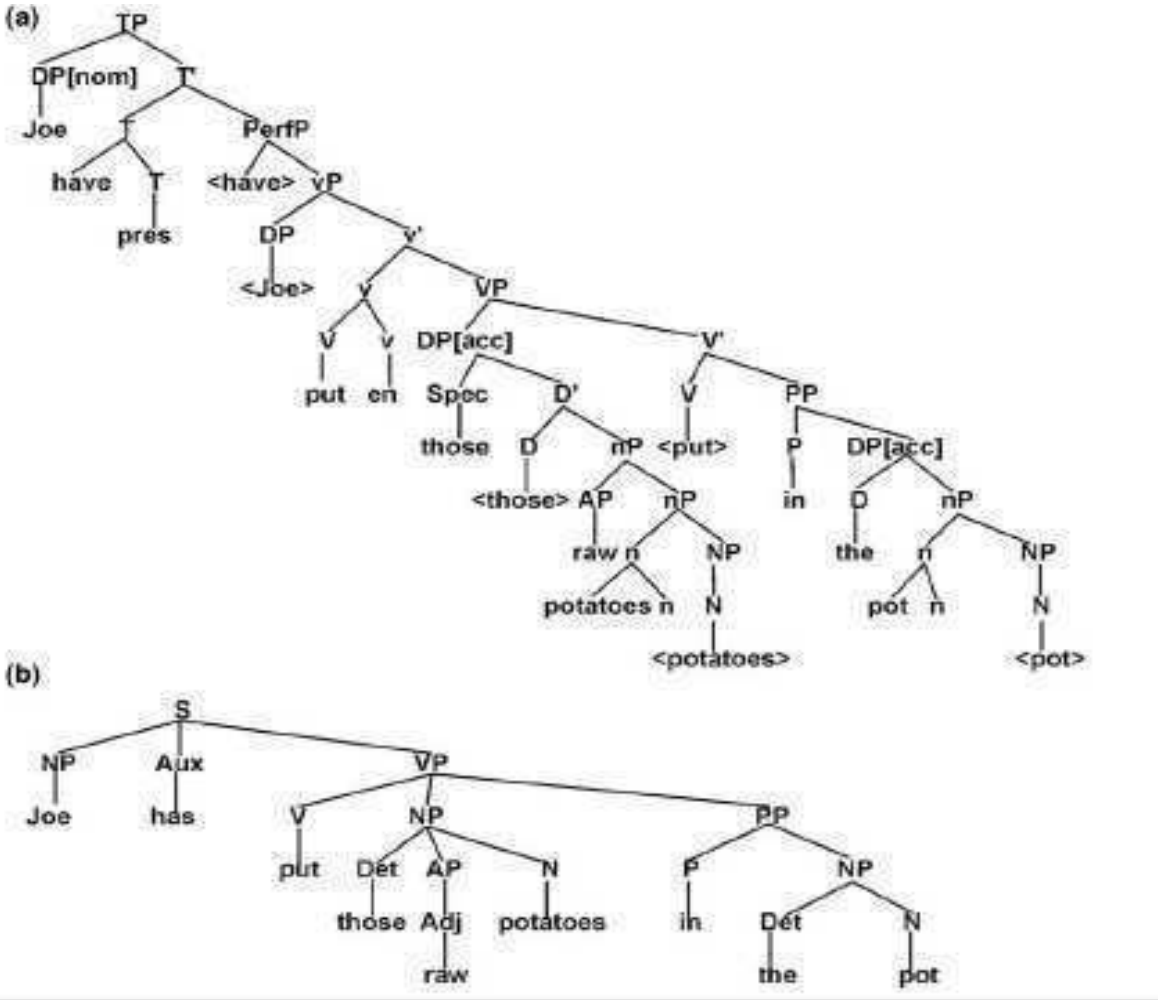


Figure 1: (a) The structure offered by the MP

(b) The structure offered by SS

Figure (a) corresponds to the structure for the sentence *Joe has put those raw potatoes in the pot* provided by the Minimalist Program, while figure (b) corresponds to the structure provided by Simpler Syntax Hypothesis. The mainstream analysis of the sentence includes many abstract representations that do not correspond to the forms as recognized by the speakers. The elements in brackets are phonetically absent copies of elements that originally belong to some other place in the tree. On the other hand, the Simpler Syntax analysis of the very same sentence includes only the traditional

constituents without any hidden elements or inaudible copies. This demonstrates that the mission targeted by MGG has failed and that the theory is not as minimal as it is claimed to be, and SSH well provides a plainer and simpler grasp of syntactic structures.

III.1.2 Conceptual Structure and Organization of Language

The foundations of SSH dates back to Jackendoff (1983, 1997a, 1990), which introduce the *Conceptual Structure Hypothesis*. As an answer to the question what the nature of meaning in human language is and how human beings can talk about what they perceive and what they do, Jackendoff presents the theory of conceptual structure where linguistic and visual modalities are combined.

Jackendoff (2004: 323) defines a concept "as an entity within one's head, a private entity, a product of the imagination that can be conveyed to others only by means of language, gesture, drawing, or some other imperfect means of communication." Jackendoff builds his inquiry on the basis of I-concepts following the traces of Chomsky's old division of language into two poles as E-language and I-language. Just like Chomsky, Jackendoff (1983, 1990, 1997b) favours I-language and founds his Conceptual Semantics on I-concepts. Accordingly, in producing or comprehending a sentence, conceptual knowledge as well is employed along with the syntactic knowledge:

> Parallel arguments obtain for conceptual knowledge, in two different ways. First, a language user presumably is not gratuitously producing and parsing syntactic structures for their own sake: a syntactic structure expresses a concept. On the basis of this concept, the language user can perform any number of tasks, for instance checking the sentence's consistency with other linguistic or extralinguistic knowledge, performing inferences, formulating a response, or translating the sentence into another language. Corresponding to the indefinitely large variety of syntactic structures, then, there must be an indefinitely large variety of concepts that can be invoked in the production and comprehension of

> sentences. It follows that the repertoire of concepts expressible by sentences cannot be mentally encoded as a list, but must be characterized in terms of a finite set of mental primitives and a finite set of principles of mental combination that collectively describe the set of possible concepts expressed by sentences. For convenience, I will refer to these two sets together as the "grammar of sentential concepts" (Jackendoff, 2004: 324)

The Conceptual Structure Hypothesis proposes that "There is a single level of representation, conceptual structure, at which linguistic, sensory and motor information are compatible." Conceptual structures we may utilize are characterized by a limited number of conceptual well-formedness rules. Just like UG concept of MGG, these rules and structures are both innate and universal and develop by experience. Moreover, just like the rules of syntax, sentential concepts and lexical concepts are also acquired with the help of experience (both linguistic and nonlinguistic) and with the help of innate constraints (Jackendoff, 1983; 2004). Culicover and Jackendoff (2005: 20) well emphasizes the importance of Conceptual Structure:

> In other words, Conceptual Structure is a central system of the mind. It is not a part of language per se; rather it is the mental structure which language encodes into communicable form. Language per se ("The Narrow Faculty of Language") includes (a) syntactic and phonological structure, (b) the interface that correlates syntax and phonology with each other, and (c) the interfaces that connect syntax and phonology with Conceptual Structure (The Conceptual-Intentional Interface") and with perceptual input and motor output (the "Sensorimotor Interface", actually one interface with audition and one with motor control).

Taking the above mentioned components of conceptual structure into consideration, Jackendoff (2004: 329) schematizes the relation of the level of conceptual structure to language as shown in Figure 2 below.

Relation of the level of conceptual structure to language is as follows:

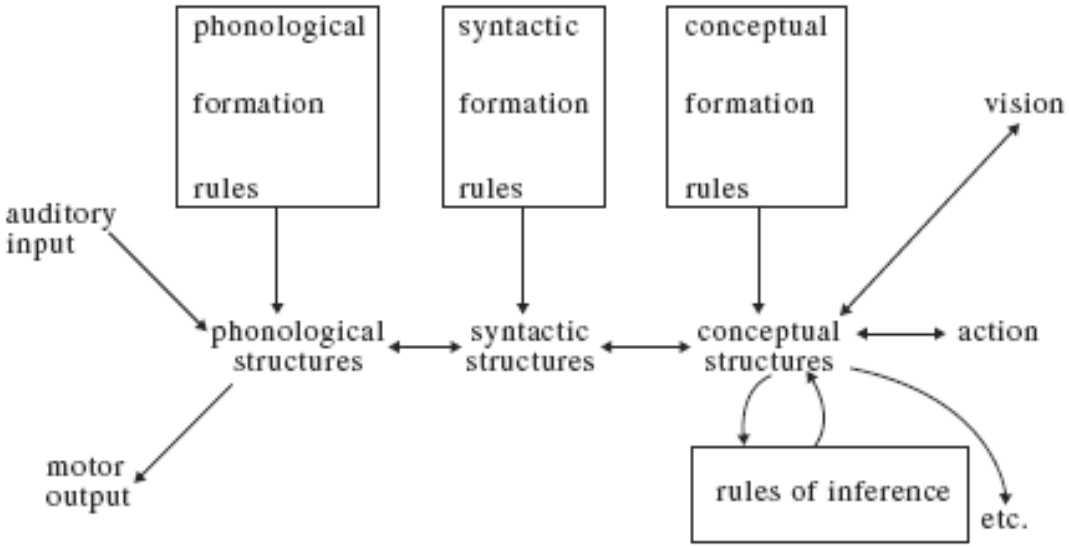


Figure 2: Organization of language around Conceptual Structure

This organization of language consists of three autonomous levels: phonological, syntactic, and conceptual. The relationship between the levels in question is set by correspondence rules.

Apart from just mentioned linguistic levels, there exist nonlinguistic levels in the schema such as vision and action. The relationship between linguistic and nonlinguistic levels is also observed by correspondence rules. It should also be underlined that the existence of nonlinguistic levels in such a schema shows that conceptual structure is not solely language-dependent.

Thus, Conceptual Structure Hypothesis and Cognitive Constraint go hand in hand in a search for a simpler syntax. Cognitive Constraint proposes that mental representations include certain secondary systems such as vision, nonverbal audition, smell, kinesthesia in addition to the system of language (Jackendoff, 1983: 17).

Conceptual structure is superior to semantic structure, and meaning is derived thanks to conceptual structure. Since conceptual structure covers semantic structure, it is quite natural that these two structures coincide at a point. The conceptual structure hypothesis in conclusion defends that "semantic structures could be simply a subset of conceptual structure … both rules of inference and rules of pragmatics are mappings from conceptual structure back into conceptual structure" (Jackendoff, 1983: 19)

Conceptual Structure is especially important in simpler syntax. In mainstream research, should one consider the tenets of Interface Uniformity particularly, semantics is considered to be inferior to syntax. Nonetheless, simpler syntax suggests that Conceptual Structure is an autonomous framework; that's why, not every conceptual operation should be reflected onto syntax. Therefore, the parallel architecture primarily observes semantic principles and avoids referring to syntax as much as possible.

Being such, we investigate the control relations on the basis of Conceptual Structure. Jackendoff and Culicover (2003: 520) praise the level of Conceptual Structure over syntactic structure and specify three reasons to underline that Conceptual Structure is the proper level to investigate control:

> (i) At the level of CS [Conceptual Structure], syntactically implicit arguments are explicit, so that an antecedent is readily available for cases … [where there are no explicit antecedents to serve as the controller, cf. (2) in § II.1.1]
>
> (ii) At the level of CS, the meanings of verbs are explicitly represented in such a way that they can directly bear on control relations without special added machinery.
>
> (iii) Finally, CS is the level at which thematic roles are structurally represented, so that the association of control with constant thematic roles is natural.

On the other hand, the aim here is not to claim that semantics is enough on its own or that syntax should be investigated in the light of semantics. The aim "is only to attempt to minimize the differences of syntactic and semantic structure, not to eliminate them altogether" -called as Grammatical Constraint in the hypothesis (Jackendoff, 1983: 14). As it is also clarified most recently by Culicover and Jackendoff (2005: 5), "The most explanatory syntactic theory is one that imputes the minimum structure necessary to mediate between phonology and meaning." Also, it should be noted that it is not possible for a theory to do without syntax according to Culicover and Jackendoff (2005: 22): "That is, we are going to take it for granted that there is some substantial body of phenomena that require an account in terms of syntactic structure. It is just that we think this body is not as

substantial as mainstream generative grammar has come to assume. This is the reason why we call our hypothesis 'Simpler Syntax' rather than just plain 'Simple Syntax.'"

III.1.3 The Parallel Architecture

Before we present the Simpler Syntax Hypothesis, we have some questions we would like to answer in contrast with mainstream grammar:

(i) Are there multiple levels of syntax such as D-structure, S-structure, and Logical Form, or is there only one?

(ii) Which of these levels interact directly with the lexicon?

(iii) Which level interacts with semantic interpretation?

Following these questions, Culicover and Jackendoff (2005: 14) define some criteria to determine the architecture of grammar in SSH and put forward the following contrastive hypotheses. These hypotheses adopted in SSH are not totally different from other generative theories. Firstly, the tenets of mainstream research are presented, and then the hypotheses of SSH are provided. To begin with, there are four pillows that MGG rests on:

(i) The formal technology is derivational.

(ii) There are "hidden levels" of syntax.

(iii) Syntax is the source of all combinatorial complexity; phonology and semantics are "interpretive".

(iv) Lexicon is separate from grammar

The hypotheses of SSH are as follows as it is highlighted in Culicover and Jackendoff (2005: 15):

(i) The formal technology is constraint-based.

(ii) There are no "hidden levels" built of syntactic units.

(iii) Combinatorial complexity arises independently in phonology, syntax, and semantics.

(iv) There is a continuum of grammatical phenomena from idiosyncratic (including words) to general rules of grammar.

(v) Semantics is served by a richly structured representation that is to a great degree independent of language.

(vi) The combinatorial principles of syntax and semantics are independent; there is no "rule-to-rule" homomorphism.

According to these hypotheses, the peculiarities of SSH are as follows. Firstly, contrary to MGG that formulates grammar on the basis of derivational rules which apply to sentences in a chronological and hierarchical order, the architecture of grammar in SSH acknowledges the grammaticality of a linguistic structure if it complies with all the applicable constraints. In MGG, there are levels and rules following one another in a certain order or logic. Nevertheless, in SSH, there is no such order; the rules may apply from anywhere to everywhere, that is, top-down, bottom-up, left-to-right, or vice versa, and etc. Thus, we say that *the architecture of grammar in SSH is parallel* in nature with no superior levels or representations.

Secondly, SSH denies the existence of any abstract representations in the parallel architecture of grammar. All the inventions of MGG starting from the early

generative grammar to date have had some mysterious levels. To begin with, early generative grammar had proposed some transformations in the form of addition, deletion, and rearrangement of syntactic structures. Then, the Standard Theory offered Deep Structure, the home of lexicon, basic grammar rules, and phrase structure rules. Finally, GB introduced Logical Form, which is the result of a secret movement applied to Surface Structure. Nonetheless, the parallel architecture is "monostratal" in that it does not have any unseen operations, and, that's why, it conceives the syntax-semantics relation to be more flexible in contrast with MGG.

Thirdly, contrary to the syntactocentric view of mainstream grammar, which underlines the two most important interfaces sound (phonology) and meaning (semantics) are read off from syntactic structure, SSH underlines that all the components of grammar are independent from one another. The parallel architecture of grammar includes both sound and meaning along with the syntactic structure, and all these components are autonomous representations. Additionally, the parallel architecture includes *interface components* that serve to supervise the relations among just mentioned components: syntax, semantics, and phonology. A structure is accepted to be well-formed if it complies with interface constraints. Hence, the parallel architecture aims to construct a basis for sound and meaning to reflect onto each other.

The parallel architecture of grammar assigns a status for lexicon also. Lexicon includes words and certain characteristics of words such as phonological, syntactic, and semantic peculiarities. In MGG, a word is added or merged into syntactic structure and its semantic and phonological properties are interpreted in the light of syntactic structure. On the other hand, in SSH lexicon receives a more active role in the construction of sentences and reflects onto the three components of parallel architecture of grammar (syntax,

semantics, and phonology) at the same time. Thus, Culicover and Jackendoff (2005: 18) underlines that instead of lexical insertion or Merge introducing lexical items into syntax, we can think of lexical items as being inserted simultaneously into the three structures and establishing a connection between them.

Consequently, SSH abandons the traditional categorization of linguistics into subfields as phonology, morphology, syntax, semantics, and lexicon. Mainstream research divides linguistic phenomena into two categories as grammar and lexicon. In this division, grammar occupies the core position, whereas lexicon is in the periphery. According to mainstream research, lexicon reflects irregularities while grammar provides general rules. This way, lexicon is evaluated as a handicap to linguistic study and ignored at the expense of reaching so-called general rules. However, Culicover and Jackendoff (2005: 26) protests this judgment:

> Conversely, it might turn out that a learning theory adequate for the lexicon and the "peripheral" rules would, with only moderate adjustment or amplification, be able to learn the "core" as well. This is the hypothesis we are going to pursue here, leading in a direction quite different from the mainstream program.

The parallel architecture gives equal share to phonology, syntax, semantics, and lexicon and allocates a place for morphology also. SSH acknowledges the existence of morphology below world level. Additionally, to determine how these parallel components are related to each other, SSH observes some interface rules. The parallel architecture of grammar is schematized as follows by Culicover and Jackendoff (2005: 18):

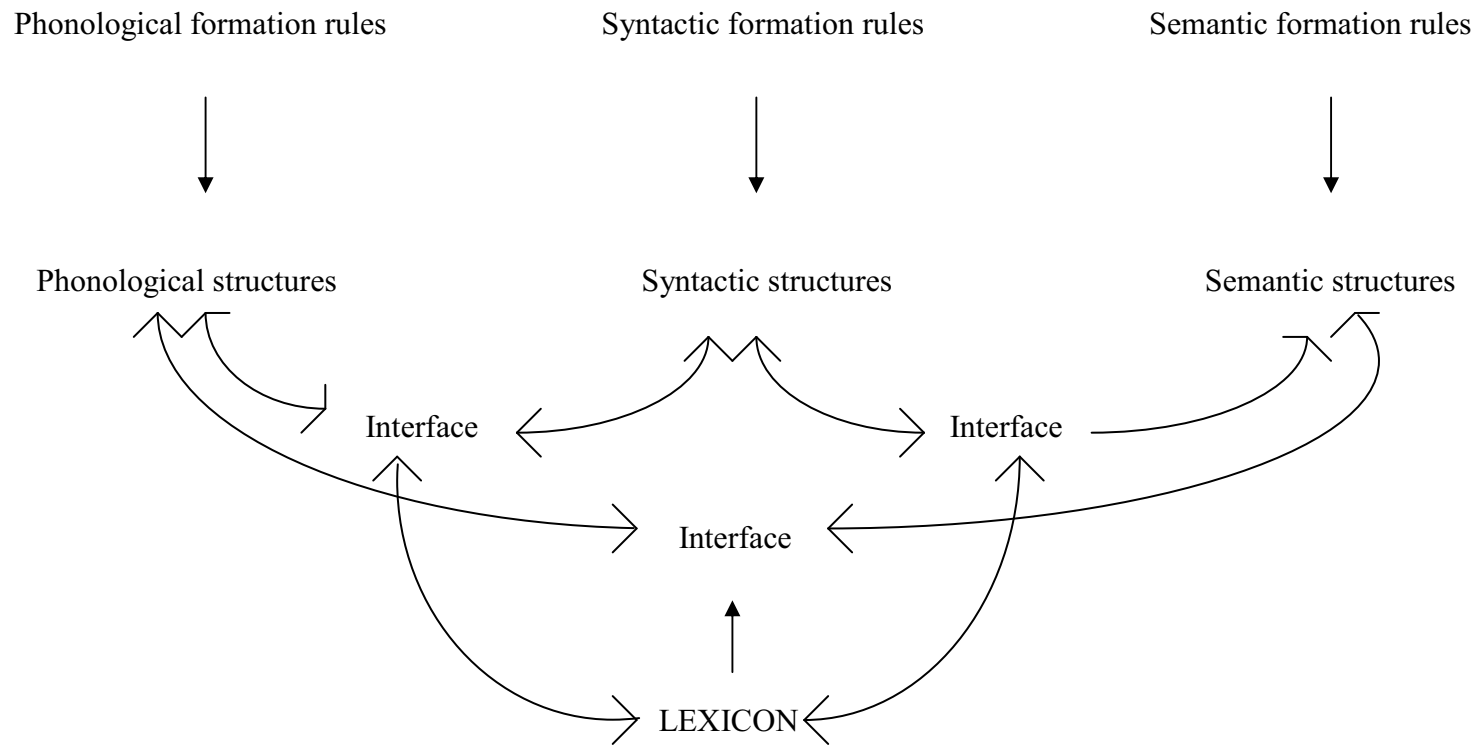


Figure 3: The Parallel Architecture (cf. (4) in § I.1)

III. 2 The Semantic Basis of Control in Turkish

III.2.1 Basic Discussions

In Turkish, infinitive marker is traditionally acknowledged to be *–mE* and *–mEK*. The complement VPs that go with Turkish control verbs are mostly Case marked. Apart from the control verbs *iste- (want)* and *bil-(know)*, which were initially mentioned by Erguvanlı Taylan (1984), control verbs such as *gerek- (need), zorunda ol/kal- (have to)* also go without any Case marking in their complement VPs.

One controversial area regarding control structures in Turkish is the case of possessive morphology (not) to be attached on complement VPs. As is well known, the most prominent characteristic of control structures is that they carry neither tense nor agreement markers. However, in Turkish, there are certain control configurations which carry possessive marking in their complement VPs contrary to the regulations. Following Haig and Slodowicz (2006), we referred to such cases as *Quirky Possessive Marking* (cf. (40) and (41) in §I.3), repeated here for convenience:

(1) *Quirky Possessive Marking*

Ahmet$_i$ [Ø$_i$ bisiklet-i tamir et-me-sin]-i becer-di.

Ahmet bike-ACC fix LV-INF-POSS3SG-ACC manage-PST(3S)

(a) ‘Ahmet managed to fix the bike.’ (accepted by the majority of informants)

(b) *‘Ahmet managed (someone else’s) fixing the bike.’(rejected by all)

(Haig and Slodowicz, 2006: 174)

Such control cases with possessive morphology lead Özsoy (1986) to conclude that in Turkish the sentence is headed by AGREEMENT not TENSE (qtd. in Uzun, 2000: 278). In fact, what has been referred to as *Quirky Possessive Marking* in most recent studies had been investigated by Özsoy (1988: 300) in depth as *possessed impersonal infinitive constructions*.

There are two positions that impersonal infinitive constructions can occupy in a sentence: the subject complement position and the object complement position. When the impersonal infinitive serves as the sentential subject, generic reading is observed. Nevertheless, when the impersonal object serves as the object complement, it is obligatorily controlled by the matrix subject.

Also, impersonal infinitive subject complements are possible with some though- movement verbs such as *kolay (easy), zor (hard), sıkıcı (boring)*, etc., and impersonal infinitive object complements comply with predicates such as *bil- (know)* and *sev- (love)*:

(2)

a. (e bu sıcakta ders çalış – **ma – sı**) çok zor.

b. Ben (e fala bak – **ma- sı-**) nı bilmiyorum.

(Özsoy, 1988: 301)

Özsoy differentiates among three types of infinitival constructions: non-possessed regular infinitives, inflected infinitives, possessed impersonal infinitives:

(3)

a. Çocuklar (PRO ders çalış-mak) istemiyorlar. *regular infinitive*

b. Ayşe (ben-im onlar-ı çağır-ma-m-) ı istemiyor. *inflected infinitive*

c. O kadınlar (PRO fala bak-ma-sı-) nı bilmiyorlar. *Poss.impersonal inf.*

In the cited examples, sentence (a) has the regular (non-possessed) infinitive without tense or person marker. Sentence (b) has the inflected infinitive since the complement VP carries the person marker in agreement with the lower overt subject although it lacks the tense marker. Lastly, sentence (c) has the possessed impersonal infinitive.

Sentence (a) includes the true infinitival complement in Turkish since it is unmarked for both tense and agreement. However, the infinitival complement in sentence (b) possesses both of these markers. As for the infinitival complement in sentence (c), it could be said that although it is marked by possessive morphology (it carries the third person possessive marker *–sI*), it carries the properties of [-tense], [- agreement] as it will also be proven in the paragraphs to fallow. As a result, among these infinitival complements, only (a) and (c) could be observed to exhibit control relation.

According to Özsoy, the two configurations (sentence (3b) and (3c)) are different in deep structure although they have the same surface structure. The former includes an infinitival complement marked with possessive morphology. Similarly, the

latter also includes an infinitival complement with a possessive marker. However, this marker in sentence (c) does not spot any person, which means that it cannot show AGR. That's why, PRO substitutes for the empty (phonetically null) subject in these constructions; the existence of a local subject, moreover, makes the structure ungrammatical. Therefore, we can conclude that the infinitival clauses that carry possessive morphology like (3c) are no different from other infinitival clauses with the properties of [-tense], [- agreement].

Below example shows that as opposed to inflected infinitives there is not one to one correspondence between the third person possessive marker *–sI* and its controller in the matrix clause in impersonal infinitives:

(4)

Ben/Sen/O/Biz/Siz/Onlar$_i$ (sahilde ¡dolaş- ma-sı-) nı seviyor-um/sun/Ø/uz/sunuz/lar

As is observed in the just mentioned sentence, the third person possessive marker in the impersonal infinitive is stable irrespective of the person and the number properties of its controller, namely, the matrix subject here.

Note that Bozşahin (2006) also maintains that there are cases where the subject in the complement VP and the matrix subject are not co-referent in spite of the so called possessive marking:

(5)

Wright kardeş-ler uç-ma-sın-ı/uç-mağ-ı becer-di

W brother-PLU fly-mA-POSS.3SG-ACC/fly-INF-ACC manage-PAST

'The Wright brothers managed flying/to fly.'

(Bozşahin, 2006: 125)

Important to our point is the fact that Bozşahin (2006: 125) concludes that example (1) does not have an infinitival of the kind required by control. According to Bozşahin, the co-reference between the empty subject and the matrix subject in this type of clauses is not triggered by the control of the finite embedded clause.

Further evidence supporting the claim that impersonal infinitives are of the characteristic [-AGR] comes from passive constructions:

(6)

a. Ben (e takip ed-il-me-si-)ni sevmiyorum.

This passive structure carries the possessive marker in spite of the absence of the subject in the sentence. Similar to the infinitival complements, *-sI* in this sentence does not show any AGR. This shows that the morpheme *–sI* is an independent morpheme with no relation to the element in the subject position.

Considering all these instances, Özsoy (1988) once more underlines that the head of S in Turkish is AGR rather than TENSE, complying with Kornfilt (1984) and Brendemoen and Csato (1986). Being such, the cases where INFL is marked [-tense] and [-agreement] could be defined as control constructions such is the case with regular (non-possessed) infinitives and impersonal infinitives, where the possessive marker is base generated.

III.2.2 Control Types in Turkish[1]

As is offered by Culicover and Jackendoff (2005), SSH differs from MGG in that it offers a grammar of conceptual structure consisting of syntax, semantics, phonology, and lexicon, which projects onto the three components. In this architecture, all the components are placed on a continuum with equal share in the interpretation of grammar; thus, they are autonomous entities independent from one another. Following SSH, Culicover and Jackendoff base their theory of control on lexical semantics. That is, the matrix verb governs the control relations since it determines both the control type and the controller choice.

Below we provide control types in Turkish following the typology offered by Culicover and Jackendoff (2003, 2006) and then investigate to explain controller choice in the light of SSH and its extension in control theory: Unique Control of Actional Complements Hypothesis.

Classically, control relations are categorised into two groups as obligatory control (OC) and non-obligatory control (NOC). Obligatory control includes the cases of subject and object control while non-obligatory control includes the cases of arbitrary

[1] Refer to Table 1 in the Appendix for the list of control verbs in Turkish.

control and long-distance control ("super-equi" or "remote control" in early literature). A more detailed categorisation is offered by Landau (1999), where split, partial, and implicit control relations are added. Landau examines subject and object control relations under exhaustive control. However, no clear-cut boundaries seem to exist in this typology for split and implicit controls although Landau rejects the traditional view that split control is an instance of Obligatory Control.

CONTROL			
Obligatory Control (OC)		Non-obligatory Control (NOC)	
Exhaustive Control (Subject or Object Control)	Partial Control	Long-Distance Control	Arbitrary Control

Table 1: The Control Typology Offered by Landau (1999)

(i) **Obligatory Control (OC):** The controller and the infinitive must be clausemates.

(ii) **Exhaustive Control (EC):** PRO must be identical to the controller

(iii) **Partial Control (PC):** PRO must include the controller.

(iv) **Split Control:** Two matrix arguments jointly control (a plural) PRO

(v) **Non-Obligatory Control (NOC):** The infinitive need not have a clausemate controller.

(vi) **Long –Distance Control**: The controller and the infinitive are not clausemates.

(vii) **Arbitrary Control:** Complement VP has no argumental controller.

(viii) **Implicit Control:** the controller is not syntactically expressed.

The most exhaustive categorisation provided in literature so far is the one proposed by Culicover and Jackendoff (2003, also 2005, 2006a). In this typology, there are three main types of control relations: Free Control, Nearly-free Control, and Unique Control. The classical non-obligatory control class is divided into two further classes as free control and nearly free control. Obligatory Control keeps its position, though with a different name: unique control.

FREE CONTROL	NEARLY-FREE CONTROL	UNIQUE CONTROL
• Subject/object control • Long–Distance Control • Split control • Arbitrary control • Discourse control • Speaker/hearer control • Speaker + an NP in the sentence	• Subject/object control • Split control • Arbitrary control	• Subject control • Object control

Table 2: The Control Typology Offered by Culicover and Jackendoff (2005, 2006)

Important to our point is the fact that none of the categories has clear-cut boundaries among control types. For example, a matrix predicate that triggers control may be stuck somewhere between nearly-free control and unique control as it will be highlighted in the sections to follow.

Apart from that, our observation on Turkish control structures show that all the control relations outlined by both Landau and Culicover and Jackendoff are applicable for Turkish data. Thus, we adopt Culicover and Jackendoff's categorization along with an addition of Partial Control from Landau (1999). However, since PC is too broad a topic to be covered in this chapter, we dwell on its complications in the following chapter.

OBLIGATORY CONTROL		**NON-OBLIGATORY CONTROL**	
FREE CONTROL	**NEARLY-FREE CONTROL**	**UNIQUE CONTROL**	**PARTIAL CONTROL**
• Subject/object control • Long –Distance Control • Split control • Arbitrary control • Discourse control • Speaker/hearer control • Speaker + an NP in the sentence	• Subject/object control • Split control • Arbitrary control	• Subject control • Object control	• Subject + an NP outside the clause

Table 3: The Control Typology Adopted in the Present Study

III.2.2.1 Free Control

Culicover and Jackendoff (2006a: 138) states that Free control is a configuration in which the range of possible controllers includes (a) any NP in the sentence or surrounding discourse plus the speaker and the hearer (b) the possibility of split antecedents, and (c) the possibility of a generic controller.

Free control is most frequently observed in subject complement position in languages. According to Manzini (1983), sentential subjects cannot exhibit obligatory control. Turkish partially complies with this proposal since free control cases are observed

only in infinitive sentential subjects in Turkish. However, not all of the sentential complements are cases of free control. That is, infinitive sentential complements can also reveal obligatory control in Turkish.

The preliminary examples of control in sentential subjects can be traced to Sezer (1996: 125-126):

(7)

a. [İstakoz-u çiğ ye-mek] sağlığ-a zararlıdır

lobster-Acc raw eat-Inf health-Dat detrimental

'It is hazardous to health to eat lobster raw.'

b. [Bu parça-yı dinle-mek] çok zevkli oluyor

this piece-Acc listen-Inf very pleasant is

'To listen to this piece is very pleasant.'

While sentence (a) in the above examples includes a good representative of arbitrary control since the controller is generic with no specific 'eater' in mind, complement VP in sentence (b) can be bound by a specific controller, that is, by speaker, or by speaker and listener both, or by speaker plus somebody else in the discourse. This shows us that sentential subjects do not exhibit free control all the time.

Clearer examples that distinguish between free and obligatory control relations in sentential complements are provided by Erguvanlı Taylan (1996: 50), which we also referred to in the first chapter.

(8)

a. (Ø Deniz kenar-ın-da piknik yap-mak) çok zevkli ol-*ur*
sea side-Poss3-Loc picnic do-inf vert pleasurable be-Aor
'It is very pleasurable to have a picnic by the seaside.'

b. (Ø Deniz kenar-ın-da piknik yap-mak) çok zevkli ol-*du*
sea side-Poss3-Loc picnic do-inf vert pleasurable be-Past
'It was very pleasurable to have a picnic by the seaside.'

The example (a) reveals a non-specific reading because of the aorist attached to the matrix verb. However, the example (b) reveals that the complement VP is controlled by the speaker or speaker plus somebody else in the same discourse since past tense marker is attached to the matrix verb, which shows that what we are talking about is a specific event completed in the past with specific participants involved. To prove this, Erguvanlı Taylan (1996) proposes a discourse for the above control relation to be interpreted exhaustively:

(9)

İyi ki ev-de otur-ma-mış-ız da bura-ya gel-miş-iz

good sub. house-Loc stay-neg-Past- 1pl and here-Dat come-Past-1pl

(Ø deniz kenar-ın-da piknik yap-mak) çok zevkli ol-*du*

sea side-Poss3-Loc picnic do-inf vert pleasurable be-Past

'It is good that we didn't stay at home but came here. It was fun to having a picnic by the seaside.'

Besides, the two most recent investigations on control, Stiebels (2007) and Slodowicz (2007), which specifically focuses on complement control in Turkish, underline that sentential subjects with causative experiencer verbs are obligatorily controlled:

(10)

[_$_i$ bu viski-yi içmek] ban-a$_i$ hiç iyi gel-me-di

this whisky-ACC drink-INF not well 1SG-DAT come-NEG-PST.3SG

'To drink this whisky was not good for me.'

The above example shows that sentential subjects could be controlled in Turkish. It further underlines that this flexibility of control relations in sentential complements are not due to configurational factors. Rather, the control relation (specific or non-specific reading at least) is determined by the semantic tense of the matrix verb or by referentiality.

Finally, following Landau (1999), Oded (2006) investigates Obligatory versus Non-Obligatory control relations in sentential subjects in further detail. Below examples show that sentential subjects in Turkish can reveal both Obligatory and Non-Obligatory

control and that semantic and pragmatic factors should be considered to solve the control puzzle in such cases.

(11)

a. [$PRO_{i/*arb}$ Haberi duy-mak] Ali-yi üz-dü

news-Acc hear-inf Ali-Acc upset-Pst 3S

'To hear the news upset Ali.'

b. [$PRO_{i/arb}$ oda-da sigara iç-mek] Ali-ye zarar ver-di

room-Loc cigarette drink-Inf Ali-Dat harm give-Pst 3S

'To smoke in the room harmed Ali.'

(Oded, 2006: 133,134)

Although these two sentences are the same configurationally, they may exhibit different control relations: sentence (a) has only obligatory control reading where complement VP has to be controlled by the matrix subject. However, in sentence (b), complement VP may or may not be controlled by the matrix subject. That is, generic reading defined under non-obligatory control is also possible with this sentence.

According to Landau (1999), such a distinction in control relations results from the semantic characteristics of the matrix verb. Psych verbs take complements that exhibit obligatory control, whereas non-psych verbs take complements that exhibit either obligatory or non-obligatory control. Being such, sentence (a) in the above examples exhibits obligatory control because the matrix verb is a psych verb. On the other hand,

sentence (b) includes a non-psych verb, and, that's why, the control relation is either obligatory control or non-obligatory control, where the complement VP receives a non-specific reading.

Keeping these variables in mind, we now turn back to our scale of free control relations offered by Culicover and Jackendoff and lay out different control relations of free control in Turkish. Sentence (12) exhibits four out of eight control relations of free control:

(12)

Suzan$_i$ [[Can ile dans $_{i/j/i+j/gen}$et-mek] Ali-yi$_j$ kızdır-ır] diye düşün-üyor.
Suzan Can with dance LVC-Inf Ali-Acc anger-Aorist think-Prog3SG
'Suzan$_i$ thinks that $_{i/j/i+j/gen}$dancing with Can angers Ali.'

(i) The sentence exhibits long distance control when the matrix subject is considered to be co-referent with the complement VP in the lower clause, so in long distance control, the controller and the infinitive are not clause mates.

(ii) The sentence exhibits object control when the matrix object is considered to be co-referent with the complement VP.

(iii) The sentence exhibits split control when the matrix subject and object are jointly considered to be co-referent with the complement VP.

(iv) The sentence exhibits arbitrary control when there is no argumental controller that can be considered to be co-referent with the complement VP.

Implicit reading is also possible in free control as sentence (13) exemplifies. In this sentence, there is no antecedent to control the complement VP. Rather, the controller is read off from the context and this is called discourse (implicit) control as the argument embedded in the subject NP of the matrix clause in the preceding clause serves as the controller:

(13)

Fatih Terim-in$_i$ baş-ı dert-te. [Hakan Şükür-ü takım-dan $_i$at-mak]
FT-Gen head-Acc trouble-Loc. HŞ-Acc team-Abl fire-Inf
sıkandal-a yol aç-acak.
scandal-Dat way open-Fut3SG
'FT$_i$ is in trouble. $_i$Firing HŞ is going to cause a scandal.'

In (14) the complement VP is controlled by speaker and/or hearer as the reflexive pronouns *myself/yourself* also suggest, and this is called speaker/hearer control:

(14)

[Kendimi/kendini güdüle-me-mek] sürec-i zedele-yecek
myself-yourself motivate-Neg-Inf process-Acc harm-Fut3SG
'Demotivating myself/yourself will harm the process.'

In (15) controllers are the speaker and the object NP of the matrix clause:

(15)

[Kendimiz-i herkes-in için-de rezil et-mek] Can-ı çıldırt-abilir.

Ourselves-Acc everybody-Gen in-Dat humiliate-Inf Can-Acc drive crazy-Mood

'It might drive Can crazy to humiliate ourselves (Can and me) in front of everyone.'

III.2.2.2 Nearly Free Control

Nearly free control occurs mostly with verbs of communication and thought where the controlled complement always denotes a proposition being communicated, according to Culicover and Jackendoff (2003, 2005, 2006a). Subject/object control, split control, and arbitrary control are applicable to nearly-free control as is seen in (16), while other options that are possible with free control are not available:

(16)

Can_i Suzan-a_j [$kendine_{i/j/gen}$/$kendilerine_{i+j}$ iyi $_{i/j/i+j/gen}$bak-mak]-tan bahsed-iyor.

Can Suzan-Dat $himself_i$/$herself_j$/$oneself_{gen}$/$themselves_{i+j}$ well take care-Inf-Abl talk about-Prog3SG

'Can_i is talking to $Suzan_j$ about $_{i/j/i+j/gen}$taking care of himself/ herself/ oneself/ themselves.'

(17) *Discourse (Implicit) Control*

*Fatih Terim-in$_i$ baş-ı dert-te. Suzan Can-a [Hakan Şükür-ü takım-dan

F.T.-Gen head-Acc trouble-Loc. Suzan Can-Dat H.Ş.-Acc team-Abl

$_i$at-mak]-tan bahset-ti.

fire-Inf-Abl talk about-Past3SG

*Fatih Terim$_i$ is in a trouble. Suzan talked to Can about $_i$firing Hakan Şükür.

(18) *Control by the speaker and/or hearer*

* Can Suzan-a [kendim-e/kendi-ne iyi bakmak]-tan bahset-ti.

Can Suzan-Dat myself-Dat/yourself-Dat well take care-Inf-Abl talk about-Past3SG

* Can talked to Suzan about taking better care of myself/yourself.

Öner- (suggest[2]*)*, *davet et-(invite),* and *tartış- (negotiate)* are other control verbs in Turkish that comply with nearly-free control.

Following Erguvanlı Taylan (1996), Slodowicz (2007) defines the control relationship revealed by *öner-* as *variable* control, and adds two control verbs to the same classification: *tehdit et- (threaten)* and *teklif et- (propose)*. However, it is not possible to categorize these three verbs in the same group since, first of all, unlike *öner- (suggest)*, *tehdit et- (threaten)* is not possible with object control or arbitrary control contrary to what Slodowicz (2007: 145-146) claims in the below examples:

[2] Similar examples with *öner- (suggest)* can be traced to Erguvanlı Taylan (1996).

(19)

a. $\__i$ Sen-i_j [$\__i$ iş-in-i el-in-den al-mak]-la tehdit edi-yor.

2SG-ACC work-2SG.P-ACC hand-2SG.P-ABL take-INF-COM threat LV-PROG-3SG

'She/he is threatening you that she will take away your job.'

b. $\__i$ Sen-i_j [$\__j$ ev-de kal-mak]-la tehdit edi-yor.

2SG-ACC house-LOC stay-INF-COM threat LV-PROG-3SG

'She/he is threatening you that you will stay at home.'

While we consider (a) to be a good representative of subject control, we think sentence (b) is not a well-formed sentence in Turkish, and, that's why, we conclude *tehdit et- (threaten)* is nearer to unique control end on the continuum since it is compatible with subject control and split control only.

As for *teklif et- (propose)*, we consider it to be an irregular control verb whose scope is broader than unique control but narrower than nearly-free control in that it is compatible with subject and split control while it is not possible with object or arbitrary control as can be observed in the below examples also.

(20) *Subject and split control with teklif et- (propose)*

a. Can$_i$ Ali-ye$_j$ [ona yardım $_i$et-me]-yi teklif et-ti *subject control*

Can Ali-Dat him help LVC-Inf-Acc propose-Past3SG

'Can proposed Ali to help him'

b. Can$_i$ Ali-ye$_j$ [sınav-a birlikte $_{i+j}$çalış-ma]-yı teklif et-ti *split control*

Can Ali-Dat exam-Dat together study-Inf-Acc propose-Past3SG

'Can proposed Ali to study together for the exam'

c. *Can$_i$ Ali-ye$_j$ [sınav-a sıkı $_{*j}$çalış-ma]-yı teklif et-ti **object control*

Can Ali-Dat exam hard study-Inf-Acc propose-Past3SG

'Can proposed Ali to study hard for the exam.'

d. Diş hekimleri [Oral-b $_{*gen}$kullan-ma]-yı teklif et-ti **arbitrary control*

Dentists Oral-b use-Inf-Acc propose-Past3SG

'Dentists proposed using Oral-b.'

Similarly, *tavsiye et- (recommend)* (along with *destekle (support)*, which has a similar tendency) is another irregular control verb, but it behaves differently from *teklif et- (propose)* in that it is compatible with object control and arbitrary control, whereas it is not possible with subject or split control:

(21) *Object Control and arbitrary control with tavsiye et- (recommend)*

a. Can$_i$ Ali-ye [sınav-a $*_{i/\ j/*i+j}$ çalış-ma]-yı tavsiye et-ti *object control*

Can Ali-Dat exam-Dat study-Inf-Acc recommend-Past3SG

'Can recommended Ali that he should study for the exam'

b. Diş hekimleri [Oral-b $_{gen}$kullan-ma]-yı tavsiye et-ti *arbitarary control*

Dentists Oral-b use-Inf-Acc recommend-Past3SG

'Dentists recommended using Oral-b.'

These examples all show that control verbs *teklif et- (propose)* and *tavsiye et- (recommend)* are in a kind of complementary distribution. While the former is a subject and split control verb, the latter is an object and arbitrary control verb. Below chart well outlines these irregular control relations in Turkish[3].

VERB	***Subject control***	***Object control***	***split control***	***arbitrarycontrol***
bahset-	√	√	√	√
tartış-	√	√	√	√
öner-	√	√	√	√
davet et-	√	√	√	√
tavsiye et-	**X**	√	**X**	√
destekle-	**X**	√	**X**	√
teklif et-	√	**X**	√	**X**
tehdit et-	√	**X**	√	**X**

Table 4: Exceptional Control Verbs in Turkish

[3] These verbs except for *tehdit et- (threaten)* and *destekle- (support)* are also compatible with Partial Control (control by the matrix subject plus an NP outside the sentence) to be covered in Chapter IV

As is clear, there is not a clear-cut boundary among the control verbs of Turkish mentioned in this section. Verbs such as *bahset- (talk about),tartış- (negotiate), öner- (suggest),* and *davet et-(invite)* are in harmony with the classification offered by Culicover and Jackendoff. However, some control verbs in Turkish comply neither with the classical control verb categorization nor with the latest categorization offered by Culicover and Jackendoff. For example, verbs such as *teklif et- (propose), destekle- (support)* and *tavsiye et- (recommend)* do not satisfy any classification in literature.

III.2.2.3 Unique Control[4]

The most restricted form of control is unique control which appears in many object complements and in adjunct clauses. In unique control, there are two possible targets of control in the matrix clause, but only one of them can serve as the controller. For example, object control reading is impossible with sentence (22), and similarly subject control reading is impossible with sentence (23).

(22) *Subject Control*

Suzan$_i$ Can-a$_j$ [sınav-a $_{i/*j}$gir-me]-ye söz ver-di.

Suzan Can-Dat exam-Dat enter-Inf-Dat promise give-Past3SG

'Suzan$_i$ promised Can$_j$ to $_{i/*j}$take the exam.'

[4] Refer to Table 2 in the Appendix for Unique Control verbs in Turkish.

(23) *Object Control*

Suzan$_i$ Can-a$_j$ [sınav-a $_{j/*i}$gir-me]-ye izin ver-di.

Suzan Can-Dat exam-Dat enter-Inf-Dat permission give-Past3SG

'Suzan$_i$ allowed Can$_j$ to $_{j/*i}$take the exam.'

As we have repeatedly underlined several times in this study, the choice of controller is not something to be made according to configurational properties. As is seen in the representative two sentences show above, the two structures reveal different control relations although they exhibit the same syntactic structure. That's why, we adopt a semantic perspective to determine the controller choice: we focus on the semantic properties of the matrix verb and on the properties of the complement VP.

Verbs that comply with Unique Control select actional (voluntary) complements only, according to Unique Control of Actional Complements (UCAC) Hypothesis offered by Culicover and Jackendoff (2003, 2005, 2006a) based on a previous study "The Conceptual Structure of Intending and Volitional Action" by Jackendoff (1995).

Traditionally, to determine whether a predicate is a voluntary action or a non-voluntary (non)action, tests such as the imperative and the adverbials *voluntarily* and *on purpose* can be applied. The following is offered by Culicover and Jackendoff (2005: 428):

(24) ***Voluntary actions***

a. Run the race!

Roberta ran the race voluntarily

b. Be quiet!

Roberta was quiet voluntarily

c. Be examined by a doctor!

Roberta was examined by a doctor voluntarily

(25) ***Non-voluntary (non-)actions***

a. *Grow taller!

* Roberta grew taller voluntarily

b. *Strike Simmy as smart!

* Roberta struck Simmy as smart voluntarily

c. *Realize it's raining!

* Roberta realized it was raining voluntarily

The criteria that separates unique control from other control types is that sentences that exhibit unique control select voluntary actional complements only. On the other hand, free control and nearly-free control verbs comply with complements of any state or event.

The predicates that select free and nearly-free control are compatible with both actional and situational complement as it is laid out in (26) and (27). Nevertheless, predicates that trigger unique control select only actional complements as (28) also suggests. What follows is an outline offered by Culicover and Jackendoff (2006a: 142):

(26) *Free control predicates: not restricted to actional complements*

a. Voluntary Actions

{ Running the race / Being quiet / Being examined by a doctor } { annoys Max / is a drag }

b. Nonvoluntary Actions

{ Growing taller / Striking Simmy as smart / Realizing it's raining } { annoys Max / is a drag }

(27) *Nearly free control predicates : not restricted to actional complements*

a. *Voluntary Actions*

Mark spoke to Ed about { running the race / being quiet / Being examined by a doctor }

b. *Nonvoluntary Actions*

Mark spoke to Ed about { growing taller / having struck Simmy as smart / realizing it's raining }

(28) *Unique control predicates: restricted to actional complements*

{ Fred promised (Lousie) …
Fred persuaded Louse … }

a. Voluntary Actions

{ to run the race
to be quiet
to be examined by a doctor }

b. Nonvoluntary Actions

{ # to grow taller
to strike Simmy as smart
to realize it was raining }

That the basic semantic predicate *zorla- (force)* cannot occur with situational complement *uzun ol- (be tall)* proves *zorla- (force)* is a unique control predicate.

(29) *Zorla- (force) as a unique control verb:*

Can Suzan-ı [Ali ile dans et-me-ye/*uzun ol-ma] -ya zorla-dı.

Can Suzan-Acc Ali with dance LVC-Inf-Dat/tall be-Inf-Dat force-Past3SG

Can forced Suzan to dance with Ali/*to be tall.

As the following configuration suggests *zorla- (force)* is an object control verb; thus, it cannot assign subject control, split control, arbitrary control, etc.

(30)

Can$_i$ Suzan-ı$_j$ [Ali ile dans $_{j/*i/*i+j/*gen}$et-me]ye zorla-dı.

Can Suzan-Acc Ali with dance LVC-Inf-Dat force-Past3SG

Can$_i$ forced Suzan$_j$ to $_{j/*i/*i+j/*gen}$dance with Ali.

On the other hand, *bahset- (to talk about)*, which is a nearly-free control verb can occur with situational complements. As sentence (31) proves, it can assign subject control, object control, split control, and arbitrary control.

(31) *Bahset- (talk about) as a nearly-free control verb*

Can Suzan-a Ali ile dans et-mek-ten/uzun ol-mak-tan bahset-ti.

Can Suzan-Dat Ali with dance LVC-Inf-Abl/tall be-Inf-Abl talk about-Past3SG

Can$_i$ talked to Suzan$_j$ about $_{j/i/i+j/gen}$dancing with Ali/being tall.

III.2.3 Controller Choice in Unique Control

As we stated earlier the problem of controller choice arises in cases of unique control where out of two potential arguments of matrix clause only one can serve as the controller. Since we have presented examples of unique control which exhibit the same syntactic architecture with different controller choice or different syntactic architectures

with the same controller choice, the controller choice is not syntactically bound. Then, a final question arises: what determines the controller choice?

According to UCAC, Unique Control is determined by the conceptual structure established by the matrix predicate. The Unique Controller carries the role of actor for the action in question whatever its syntactic position is. UCAC proposes six matrix verb classes that select actional complements i.e. that go with unique control. We try to solve the control puzzle through these basic semantic predicates:

(32) Unique Control=Basic Semantic Predicate+Actional Complement

X^{α} INTEND [α ACT]

X^{α} OBLIGATED [α ACT] TO Y

$\left(X^{\alpha} \text{ OBLIGATED } [\alpha \text{ ACT}]^{\beta} \right)$
β BENEF Y

X^{α} CS Y^{α} [α ACT]

X^{α} ABLE [α ACT]

X^{α} $SHOULD_{root}$ [α ACT]

X^{α} REQUEST $Y^{\beta} \left(\begin{array}{l} [\beta \text{ ACT}]^{\gamma} \\ \gamma \text{ BENEF } _{\alpha} \end{array} \right)$

The predicate *intend* is a two place predicate. One of the arguments is the intender, an animate entity; the other argument is the actional complement whose actor inherently overlaps with the intender. The *intend* class includes verbs such as *niyet et-* (*intend*), *karar ver-* (*decide*), *ikna et-* (*persuade*). *Niyet et-* (*intend*) and *karar ver-* (*decide*)

are subject control verbs, but *ikna et-* (*persuade*) is an object control verb. With *ikna et-* (cause someone to decide), the one who holds the *intention* is the object; that's why, *ikna et-* (*persuade*) triggers object control.

Another predicate type that selects actional complement is *obligation*. The verbs in obligation class take three arguments. One argument imposes an obligation on the other argument to perform some action. The content of the obligation is expressed via propositional complement. The actor of the propositional complement has to be the one under obligation irrespective of its syntactic role. The obligation class includes verbs such as *emret-* (*order*), *söz ver-* (*promise*), *taahhüt et-* (*pledge*), *yemin et-* (*vow*). *Emret- (order)* is an object control verb, while the rest are subject control verbs.

The third predicate type involves the class of *force-dynamic* predicates. These include predicates of causing, preventing, enabling, and helping. With these verbs, the agent always maps onto subject position; thus, these are all object control verbs. The force-dynamic predicates include verbs such as *zorla-* (*force*), *yardım et-* (*help*), *destekle-* (*assist*), *cesaretlendir-* (*encourage*), *izin ver-* (*allow*), *alıkoy-* (*hinder*).

The fourth predicate type that requires an actional complement is *be able*. This predicate takes two arguments, an entity and an action. The person with the ability serves as the actor of the propositional complement. Verbs such as *öğren- (learn), öğret- (teach), başar- (succeed), and becer- (manage)* belong to this class. Ö*ğren- (learn), başar- (succeed), and becer- (manage)* are subject complement verbs, whereas *öğret- (teach)* is an object control verb.

The fifth predicate type is *should* that denotes *normativity*. Similar to previous predicates of unique control, this basic predicate also encodes an inherent control equation: the entity that undertakes a norm is supposed to perform the action. *Hatırla- (remember)*

and *unut-(forget)* belong to this class and exhibit subject control; *hatırlat- (remind)* is also a member of this class, and it exhibits object control.

The last predicate type is *request*, which takes three arguments: the speaker demands that the addressee perform an action. In such a situation, the addressee is the controller, and the speaker in a way benefits from the action. The verbs of request are *rica et- (request)* and *telep et- (require)*.

III. 3 Summary

Simpler Syntax Hypothesis favours the parallel architecture of grammar where phonological structure, syntactic structure, semantic structure, and lexicon along with interface rules rather than syntactocentric approaches to grammar. Thus, to explain control relations in Turkish, we follow semantic and pragmatic constraints. Compiling the classifications offered by Culicover and Jackendoff (2003, 2006) and Landau (1999), we analyze control relations in Turkish in four categories: free control, nearly-free control, unique control, and partial control.

Free control cases occur only as sentential complements in Turkish, but note that not all instances of control in sentential subject position result in free control. The control relations in sentential subject position are highly affected by the characteristics of the matrix predicate (especially by the psych versus non-psych characteristics of the verb).

As for the nearly-free control, we have examined four true nearly-free control verbs in Turkish: *bahset- (talk about), öner- (suggest)*, *davet et-(invite),* and *tartış- (negotiate)*. Apart from these, there are some exceptional control verbs in Turkish stuck between nearly-free control and unique control: *tavsiye et- (recommend), teklif et- (propose),* and *tehdit et- (threaten)*.

To solve the problem of controller choice in unique control instances, we have utilized seven verb classes: intention, obligation, force-dynamic, ability, necessity (should), request. We have underlined that irrespective of the syntactic position, controller choice in the existence of two potential arguments to serve as the controller is made on the basis of thematic relations tht the matrix predicate assigns.

CHAPTER IV

ISSUES OUT OF CLASSIFICATION

In this chapter, we aim to discuss two issues on control: partial control and control in adjunct clauses.

Following Landau (1999), we will discuss partial control (the cases where the complement is controlled by the subject plus an NP outside the sentence) as a sub-case of Obligatory Control. More specifically, we are going to focus on

(i) the similarities and differences between exhaustive control[1] and partial control

(ii) the verb classes which outline matrix predicates selecting exhaustive control or partial control

(iii) some deviant points we encounter in Turkish concerning partial control.

Secondly, we examine adjunct clauses in Turkish to see what kind of control relations these structures reveal. Postpositions such as *için (in order to), üzere (for), -mAdAn önce (before doing)* are analyzed. The data from Turkish prove that controller choice cannot be made irrespective of semantic and pragmatic factors. We may have the same control structure resulting in different controller choice in each case, even if we keep the matrix predicate intact. Thus, once more, we have to resort to context of the utterance for such cases.

[1] The cases where the complement VP is obligatorily controlled by the matrix subject or object, what Culicover and Jackendoff calls *unique control* or what some others call *obligatory control* simply.

IV.1. Partial Control[2]

The phenomenon of Partial Control has been mentioned in few studies in literature such as Williams (1980), Wurmbrand (1998), Barrie (2003), and most recently Barrie and Pittman (2004). However, the most exhaustive analysis on Partial Control has been offered by Landau (1999).

Traditionally, control is investigated under two categories: Obligatory Control (OC) and Non-obligatory Control (NOC). Landau develops this classification and divides OC category into two further types termed *Exhaustive Control* (EC) and *Partial Control*[3] (PC) (cf. table 1 in § III.2.2). The most prominent feature of PC category is that PC predicates are compatible with collective predicates. Thus, while in EC the controlled element is equal to the controller in semantic number, in PC the controllee includes the controller, but its semantic number may not be equal to that of the controller.

PC may include collective predicates in the complement VP in spite of the existence of a singular matrix subject. Note that collective predicates occur with collective subjects under normal circumstances:

(1)

a. *I met/gathered at six yesterday.

b. We met/gathered six yesterday.

[2] Refer to Table 3 in the Appendix for Partial Control verbs in Turkish (cf. Table 2 in the Appendix).
[3] If we try to place PC into the typology of Culicover and Jackendoff (cf. table 2 in § III.2.2), we see that PC cuts across the distinction among free*, nearly free*, and *unique control*.

However, in PC cases, we may come across controllers which are not identical to the controlled elements semantically. Below, we contrast EC and PC predicates to see the difference more clearly following Culicover and Jackendoff (2005: 460):

(2)

a. John and Bill/* John managed to meet at six.

The committee/* the chair dared to gather during the strike.

b. John wanted to meet at six.

The chair was afraid to gather during the strike.

c. The teacher promised the parents to take a class trip to Greece.

The matrix predicates in sentence (a) *manage* and *dare* are EC verbs and that's why are not compatible with singular controllers like *John* and *the chair*. Nevertheless, the matrix predicates in sentences (b-c) *want* and *promise* are PC verbs and are compatible with collective complements with singular controllers.

To understand PC relation better, in the sections to follow, we firstly lay out the basic properties EC and PC relations have in common. After that, we investigate the points in which both differ from each other.

IV.1.1. Comparison between EC and PC

Important to our point is the fact that, as Landau (1999: 39) underlines it, most control verbs are PC verbs, and only a small minority constitutes EC verbs. Landau (1999: 49) summarizes the properties of PC as follows:

(3) *The PC category*

a. Arbitrary Control is impossible.

b. Long-Distance Control is impossible.

c. Strict reading of PRO is impossible.

d. De re reading of PRO is impossible.

e. Partial Control is possible.

The properties provided here are the criteria for both EC and PC cases, and that is the reason why Landau categorizes both to be instances of OC. Below we provide PC examples from Turkish following Landau to test if the above criteria apply for the PC instances in Turkish:

(4) *Arbitrary Control is impossible*

* Ali [sınv-ı $_{arb}$kazan-ma]-yı iste-di.

Ali exam-Acc win-Inf-Acc want-3SGPast

'Ali wanted to pass the exam.'

As is clear, arbitrary control matched with NOC cases does not comply with PC. The second test of PC comes with LD control:

(5) *Long-Distance Control is impossible.*

Ali$_i$ [Suzan$_j$'ın [kendini$_{*i/j}$ toparla-ma]-yı um-duğ-u]-nu biliyordu

Ali Suzan-Gen *himself/herself collect-Inf-Acc hope-Nom-Poss-Acc know-prog-3SGpast

'Ali knew that Suzan hoped to collect *himself/herself.'

The above example shows that PC verbs cannot be controlled by the subject of the higher clause, excluding LD control. The third test of PC comes with strict reading of PRO (under ellipsis). When we use ellipsis with PC predicates, we do not have only one interpretation limited to the matrix clause; rather, we may interpret the ellipsis independent of its preceding counterpart:

(6) *Strict reading of PRO (under ellipsis) is impossible.*

a. Ali$_i$ [erken $_{i+1}$ayrıl-ma]-yı tercih et-ti, Suzan da öyle.

Ali early leave-Inf-Acc preferance LVC-3SGPast, Suzan too such

'Ali preferred to leave early, and Suzan did, too.'

b. Sadece Ali_i [kimi $_{i+1}$davet et-mek gerektiği] konusunda meraklan-dı

Only Ali whom invitation LVC-Inf require about wonder-3SGPast

'Only Ali wondered whom it was necessary to invite.'

Sentence (a) includes ellipsis where we can have two readings: (i) *Suzan preferred Ali to leave early* and (ii) *Suzan preferred herself to leave early*. These two different interpretations mean that we may have two controllers at hand, *Ali* for the first constructions and *Suzan* for the second construction. Sentence (b) includes an interrogative PC predicate *meraklan- (wonder)* along with an indirect infinitival question. In this sentence the *inviters* in question should absolutely consist of Bill plus somebody else. We cannot restrict the controller to the matrix subject only. The fourth test of PC comes with *de se* reading of PRO:

(7) *De re reading of PRO is impossible*

Sevgilisinin$_i$ askerliğinin bitmesine sadece bir ay kalmıştı. Zavallı kız$_j$ yakında $_{i+j}$buluş-ma-yı umuyor-du

It was only a month that his darling was going to return from army. The poor girl expected to meet him soon.

In PC, the controller in a way has to include the speaker, which leads to *de se* (beliefs about self) reading. Since in de re reading we announce thoughts about others in general (which is something closer to generic reading of the infinitival complements), EC and PC

instances exclude *de re* reading. To make the case clearer, suppose that we use the matrix predicate *öner- (suggest)* instead of the PC predicate *um- (hope)*: *Zavallı kız yakında buluşmayı öneriyordu* meaning *The poor girl suggested meeting him soon*. In such a sentence, we can easily tend to think that the *meeter* will be somebody else, not *the poor girl herself*.

To sum up what we have discussed so far, the PC is a category that cuts across the typology offered by Culicover and Jackendoff (2003, 3005, and 2006). Along with EC, PC is categorized under OC; moreover, just like EC it is incompatible with *arbitrary control, long distance control, strict reading*, and *de re interpretation*. Besides, the most prominent characteristics of PC category is that the local subject in PC complement is interpreted to be semantically plural in spite of the syntactically singular controller, and that's why it allows collective predicates in the complement VP.

IV.1.2. The Contrast between EC and PC

The first difference between EC and PC is that PC predicates comply with the adverb *together*. This shows that not EC verbs (implicative, aspectual, and modal verbs) but PC verbs (factive, propositional, desiderative, and interrogative) are compatible with an embedded *collective predicate* in spite of the existence of a singular controller (Landau, 1999: 57, 58). In the below example, we test the EC verb *hatırla- (remeber)* first with a collective predicate *buluş- (meet)* and then with the collective adverb *birlikte (together)*. The result is that the EC verb *hatırla-* is compatible neither with the collective predicate nor with the collectivizer adverb:

(8)

a. *Ali$_i$ [yarın erkenden $_{i+1}$buluş-ma]-yı hatırla-dı

Ali tomorrow early meet-Inf-Acc remembered-3SGPast

‘*Ali remembered to meet early in the morning tomorrow.’

b. *Ali$_i$ [düğün-de birlikte $_{i+1}$dans et-me]-yi hatırla-dı

Ali ceremony-Loc together dance LVC-Inf-Acc remember-3SGPast

‘*Ali remembered to dance together at the ceremony.’

On the other hand, in the below example we do the same test with the PC verb *razı ol- (agree)*. The sentences below prove that *razı ol-* is a true PC verb as it is compatible with both the collective predicate *buluş- (meet)* and the collective adverb *birlikte (together)*:

(9)

a. Ali$_i$ [yarın erkenden $_{i+1}$buluş-ma]-ya razı ol-du

Ali tomorrow early meet-Inf-Acc willing LVC-3SGPast

‘Ali agreed to meet early in the morning tomorrow.’

b. Ali$_i$ [düğün-de birlikte $_{i+1}$dans et-me]-ye razı ol-du

Ali ceremony-Loc together dance LVC-Inf-Acc willing LVC-3SGPast

‘Ali agreed to dance together at the ceremony.’

The above examples all show that with PC verbs the complement VP is understood to include collective performers, that is, more than one person to *meet* in sentence (a) and more than one *dancer* in sentence (b) although the controller is singular.

The second difference between the EC predicates and PC predicates is that predicates that are inflected for plural/dual or contain plural anaphors or quantifiers are absent from PC (in contrast to the predicates that are lexically collective or contain the collectivizer *together* discussed in the preceding examples) (Landau, 1999: 62). Below examples show that PC predicates do not comply with plural anaphors and quantifiers such as *themselves*, *all*, *each other*, and *each*.

Sentence (10) shows that the PC verb *tercih et- (prefer)* is not compatible with the anaphor *birbirleri (each other)*.

(10)

*Ali Suzan'a [[birbirleri-ni sabah erkenden gör-me]-yi tercih et-tiğ-i-]ni

söyle-di

Ali Suzan-Dat each other-Acc morning early see-Inf-Acc prefer LVC-Nom-Poss-Acc tell-3SGPasst

'*Ali told Suzan that he preferred to meet each other early in the morning'

The following example shows that another PC verb pişmanlık duy- (regret) is not in harmony with the plural anaphor *kendi kendileri (themselves)*:

(11)

*Ali Suzan'a [[kendi kendileri hakkında konuş-mak]-tan pişmanlık duy-duğ-u] -nu söyle-di

Ali Suzan-Dat themselves about talk-Inf-Abl regret feel-Nom-Poss-Acc tell-3SGPast

'*Ali told Suzan that he regretted having talked about themselves'

The below example is a little bit different from the previous ones in that the infinitival complement includes a subject marked with the genitive Case, and the complement VP is marked with possessive morphology to harmonize with that local subject. This means that the infinitival complement in this sentence carries AGR, which we have termed as *inflected infinitive* following (Özsoy, 1988). Nonetheless, irrespective of the grammatical structure we have at hand, the PC verb *niyet et- (intend)* in the below example cannot occur with the pronoun *each*:

(12)

*Ali arkadaş-lar-ı-na [[her biri-nin 100 dolar bağış yap-ma-sı]-na niyet et-tiğ]-i-ni söyle-di

Ali friend-PL-Poss-Dat each-Gen dollar donation do-Poss-Dat intention LVC-Nom-Poss-Acc tell-3SGPast

'*Ali told his friends that he intended to each donate $ 100'

Finally, the last example shows that the PC verb um- (hope) is not possible with a predicate inflected with plural:

(13)

*Ali [Suzan'ın [yeni müdür yardımcı-lar-ı ol-ma]-yı um-duğ]-u-nu bili-yor-du

Ali Suzan-Gen new head assistant-PL-Poss become-Inf-Acc hope-Nom-Poss-Acc know-Prog-3SGPast

'*Ali knew that Suzan hoped to become new assistant managers'

In PC, the complement VP exhibits plural characteristics, which is not something to do with the syntactic characteristics of the controller (since we know that the controller is singular in PC). The controlled element in PC carries semantic plurality just like nouns *group*, *committee*, or *government*. That's why, the complement VPs cannot reflect this plurality and cannot occur with the just mentioned plural anaphors and quantifiers such as *themselves*, *all*, *each other*, and *each*, which all require syntactic plurality on the matrix subject.

Thus, Landau distinguishes between semantic and syntactic plurality concluding that the subjects in PC structures are all singular syntactically and carry semantic plurality, which is not visible and that's why not compatible with predicates inflected for plural or with plural anaphors.

The third difference between PC and EC is Tense. According to Landau (1999: 70), PC complements can have their own tense independent of the higher clause, whereas EC complements cannot. Below we contrast EC and PC predicates to see the difference in Tense:

(14) *EC with tensed complements*

a. *Bugün Ali [yarın yüz-me]-yi başar-dı *implicative*

today Ali tomorrow swim-Inf-Acc succeed-3SGPast

'*Today Ali succeeded in swimming tomorrow.'

b. *Bugün Ali [yarın yüz-me]-ye başla-dı *aspectual*

today Ali tomorrow swim-Inf-Dat start-3SGPast

'*Today Ali started swimming tomorrow'

c. *Bugün Ali [yarın yüzmek] zorunda kaldı *modal*

today Ali tomorrow swim-Inf have LVC-3SGPast

'*Today Ali had to swim tomorrow'

These examples show that in EC we have to interpret the event in the complement VP to be simultaneous with the matrix event. Below we provide examples of PC with different time adverbs marking different tenses in the higher and the lower clause:

(15) *PC with tensed complements*

a. Bugün Ali [yarın yüz-me]-yi hayal et-ti *propositional*

today Ali tomorrow swim-Inf-Acc delusion LVC-3SGPast

'Today Ali dreamt of swimming tomorrow'

b. Bugün Ali [yarın yüz-me]-yi planla-dı *desiderative*

today Ali tomorrow swim-Inf- plan-3SGPast

'Today Ali planned to swim tomorrow'

To recap, the PC category is marked by its three most important characteristics:

(i) PC predicates comply with collective predicates and the collectivizer adverb *together*

(ii) PC predicates do not comply with predicates inflected for plural and plural anaphors/quantifiers since the PRO in PC is syntactically singular but semantically plural and that's why does not agree with plural embedded predicate or plural anaphors/quantifiers

(iii) The complement VP in PC carries its own tense independent of the tense of the matrix clause.

(iv) All these properties are well summarized in the following:

(16) *The PC Generalization*

Syntactic number on PRO in PC-complements is inherited from the controller, but semantic number is not (Landau, 1999: 70)

IV.I.3 Verb Classes of EC and PC

Having specified the most leading characteristics of PC, we can now turn back to another important question: how do we come to differentiate between EC verbs and PC verbs? More specifically, how do we know that *manage* and *dare* are EC verbs, while *promise* and *want* are PC verbs? Landau (1999: 49) makes the following generalization regarding this distinction:

(17)

a. EC verbs are *implicative*, *aspectual*, or *modal*

b. PC verbs are *factive*, *propositional*, *desiderative*, or *interrogative*

The list of each predicate type presented above is as follows:

(18)

a. **Implicatives**

dare, manage, make sure, bother, remember, get, see fit, condescend, avoid, forget, fail, refrain, decline, neglect, force, compel

b. **Aspectual**

begin, start, continue, finish, stop, resume

c. **Modal**

have, need, may, should, is able, must

d. **Factives**

glad, sad, regret, like, dislike, hate, loath, surprised, shocked, sorry

e. **Propositional**

Believe, think, suppose, imagine, say, claim, assert, affirm, declare, deny

f. **Desideratives**

want, prefer, yearn, arrange, hope, afraid, refuse, agree, plan, aspire, decide, mean, intend, resolve, strive, demand, promise, choose, offer, eager, ready

(Landau, 1999: 50)

Below, we provide corresponding control verbs in Turkish[5]:

(19)

a. **Implicatives**

alıkoy- (prevent), başar- (manage), başarısız ol- (fail), becer- (accomplish), boşla- (neglect), cesaret et- (dare), çekin- (abstain), emret (order), hak et- (deserve), hatırla- (remember), ihmal et- (neglect), ikna et- (persuade), izin ver- (give permission), kaç- (avoid), kaçın- (abstain), mecbur et- (compel), men et- (prevent), mahrum et- (deprive), razı et- (persuade), sakın- (avoid), tembih et- (warn), tenezzül et- (condescend), teşvik et- (encourage), unut- (forget), yardım et- (help), yasakla- (forbid), zahmet et- (bother), zorla- (force)

b. **Aspectual**

başla- (start), bırak- (quit), bitir- (finish), devam et- (continue), kes- (stop),

c. **Modal**

zorunda ol/kal(have), gerek- (require), gerkli ol- (be necessary), ihtiyaç. duy (need)

d. **Factives**

bık- (be fed up with), hoşlanm- (like), nefret et- (hate), pişmanlık duy- (regret), sıkıl- (be bored),

e. **Propositional**

düşün- (think), hayal et- (imagine)

f. **Desideratives**

*aklına koy- (resolve), arzula- (yearn), ayarla- (arrange), bekle- (expect), can at- (long for), çabala- (put effort), çalış- (work), dile- (wish), dene- (try), gayret et- (endeavor), gönüllü ol- (volunteer), hazır ol- (be ready), hazırlan- (get ready), ısrar et- (insist), ikna ol-(to be conviced), kabul et- (accept), kalkış- (attempt), karar ver- (decide), karşı çık- (object), kasdet- (mean), kork- (afraid), murat et-(desire), niyet et- (intend), planla- (plan), razı ol- (comply), reddet- (refuse), rıza göster- (resolve), *rica et- (ask), seç- (choose), *söz ver- (promise), *talep et- (demand), talip ol- (aspire), tasarla- (resolve), *teklif et- (offer), temenni et- (wish), tercih et- (prefer), tereddüt et- (hesitate), uğraşmak (strive), um-/ umut et- (hope), vazgeç (abandon)*

[5] This list of Turkish control predicates is not without problems. The boundaries are not crystal clear for Turkish and need some tailoring as we also discuss in the following section. The underlined verbs are compatible with PC, and the verbs marked with an asterisk are compatible with split control.

IV.1.4. Tailoring Landau's Typology

IV.1.4.1 Further Restrictions on PC Complements

We already know that PC complements are to include collective predicates with subjects understood as semantically plural. According to Culicover and Jackendoff (2005: 460, 461) the basis for PC to occur is the existence of 'collective intention.' That is, the controller should possess an intention on realizing a joint activity revealed by the complement VP. Culicover and Jackendoff makes a more specific remark on the issue stating that the collective predicates in PC complements should include voluntary joint activities and exclude collective states and collective non-voluntary events.

Remember that we use the adverb *voluntarily* to test if a predicate is a voluntary or non-voluntary (non)action. In the below example, the PC predicate *want* does not comply with the predicate *constitute* since it is a state incompatible with the adverb *voluntarily*. However one can *form an alliance* voluntarily, and that's why the matrix predicate is far better with the complement verb *form*:

(20)

a. Hildy and I formed/constitute an alliance.

b. [6]Hildy told me that she wants to $_{i+}$form/# $_{i+}$constitute an alliance.

[6] Culicover and Jackendoff use the notation $_{i+}$ to represent partial control reading. We abide by the notation $_{i+1}$ as it is originally used by Landau in our examples.

Similarly, in the following examples provided by Culicover and Jackendoff (2005: 461), *being examined by a doctor* can be preformed voluntarily, whereas *being elected by the voters* cannot. Hence, sentence (b) is a better statement, and the complement VP in sentence (b) is rejected by the desiderative verb *look forward to*:

(21)

a. ?George told Dick that he looked forward to $_{i+}$being jointly examined by the doctor.

b. #George told Dick that he looked forward to $_{i+}$being jointly elected by the voters.

Another point on PC is something to do with the [+tense] property of the complement VP in partial control. Again remember that in EC, the tense of the complement VP has to be parallel to that of the matrix clause since complement VPs in EC do not have their own tense, but complement VPs in PC are autonomous and carry their own tense. At this point, Culicover and Jackendoff (2005: 462) underline that PC structures also have restrictions on tense in that the complements in partial control structures are non-past oriented when compared with their matrix clause:

(22)

a. *No partial control*

*Dan managed/dared/was unwise/was rude to meet at 6.

b. *Time-locked*

This morning, Dan managed/dared/was unwise/was rude/to run the race (?right then/*tomorrow/*yesterday).

(23)

a. *Partial Control*

Dan intended/planned/agreed to meet at 6.

b. *Non-past-oriented*

This morning, Dan intended/planned/agreed to run the race right then/tomorrow/*yesterday.

The rationale behind this nuance is that the PC predicates reveal an intention for a collective activity, and this intention inherently has to be non-past oriented. Thus, the complement VP in PC can target future but not past since we cannot have intentions towards a completed action.

The same deduction also holds for Turkish:

(24)

Ali bu sabah [proje-ye yarın/*dün başla-ma]-ya razı ol-du

Ali this morning project tomorrow/yesterday start agree-3SGPast

'This morning Ali agreed to start the project tomorrow/*yesterday.'

IV.1.4.2. Further Restrictions on PC Verbs

The classification of EC and PC predicates complies with the data in Turkish to a large extent. Nevertheless, it also shows some deviation; below we provide some inconsistencies of the classification in Turkish:

(25) *PC restrictions in Turkish*

(i) There are some implicatives, aspectuals, and factives that comply with not EC but PC.

(ii) There are some predicates that comply with PC reading (i+1) but do not obey the [+tense] restriction put on the complement VP in PC structures.

(iii) There are some PC predicates that can possibly exhibit split control when used with an object in the matrix clause.

(iv) There are some EC predicates that can possibly exhibit split control

(v) There are some PC verbs that can harmonize with generic reading, that is, arbitrary control.

To begin with, in the below list, we provide *implicatives*, *aspectuals*, and *factives* that we can optionally use with PC:

(26)

a. Implicative PC predicates

cesaret et- (dare), çekin- (abstain), kaç- (avoid), kaçın- (abstain), tenezzül et- (condescend), zahmet et- (bother)

b. Aspectual PC predicates

bırak- (quit), kes- (stop)

c. Factive PC predicates

bık- (be fed up with), hoşlan- (like), nefret et- (hate), pişmanlık duy- (regret), sıkıl- (be bored),

In the examples to follow, a predicate from each set is exemplified respectively (the other predicates in the list in question can also replace the matrix predicate in our example). In

these examples, we test the PC reading with a collective predicate, and we have no problem concerning the grammaticality of the sentences:

(27)

a. Ali$_i$ [sabah erkenden $_{i+1}$buluş-ma]-ya cesaret ed-e-me-di

Ali morning early meet-Inf-Dat dare LVC-able-Neg-3SGPast

'Ali could not dare to meet early in the morning.'

b. Ali$_i$ [sabah erkenden $_{i+1}$buluş-ma]-yı kes-ti

Ali morning early meet-Inf-Acc stop-3SGPast

'Ali stopped meeting early in the morning.'

c. Ali$_i$ [sabah erkenden $_{i+1}$buluş-mak]-tan bık-tı

Ali morning early meet-Inf-Abl be fed up-3SGPast

'Ali is fed up with meeting early in the morning.'

However, these verbs are closer to EC end in the dichotomy when the [+/- tense] distinction is in question. Namely, we still cannot say *Ali bugün yarın sabah erkenden buluşmaktan bıktı* meaning *Today Ali is fed up with meeting early in the morning tomorrow*.

Another point to be made on the PC predicates of our list is something to do with the availability of the split reading with certain partial control verbs. With the following verbs, we can obtain split control relation in the presence of an object in the matrix clause.

(28) *PC predicates in split control*

Israr et- (insist), iste- (want), rica et- (ask), söz ver- (promise), talep et- (demand), taahhüt et- (pledge)

In the below example, we compare partial control and split control with a representative predicate *rica et- (ask)*. Sentence (a) has partial reading, whereas sentence (b) has split control reading:

(29)

a. Ali$_i$ [sabah erkenden $_{i+}$buluş-ma]-yı rica et-ti

Ali morning early meet-Inf-Acc request LVC-3SGPast

'Ali requested meeting early in the morning.'

b. Ali$_i$ ben$_j$-den [sabah erkenden $_{i+j}$buluş-ma]-yı rica et-ti

Ali I-Abl morning early meet-Inf-Acc request LVC-3SGPast

'Ali asked me to meet early in the morning.'

The EC predicates below can exhibit split control as the tests with *each other* and *together* also prove (refer to Table 4 in the appendix for the list of EC and PC predicates compatible with split control).

(30) *EC predicates in split control*

Hatırlat- (remind), ikna et- (persuade), mahrum et- (deprive), mecbur et- (compel), öğret- (teach), razı et- (persuade), teşvik et- (encourage), zorla- (force)

(31)

Ali ben-i birbirimizi gör-me-ye ikna et-ti/mecbur et-ti/ razı et-ti/teşvik et-ti/ zorla-dı

Ali I-Acc each other see-Inf-Dat persuasion LVC-3SGPast/ obligation LVC-3SGPast/ encouragement LVC-3SGPast /force-3SGPast

'Ali persuaded/obliged/persuaded/forced me to see each other.'

Finally, there are some PC predicates that even comply with generic reading:

(32) *PC predicates in arbitrary control*

kasdet- (mean), [7]karşı çık- (oppose), rıza göster- (consent), tavsiye et- (recommend)

(33)

Başbakan enflasyon art-ıyor derken [kemer-ler-i biraz daha $_{arb}$sık-ma]-yı kasdet-ti

Prime minister inflation increase-Prog say belt-Pl-Acc a bit more tighten-Inf-Acc mean-3SGPast

'The P.M. meant tightening the belts when saying the inflation is increasing.'

To conclude, some EC predicates carry the properties of the partial control, and we accept them to be predicates of both EC and PC. Similarly, some PC predicates are also compatible with split control reading; we do not ignore this compatibility and accept these verns as predicates of both partial control and split control. Finally, some PC predicates exhibit arbitrary control allowing generic reading, and that's why we accept these

[7] It is interesting that not *reddet- (refuse)* but *karşı çık (reject)* is compatible with arbitrary control. In fact, this is the only point these predicates differ:

a. Ali [oda-da sigara $_{arb}$iç-me]-ye karşı çıktı
Ali room-Loc cigarette smoke-Dat object-3SGPast
'Ali objected smoking in the room.'

b. Ali [oda-da $_{*arb}$sigare iç-me]-yi reddet-ti
Ali room-Loc cigarette smoke-Acc refuse-3SGPast
'Ali refused to smoke in the room.'

predicates to be instances of both OC (exhibiting partial control) and NOC (exhibiting arbitrary control) at the same time.

IV.2. Control in Adjunct Clauses

The most context bound structures of control are adjunct clauses. That's why, it is hard to examine adjunct clauses on the basis of a configurationally determined approach. In this section, we basically analyze purpose clauses on the basis of semantic and pragmatic factors.

Purpose clauses in Turkish are most commonly constructed with postpositions *için (in order to)* and *üzere (for)*. Traditionally, purpose clauses with *için* are observed to exhibit subject control, whereas purpose clauses with *üzere* are observed to exhibit subject or object control:

(34)

a. Başbakan$_i$ profesör$_j$-ü [şu anki ekonomik durum-u $_{i/*j}$anlat-mak için] çağır-dı

Prime minister Professor-Acc this moment economic situation-Inf in order to call-3SGPast

'The P.M. called the professor to tell about the current economic situation.'

b. Başbakan$_i$ profesör$_j$-ü [şu anki ekonomik durum-u $_{i/j}$anlat-mak üzere]

çağır-dı

Prime minister Professor-Acc this moment economic situation-Inf for

call-3SGPast

'The P.M. called the professor to tell about the current economic situation.'

Besides, both postpositions are also possible with partial control and split control relations. In the following examples, sentence (a) exhibits partial control since the controllers include the matrix clause subject plus another controller outside the sentence. Sentence (b) exhibits split control since matrix clause subject and object jointly control the purpose clause:

(35)

a. ABD yetkilisi$_i$ [İran'ı $_{i+1}$görüş-mek üzere/için] İsrail-e git-ti

ABD supervisor Iran-Acc negotiate-Inf in order to Israel-Dat-3SGPast

'The American supervisor went to Israel to negotiate over Iran.'

b. Anne-m komşu-lar-ı [çay iç-mek için] çağır-dı

Mother-poss neighbour-PL-Acc tea drink-Inf in order to invite-3SGPast

'My mother called the neighbours to drink tea.'

That the purpose clauses in such sentences are compatible with the collectivizer adverb *birlikte (together)*, the pronouns kendi *kendilerini (themselves)* and *birbilerini (each other)* shows that these structures are not restricted to unique (exhaustive) control:

(36)

a. Ali Suzan-ı [birlikte çalış-mak için/üzere] tut-tu

Ali Suzan-Acc together work-Inf in order to hold-3SGPast

'Ali hired Suzan to work together.'

b. Ali Suzan-ı [birbirleriyle dertleş-mek için/üzere] ara-dı

Ali Suzan-Acc each other to pour out one's grief-Inf in order to call-3SGPast

'Ali called Suzan to pour out their grief to each other.'

c. Ayşe Suzan-ı [kendi kendilerine yemek yap-mak için/üzere] davet et-ti

Ali Suzan-Acc themselves meal do-Inf for invite LVC-3SG

'Ali called Suzan to cook themselves some meal.'

Also, there are instances with *için (in order to)* clauses where the complement VP is controlled by an implicit agent. This is especially true for passive constructions including infinitival complement- based on Culicover and Jackendoff (2001: 504):

(37)

Çocuk [fidye al-mak için] kaçır-ıl-dı

Child ransom take-Inf in order to kidnap-Pass-3SG

'The child was kidnapped to take ransom.'

In the above sentence, the purpose clause is controlled by the implicit Agent of the passive construction. Alternatively, the subject of the purpose clause may be co-indexed with the explicit Agent provided by a *by phrase* in the passive construction. One important point is that control by either the explicit or the implicit Agent cannot be explained on the basis of Hornstein's movement theory discussed in Chapter II.

One difference between *için* and *üzere* is that the former is not possible with an anaphor, whereas the latter is:

(38)

a. Ali arkadaş-lar-ı-nı [her biri bir konuşma yap-mak üzere/*için] çağır-dı

Ali friend-PL-Poss-Acc each one speech do-Inf in order to call-3SGPast

'Ali called his friends to deliver a speech each.'

This sentence also shows that with the postposition *için*, the purpose clause cannot be controlled by the matrix object because the anaphor *her biri (each)* refers to the matrix object. Also, the below sentences show that *için* clauses are matrix subject oriented as controllers and exclude matrix object as the controller as sentence (b) also suggests:

(39)

a. ___$_i$ [ders kitabı olarak $_i$kulan-mak için] Headway$_j$-i seç-tik

Course book as use-Inf in order to Headway-Acc choose-1PLPast

'We choose Headway to use as the course book'

b. * ___$_i$ [ders kitab-ı $_j$ol-mak için] headway$_j$-i seçtik

Course book be-Inf in order to Headway-Acc choose-1PLPast

'We choose Headway to be the course book'

The same restriction is also true for nominal forms. In the following examples, although both the sentences lack overt subjects, we somehow know that the first sentence is grammatical, whereas the latter is not. This is a semantic restriction put on the purpose clause since the grammatical structures in (39) and (40) are different from each other, the latter including nominalization:

(40)

a. [ders kitab-ı olarak kullan-mak için] Headway-in alım-ı

Course book as use-Inf in order to Headway-Gen purchase-Poss

'The purchase of Headway to use as the coursebook.'

b. *[ders kitab-ı ol-mak için] Headway-in alım-ı

Course book be-Inf in order to Headway- Gen purchase-Poss

'The purchase of Headway to be the coursebook.'

Be that as it may, that the syntactic matrix subject or the Agent in the passive constructions serve as the primary controllers in *in order to* clauses can be somehow refuted. In such cases, context bound property of purpose clauses becomes clearer:

(41)

a. Bakıcı (ev sahibi tarafından) [çocuk-lar-a bak-mak için] tut-ul-du

Babysitter (house owner by) child-PL-Dat look-Inf in order to hold-Pass-3SGPast

'The babysitter was hired (by the host) to take care of children'

b. Sert içki-ler (ev sahibi tarafından) [kolay sarhoş olmak için] getir-il-di

Hard beverage-PL (house owner by) easy drunk LVC-Inf in order to bring-Pass-3SGPast

'Strong beverages were brought (by the host) to become drunk easily.'

In sentence (a), the grammatical subject *babysitter* can easily be marked as the controller. On the other hand, in sentence (b) the grammatical subject *beverages* cannot be the

controller for the purpose clause. This shows that in purpose clauses, we have to consider semantic and pragmatic factors to determine the controller.

Alternatively, with certain matrix verbs, *in order to* clauses can be controlled by the matrix object in spite of the existence of an overt matrix subject:

(42)

___$_i$ Ali$_j$-yi [ekmek $_j$al-mak için] bakkal-a yolla-dı-m

Ali-Acc bread buy-Inf im order to grocer-Dat send-Past1SG

'I sent Ali to the grocer to buy bread.'

Control relations in temporal adjunct clauses with postpositions such as *–mAdAn önce (before doing)* also support our claim that controller choice should be made on the basis of semantic and pragmatic factors.

Consider the following example with *-mAdAn önce (before doing)*:

(43)

Ali$_i$ Suzan$_j$-ı [okul-a $_{i/j}$git-me-den] önce ara-dı

Ali Suzan-Acc school-Dat go-Inf-Abl before call-3SGPast

'Ali called Suzan before he/she went to school.'

In the above example, the controller could be interpreted as the matrix subject *Ali* or as the matrix object *Suzan*. The choice is to be made on the basis of pragmatic factors.

IV. Summary

In this chapter, we firstly focus on a sub-class of Obligatory Control: Partial Control. Basically, we follow Landau (1999) to differentiate between partial control verbs and unique control verbs in Turkish. This classification is not without shortcomings. Turkish control verbs show some deviations from the pattern offered by Landau as it is also laid out in the first half of the chapter in detail.

As for the control in adjunct clauses, we underline that both the matrix predicate type and the complement type are decisive for controller choice in these clauses. For example, *için (in order to)* clauses, which are traditionally acknowledged to include subject control, can also exhibit object control, partial control and split control.

CONCLUSION

The present study has investigated the applicability of Culicover and Jackendoff's Unique Control of Actional Complements (UCAC) Hypothesis (2003, 2006), a treatment that brings into play the conceptual structure and syntax-semantics interface.

Sentences with the same syntactic structure but with different control relations have shown that we cannot account for control relations on the basis of syntactic constraints per se. There are also sentences where no overt controllers exist to serve as controller such as instances of partial control and implicit (discourse) control. Additionally, syntactic factors are of no use with sentences where there are two potential controllers in the matrix predicate but only one of them can be the controller.

In the hypothesis adopted here, we have supported that the thematic structure employed on the matrix predicate determines both the controller choice and the control type. Thus, to determine the control types in Turkish, we have utilized the control categories offered by Culicover and Jackendoff (2005, 2006): Free Control, Nearly-Free Control, and Unique Control. We have underlined that Unique Control occurs in the existence of a volitional action in the complement VP. Following this, we have underlined that in the existence of two potential controllers in the matrix clause to serve as the controller the choice of controller could be made on account of six basic semantic predicates: verbs of *intention*, verbs of *obligation*, verbs o *ability*, verbs of *necessity*, verbs of *request*, and finally *force-dynamic* verbs.

We have also analyzed Partial Control on the basis of verb classes offered by Landau (1999). Although there are some deviations for this typology in Turkish, it is a

wholesome approach that covers a control type that has not been investigated exhaustively so far.

Control relations in adjunct clauses have clearly shown that it is not possible to solve the problem of controller choice irrespective of semantic and pragmatic factors.

To conclude, the data presented here provide evidence for a semantic basis to control in Turkish and demonstrate that in each case the controller is the argument denoted by the controlled complement, irrespective of its syntactic function or position.

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APPENDIX

Table 1: Control Verbs in Turkish

1. Aklına koy- (resolve)	41. İste- (want)	81. Tasarla- (plan)
2. Alıkoy- (hinder)	42. istekli ol- (be willing)	82. Tavsiye et- (recommend)
3. Arzula- (desire)	43. İzin ver- (permit)	83. Tehdit et- (threaten)
4. Ayarla- (arrange)	44. Kabul et- (accept)	84. Teklif et- (offer)
5. Bahset- (talk about)	45. Kaç- (avoid)	85. Tembih et- (warn)
6. Başar- (succeed)	46. Kaçın- (abstain)	86. Temenni et- (wish)
7. Başarısız ol- (fail)	47. Kalkış- (attempt)	87. Tenezzül et- (condescend)
8. Başla- (start)	48. Karar ver- (decide)	88. Tercih et- (prefer)
9. Becer- (manage)	49. Karşı çık- (object)	89. Teşvik et- (prompt)
10. Bekle- (wait, expect)	50. Kasdet- (mean)	90. Uğraş- (deal with)
11. Bık- (be fed up with)	51. Kes- (stop)	91. Unut- (forget)
12. Bırak- (quit, leave)	52. Kork- (be afraid)	92. Ümit et- (hope)
13. Bitir- (finish)	53. Mahrum et- (deprive)	93. Vazgeç- (abandon)
14. Boşla- (ignore)	54. Mahrum ol- (to be deprived of)	94. Yardım et- (help)
15. Can at- (long for)	55. Mecbur et- (compel)	95. Yasakla- (forbid)
16. Cesaret et- (dare)	56. Mecbur ol- (be obliged to)	96. Yemin et- (swear, vow)
17. Çabala- (endeavour)	57. Men et- (prevent)	97. Yeniden başla- (restart)
18. Çalış- (work)	58. Men ol- (be prevented)	98. Zahmet et- (bother)
19. Çekin- (abstain)	59. Murad et- (want)	99. Zorla- (force)
20. Davet et- (invite)	60. Müsaade et- (permit)	100. Zorunda ol/kal (have to)
21. Dene- (try)	61. Nefret et- (hate)	
22. Devam et- (continue)	62. Niyet et- (intend)	
23. Destekle- (support)	63. Öğren- (learn)	
24. Dile- (wish)	64. Öğret- (teach)	
25. Durdur- (stop)	65. Öner- (propose)	
26. Düşün- (think)	66. Pişmanlık duy- (regret)	
27. Gerek- (require)	67. Planla- (plan)	
28. Gönüllü ol- (volunteer)	68. Razı et- (persuade)	
29. Emret- (order)	69. Razı ol- (comply)	
30. Hak et- (deserve)	70. Rıza göster- (resolve)	
31. Hallet- (solve, resolve)	71. Reddet- (refuse)	
32. Hatırla- (remember)	72. Rica et- (ask)	
33. Hatırlat- (remind)	73. Sakın- (avoid)	
34. hazır ol- (be ready)	74. Seç- (choose)	
35. Hoşlan- (like)	75. Sıkıl- (be bored)	
36. Israr et- (insist)	76. Söz ver- (promise)	
37. İhmal et- (neglect)	77. Taahhüt et- (pledge)	
38. İhtiyaç duy- (need)	78. Talep et- (demand)	
39. İkna et- (persuade)	79. Talib ol- (to put oneself in for)	
40. İkna ol- (be persuaded)	80. Tartış- (negotiate)	

Table 2: Unique (Exhaustive) Control Verbs in Turkish

1. Alıkoy- (hinder)	implicative
2. Ayarla- (arrange)	desiderative
3. Başar- (succeed)	implicative
4. Başarısız ol- (fail)	implicative
5. Başla- (start)	aspectual
6. Becer- (manage)	implicative
7. Bitir- (finish)	aspectual
8. Boşla- (ignore)	implicative
9. Çabala- (endeavour)	desiderative
10. Çalış- (work)	desiderative
11. Dene- (try)	desiderative
12. Devam et- (continue)	aspectual
13. Durdur- (stop)	aspectual
14. Emret- (order)	implicative
15. Hak et- (deserve)	implicative
16. Hallet- (solve, resolve)	desiderative
17. Hatırla- (remember)	implicative
18. Hatırlat- (remind)	implicative
19. İhmal et- (neglect)	implicative
20. İkna et- (persuade)	implicative
21. İzin ver- (give permission)	implicative
22. Kalkış- (attempt)	desiderative
23. Mahrum et- (deprive)	implicative
24. Mecbur et- (compel)	implicative
25. Men et- (prevent)	implicative
26. Müsaade et- (permit)	implicative
27. Öğren- (learn)	----------
28. Öğret- (teach)	----------
29. Razı et- (persuade)	implicative
30. Tembih et- (warn)	implicative
31. Teşvik et- (prompt)	implicative
32. Uğraş- (deal with)	desiderative
33. Unut- (forget)	implicative
34. Yardım et- (help)	implicative
35. Yasakla- (forbid)	implicative
36. Yemin et- (swear, vow)	desiderative
37. Yeniden başla- (restart)	aspectual
38. Zorla- (force)	implicative

Table 3: Partial Control Verbs in Turkish

1. Aklına koy- (resolve)	desiderative
2. Arzula- (desire)	desiderative
3. Bekle- (wait, expect)	desiderative
4. Bık- (be fed up with)	factive
5. Bırak- (quit, leave)	aspectual
6. Can at- (long for)	desiderative
7. Cesaret et- (dare)	implicative
8. Çekin- (abstain)	implicative
9. Dile- (wish)	desiderative
10. Düşün- (think)	propositional
11. Gönüllü ol- (volunteer)	desiderative
12. Hak et- (deserve)	implicative
13. Hazır ol- (be ready)	desiderative
14. Hoşlan- (like)	factive
15. Israr et- (insist)	desiderative
16. İhtiyaç duy- (need)	modal
17. İkna ol- (be persuaded, convinced)	desiderative
18. İste- (want)	desiderative
19. istekli ol- (be willing)	desiderative
20. Kabul et- (accept)	desiderative
21. Kaç- (avoid)	implicative
22. Kaçın- (abstain)	implicative
23. Karar ver- (decide)	desiderative
24. Karşı çık- (object)	desiderative
25. Kasdet- (mean)	desiderative
26. Kes- (stop)	aspectual
27. Kork- (be afraid)	factive
28. Mahrum ol- (to be deprived of)	desiderative
29. Mecbur ol- (be obliged to)	desiderative
30. Men ol- (be prevented)	desiderative
31. Murad et- (want)	desiderative
32. Nefret et- (hate)	factive
33. Niyet et- (intend)	desiderative
34. Pişmanlık duy- (regret)	factive
35. Planla- (plan)	desiderative
36. Razı ol- (comply)	desiderative
37. Reddet- (refuse)	desiderative
38. Rıza göster- (resolve)	desiderative
39. Rica et- (ask)	desiderative
40. Sakın- (avoid)	implicative
41. Seç- (choose)	desiderative
42. Sıkıl- (be bored)	factive
43. Söz ver- (promise)	desiderative
44. Taahhüt et- (pledge)	desiderative
45. Talep et- (demand)	desiderative
46. Talib ol- (to put oneself in for)	desiderative
47. Tasarla- (plan)	desiderative
48. Temenni et- (wish)	desiderative
49. Tenezzül et- (condescend)	implicative
50. Tercih et- (prefer)	desiderative
51. Ümit et- (hope)	desiderative
52. Vazgeç- (abandon)	desiderative
53. Zahmet et- (bother)	implicative
54. Zorunda ol/kal (have to)	modal

Table 4: Obligatory Control Verbs That Are Compatible With Split Control

1. Hatırlat- (remind)	(UC)	implicative
2. Israr et- (insist)	(PC)	desiderative
3. İkna et- (persuade)	(UC)	implicative
4. İste- (want)	(PC)	desiderative
5. Mahrum et- (deprive)	(UC)	implicative
6. Mecbur et- (compel)	(UC)	implicative
7. Öğret- (teach)	(UC)	----------
8. Razı et- (persuade)	(UC)	implicative
9. Rica et- (ask)	(PC)	desiderative
10. Söz ver- (promise)	(PC)	desiderative
11. Taahhüt et- (pledge)	(PC)	desiderative
12. Talep et- (demand)	(PC)	desiderative
13. Teşvik et- (prompt)	(UC)	implicative
14. Zorla- (force)	(UC)	implicative